Disclaimer

Every effort has been made to ensure that what is stated in this catalog is accurate. The courses and programs we offer, together with other information contained in this online catalog, are subject to change without notice by the administration of the Los Rios Community College District and American River College for reasons related to student enrollment, level of financial support, or for any other reason, at the discretion of the district and American River College. The district and American River College further reserve the right to add, amend, or repeal any of their rules, regulations, policies, and procedures.

COVID-19 (Coronavirus) Impacts

As a result of the COVID-19 public health crisis, Los Rios Community College District and American River College moved to 100% remote operations in March 2020. If, as a result of the rapid deployment of this new online catalog, there are any errors or omissions, then please report the error or omission [https://lrccd.formstack.com/forms/catalog_feedback_form] and we will resolve them immediately.

American River
(916) 484-8011
4700 College Oak Drive, Sacramento, CA 95841

Website: arc.losrios.edu (https://arc.losrios.edu)

Mather Center
(916) 484-8011
10150 Missile Way, Mather, CA 95655

McClellan Center
(916) 570-5000
5146 Arnold Avenue, McClellan, CA 95652

Natomas Center
(916) 485-6000
2421 Del Paso Road, Sacramento, CA 95835

Publication Date: June 1, 2020
Introduction | American River College

In This Section

How to Use This Catalog (/2020-2021-catalog/catalog-introduction/how-to-use-this-catalog)

The college catalog is a vital resource for you as an American River College student. Spend some time familiarizing yourself with the information in this catalog – it can be a key tool in your academic success.

About American River College (/2020-2021-catalog/catalog-introduction/about-american-river-college)

Learn about American River College, including its mission and vision, accreditation status, and leadership.
How to Use This Catalog | American River College

An Important Resource

This college catalog is a vital resource for you as a student at American River College. Please spend some time becoming familiar with the information in this catalog – it can be a key tool in your academic success.

Changes

It’s important to keep in mind that policies and regulations are subject to change. Many of these changes are dictated by the State of California or federal agencies. This catalog captures the latest information as of the publish date, but changes happen on a regular basis. For updated information, please consult the college website.

Official Updates

If there are significant changes – such as new courses, programs, or regulations – the college will publish a catalog update online (similar to an "addendum" in a print catalog). If updates are published, then they will typically appear in November of each year, but may be added at other times if critical content updates are necessary. Throughout the year, the catalog website (https://arc.losrios.edu/2020-2021-catalog) will always include the most current catalog content.

Career Education Program Changes

Please be aware that the required courses for career education (formerly career and technical education, or CTE) programs are subject to change due to state, regional, and federal agencies. It’s important to meet with a counselor to stay on top of any potential changes to these programs.

About This Catalog

Every effort has been made to ensure that what is stated in this catalog is accurate. The courses and programs we offer, together with other information contained in this online catalog, are subject to change without notice by the administration of the Los Rios Community College District and American River College for reasons related to student enrollment, level of financial support, or for any other reason, at the discretion of the district and American River College. The district and American River College further reserve the right to add, amend, or repeal any of their rules, regulations, policies, and procedures.
American River College is a top transfer school for CSU Sacramento and UC Davis. Our beautiful 153-acre main campus is in the suburbs of Sacramento, California, on the old Cameron Ranch. We enroll approximately 30,000 students each spring and fall, making it one of the larger higher education institutions in California. Our vision is to transform the future of all students and our community through inclusive, equitable education.

We offer a large selection of academic and career-oriented associate degrees and programs designed to prepare students to enter the workforce or transfer to complete their bachelor's degree. We are a feeder school for many of the four-year universities in the area, including California State University (CSU) Sacramento and University of California (UC) Davis. In fact, American River College transfers more students to CSU Sacramento and UC Davis than any other community college in California.

We offer associate degrees, vocational training programs, continuing education courses, and non-credit personal enrichment programs.

In This Section

See American River College's mission, vision, values, and commitment to equity.

Accreditation (/2020-2021-catalog/catalog-introduction/about-american-river-college/accreditation)
American River College is accredited by the Accrediting Commission for Community and Junior Colleges (ACCJC) of the Western Association of Schools and Colleges.

Board of Trustees and Chancellor (/2020-2021-catalog/catalog-introduction/about-american-river-college/board-of-trustees-and-chancellor)
The Board of Trustees is the governing body of Los Rios Community College District, including American River College.
Mission, Vision, and Values | American River College

Our Vision
Transform the future of all students and our community through inclusive, equitable education.

Our Mission
American River College places students first in providing an academically rich, inclusive environment that inspires critical thinking, learning and achievement, and responsible participation in the community.

American River College, serving the greater Sacramento region, offers education and support for students to strengthen basic skills, earn associate degrees and certificates, transfer to other colleges and universities, and achieve career as well as other academic and personal goals.

Our Commitment to Social Justice and Equity
American River College strives to uphold the dignity and humanity of every student and employee. We are committed to equity and social justice through equity-minded education, transformative leadership, and community engagement. We believe this commitment is essential to achieving our mission and enhancing our community.
The Los Rios Community College District consists of four comprehensive, public California community colleges: American River College, Cosumnes River College, Folsom Lake College, and Sacramento City College. American River College is accredited by the Accrediting Commission for Community and Junior Colleges (ACCJC) of the Western Association of Schools and Colleges, an institutional accrediting body recognized by the Council of Higher Education Accreditation and the US Department of Education. The American River College educational centers are fully accredited under the college's accreditation status.
The Board of Trustees is the governing body of Los Rios Community College District.

The board is responsible for the educational, physical, and financial well-being of the district. The board also sets legal policy for the district.

The board is composed of seven board members who are elected to four-year terms by registered voters. The board also includes a non-voting student trustee who is elected by students.

Board Members

Ms. Pamela Haynes
Mr. Robert Jones
Mr. Dustin Johnson
Mr. John Knight
Ms. Tami Nelson
Ms. Deborah Ortiz
Student Trustee

Chancellor

Brian King
## In This Section

- **Academic Calendar** ([/2020-2021-catalog/getting-started/academic-calendar])
  
  See important academic dates and deadlines for American River College.

- **How to Enroll** ([/2020-2021-catalog/getting-started/how-to-enroll])
  
  Learn how to apply to American River College and enroll in classes, and find other enrollment-related information.

- **Admission Requirements and Procedures** ([/2020-2021-catalog/getting-started/admission-requirements-and-procedures])
  
  Learn about admission requirements and procedures at American River College.

- **Fees** ([/2020-2021-catalog/getting-started/fees])
  
  Learn about fees, payment deadlines, refunds, and more.
## 2020-2021 Unofficial Catalog Preview

### Academic Calendar | American River College

#### Summer 2020


<table>
<thead>
<tr>
<th>DATE</th>
<th>ACTION/EVENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 8</td>
<td>Instruction begins</td>
</tr>
<tr>
<td>June 19</td>
<td>Last day to petition for graduation/certification</td>
</tr>
<tr>
<td>July 3</td>
<td>Holiday – Independence Day (no classes; offices closed)</td>
</tr>
<tr>
<td>August 5</td>
<td>End of semester</td>
</tr>
<tr>
<td>August 10</td>
<td>Grades due</td>
</tr>
</tbody>
</table>

#### Fall 2020


<table>
<thead>
<tr>
<th>DATE</th>
<th>ACTION/EVENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 22</td>
<td>Instruction begins</td>
</tr>
<tr>
<td>September 7</td>
<td>Holiday – Labor Day (no classes; offices closed)</td>
</tr>
<tr>
<td>October 2</td>
<td>Last day to petition for graduation/certification</td>
</tr>
<tr>
<td>November 11</td>
<td>Holiday – Veterans Day (no classes; offices closed)</td>
</tr>
<tr>
<td>November 26 to 29</td>
<td>Holiday – Thanksgiving Recess</td>
</tr>
<tr>
<td>December 17</td>
<td>End of semester</td>
</tr>
<tr>
<td>January 4, 2021</td>
<td>Grades due</td>
</tr>
</tbody>
</table>

#### Spring 2021


<table>
<thead>
<tr>
<th>DATE</th>
<th>ACTION/EVENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 16</td>
<td>Instruction begins</td>
</tr>
<tr>
<td>January 18</td>
<td>Holiday – Martin Luther King, Jr. Birthday (no classes; offices closed)</td>
</tr>
<tr>
<td>February 12</td>
<td>Holiday – Lincoln Birthday (no classes; offices closed)</td>
</tr>
<tr>
<td>February 15</td>
<td>Holiday – Washington Birthday (no classes; offices closed)</td>
</tr>
<tr>
<td>March 5</td>
<td>Last day to petition for graduation/certification</td>
</tr>
<tr>
<td>March 29 to April 4</td>
<td>Holiday – Spring Recess (no classes; offices closed)</td>
</tr>
<tr>
<td>May 19</td>
<td>End of semester</td>
</tr>
<tr>
<td>May 26</td>
<td>Grades due</td>
</tr>
</tbody>
</table>
How to Enroll | American River College

In This Section

Steps to Enroll (/2020-2021-catalog/getting-started/how-to-enroll/steps-to-enroll)
Learn about the steps to enrollment, including how to apply to American River College, how to apply for financial aid, and other admissions tips.

Challenges to Matriculation Process (/2020-2021-catalog/getting-started/how-to-enroll/challenges-to-matriculation-process)
Students can elect to not participate or be exempt from some or all of the matriculation process if they meet certain criteria.
Steps to Enroll | American River College

Apply Now

Guarantee your admission to American River College by completing the online application to American River College (https://www.opencccapply.net/cccapply-welcome?cccMisCode=231).

Note: You must submit a new application any time you have a break of enrollment where you do not attend for a year or more.

When applying to one college in the Los Rios Community College District, you are able to enroll in all four colleges (American River College, Cosumnes River College, Folsom Lake College, and Sacramento City College).

Save Money

To qualify for the Los Rios Promise and other programs, fill out the Free Application for Federal Student Aid (FAFSA) or the California Dream Act Application (CADAA). Learn more about how to save money with financial aid (https://arc.losrios.edu/save-money).

Other Admissions Tips

- Submit your high school and/or college transcripts to be placed automatically into English and mathematics courses that match your skill level. Learn more about placement (https://arc.losrios.edu/admissions/placement). English as a Second Language (ESL) assessment testing is still available via assessment testing (https://arc.losrios.edu/admissions/placement/assessment-testing).
- Participate in orientation for new students (https://arc.losrios.edu/admissions/orientation).
Students can elect to not participate or be exempt from most or parts of the matriculation process based on the following criteria:

1. The student has completed an associate degree or higher.

2. The student satisfies at least two of the following:
   - The student has identified a goal of upgrading job skills
   - The student has enrolled for fewer than 12 units
   - The student is concurrently enrolled in another post-secondary institution
   - The student has declared no degree or occupational objective
Admission Requirements and Procedures
| American River College

In This Section

Admissions Eligibility (/2020-2021-catalog/getting-started/admission-requirements-and-procedures/admissions-eligibility)
Learn about admissions eligibility for first-time college students, continuing American River College students, returning or transfer students, and high school students.

Admission with Transfer Credit (/2020-2021-catalog/getting-started/admission-requirements-and-procedures/admission-with-transfer-credit)
Students who desire academic credit for courses taken at other regionally accredited colleges and universities must submit official transcripts to the Admissions and Records Office.

Admission for Veterans and Dependents Using Veterans Educational Benefits (/2020-2021-catalog/getting-started/admission-requirements-and-procedures/admission-for-veterans-and-dependents-using-veterans-educational-benefits)
Learn about admissions information for veterans, spouses of veterans, and dependents of veterans.

International Student Admission (/2020-2021-catalog/getting-started/admission-requirements-and-procedures/international-student-admission)
Learn about admissions for international students.

Advanced Education for High School Students (/2020-2021-catalog/getting-started/admission-requirements-and-procedures/advanced-education-for-high-school-students)
Learn about admissions for high school students who want to take college classes through advanced education.

Undocumented Student Admission (/2020-2021-catalog/getting-started/admission-requirements-and-procedures/undocumented-student-admission)
Learn about admissions for undocumented students, a group we define as all immigrants who reside in the US without legal status.

Residency Requirements (/2020-2021-catalog/getting-started/admission-requirements-and-procedures/residency-requirements)
Learn about the requirements for having and maintaining California residency.

Readmission from Dismissed Status (/2020-2021-catalog/getting-started/admission-requirements-and-procedures/readmission-from-dismissed-status)
Students on dismissed status from American River College must submit a petition to be readmitted after dismissed status.
Any person who has earned a high school diploma or the equivalent – such as a certificate of proficiency issued by the State Board of Education including a General Education Development (GED) – is eligible for admission to American River College. Non-high school graduates 18 years of age or older who demonstrate ability to profit from a community college education may also be admitted.

There are four main types of students who attend American River College:

First-Time College Students

First-time college students are individuals who are a high school graduates or are at least 18 years old and never attended any college (other than those who attended while in high school).

Continuing Students

Continuing students are individuals who attended classes at any Los Rios college in the term immediately prior to the next term.

Returning or Transfer Students

All students returning after an absence or transferring from a non-Los Rios college must complete an admissions application and submit official transcripts of all other college work to the Admissions and Records Office.

High School Students

High school students who will be a junior or senior (grades 11 or 12) or at least 16 years of age by the start of classes may be eligible to enroll in a maximum of two community college classes each semester through the Advanced Education program.
Students who desire academic credit for courses taken at other regionally accredited colleges and universities must submit official transcripts of that work to the Admissions & Records office. It is the student’s responsibility to initiate a request to each institution asking that an official transcript of their work be sent directly to:

To be credited by American River College, the coursework must meet the following criteria:

- The course(s) must have been taken at a regionally accredited college or university.
- The course(s) must be at the undergraduate level.
- The course(s) must have been completed with a grade of D or higher. All transferred grades (including Fs) will be used in the calculation of units attempted, units completed, and the grade point average.
- For determination of course applicability/equivalency, student must meet with a counselor.

Students who have completed college- or university-level courses outside of the United States and who are requesting credit must have those transcripts evaluated by a Foreign Credit Evaluation Service. American River College will accept a foreign transcript evaluation from a current member of Association of International Credential Evaluators, Inc. (http://aice-eval.org/) (AICE) or National Association of Credential Evaluation Services (https://www.naces.org/) (NACES).

Credit for coursework/degrees will be granted if it is determined to be equivalent to that of a regionally accredited college or university in the US and is at the baccalaureate level. Once received by American River College, the evaluation becomes property of the college and is treated in the same manner as an official transcript.
Veterans services are available to assist veterans, spouses, and children of disabled or deceased veterans who may be eligible for federal and/or state educational benefits. New students should contact the Admissions & Records office at least two months prior to the start of the college semester to initiate the required paperwork.

In most cases, all tuition and enrollment fees, miscellaneous fees, textbooks, and class supplies are paid for by the student and not by Veterans Affairs (VA). The exception is students who are using the Post 9/11 GI Bill or Vocational Rehabilitation benefits.

If you believe VA will be paying your enrollment fees, then please verify with Veterans Services before you enroll in courses. The benefit process may take several months to complete for new benefit recipients. For continuing students, the benefit process can take four to six weeks. Benefit recipients should anticipate a delay of at least two months before receiving the first payment.

Visit the GI Bill website (https://benefits.va.gov/gibill/) for more information on VA benefits. Disabled veterans who qualify for additional benefits should contact their VA Vocational Rehabilitation Counselor prior to enrolling.

For more information, see veteran student admissions (https://arc.losrios.edu/veteran-admissions).
American River College welcomes students from all over the world. Students who enter the US on a non-immigrant visa are considered international students; however, there are different attendance requirements for each visa type.

American River College is approved by the Bureau of Citizenship and Immigration Services (formerly INS) to issue the I-20 for the F-1 visa. An international student must be enrolled in at least 12 units each semester and must maintain a C (2.0) grade point average at all times, in order to comply with F-1 visa requirements.

For more information, see [international student admissions](https://arc.losrios.edu/international-students).
Courses that provide enrichment and advancement in educational experience may be offered on a limited basis to high school students who have demonstrated academic achievement. The student must be 16 years of age or have completed their sophomore year of high school prior to the first day of the college semester. Advanced education students may not take remedial classes, those classes which need to be repeated because of low grades, and classes offered in the student's own school.

High school students should request information from their high school counselor regarding eligibility and an advanced education application. Advanced education students should then submit online a completed advanced education application form which has been signed by a parent and by a high school counselor or principal, an official transcript plus work in progress, and a written statement describing how the eligibility criteria are met and why they wish to take classes.

After the advanced education application has been approved, the student may register for classes. Students must enroll in person at Admissions & Records. An advanced education student is not considered a continuing student when registering for classes for any subsequent semesters. It is the responsibility of the advanced education student to become familiar with, and aware of, all the requirements, processes, and deadlines pertaining to advanced education.

For more information, see advanced education admissions (https://arc.losrios.edu/advanced-education).
At American River College, we define undocumented to include all immigrants who reside in the US without legal status. All undocumented students must:

1. Complete the online application to American River College (https://www.opencccapply.net/cccapply-welcome?cccMisCode=231).
2. Submit a California Non-Resident Tuition Exemption Form available to the Admissions & Records Office.

For more information, see undocumented student admissions (https://arc.losrios.edu/undocumented-students).
Residency Requirements | American River College

Students who are California residents pay in-state tuition of $46 per unit, whereas students who are non-residents pay out-of-state tuition of $353 per unit. (Note: Tuition fees are for the 2020-21 academic year.) Community college enrollment fees are set by the California State Legislature. All fees are subject to change.

The term "California resident" for fee purposes may differ from other definitions of California residency. A person who has a California driver's license and/or vehicle registration or who is a California resident for tax, voting, or welfare purposes may have established legal residence in the state but not necessarily be considered a resident for fee purposes.

Residency Eligibility

To be eligible for California residency, a student must do the following:

- Be a citizen or hold a US immigration status that does not prevent establishment of residency
- Verify physical presence in California for at least one year and one day prior to the first day of the semester/term
- Verify intent to make California your permanent place of residence
- Establish financial independence from a non-resident parent or guardian

For more information, go to residency requirements on the American River College website (https://arc.losrios.edu/residency-requirements).
Readmission from Dismissed Status | American River College

Students on dismissed status from American River College must submit a Petition for Readmission After Dismissed Status form, which is completed with a college counselor. In order to enroll in classes, the dean must approve readmission following counselor recommendation.
In This Section

Schedule of Fees (/2020-2021-catalog/getting-started/fees/schedule-of-fees)
See the schedule of fees at American River College, including tuition, student representation fees, health services fees, and more.

Fee Payment Deadlines (/2020-2021-catalog/getting-started/fees/fee-payment-deadlines)
See fee payment deadlines for each semester and learn how to pay for your classes at American River College.

Debts Owed to College (/2020-2021-catalog/getting-started/fees/debts-owed-to-college)
If a student or former student fails to pay a debt owed to the institution, then the institution may withhold permission or access to certain information or services.

Federal Education Tax Credits (/2020-2021-catalog/getting-started/fees/federal-education-tax-credits)
Students (or parents of dependent students) may be able to obtain federal tax credits for enrollment fees if a student meets certain criteria.

Fee Refunds (/2020-2021-catalog/getting-started/fees/fee-refunds)
See which fees are refundable and learn how to apply for a refund.
Schedule of Fees | American River College

Community college enrollment fees are set by the California State Legislature. All fees are subject to change.

2020-2021 Mandatory Fees

<table>
<thead>
<tr>
<th>FEE NAME</th>
<th>SUMMER 2020</th>
<th>FALL 2020</th>
<th>SPRING 2021</th>
<th>REFUNDABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resident tuition and enrollment</td>
<td>$46 per unit</td>
<td>$46 per unit</td>
<td>$46 per unit</td>
<td>Yes</td>
</tr>
<tr>
<td>Non-resident tuition and enrollment</td>
<td>$353 per unit</td>
<td>$353 per unit</td>
<td>$353 per unit</td>
<td>Yes</td>
</tr>
<tr>
<td>Foreign student application fee 1 (/2020-2021-catalog/getting-started/fees/schedule-of-fees#sup1)</td>
<td>$50</td>
<td>$50</td>
<td>$50</td>
<td>No</td>
</tr>
<tr>
<td>Student representation fee</td>
<td>N/A</td>
<td>$2</td>
<td>$2</td>
<td>Yes</td>
</tr>
<tr>
<td>Health services fee</td>
<td>N/A</td>
<td>$20</td>
<td>$20</td>
<td>Yes</td>
</tr>
<tr>
<td>Universal transit pass (UTP) fee</td>
<td>$11 (flat fee)</td>
<td>$2.50 per unit 2 (/2020-2021-catalog/getting-started/fees/schedule-of-fees#sup2)</td>
<td>$2.50 per unit 2 (/2020-2021-catalog/getting-started/fees/schedule-of-fees#sup2)</td>
<td>Yes</td>
</tr>
</tbody>
</table>

1 The foreign student application fee applies to international students who are not legal US residents or permanent residents.

2 Eligible students must be taking one (1) or more units to be charged the UTP fee. Students taking more than 15 units will only be charged for 15 units ($33.75). Fractions of units are rounded up to the nearest whole unit.

2020-2021 Parking Fees

<table>
<thead>
<tr>
<th>FEE NAME</th>
<th>SUMMER 2020</th>
<th>FALL 2020</th>
<th>SPRING 2021</th>
<th>REFUNDABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semester parking permit (automobiles)</td>
<td>N/A 3 (/2020-2021-catalog/getting-started/fees/schedule-of-fees#sup3)</td>
<td>$41 4 (/2020-2021-catalog/getting-started/fees/schedule-of-fees#sup4)</td>
<td>$41 4 (/2020-2021-catalog/getting-started/fees/schedule-of-fees#sup4)</td>
<td>Yes</td>
</tr>
<tr>
<td>Semester parking permit (carpools with 3 or more passengers)</td>
<td>N/A 3 (/2020-2021-catalog/getting-started/fees/schedule-of-fees#sup3)</td>
<td>$36</td>
<td>$36</td>
<td>Yes</td>
</tr>
<tr>
<td>Semester parking permit (motorcycles)</td>
<td>N/A 3 (/2020-2021-catalog/getting-started/fees/schedule-of-fees#sup3)</td>
<td>$26</td>
<td>$26</td>
<td>Yes</td>
</tr>
<tr>
<td>Daily parking permit</td>
<td>N/A 3 (/2020-2021-catalog/getting-started/fees/schedule-of-fees#sup3)</td>
<td>$2</td>
<td>$2</td>
<td>No</td>
</tr>
</tbody>
</table>

3 All summer 2020 classes will be online; therefore, no parking services will be available.

4 Students who receive the California College Promise Grant (formerly known as the BOG Fee Waiver) only pay $31 for a fall or spring semester parking permit.

Fee Descriptions
Tuition and Enrollment Fee

Refundable: Yes. Learn more about refunds (https://arc.losrios.edu/admissions/cost-of-attendance/refunds).

Tuition and enrollment fees are charged per unit of enrollment. These fees are set by the State of California and are subject to change at any time. Students who have registered for classes prior to an increase may be required to pay the additional amount.

Foreign Student Application Fee

Refundable: No.

The foreign student application fee applies to all international students. Some international students may be exempt from paying this fee if they demonstrate economic hardship. Read Regulation R-2251 Nonresident and International Student Fees to learn more.

Student Representation Fee

Refundable: Yes.

The student representation fee supports student government in its effort to advocate and lobby for legislative issues that affect students.

$1 of every $2 fee supports the operations of a statewide community college student organization that is recognized by the Board of Governors of the California Community Colleges (Assembly Bill 1504). This statewide organization provides for student representation and participation in state-level community college shared governance as well as governmental affairs representatives to advocate before the legislature and other state and local governmental entities.

Students can refuse to pay this fee based on moral, religious, political, or financial grounds. To be exempted from paying the fee, complete and submit the Student Representation Fee Form BS-55 (PDF) to your college Business Services Office, preferably before you pay your fees.

This fee was established under provision of California Education Code section 76060.5 and California Code of Regulations, Title V, sections 54801-54805.

Health Services Fee

Refundable: Yes.

The following students may be exempted from the health services fee if they submit the required paperwork to the Admissions and Records Office before they register for classes:

- Students who depend exclusively upon prayer for healing in accordance with the teachings of a bona fide religious sect, denomination, or organization
- Students who receive California College Promise Grant (formerly BOG Fee Waiver) Part A

The following students are not charged the health services fee:

- Students enrolled in the Sacramento Regional Public Safety Training Center (SRPSTC)
- Students enrolled in apprenticeship programs
- Students only enrolled in UC Davis Co-Op program courses
- Incarcerated students inside correctional facilities
- Students admitted as special part-time students (K-12 students)

Universal Transit Pass (UTP) Fee

Refundable: Yes. Learn more about refunds (https://arc.losrios.edu/admissions/cost-of-attendance/refunds).

The Universal transit pass (UTP) is available to certain students for use on Regional Transit (RT) services, including buses and light rail. All eligible students are charged the UTP fee, regardless of whether or not they use the pass. The UTP is a sticker that attaches to your student access card.

Visit the Regional Transit website (http://www.sacrt.com/fares/) for a list of all transit and bus systems that accept the UTP. UC Davis Unitrans does not accept the UTP.

Eligibility

Students taking one or more units during the spring or fall semester are eligible for the UTP. All students are eligible for the UTP in the summer semester, regardless of how many units they take.

Some students are not eligible for the UTP, and therefore are not charged the fee. These students include:

- Students enrolled in the Sacramento Regional Public Safety Training Center (SRPSTC)
- Students enrolled in apprenticeship programs
- Students taking classes on the UC Davis main campus
Students studying abroad

Incarcerated students inside correctional facilities

Students whose home college is not a Los Rios college but who are enrolled in courses at a Los Rios college through the California Community Colleges Online Education Initiative Course Exchange

Valid Dates

- For the spring semester, the UTP is valid January 1 through May 31.
- For the summer semester, the UTP is valid June 1 through July 31.
- For the fall semester, the UTP is valid August 1 through December 31.

Fee Structure

Beginning with the fall 2020 semester, eligible students will pay $2.50 per unit during the fall and spring semesters. Any fraction of a unit is rounded up to the next whole unit. The minimum fee charged is $2.50 (for one unit) and the maximum fee is $37.50 (for 15 or more units). For example:

- A student enrolled in .5 units will not pay the UTP fee.
- A student enrolled in one unit will pay $2.50.
- A student enrolled in 1.5 units will pay $5.00.
- A student enrolled in 15 or more units will pay the maximum fee of $37.50.

During the summer 2020 semester, all eligible students pay $11 for the UTP.

Lost or Stolen UTP Stickers

If your UTP sticker is lost or stolen, then you will have to pay the full price of $37.50 for a new one.

Damaged UTP stickers

If your UTP sticker is damaged but the remnants are still attached to your student access card, then we will issue a replacement for free.

Semester Parking Permit Fee

Refundable: Yes. Learn more about refunds (https://arc.losrios.edu/admissions/cost-of-attendance/refunds).

Students can buy a semester parking permit online via eServices (https://ps.losrios.edu/student/signon.html) or in person*. The semester parking permit is a decal that is placed on the windshield or hung from the rear-view mirror.

Read Administrative Regulation R-2252: Student Parking Fees (https://www.losrios.edu/docs/lrccd/board/regulations/R-2252.pdf) to learn more.

Lost, Stolen, or Damaged Parking Permit

If a semester parking permit is lost or stolen, then you will have to pay full price for a new one. If a vehicle is sold or damaged, then a replacement can be issued for $2. You will need to provide the old decal and proof of sale or repair for the $2 replacement.

* At American River College, Cosumnes River College, and Sacramento City College, parking permits can be purchased at the Business Services Office. At Folsom Lake College, parking permits can be purchased at the Admissions & Records Office.

Daily Parking Permit Fee

Refundable: No.

Students can buy daily parking permits from machines located in the parking lots at each campus. Daily parking permits are not recommended for motorcycles because they can be easily stolen. Read Los Rios’ Administrative Regulation R-2252: Student Parking Fees (PDF) (https://www.losrios.edu/docs/lrccd/board/regulations/R-2252.pdf) to learn more.

Instructional Material Fees

Instructional material fees for designated courses may be assessed in accordance with Title 5, Section 59400 and Los Rios Policy P-2253 (/shared/doc/board/policies/P-2253.pdf).
Fee Payment Deadlines | American River College

Your tuition and fees are due soon after you enroll in classes. You will be dropped if your fees are not paid by the fee payment deadline. This is true even if you enroll in a class that starts later in the semester.

Summer 2020 Payment Deadlines

Payment deadlines for the summer 2020 semester.

<table>
<thead>
<tr>
<th>DATE ENROLLED IN CLASSES</th>
<th>DATE DROPPED IF NOT PAID</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 20 to May 22, 2020</td>
<td>14 days after enrollment date</td>
</tr>
<tr>
<td>May 23 to June 3</td>
<td>June 5</td>
</tr>
<tr>
<td>June 4 to June 8</td>
<td>June 9</td>
</tr>
<tr>
<td>June 9 or later</td>
<td>The next day</td>
</tr>
</tbody>
</table>

Fall 2020 Payment Deadlines

This information is still being finalized.

Spring 2021 Payment Deadlines

This information is still being finalized.

A Note About Financial Aid

Your financial aid award is not automatically applied to your fees (except the California College Promise Grant). After you have applied your financial aid, you are responsible for paying the remaining amount on your account.

Make sure you apply for financial aid as early as possible and review the financial aid deadlines [here](https://arc.losrios.edu/financial-aid-deadlines).
Should a student or former student fail to pay a debt owed to the institution, the institution may withhold permission to any combination of the following from any person owing a debt until the debt is paid (Title 5, California Code of Regulations, Sections 42380 and 42381):

- Register
- Use facilities for which a fee is authorized to be charged
- Receive services, materials, food, or merchandise

If a student believes they do not owe all or part of an unpaid obligation, the student should contact the Business Services office.
Federal Education Tax Credits | American River College

Students (or parents of dependent students) may be able to obtain federal tax credits (including the American Opportunity Credit and Lifetime Learning Credit) for enrollment fees if the student:

- Is enrolled in at least six (6) units during any semester or summer session
- Meets the other conditions prescribed by federal law

Students who consent to online access can view and print the IRS Form 1098-T through eServices by January 31 of each year. For eligible students who do not consent to online access, the IRS Form 1098-T will be mailed by January 31.
Fee Refunds | American River College

What Fees are Refundable?

Refundable Fees

- Resident enrollment and tuition fee
- Non-resident enrollment and tuition fee
- Universal transit pass (UTP) fee
- Student representation fee
- Health services fee
- Semester parking permit fee

Non-Refundable Fees

- Foreign student application fee
- Daily parking permit fee

How to Get a Refund

Refunds for Enrollment and Tuition Fees

Follow these steps to get a refund for enrollment and tuition fees:

1. Drop your class(es) by the deadline. After your class is dropped, money is credited to your eServices account. Keep all documentation that shows the date your class was officially dropped.

2. Request a refund ([https://arc.losrios.edu/admissions/cost-of-attendance/refunds/refund-application](https://arc.losrios.edu/admissions/cost-of-attendance/refunds/refund-application)) to get the money out of your eServices account by the deadline. You can submit this request online or in person at the Business Services Office.

Refunds for Student Representation Fee

Follow these steps to get a refund for the student representation fee:


2. If you paid by credit card, then a refund credit will be issued to the credit card you used. All other methods of payment will be refunded by check and mailed to the address on file with your college's Admissions and Records Office.

Refunds for UTP and Health Services Fees

Follow these steps to get a refund for Universal Transit Pass (UTP) and health services fees:

1. Drop your class(es) by the deadline. After your class is dropped, money is credited to your eServices account. Keep all documentation that shows the date your class was officially dropped.

2. Request a refund ([https://arc.losrios.edu/admissions/cost-of-attendance/refunds/refund-application](https://arc.losrios.edu/admissions/cost-of-attendance/refunds/refund-application)) to get the money out of your eServices account by the deadline. You can submit this request online or in person at the Business Services Office.

Important Information About UTP Refunds

Fall or Spring Semester

For the spring or fall semester, the UTP fee is refundable if you drop your courses within the fee refund period. If you drop to less than one unit, then you are expected to return the UTP sticker.

Summer Semester

For the summer semester, the UTP fee is refundable if you drop all of your units within the refund period. A minimum fee of $11 will be withheld from your refund if you have
already picked up a UTP sticker for the summer semester. You are expected to return the UTP sticker if you drop all units.

Refunds for Semester Parking Permits

To get a refund for a semester parking permit:

- Go to the Business Services Office to fill out a paper refund application before the deadline. Your parking permit decal must be attached to your application. You cannot do this step online. Your refund will be processed within 6-8 weeks.

Important Information About Refunds

Credit Balances in eServices

Money in your eServices account is not automatically refunded to you. If you have a credit balance in your eServices account and you do not request a refund by the last day of instruction of the semester, then you forfeit that money.

Exceptions for Military Students

If you have to withdraw from classes for military purposes, then you will be refunded 100% of your fees and tuition. This is true even if you drop after the deadline or request your refund after the end of the semester.

How long will it take to get my refund?

Refunds are issued within six to eight weeks. If you paid by credit card, then a refund will be issued to the credit card you paid with. All other methods of payment will be refunded by check and mailed to the address on file with Admissions and Records.
In This Section

Financial Aid (/2020-2021-catalog/while-you-are-here/financial-aid)
The Financial Aid Office is here to help you get the financial support you need to afford college. Learn how to apply for financial aid.

College and Academic Regulations (/2020-2021-catalog/while-you-are-here/college-and-academic-regulations)
Learn about American River College's grading policies and academic regulations.

Enrollment Verification (/2020-2021-catalog/while-you-are-here/enrollment-verification)
Enrollment verification for child care, health insurance, or car insurance can be printed out via eServices or requested by fax or in-person. All other requests can be processed immediately by the National Student Clearinghouse for a small fee.

Alternative Credit/Study Options (/2020-2021-catalog/while-you-are-here/alternative-credit/study-options)
In addition to regularly scheduled credit classes, students may receive college credit for participation in certain alternative credit and study options.

College Safety and Security (/2020-2021-catalog/while-you-are-here/college-safety-and-security)
Learn about American River College's commitment to maintaining a safe learning environment and supporting an ongoing comprehensive safety program.

Student Rights and Responsibilities (/2020-2021-catalog/while-you-are-here/student-rights-and-responsibilities)
Learn about rights and responsibilities for students at American River College.

Equal Opportunity, Equity, Discrimination, and Harassment (/2020-2021-catalog/while-you-are-here/equal-opportunity-equity-discrimination-and-harassment)
Learn about American River College's commitment to equal opportunity, equity, and diversity. In addition, see our policies prohibiting harassment, discrimination, and retaliation.
Get the Financial Help You Need

Money shouldn't get in the way of getting a college education. The Financial Aid Office is here to help you get the financial support you need to afford college.

Financial Aid Eligibility

Generally, to be eligible for financial aid, students must:

- Demonstrate financial need (for most programs)
- Be a US citizen or an eligible non-citizen
- Have a valid Social Security number (with the exception of students from the Republic of the Marshall Islands, Federated States of Micronesia, or the Republic of Palau)
- Be registered with Selective Service (https://www.sss.gov), if you're a male (you must register between the ages of 18 and 25)
- Be enrolled or accepted for enrollment as a regular student in an eligible degree or certificate program
- Be enrolled at least half-time to be eligible for Direct Loan Program funds
- Maintain satisfactory academic progress
- Sign the certification statement on the Free Application for Federal Student Aid (FAFSA) stating that:
  - You are not in default on a federal student loan and do not owe money on a federal student grant
  - You will use federal student aid only for educational purposes
- Show you're qualified to obtain a college or career school education by one of the following:
  - Having a high school diploma or a recognized equivalent such as a General Educational Development (GED) certificate
  - Completing a high school education in a homeschool setting approved under state law (or – if state law does not require a homeschooled student to obtain a completion credential – completing a high school education in a homeschool setting that qualifies as an exemption from compulsory attendance requirements under state law)
  - Enrolling in an eligible career pathway program and meeting one of the ability-to-benefit alternatives (https://www.sss.gov)

Registering for Selective Service

Most male students must be registered with Selective Service to receive federal student aid. You also must register if you are a male and are not currently on active duty in the US armed forces. If you are a citizen of the Federated States of Micronesia, the Republic of the Marshall Islands or the Republic of Palau, then you are exempt from registering for selective service.

You can call Selective Service toll-free at (888) 655-1825 for general information about registering, register online at sss.gov (https://www.sss.gov), or register when you submit your Free Application for Federal Student Aid (FAFSA) (https://fafsa.ed.gov/).

Ability-to-Benefit Alternatives

If you were enrolled in college or career school prior to July 1, 2012, or if you are currently enrolled in an eligible career pathway program*, then you may show you're qualified to obtain a higher education by one of the following:

- Passing an approved ability-to-benefit test* (if you don't have a diploma or GED, a college can administer a test to determine whether you can benefit from the education offered at that school)
- Completing six credit hours or equivalent course work toward a degree or certificate (you may not receive aid while earning the six credit hours)

*For more information about these criteria, talk to the Financial Aid Office.

Contact Financial Aid Office
In This Section

Free Application for Federal Student Aid (/2020-2021-catalog/while-you-are-here/financial-aid/free-application-for-federal-student-aid)
The Free Application for Federal Student Aid (FAFSA) is a form you fill out to get financial aid. Financial aid includes fee waivers, grants, work study, loans, and scholarships.

California Dream Act Application (/2020-2021-catalog/while-you-are-here/financial-aid/california-dream-act-application)
The California Dream Act is a law that allows some undocumented and nonresident students to receive certain types of financial aid. To apply, students submit the California Dream Act Application (CADAA).

Promise Programs (/2020-2021-catalog/while-you-are-here/financial-aid/promise-programs)
Promise programs offer first-time, full-time students up to two years of tuition-free education at American River College.

Grants (/2020-2021-catalog/while-you-are-here/financial-aid/grants)
A grant is money given to you by the federal or state government that you don’t usually have to pay back.

Federal Work-Study (/2020-2021-catalog/while-you-are-here/financial-aid/federal-work-study)
The Federal Work-Study (FWS) program provides jobs to students to help them pay for their educational expenses.

Scholarships (/2020-2021-catalog/while-you-are-here/financial-aid/scholarships)
A scholarship is money given to you to help pay for your education or related expenses. Scholarships come from a variety of sources, such as your college or a private organization.

Federal Direct Loans (/2020-2021-catalog/while-you-are-here/financial-aid/federal-direct-loans)
A federal direct loan is money you borrow from the government that you have to pay back with interest. We encourage students to apply for grants and scholarships before taking out a student loan. A loan is a serious and long-term obligation.

Private Loans (/2020-2021-catalog/while-you-are-here/financial-aid/private-loans)
A private loan is money you borrow from a private lender that you have to pay back with interest. We encourage students to apply for grants and scholarships before taking out a student loan.
What is FAFSA?

The Free Application for Federal Student Aid (FAFSA) ([https://fafsa.ed.gov/](https://fafsa.ed.gov/)) is a form you fill out to get financial aid. Financial aid includes fee waivers, grants, work-study, loans, and scholarships. Submit the FAFSA each year you are in college – it only takes about 30 minutes to complete when you are prepared.

Though undocumented students cannot apply for aid through the FAFSA, they may be eligible for state financial aid through the [California Dream Act (https://dream.csac.ca.gov/)](https://dream.csac.ca.gov/).

Deadline to Submit FAFSA

Submit the FAFSA as early as you can. This will help you figure out how to pay for college before classes begin.

Academic Year 2020-2021

The 2020-2021 academic year includes fall 2020, spring 2021, and summer 2021.

- Date FAFSA available: October 1, 2019
- Deadline to submit FAFSA: March 2, 2020*
- Tax filing year to use for FAFSA: 2018

* You can submit the FAFSA after the "Deadline to Submit" date until June 30 of the following year, but priority is given on a first-come, first-served basis. You may not be considered for a Cal Grant if you submit your application after this date.

Federal School Code

American River College's federal school code is 001232. Make sure you include this on your FAFSA if you want to receive financial aid at American River College.
The California Dream Act is a law that allows undocumented and nonresident students (US citizens and eligible non-citizens) who qualify for a non-resident exemption under Assembly Bill 540 (AB 540) to receive certain types of financial aid. The California Dream Act is unrelated to the federal Deferred Action for Childhood Arrivals (DACA) program.

Instead of submitting the Free Application for Federal Student Aid (FAFSA), students for whom any of the following are true can submit the California Dream Act Application (https://dream.csac.ca.gov/) (CADAA) to receive financial aid. You are eligible to complete the CADAA if you:

- Are undocumented
- Have a valid or expired DACA status
- Are a U visa holder
- Have Temporary Protected Status (TPS)
- Meet the non-resident exemption requirements under AB 540

Financial Aid Available for Undocumented Students

Undocumented students may qualify for the following types of financial aid:

- State grants, including the California College Promise Grant (formerly BOG Fee Waiver), Cal Grants, Chafee Grants, and Student Success Completion Grant
- Assistance from EOPS, CARE, or CalWORKs
- Some scholarships
- Los Rios Promise Program
Promise Programs | American River College

Los Rios Promise

At American River College, we believe in you and your goals, and we want to see you achieve them – that's why we're making the Los Rios Promise. Promise programs offer first-time, full-time students up to two years of tuition-free education at any Los Rios college.

The Los Rios Promise covers tuition for 12 to 18 units but does not cover the cost of books or other fees. Learn about other types of financial aid (https://arc.losrios.edu/student-resources/financial-aid/types-of-financial-aid) that can help cover your expenses.

Deadline for Los Rios Promise Program Enrollment and FAFSA Completion

Eligible students must enroll in classes and submit the FAFSA/CADAA by the following deadlines to receive Los Rios Promise funds:

<table>
<thead>
<tr>
<th>2019-2020</th>
<th>2020-2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer 2019: June 3, 2019</td>
<td>Summer 2020: June 17, 2020</td>
</tr>
<tr>
<td>Fall 2019: August 14, 2019</td>
<td>Fall 2020: September 8, 2020</td>
</tr>
<tr>
<td>Spring 2020: January 9, 2020</td>
<td>Spring 2021: February 1, 2021</td>
</tr>
</tbody>
</table>

Eligibility

To be eligible for the Los Rios Promise, you must:

- Be a California resident
- Be a first-time college student*
- Enroll in and maintain at least 12 units for fall and spring semesters by the deadline
- Complete the Free Application for Federal Student Aid (FAFSA) or the California Dream Act Application (CADAA) by the deadline

* Courses taken during high school (through dual enrollment or advanced education) are considered "pre-college" and do not prevent you from taking advantage of the Los Rios Promise. Students who transfer from a college other than a Los Rios college are not eligible for the Los Rios Promise.

Los Rios Promise Funds for Summer Tuition Fees

To use Los Rios Promise funds to pay for your summer tuition fees, you must do both of the following by the Los Rios Promise Program Enrollment and FAFSA Completion deadline:

- Enroll in any number of units for the summer term
- Enroll in at least 12 units for the fall semester

Eligibility for a Second Year

To apply for the Los Rios Promise Program for a second year, you must have been enrolled in at least 24 units by the Los Rios Promise Program Enrollment and FAFSA Completion deadline for the previous year.
Grants | American River College

What is a Grant?

A grant is money given to you by the federal or state government that you don't usually have to pay back.

Types of Grants for Community College Students

Learn more about the types of grants available to community college students, eligibility, and how and when to apply.

Cal Grant B

Cal Grants are awarded by the State of California and do not have to be repaid.

What it Covers

Cal Grant B Entitlement and Competitive awards provide up to $1,670 for books and living expenses, plus up to an additional $2,000 for full-time community college students. If you transfer to an eligible four-year college or university, Cal Grant B also helps pay for tuition, fees, and living expenses.

Eligibility

Cal Grant B Entitlement awards are for first-year, low-income students whose academic program is at least one academic year.

Cal Grant B Competitive awards are for disadvantaged and low-income students who have a minimum 2.0 grade point average (GPA) and are enrolled in an academic program that is at least one year long.

How to Apply

To apply for a Cal Grant, you must submit the following by March 2 each year you are eligible:

- FAFSA (https://fafsa.ed.gov/) or the California Dream Act (https://dream.csac.ca.gov/) application* (if you do not have a social security number)
- Verified Cal Grant GPA (http://www.csac.ca.gov/pod/cal-grant-gpa-information)
- * DACA and AB 540 students are not eligible for Cal Grant Competitive awards.

Cal Grant C

Cal Grants are awarded by the State of California and do not have to be repaid.

What it Covers

Cal Grant C awards pay $547 toward tuition, books, tools, and equipment for students in occupational, technical, or vocational programs at community colleges.

Eligibility

Cal Grant C awards are for students enrolled in vocational programs that are at least four months long. Funding is available for up to two years, depending on the length of your program.

How to Apply

To apply for a Cal Grant C award, you must submit the following by March 2 each year you are eligible:

- FAFSA (https://fafsa.ed.gov/) or the California Dream Act (https://dream.csac.ca.gov/) application (if you do not have a social security number)
- Verified Cal Grant GPA (http://www.csac.ca.gov/pod/cal-grant-gpa-information)

California College Promise Grant
The California College Promise Grant (formerly BOG Fee Waiver) is just for California community college students and does not have to be repaid.

What it Covers

The California College Promise Grant waives enrollment fees for eligible students. It does not cover the cost of books or other expenses.

Eligibility

You may qualify for the California College Promise Grant if you are a California resident or are exempt from nonresident fees under AB 540 and you meet the criteria of Type A, Type B, or Type C described below.

Type A

You are receiving Temporary Aid For Needy Families (TANF), Supplemental Security Income (SSI/SSP), or General Assistance.

Type B

You meet the income standards listed below. Please note:

- Family size means the number of people in your household, including yourself
- Total family income means adjusted gross income and/or untaxed income for the year listed

<table>
<thead>
<tr>
<th>FAMILY SIZE</th>
<th>2017 TOTAL FAMILY INCOME (FOR 2019/2020 SCHOOL YEAR)</th>
<th>2018 TOTAL FAMILY INCOME (FOR 2020/2021 SCHOOL YEAR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$18,210</td>
<td>$18,735</td>
</tr>
<tr>
<td>2</td>
<td>$24,690</td>
<td>$25,365</td>
</tr>
<tr>
<td>3</td>
<td>$31,170</td>
<td>$31,995</td>
</tr>
<tr>
<td>4</td>
<td>$37,650</td>
<td>$38,625</td>
</tr>
<tr>
<td>5</td>
<td>$44,130</td>
<td>$45,255</td>
</tr>
<tr>
<td>6</td>
<td>$50,610</td>
<td>$51,885</td>
</tr>
<tr>
<td>7</td>
<td>$57,090</td>
<td>$58,515</td>
</tr>
<tr>
<td>8</td>
<td>$63,570</td>
<td>$65,145</td>
</tr>
<tr>
<td>Note</td>
<td>For each additional family member, add $6,480</td>
<td>For each additional family member, add $6,630</td>
</tr>
</tbody>
</table>

Type C

You submitted the Free Application for Federal Student Aid (FAFSA) or the California Dream Act application (if you don’t have a social security number) and it shows you have unmet financial need.

How to Apply

To apply, fill out the California College Promise Grant (https://home.cccapply.org/money/california-college-promise-grant) application online. Alternatively, you can fill out the application below and return the completed application to the Financial Aid Office.

- 19-20 California College Promise Grant Application (/shared/doc/financial-aid/forms/19-20_CCPG_Application.pdf) PDF (For Summer 2019, Fall 2019, Spring 2020)
- 20-21 California College Promise Grant Application (/shared/doc/financial-aid/forms/20-21_CCPG_Application.pdf) PDF (For Summer 2020, Fall 2020, Spring 2021)

Maintaining the California College Promise Grant

If you qualify for the California College Promise Grant, then make sure you continue to meet the following academic and progress standards to keep receiving the grant funds.

- Academic: Maintain a grade point average (GPA) of 2.0 or higher. If your cumulative GPA falls below 2.0 for two consecutive primary terms (fall/spring semesters), then you may lose your grant eligibility.
- Progress: Complete more than 50% of your coursework. If the cumulative number of units you complete is not more than 50% in two consecutive primary terms (fall/spring semesters, or fall/winter/spring quarters), then you may lose your grant eligibility.
- Combination of academic and progress standards: Any combination of two consecutive terms of cumulative GPA below 2.0 and/or cumulative unit completion of not more than 50% may result in loss of grant eligibility.

Chafee Grant for Foster Youth

Chafee Grants are awarded by the State of California to current or former foster youth. Chafee Grants do not have to be repaid.
What it Covers
A Chafee Grant can be used to pay for tuition, fees, books, supplies, transportation, living expenses, and child care.

Eligibility
To qualify for a Chafee Grant, you must meet the following criteria:

- You are a current or former foster youth who was a ward of the court, living in foster care, for at least one day between the ages of 16 and 18
- If you are or were in Kin-GAP, a non-related legal guardianship, or were adopted, you are only eligible if you were a dependent or ward of the court, living in foster care, for at least one day between the ages of 16 and 18
- You have not reached your 26th birthday as of July 1 of the award year
- You have not participated in the program for more than five years (consecutive or otherwise)

How to Apply
To apply for a Chafee Grant, you must submit the following each year you are eligible:

- FAFSA (https://fafsa.ed.gov/) or the California Dream Act (https://dream.csac.ca.gov/) application (if you do not have a social security number)
- The Chafee Grant (https://chafee.csac.ca.gov) application

Federal Pell Grant
Federal Pell Grant are awarded by the federal government and do not have to be repaid.

What it Covers
Federal Pell Grant can be used for tuition, fees, books, supplies, transportation, living expenses, and child care.

Eligibility
Federal Pell Grant is based on financial need, cost of attendance, the number of financial aid eligible units enrolled, and how long you plan to attend college. Eligible students can receive the Federal Pell Grant for up to six years (12 full-time semester or the equivalent), or 600%.

Pell Grant are usually only given to undergraduate students who have not earned a bachelor's degree or higher. In some cases, a student enrolled in a post-baccalaureate teacher certification program can receive a Federal Pell Grant. You are not eligible to receive a Pell Grant if you are incarcerated or are subject to an involuntary civil commitment upon completion of a period of incarceration for a forcible or non-forcible sex offense.

DACA and undocumented AB 540 students are not eligible to receive Federal Pell Grant.

How to Apply
Submit the FAFSA (https://fafsa.ed.gov/) every year to see if you qualify for a Federal Pell Grant. The amount of other student aid you qualify for does not affect the amount of your Federal Pell Grant.

Federal Supplemental Educational Opportunity Grant (FSEOG)
Federal Supplemental Educational Opportunity Grants are awarded by the federal government and do not have to be repaid.

What it Covers
A FSEOG can be used for tuition, fees, books, supplies, transportation, living expenses, and child care. You can receive $100 to $600 per year.

Eligibility
FSEOGs are awarded based on financial need, how early you apply, number of financial aid eligible units enrolled, and total amount of Financial Aid.

FSEOGs are only given to undergraduate students who have not earned a bachelor's or a professional degree.

DACA and AB 540 students are not eligible to receive FSEOGs.

How to Apply
Submit the FAFSA (https://fafsa.ed.gov/) each year to see if you qualify for a FSEOG. American River College has a limited amount of FSEOG funds, so make sure you submit your FAFSA as early as possible.

Student Success Completion Grant (SSCG)
What it Covers
The Student Success Completion Grant (SSCG) provides up to $4,000 per year to pay for educational costs.

Eligibility
To qualify for a SSCG, you must be:

- A Cal Grant B or C recipient
- Enrolled in at least 12 units each semester

Students enrolled in 12 to 14.99 units will receive $649 for that semester. Students enrolled in 15 or more units will receive $2,000 for that semester.

How to Apply
Students who qualify will be notified. No additional application is necessary for eligibility for the SSCG.
Federal Work-Study | American River College

What is Federal Work-Study?
The Federal Work-Study (FWS) program provides jobs to students to help them pay for their educational expenses.

Eligibility
To be eligible, you must:

- Have a complete financial aid file
- Have unmet financial need
- Be enrolled in at least six financial aid course eligible units at American River College*
- Maintain satisfactory academic progress

*If you are enrolled at multiple Los Rios colleges, then you must have an approved consortium on file for those units to be counted towards your enrollment status.

You are not guaranteed a FWS job just because you are eligible for FWS. FWS jobs are limited, so make sure you apply for a FWS job as early as possible.

Hours
FWS students work an average of 17 hours per week during the fall and spring semesters. Students may be employed for no more than 26 hours per week during a semester and no more than 40 hours per week between semesters. The number of hours may change depending on the needs of the department. Summer FWS hours are based on funding availability.

You may not work more than the number of hours you were awarded.

Pay
FWS students are paid an hourly rate at minimum wage. On average, FWS students earn up to $7,000 during the school year. Paychecks are distributed on the tenth of each month.

Disclaimer
We reserve the right to reduce your FWS award at the end of the fall or spring semester for hours not worked or due to ineligibility. Your FWS award may also be reduced if your financial need changes. You will be notified of any change via email and it is your responsibility to notify your supervisor of the change.
What is a Scholarship?

A scholarship is money given to you to help pay for your education or related expenses. Scholarships come from a variety of sources, such as your college or a private organization.

Examples of types of scholarships:

- Merit scholarships are based on a student's achievements.
- School scholarships are given to students by the school they attend.
- Work scholarships require students to work to receive scholarship money.
- Field of Study scholarships are given to students pursuing a specific field of study or academic program.
- Need scholarships are based on financial need.
- Student-specific scholarships can be based on a student's nationality, gender, race, religion, medical history, and so on.

The Financial Aid office maintains a list of local, state, and national scholarships. Enrollment verification is usually required.

LEARN MORE ABOUT SCHOLARSHIPS ➤ (HTTPS://ARC.LOSRIOS.EDU/SCHOLARSHIPS)
Federal Direct Loans | American River College

What is a Federal Direct Loan?

A federal direct loan is money you borrow from the government that you have to pay back with interest. We encourage students to apply for grants and scholarships before taking out a student loan. A loan is a serious and long-term obligation.

Loan Eligibility

To be eligible for a federal student loan, you must:

- Submit the Free Application for Federal Student Aid (FAFSA) (https://fafsa.ed.gov)
- Demonstrate that you are qualified to enroll in college by one of the following means:
  - You have a high school diploma
  - You have a General Education Development (GED) Certificate
  - You passed the California High School Proficiency Exam (CHSPE)
- Be a US citizen or eligible non-citizen with a social security number (SSN)
- Be enrolled in an eligible degree or certificate program
- Maintain satisfactory academic progress
- Register with the US Selective Service (for males age 18 to 25)
- Have never been convicted of selling or possessing illegal drugs
- Certify that you will use federal financial aid only for educational purposes
- Certify that you are not in default on a federal student loan and do not owe money on a federal student grant

All borrowers must sign the Master Promissory Note (MPN) annually. New borrowers must also complete entrance loan counseling through studentloans.gov (https://studentloans.gov).

Types of Federal Loans

Subsidized Direct Loans

Subsidized direct loans are given to eligible students who demonstrate financial need.

The federal government pays the interest on subsidized loans while you are enrolled in school at least half-time (six units in the fall or spring semester; three units in the summer semester). If you graduate, drop below half-time, or withdraw from school, then you have a six-month grace period where the federal government will continue to pay the interest on your loan. After the six-month grace period, you are responsible for paying the interest on your loan.

Unsubsidized Direct Loans

Unsubsidized direct loans are given to eligible students, regardless of their financial need. The combined amount of an unsubsidized direct loan and all other financial aid that you receive cannot exceed the cost of attendance.

Interest accrues from the time the loan is disbursed, and interest payments begin immediately but can be deferred until you are done with school. It is advantageous to pay the interest while you are in school. This way, the debt will be the principal amount only when repayment begins. Regular monthly payments begin six months after you graduate, drop below half-time status, or withdraw from school.

Annual Loan Limits
<table>
<thead>
<tr>
<th>YEAR</th>
<th>DEPENDENT STUDENTS (EXCEPT STUDENTS WHOSE PARENTS ARE UNABLE TO OBTAIN PLUS LOANS)</th>
<th>INDEPENDENT STUDENTS (AND DEPENDENT UNDERGRADUATE STUDENTS WHOSE PARENTS ARE UNABLE TO OBTAIN PLUS LOANS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>First-Year Undergraduate Annual Loan Limit</td>
<td>$5,500 – no more than $3,500 of this amount may be in subsidized loans.</td>
<td>$9,500 – no more than $3,500 of this amount may be in subsidized loans.</td>
</tr>
<tr>
<td>Second-Year Undergraduate Annual Loan Limit</td>
<td>$6,500 – no more than $4,500 of this amount may be in subsidized loans.</td>
<td>$10,500 – no more than $4,500 of this amount may be in subsidized loans.</td>
</tr>
<tr>
<td>Subsidized and Unsubsidized Aggregate Loan Limit</td>
<td>$31,000 – no more than $23,000 of this amount may be in subsidized loans.</td>
<td>$57,500 for undergraduates – no more than $23,000 of this amount may be in subsidized loans.</td>
</tr>
</tbody>
</table>

**Borrower's Rights and Responsibilities**

When you accept a loan, you accept legal rights and responsibilities that last until the loan is repaid.

**Borrower's Rights**

You have the right to:

- Receive a copy of your promissory note either before or at the time the loan is made
- Receive a disclosure statement before repayment on your loan begins, including information about:
  - Interest rates
  - Fees
  - Loan balance
  - The number of payments
  - The amount of each payment
- A grace period after you leave school or drop below half-time status and before your loan payments begin (if applicable)
- Prepay all or part of your loans without a repayment penalty
- Receive written notice if your loan is sold to a new holder
- Apply for deferment for your loan payments for certain specified periods (if eligible)
- Request forbearance from the holder of your loan if unable to make payments and don't qualify for deferment
- Receive proof when your loan is paid in full

**Borrower's Responsibilities**

You agree to:

- Repay your loan(s), including accrued interest and fees, even if you do not:
  - Complete or find satisfaction in your education
  - Complete the program within the regular timeframe
  - Obtain employment
- Attend exit counseling before you leave school or drop below half-time enrollment
- Notify your loan holder within ten days if you:
  - Change your name, address, or phone number
  - Drop below half-time status
  - Withdraw from school
  - Transfer to another school
Loan Exit Counseling

All students who receive a loan must complete mandatory online loan exit counseling through the Department of Education. Loan exit counseling provides important information regarding repayment, deferment, and default prevention.

How to Complete Loan Exit Counseling

Visit [studentloans.gov](https://studentloans.gov/ExitCounseling) to complete loan exit counseling. You will need your FAFSA PIN to complete the loan exit counseling. Be sure to select American River College (federal school code: 001232) when asked, otherwise the Financial Aid Office will not receive confirmation that you completed the requirement.

When to Complete Loan Exit Counseling

Loan recipients must complete loan exit counseling when they do any of the following:

- Withdraw from college
- Drop below half-time units
- Transfer to another college
- Graduate

Failure to complete loan exit counseling may result in the delay of your financial aid processing.
Private Loans | American River College

What is a Private Loan?

A private loan is money you borrow from a private lender that you have to pay back with interest. We encourage students to apply for grants (https://arc.losrios.edu/grants) and scholarships (https://arc.losrios.edu/scholarships) before taking out a student loan. If you have to take out a loan, then we encourage you to learn more about federal direct loans (https://arc.losrios.edu/federal-direct-loans) before considering a private loan. A loan is a serious and long-term obligation.

Private loans are determined based on credit. They accrue interest and typically have higher interest rates than federal direct loans. Private loans also do not generally offer the same repayment protections that federal direct loans do.

Students may establish a private loan through any banking institution of their choice. Disbursements are typically made via check.

Code of Conduct for Private Loans

American River College is prohibited from engaging in any business arrangement that is a conflict of interest between the college and private lenders in accordance with the Truth in Lending Act (15 U.S.C 1638(e)). American River College does not:

- Receive any revenue sharing with any lender
- Receive gifts from lenders, guarantors, or loan services
- Have contracting arrangements providing financial benefit from any lender or affiliate of a lender
- Direct prospective student borrowers to a particular lender
- Maintain a preferred lender list
- Delay or refuse loan certifications based upon choice of private lender
- Offer funds for private loans
- Receive any compensation for members of the college that may belong to the advisory board of any lender
Academic Freedom

Statement of Principles on Academic Freedom (American Association of University Professors)

- The purpose of this statement is to promote public understanding and support of academic freedom and tenure and agreement upon procedures to ensure them in colleges and universities. Institutions of higher education are conducted for the common good and not to further the interest of either the individual teacher or the institution as a whole. The common good depends upon the free search for truth and its free exposition.

- Academic freedom is essential to these purposes and applies to both teaching and research. Freedom in research is fundamental to the advancement of truth. Academic freedom in its teaching aspect is fundamental for the protection of the rights of the teacher in teaching and the freedom of the student in learning. It carries with it duties correlative with rights.

- Teachers are entitled to freedom in the classroom in discussing their subject, but they should be careful not to introduce into their teaching controversial matter, which has no relation to their subject.

- College and university teachers are citizens, members of a learned profession, and officers of an educational institution. When they speak or write as citizens, they should be free from institutional censorship or discipline, but their special position in the community imposes special obligations. As scholars and educational officers, they should remember that the public may judge their profession and their institution by their utterances. Hence they should at all times be accurate, should exercise appropriate restraint, should show respect for the opinions of others, and should make every effort to indicate that they are not speaking for the institution.

Academic Honors

The distinction of honors and highest honors is noted on a student’s transcript for each semester in which a student has enrolled in twelve (12) units or more, and has earned a grade point average (GPA) of at least 3.0 (honors) or 3.5 or higher (highest honors). Students earning highest honors will be notified by email of their eligibility to join the honor society, Phi Theta Kappa.

Honors at Graduation

Students who maintain a high grade point average are eligible for honors at graduation. Students who maintain a grade point average of 3.0 or better are eligible for graduation with honors, and students who maintain a grade point average of 3.5 or better are eligible for graduation with highest honors. All college coursework that a student has completed is used to calculate honors at graduation (including coursework taken outside of Los Rios). The published lists of students are compiled from the data available at the time of publication and may be subject to subsequent revision.

Academic Renewal

A student may petition to have previous sub-standard grades (a D or F) earned at American River College discounted. Courses and grades which no longer reflect a student’s current educational objective and current level of academic success may upon petition be discounted in the computation of the grade point average (Title 5, Section 55046). The following conditions must apply:

- A minimum of twelve (12) consecutive months shall have elapsed since the end of the semester or summer session in which the work to be alleviated was recorded; and a minimum of twelve (12) semester units (or its equivalent) with a grade of C or Pass/Credit or better shall have been attained. The coursework must have been completed at a regionally accredited college.

- Current educational objectives must be discussed with a counselor and the counselor’s recommendation must be included on the petition.

- No more than thirty (30) units of substandard grades may be discounted.

- Under no circumstances may course work be discounted if it was used to fulfill requirements for a degree or certificate that has been awarded.

- All grades remain on the permanent record and transcript of grades. However, a proper notation on the transcript will indicate the specific grades that were discounted from the grade point average.

- Once elected, the academic renewal cannot be reversed.

- Academic renewal is not intended for courses that are required and/or will be repeated.

Students with questions regarding this policy or who want to initiate a petition should contact the Counseling office.

Attendance
For students to successfully complete their college work, regular class attendance is necessary, and students are expected to attend all sessions of classes in which they are enrolled (Los Rios Regulation R-2222). All students who remain enrolled in a class after the last day to withdraw (see the academic calendar) will be issued a letter grade for the course. If a student has stopped attending but not dropped the class, the student may receive an F grade for the course on their permanent record. Exception to this policy involves completion of the Student Petition, with appropriate signatures and documentation of extenuating circumstances.

**Excessive Absences**
Students are expected to attend all sessions of the class in which they are enrolled. Any student with excessive absences may be dropped from class (Title 5, Section 58004).

Per Los Rios Regulation R-2222, a student may be dropped from any class when that student's absences exceed six percent (6%) of the total hours of class time. Instructors shall state in each course syllabus what constitutes excessive absences for that course.

**Non-Attendance at First Class**
Per Los Rios Regulation R-2222, students who fail to attend the first session of a class may be dropped by the instructor.

**Auditing Courses**
American River College does not permit auditing of classes. Auditing is defined as attending a course without having enrolled in the course, without responsibility for completing assignments, and without receiving a grade or credit.

**Catalog Rights**
For purposes of graduation from any of the colleges of the Los Rios Community College District, students who remain in attendance in one regular session (semester or summer session) may elect to meet the requirements in effect at the Los Rios college from which the student intends to graduate, in one of three ways:

1. Requirements in effect at the time of admission to a Los Rios college
2. Requirements in effect at the time the student originally enrolled in a regionally accredited college or university
3. Requirements in effect at the intended date of graduation from a Los Rios college

Please note:

- A college may authorize or request substitution for discontinued courses.
- Students changing their major field of study may be required to complete those requirements for the major in effect at the point of change.
- For purposes of this section, “attendance” means taking classes in at least one session (semester or summer session) in each calendar year. Absence for attendance at another regionally accredited institution shall not be considered an interruption in attendance, Los Rios Policy P-7242.

**Change of Address and/or Name**
Requests to have a student's name changed are submitted directly to the Admissions & Records office. In order for this type of request to be processed, documentation (such as a marriage license, court documents, or naturalization papers) is required to verify a legal name change.

Students should report a change of address immediately. Changes can be submitted online in eServices or by submitting a Change of Data form to the Admissions & Records office. American River College is not responsible for misdirected mail if the address change is not provided by the student.

Students can submit birth date and social security number corrections to the Admissions & Records office along with proper documentation (official birth certificates or social security verification).

**Course Repetition and Repeatability**
Repetition of courses must be conducted by all California community colleges in compliance with Title 5, Sections 55040 through 55046.

**Course Repetition Where Substandard Grade is Recorded**
Where a student has received a substandard grade in a course taken at a college, a student may repeat that course up to a maximum of two (2) times in an effort to alleviate the substandard academic grade. Substandard grade is defined as a notation of D, F, NC (No Credit), NP (No Pass), or W (Withdrawal). This regulation is effective across all Los Rios colleges.

The grade and credits earned in the final enrollment shall be used exclusively in determining the grade points earned for that particular course (Title 5, Section 55042).

**Repeatable Courses**
Courses taken where a grade of C or better was earned cannot be repeated. There are, however, certain specialized courses that are designated as "repeatable" and are listed as such in the course description. These include:

- Courses for which repetition is necessary to meet the major requirements of CSU or UC for completion of a bachelor's degree
Intercollegiate athletics and their related conditioning courses may be repeated to meet requirements for California Community College Athletic Association (CCCAA) eligibility.

Intercollegiate academic or vocational competition courses with the primary purpose to prepare students for competition

Variable unit courses that are open entry/exit such as math, reading, and writing laboratory courses. Students may re-enroll in these courses as many times as necessary to complete one time the entire curriculum of the course.

Work Experience courses, which can be taken again when there is new or expanded learning on the job for a maximum of six (6) to sixteen (16) units.

Repetition Without Substandard Grades

Unless a specific exception applies, a student who has received a satisfactory grade shall not repeat the course. Satisfactory grade is defined as A, B, C, P (Pass), or CR (Credit). There are special circumstances that allow for repetition. However, the student must submit a petition requesting the course repetition. These include:

- Students may repeat a course where a course is required by a statute or regulation as a condition of continued paid or volunteer employment, or as a result of a significant change in industry or licensure standards such that repetition is necessary for employment or licensure. These repetitions are not limited and are granted based on the college's verification of established legal mandates (Cal. Code Regs., Title 5, section 55040).

- Students may repeat a course if there has been a significant lapse of time since the first grade was obtained, and:
  - If the college has a properly established recency prerequisite for a course or program (Title 5, Section 55043).
  - If the college finds that another institution of higher education to which the student seeks to transfer has established a recency requirement which the student shall not be able to satisfy without repeating the course in question (Title 5, Section 55043).

- The college finds that the student's most recent previous grade is, at least in part, the result of extenuating circumstances. Extenuating circumstances are verified cases of accident, illness, or other circumstances beyond the student's control. This is a one-time exception.

- A special course that can be repeatable by petition so that a particular student can be approved to repeat it as a disability-related accommodation.

Limitations on Active Participatory Courses

Active participatory courses are those courses where individual study or group assignments are the basic means by which learning objectives are obtained. These include kinesiology/physical education (PE) active participatory courses, as well as visual and performing arts active participatory courses (theatre arts, music, and art). Some courses in these categories are related in content and have been placed in groups that the Los Rios colleges are calling “families” of courses. Each family of courses allows for skill development beyond an introductory level.

Students are limited to taking a maximum of four courses in any one family across all four Los Rios colleges, regardless of how many courses there are. Sometimes a family of courses may include more than four. For example, the Modern Dance Technique family of courses across the four Los Rios colleges includes five courses – DANCE 330 through DANCE 334 (Modern Dance I, II, III, IV, and V).

In addition, if a student gets a substandard grade [a notation of D, F, NC (No Credit), NP (No Pass), or W (Withdrawal)] in any course within a family, the substandard grade counts as one of the four course limitations in the family. The list of families of courses is available in the Counseling office. Please consult with a counselor for more information.

Course Time Conflict/Course Overlap

Students may not enroll in two classes that meet during part of the same hour, except through a petition process. The student must state their justification for enrolling in the overlapping class, and instructors must indicate how the missed time will be made up (Title 5, Section 58031).

Good Standing

In some circumstances, a previous sub-standard grade (a D or F) can be alleviated. You may petition to discount these units in computing your grade point average (GPA) if they meet the criteria set out by the Admissions and Records policies. However, no discount will be given for coursework required for a degree or certificate that has been granted.

Grades and Grade Point Averages (GPA)

Types of Grades

<table>
<thead>
<tr>
<th>LETTER GRADE</th>
<th>EXPLANATION</th>
<th>GRADE POINTS PER UNIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Excellent</td>
<td>Four (4) grade points per unit</td>
</tr>
<tr>
<td>B</td>
<td>Good</td>
<td>Three (3) grade points per unit</td>
</tr>
<tr>
<td>C</td>
<td>Satisfactory</td>
<td>Two (2) grade points per unit</td>
</tr>
<tr>
<td>D</td>
<td>Passing (not satisfactory)</td>
<td>One (1) grade point per unit</td>
</tr>
</tbody>
</table>
Types of Grades

<table>
<thead>
<tr>
<th>LETTER GRADE</th>
<th>EXPLANATION</th>
<th>GRADE POINTS PER UNIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>Failing</td>
<td>Zero (0) grade points per unit</td>
</tr>
<tr>
<td>P</td>
<td>Pass (C or better)</td>
<td>Not computed in GPA</td>
</tr>
<tr>
<td>NP</td>
<td>No Pass (less than C)</td>
<td>Not computed in GPA; affects progress probation and dismissal</td>
</tr>
<tr>
<td>I</td>
<td>Incomplete</td>
<td>Not computed in GPA; affects progress probation and dismissal</td>
</tr>
<tr>
<td>W</td>
<td>Withdrawal</td>
<td>Not computed in GPA; affects progress probation and dismissal</td>
</tr>
<tr>
<td>EW</td>
<td>Excused Withdrawal</td>
<td>Not computed in GPA; does not affect progress probation and dismissal; does not count as one of your three attempts</td>
</tr>
</tbody>
</table>

Grade Point Average
The grade point average is found by taking the (Total Grade Points Earned) divided by (Total units attempted with a letter grade).

Progress Percentage
The progress percentage is found by taking the (Total units with W, I and NC) divided by (Total units enrolled).

Pass/No Pass Grading
You may choose one course each semester from courses that allow Pass/no Pass (P/NP) grading. A petition must be filed with the admissions office before the deadline published in the Class Schedule. A grade earned with an "A", "B" or "C" grade will be recorded as P with Grade Points Per Unit. A "D" or "F" grade will be recorded as NP with no Grade Points Per Unit. Units attempted for P/NP grades are not computed in the grade point average but are used for determining progress probation and dismissal. Once you have filed for P/NP grading in a course, it cannot be changed to a letter grade. No more than 15 units of Pass/No Pass may be applied toward an AA or AS degree.

Incomplete Grading
An instructor may assign an incomplete grade, "I", when the instructor believes the student cannot complete the requirements of the class before the end of the semester due to unforeseeable emergency and justified reasons. To receive credit for the class, the student must finish the incomplete work within one year after the end of the semester. After the work is completed and evaluated, or when the time has expired, a final grade will be assigned. A student receiving an incomplete may not reenroll in the class.

In Progress
If you receive an "in-progress" grade, you must re-enroll in the class in the next semester. If you don't re-enroll, a grade will be assigned in lieu of the "in-progress."

Withdrawal from Class
A student may officially drop a class without notation on the permanent academic record/transcript prior to the point in which 15% of a class has occurred (see the academic calendar [https://arc.losrios.edu/admissions/academic-calendar] for withdrawal deadlines). Withdrawals occurring after this time, and before the point in which 75% of the class has occurred, shall result in a W notation on the permanent academic record/transcript. Official withdrawals are those that have been processed via eServices or in the Admissions and Records office.

A W grade on the permanent academic record/transcript is used for determining progress probation and progress dismissal. No withdrawals are permitted during the last 25% of a course (see academic calendar for deadlines), except due to extenuating circumstances (verified cases of accidents, illness, or other circumstances beyond the control of the student), for which a student may request withdrawal through the student petition process. After consultation with the instructor and with administrative approval, the grade may be recorded as a W rather than as a less than satisfactory or failing grade on the permanent academic record/transcript. In all other cases, after the 75% date, a student will receive a grade in the course.

Military withdrawal is available for students who are members of an active or reserve military service, and who receive orders compelling a withdrawal from courses. Students requesting military withdrawal must file a student petition and include supporting documentation.

Excused withdrawal is available when a student is permitted to withdraw from a course(s) due to specific events beyond the control of the student making his or her ability to complete a course(s) impractical. These events may include a job transfer outside the geographical region, an illness in the family where the student is the primary caregiver, when the student who is incarcerated in a California state prison or county jail is released from custody or involuntarily transferred before the end of the term, when the student is the subject of an immigration action, or other extenuating circumstances. Excused withdrawal shall not be counted in progress probation and dismissal calculation. Excused withdrawal shall not be counted toward the permitted number of withdrawals or counted as an enrollment attempt.

Probation and Dismissal
There are two types of probation: academic and progress.

Academic Probation
A student who has attempted at least twelve (12) units is placed on academic probation if the student has earned a cumulative grade point average below 2.0.

Progress Probation
A student who has enrolled in a minimum of twelve (12) semester units is placed on progress probation when W, I, or NP grades are recorded in one-half or more of all units in which a student has enrolled.
Unit Limitation
A student on either academic or progress probation may be limited to 12 or fewer units, or to a course load recommended by the student’s counselor.

Removal from Probation
A student on academic probation is removed from probation and achieves good standing when the student’s cumulative grade point average is 2.0 or higher.
A student on progress probation is removed from probation and placed in good standing when less than half of the student’s units are recorded as W, I, or NP.

Remedial Unit Limitation
The California Community Colleges Board of Governors has adopted regulations limiting the number of remedial course units a student may take to 30. These courses are usually numbered 1 through 99. Students may petition for a waiver to the 30-unit limitation through a counselor. However, federal financial aid does not allow a student to receive aid for more than 30 remedial units.

Transcripts
Order Transcripts Online
Current and former students can order transcripts and authorize the release of student records online. Students must submit a separate order for each Los Rios college they attended.

ORDER TRANSCRIPTS ONLINE ➔ (HTTPS://ARC.LOSRIOS.EDU/ORDER-TRANSCRIPTS)

Unit/Academic Load
Per Los Rios Regulation R-7211, fifteen (15) units each semester is considered a full load. Twelve (12) units each semester is a minimum full-time load and is usually acceptable to qualify for scholarships, grants, loans, and holding student offices.

Fall/Spring Semester
Eighteen (18) units per semester is a maximum load. Unit limit shall be district-wide. A petition to exceed the maximum load must be submitted in writing to the college at which the additional units will be taken prior to registration. A student may petition up to a maximum of six (6) additional units district-wide through this process.

Summer Session
Eight (8) units per summer session is a maximum load. Unit limit shall be district-wide. A petition to exceed the maximum load must be submitted in writing to the college at which the additional units will be taken prior to registration. A student may petition up to a maximum of four (4) additional units district-wide through this process.

Special Considerations
Full governmental subsistence for veterans and dependents requires the unit load of twelve (12) units (with reduced benefit amounts dependent on the total number of enrolled units).

The following categories require the minimum unit load indicated:

- International students – twelve (12) units
- Student athletes – twelve (12) units, including kinesiology/physical education

Unit of Credit
Units of credit are assigned to courses based on the "Carnegie Unit," which assigns one unit of credit for three hours of work by the student per week. Usually this means one hour of lecture or discussion led by the instructor and two hours of outside preparation by the student. In laboratory courses, three hours of work in the laboratory are normally assigned one unit of credit which may include some additional preparation outside of class time. Students can find the number of units of credit with each course description.
Enrollment Verification | American River College

Enrollment verification for child care, health insurance, or car insurance can be printed out via eServices or requested by fax or in-person. All other requests can be processed immediately by the National Student Clearinghouse for a fee.

Verifications for Child Care, Health Insurance, and Car Insurance

eServices

You can print or save an enrollment verification certificate for free through eServices (https://ps.losrios.edu/student/signon.html). From your eServices dashboard:

1. Click Student Center
2. Click Enrollment Verification (under Academics)
3. Follow the instructions to get to your printable verification

Fax and In-Person Requests

We do not accept verification requests over the phone. Faxed and in-person requests are processed in five to seven business days after we receive the request. We do not fax back verifications – all verifications must be picked up in person at Admissions and Records. You must provide a photo ID when you pick up your enrollment verification.

Other Enrollment and Degree Verifications

Requests from the following types of companies or individuals will be directed to the National Student Clearinghouse:

- Credit issuers
- Travel and consumer product companies
- Housing providers
- Scholarship providers
- Employers and employment agencies
- Verifications required by students or parents that do not include child care, health insurance, or car insurance

For your convenience, Los Rios has authorized the National Student Clearinghouse to act as its agent for verification of student enrollment and degree status. You can obtain an official Enrollment Verification Certificate at any time via the National Student Clearinghouse website at nscverifications.org (http://nscverifications.org/welcome-to-verification-services/).
In addition to regular classes, students may receive college credit when they participate in the following alternative credit and study options.

Advanced Placement (AP) Exams

American River College grants credit for College Board Advanced Placement (AP) examinations. A student who meets the following requirements may receive credit for exams they successfully passed:

- Official copies of test scores are on file with Admissions and Records
- Student is in good standing, which is defined as having completed twelve (12) units of credit and having a minimum 2.0 grade point average (GPA)

Students should be aware that other colleges and universities have the right to accept, modify, or reject the use of AP scores towards their graduation requirements. Check with your counselor to determine whether these test results will be accepted at the transfer institution of your choice.

Review the [AP Credit Chart](https://arc.losrios.edu/ap-scores-chart) to see how American River College grants credit for AP exams.

College-Level Examination Program (CLEP)

American River College grants credit for College-Level Examination Program (CLEP) examinations. CLEP scores fulfill general education areas only; they do not fulfill graduation competencies, requirements for any major at American River College, or enrollment limitations (such as prerequisite requirements) for any course at American River College.

A student may receive credit for CLEP exams they have successfully passed once the following requirements are met:

- Official copies of test scores are on file with Admissions and Records
- Student has completed twelve (12) units of credit and has a minimum 2.0 grade point average (GPA)

Visit the [College Board's College-Level Examination Program website](https://clep.collegeboard.org) to learn more.

CLEP scores are not accepted for transfer to the University of California. Students should be aware that other colleges and universities have the right to accept, modify, or reject the use of CLEP scores towards their graduation requirements. Check with your counselor to determine whether these test results will be accepted at the transfer institution of your choice.

Review the [CLEP Credit Chart](https://arc.losrios.edu/clep-scores-chart) to see how American River College grants credit for CLEP exams.

International Baccalaureate (IB) Tests

American River College may award college credit for international baccalaureate (IB) higher-level course completion, if the course work is compatible with the college's curriculum. No credit will be granted for lower-level course work completed in the IB program.

A student who meets the following requirements may receive credit for IB tests they successfully passed:

- Official copies of test scores are on file with Admissions and Records
- Student is in good standing, which is defined as having completed twelve (12) units of credit and having a minimum 2.0 grade point average (GPA)

Review the [IB Credit Chart](https://arc.losrios.edu/ib-scores-chart) to see how American River College grants credit for IB tests.

Students should be aware that other colleges and universities have the right to accept, modify, or reject the use of IB scores towards their graduation requirements. Check with your counselor to determine whether these test results will be accepted at the transfer institution of your choice.

Students who have earned credit from an IB test should not take a comparable college course because transfer credit will not be granted for both.

Credit by Examination

Under special circumstances and with department approval, students regularly enrolled and in good standing who believe they are qualified by experience or previous training may take a special examination to establish credit in a course in which they are not formally enrolled. A student who wishes to petition for credit by examination must have:
• Successfully completed a minimum of 12 units at American River College

• A minimum grade point average (GPA) of 2.0

Successful completion of a course by examination is recorded on the permanent record/transcript as a Pass (P) grade. The P grade does not enter into the computation of the student's GPA.

Limitations
A maximum of 15 units may be allowed by credit by examination. The units may not be used to satisfy the 12-unit residence requirement for graduation. Credit by examination is not applicable to all courses, and in some instances, the process may require measures of evaluation.

Some four-year colleges and universities do not accept units granted through credit by examination. Students are encouraged to meet with a counselor for more information.

For more information, contact the area dean.

Credit for Military Service
Veterans may receive credit for military service if they present papers showing honorable discharge from active duty of one year or more in the United States armed forces.

How to Apply
After you have completed one semester at American River College, submit a copy of your DD-214 (member copy 4) separation paper and a petition to the Admissions and Records Office.

You may be eligible to receive the following credit (if applicable):

• Three (3) units of living skills graduation requirements
• One (1) unit of elective credit

In some circumstances, veterans may also receive credit for satisfactory training completed in service school.

Guidance from the American Council on Education
Credit granted for military service is based on A Guide to the Evaluation of Educational Experiences in the Armed Services, published by the American Council on Education.

Students in the six-month reserve training program are not eligible for military credit. This is in accordance with the recommendation of the American Council on Education.

Students are encouraged to contact a counselor for more information.

Distance/Online Education
American River College offers instruction via the internet. This includes online course sections where all work is carried out online, and partially online course sections where instruction is divided between online and in-person modalities.

To be successful in online courses, students need to be self-directed, motivated, and able to independently complete and electronically submit assignments on schedule. Students will also need reliable access to a computer and basic internet skills.

Online Classes
In online classes, classes meet online and all coursework is done online.

Partially Online or "Hybrid" Classes
Partially online classes feature a mix of online and in-person meetings and coursework. Class schedules will indicate the day/time of the in-person, on-campus class sessions.

Online Learning Platform
All online classes are offered through Canvas (https://canvas.losrios.edu), a cloud-based learning management system used by faculty and students within Los Rios Community College District.

Learn more about online education at American River College (https://arc.losrios.edu/academics/online-education).

Independent Study
An independent study course involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses, pursuant to an agreement among the college, faculty member, and student(s). Independent studies require regular meetings between the student and instructor. Additionally, the instructor may require examinations or other measures of evaluation, field trips, term papers, and other assignments.

Please note that some four-year colleges and universities do not accept units granted through independent study. Students are encouraged to meet with a counselor for more information.

For the appropriate petition and course proposal form, please contact Admissions and Records (https://arc.losrios.edu/admissions-records).
Study Abroad

Study abroad can be an enlightening, maturing, and life-changing experience. Students are challenged to re-examine themselves, their attitudes, and their studies as they learn to understand new and different cultures. In cooperation with the American Institute for Foreign Study, Los Rios Community College District offers unique study opportunities in cities such as:

- London, England
- Barcelona, Spain
- Florence, Italy

Requirements

To study abroad, students must:

- Be at least 18 years old
- Be in good academic standing with 12 college units completed by the time you go abroad
- Have a minimum overall grade point average (GPA) of 2.25

During the 13-week Study Abroad program, all students take 12 units – a three-unit Life and Culture class, an additional Los Rios class, and two other classes from the list of offerings.

Financial Aid

Financial Aid is available for study abroad.

Upcoming Study Abroad Opportunities

Learn more about current and upcoming study abroad opportunities (https://arc.losrios.edu/study-abroad).

Work Experience and Internship Program

Work experience is an academic program in which students apply what they have learned in the classroom to a job or internship and work to earn college credits. There are two types of programs: vocational and general.

For more information, please visit the Work Experience and Internship Program (https://arc.losrios.edu/wexp).
Students may earn credit for College Entrance Board Advanced Placement (AP) tests with scores of 3, 4, or 5. AP scores can be used to meet American River College AA/AS general education requirements (/2020-2021-catalog/while-you-are-here/alternative-credit/study-options/advanced-placement-test-scores#aa-as-ge), California State University (CSU) general education requirements (/2020-2021-catalog/while-you-are-here/alternative-credit/study-options/advanced-placement-test-scores#csu-ge), and Intersegmental General Education Transfer Curriculum (IGETC) (/2020-2021-catalog/while-you-are-here/alternative-credit/study-options/advanced-placement-test-scores#igetc).

A student may receive credit for AP exams they have successfully passed once the following requirements are met:

- Official copies of test scores are on file with Admissions and Records
- Student has completed twelve (12) units of credit and has a minimum 2.0 grade point average (GPA)

Students should be aware that other colleges and universities have the right to accept, modify, or reject the use of AP scores towards their graduation requirements. Check with your counselor to determine whether these test results will be accepted at the transfer institution of your choice.

### AP Credit Toward American River College General Education Requirements

This table describes how passing AP scores translate into college credit at American River College, and which general education areas they satisfy (if any).

<table>
<thead>
<tr>
<th>AP EXAM</th>
<th>SCORES</th>
<th>ARC COURSE EQUIVALENCY</th>
<th>SATISFIES ARC GE AREA</th>
<th>UNITS EARNED AT ARC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art History</td>
<td>3, 4</td>
<td>N/A</td>
<td>I</td>
<td>3</td>
</tr>
<tr>
<td>Art History</td>
<td>5</td>
<td>ARTH 302 and ARTH 308</td>
<td>I</td>
<td>6</td>
</tr>
<tr>
<td>Biology</td>
<td>3</td>
<td>BIOL 300</td>
<td>IV</td>
<td>3</td>
</tr>
<tr>
<td>Biology</td>
<td>4 or 5</td>
<td>BIOL 310 *</td>
<td>IV</td>
<td>4</td>
</tr>
<tr>
<td>Biology</td>
<td>5</td>
<td>BIOL 400 *</td>
<td>IV</td>
<td>5</td>
</tr>
<tr>
<td>Calculus AB</td>
<td>3, 4, 5</td>
<td>MATH 400</td>
<td>II(b)</td>
<td>5</td>
</tr>
<tr>
<td>Calculus BC</td>
<td>3, 4, 5</td>
<td>MATH 400 and MATH 401</td>
<td>II(b)</td>
<td>10</td>
</tr>
<tr>
<td>Calculus BC/AB Subscore</td>
<td>N/A</td>
<td>N/A</td>
<td>II(b)</td>
<td>3</td>
</tr>
<tr>
<td>Chemistry (taken prior to Fall 2009)</td>
<td>4 or 5</td>
<td>CHEM 305 or CHEM 400 *</td>
<td>IV</td>
<td>5</td>
</tr>
<tr>
<td>Chemistry</td>
<td>3, 4, 5</td>
<td>CHEM 305 or CHEM 310</td>
<td>IV</td>
<td>5</td>
</tr>
<tr>
<td>Chemistry</td>
<td>4 or 5</td>
<td>CHEM 400 *</td>
<td>IV</td>
<td>5</td>
</tr>
<tr>
<td>Chinese Language and Culture</td>
<td>3, 4, 5</td>
<td>N/A</td>
<td>I</td>
<td>3</td>
</tr>
<tr>
<td>Comparative Government and Politics</td>
<td>3, 4, 5</td>
<td>POLS 302</td>
<td>V(b)</td>
<td></td>
</tr>
<tr>
<td>Computer Science A</td>
<td>4 or 5</td>
<td>CISP 300</td>
<td>N/A</td>
<td>3</td>
</tr>
<tr>
<td>Computer Science AB</td>
<td>3, 4, 5</td>
<td>N/A</td>
<td>N/A</td>
<td>3</td>
</tr>
<tr>
<td>Computer Science Principles</td>
<td>4 or 5</td>
<td>CISC 310</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>English Language and Composition</td>
<td>3, 4, 5</td>
<td>ENGWR 300</td>
<td>II(a)</td>
<td>3</td>
</tr>
</tbody>
</table>
# AP Credit Toward American River College General Education Requirements

This table describes how passing AP scores translate into college credit at American River College, and which general education areas they satisfy (if any).

<table>
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<tr>
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<th>SCORES</th>
<th>ARC COURSE EQUIVALENCY</th>
<th>SATISFIES ARC GE AREA</th>
<th>UNITS EARNED AT ARC</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Literature and Composition</td>
<td>3, 4, 5</td>
<td>ENGWR 300</td>
<td>II(a)</td>
<td>3</td>
</tr>
<tr>
<td>Environmental Science (taken prior to Fall 2009)</td>
<td>3, 4, 5</td>
<td>N/A</td>
<td>IV</td>
<td>3</td>
</tr>
<tr>
<td>Environmental Science (taken Fall 2009 or later)</td>
<td>3, 4, 5</td>
<td>NATR 300</td>
<td>IV</td>
<td>3</td>
</tr>
<tr>
<td>European History</td>
<td>3, 4, 5</td>
<td>N/A</td>
<td>I or V(b)</td>
<td>3</td>
</tr>
<tr>
<td>French Language (taken prior to Fall 2009)</td>
<td>3, 4, 5</td>
<td>FREN 401</td>
<td>I</td>
<td>4</td>
</tr>
<tr>
<td>French Language (taken between Fall 2009 and Fall 2011)</td>
<td>3, 4, 5</td>
<td>FREN 401</td>
<td>I</td>
<td>4</td>
</tr>
<tr>
<td>French Language and Culture</td>
<td>3, 4, 5</td>
<td>N/A</td>
<td>I</td>
<td>3</td>
</tr>
<tr>
<td>French Literature (taken prior to Fall 2009)</td>
<td>3, 4, 5</td>
<td>N/A</td>
<td>I</td>
<td>3</td>
</tr>
<tr>
<td>German Language (taken prior to Fall 2009)</td>
<td>3, 4, 5</td>
<td>GERM 401</td>
<td>I</td>
<td>4</td>
</tr>
<tr>
<td>German Language and Culture</td>
<td>3, 4, 5</td>
<td>N/A</td>
<td>I</td>
<td>3</td>
</tr>
<tr>
<td>Human Geography</td>
<td>3, 4, 5</td>
<td>GEOG 310</td>
<td>V(b)</td>
<td>3</td>
</tr>
<tr>
<td>Italian Language and Culture</td>
<td>3, 4, 5</td>
<td>N/A</td>
<td>I</td>
<td>3</td>
</tr>
<tr>
<td>Japanese Language and Culture</td>
<td>3, 4, 5</td>
<td>N/A</td>
<td>I</td>
<td>3</td>
</tr>
<tr>
<td>Latin Literature</td>
<td>N/A</td>
<td>N/A</td>
<td>I</td>
<td>3</td>
</tr>
<tr>
<td>Latin: Vergil</td>
<td>N/A</td>
<td>N/A</td>
<td>I</td>
<td>3</td>
</tr>
<tr>
<td>Macroeconomics</td>
<td>3</td>
<td>N/A</td>
<td>V(b)</td>
<td>3</td>
</tr>
<tr>
<td>Macroeconomics</td>
<td>4 or 5</td>
<td>ECON 302</td>
<td>V(b)</td>
<td>3</td>
</tr>
<tr>
<td>Microeconomics</td>
<td>3</td>
<td>N/A</td>
<td>V(b)</td>
<td>3</td>
</tr>
<tr>
<td>Microeconomics</td>
<td>4 or 5</td>
<td>ECON 304</td>
<td>V(b)</td>
<td>3</td>
</tr>
<tr>
<td>Music Theory (taken prior to Fall 2009)</td>
<td>3, 4, 5</td>
<td>N/A</td>
<td>I</td>
<td>3</td>
</tr>
<tr>
<td>Music Theory (taken Fall 2012 or later)</td>
<td>3, 4, 5</td>
<td>MUFHL 321 and MUFHL 400</td>
<td>I</td>
<td>3</td>
</tr>
<tr>
<td>Physics 1</td>
<td>3 or 4</td>
<td>N/A</td>
<td>IV</td>
<td>4</td>
</tr>
<tr>
<td>Physics 1</td>
<td>5</td>
<td>PHYS 350</td>
<td>IV</td>
<td>4</td>
</tr>
<tr>
<td>Physics 2</td>
<td>3, 4, 5</td>
<td>N/A</td>
<td>IV</td>
<td>4</td>
</tr>
<tr>
<td>Physics B</td>
<td>3 or 4</td>
<td>PHYS 310 and PHYS 312 * or PHYS 310</td>
<td>IV</td>
<td>3 or 4</td>
</tr>
</tbody>
</table>
### AP Credit Toward American River College General Education Requirements

This table describes how passing AP scores translate into college credit at American River College, and which general education areas they satisfy (if any).

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<th>SCORES</th>
<th>ARC COURSE EQUIVALENCY</th>
<th>SATISFIES ARC GE AREA</th>
<th>UNITS EARNED AT ARC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physics B (taken between Fall 2009 and Fall 2015)</td>
<td>3 or 4</td>
<td>PHYS 310 and PHYS 312 * or PHYS 310</td>
<td>IV</td>
<td>3 or 4</td>
</tr>
<tr>
<td>Physics B (taken between Fall 2009 and Fall 2015)</td>
<td>5</td>
<td>PHYS 350 or PHYS 410 *</td>
<td>IV</td>
<td>4</td>
</tr>
<tr>
<td>Physics C (electricity/magnetism)</td>
<td>N/A</td>
<td>N/A</td>
<td>IV</td>
<td>4</td>
</tr>
<tr>
<td>Physics C (mechanics)</td>
<td>N/A</td>
<td>N/A</td>
<td>IV</td>
<td>4</td>
</tr>
<tr>
<td>Psychology</td>
<td>3, 4, 5</td>
<td>PSYC 300</td>
<td>V(b)</td>
<td>3</td>
</tr>
<tr>
<td>Spanish Language (taken Spring 2014 or earlier)</td>
<td>3, 4, 5</td>
<td>SPAN 401</td>
<td>I</td>
<td>4</td>
</tr>
<tr>
<td>Spanish Language and Culture</td>
<td>3, 4, 5</td>
<td>N/A</td>
<td>I</td>
<td>3</td>
</tr>
<tr>
<td>Spanish Literature (taken Spring 2013 or earlier)</td>
<td>N/A</td>
<td>N/A</td>
<td>I</td>
<td>3</td>
</tr>
<tr>
<td>Spanish Literature and Culture</td>
<td>3, 4, 5</td>
<td>N/A</td>
<td>I</td>
<td>3</td>
</tr>
<tr>
<td>Statistics</td>
<td>3, 4, 5</td>
<td>STAT 300</td>
<td>II(b)</td>
<td>4</td>
</tr>
<tr>
<td>Studio</td>
<td>3, 4, 5</td>
<td>N/A</td>
<td>N/A</td>
<td>3</td>
</tr>
<tr>
<td>US Government and Politics</td>
<td>3, 4, 5</td>
<td>POLS 301</td>
<td>V(a) or V(b)</td>
<td>3</td>
</tr>
<tr>
<td>US History</td>
<td>3, 4, 5</td>
<td>HIST 310 and HIST 311</td>
<td>I or V(b)</td>
<td>6</td>
</tr>
<tr>
<td>World History</td>
<td>3, 4, 5</td>
<td>HIST 307 and HIST 308</td>
<td>I or V(b)</td>
<td>6</td>
</tr>
</tbody>
</table>

* With department approval upon review of lab reports.

### AP Credit Toward CSU General Education Requirements

This table describes how a passing AP exam score of 3, 4, or 5 meets California State University (CSU) general education (GE) breadth requirements as well as how they translate into credit.

<table>
<thead>
<tr>
<th>AP EXAM</th>
<th>AMERICAN INSTITUTIONS AND/OR GE BREADTH AREA</th>
<th>SEMESTER CREDITS TOWARD GE BREADTH CERTIFICATION</th>
<th>MINIMUM SEMESTER CREDITS EARNED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art History</td>
<td>C1 or C2</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Biology</td>
<td>B2 and B3</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Calculus AB</td>
<td>B4</td>
<td>3</td>
<td>3 +</td>
</tr>
<tr>
<td>Calculus BC</td>
<td>B4</td>
<td>3</td>
<td>6 +</td>
</tr>
<tr>
<td>Calculus BC/AB Subscore</td>
<td>B4</td>
<td>3</td>
<td>3 +</td>
</tr>
<tr>
<td>Chemistry (taken in Fall 2009 or later)</td>
<td>B1 and B3</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Chemistry (taken before Fall 2009)</td>
<td>B1 and B3</td>
<td>6</td>
<td>6</td>
</tr>
</tbody>
</table>
This table describes how a passing AP exam score of 3, 4, or 5 meets California State University (CSU) general education (GE) breadth requirements as well as how they translate into credit.

<table>
<thead>
<tr>
<th>AP EXAM</th>
<th>AMERICAN INSTITUTIONS AND/OR GE BREADTH AREA</th>
<th>SEMESTER CREDITS TOWARD GE BREADTH CERTIFICATION</th>
<th>MINIMUM SEMESTER CREDITS EARNED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chinese Language and Culture</td>
<td>C2</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Comparative Government and Politics</td>
<td>D</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Computer Science A</td>
<td>N/A</td>
<td>0</td>
<td>3+</td>
</tr>
<tr>
<td>Computer Science AB</td>
<td>N/A</td>
<td>0</td>
<td>6+</td>
</tr>
<tr>
<td>Computer Science Principles</td>
<td>B4</td>
<td>3</td>
<td>6+</td>
</tr>
<tr>
<td>English Language and Composition</td>
<td>A2</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>English Literature and Composition</td>
<td>A2 and C2</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Environmental Science (taken in Fall 2009 or after)</td>
<td>B1 and B3</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Environmental Science (taken before Fall 2009)</td>
<td>(B1 and B3) or (B2 and B3)</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>European History</td>
<td>C2 or D6</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>French Language and Culture</td>
<td>C2</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>French Language (taken from Fall 2009 through Fall 2011)</td>
<td>C2</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>French Language (taken before Fall 2009)</td>
<td>C2</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>French Literature (taken before Fall 2009)</td>
<td>C2</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>German Language and Culture</td>
<td>C2</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>German Language (taken from Fall 2009 through Fall 2011)</td>
<td>C2</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>German Language (taken before Fall 2009)</td>
<td>C2</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>German Language (taken before Fall 2009)</td>
<td>C2</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Human Geography</td>
<td>D5</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Italian Language and Culture</td>
<td>C2</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Japanese Language and Culture</td>
<td>C2</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Latin</td>
<td>C2</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Latin Literature (taken before Fall 2009)</td>
<td>C2</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Latin: Vergil (taken before Fall 2012)</td>
<td>C2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Macroeconomics</td>
<td>D2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Microeconomics</td>
<td>D2</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>
### AP Credit Toward CSU General Education Requirements

This table describes how a passing AP exam score of 3, 4, or 5 meets California State University (CSU) general education (GE) breadth requirements as well as how they translate into credit.

<table>
<thead>
<tr>
<th>AP EXAM</th>
<th>AMERICAN INSTITUTIONS AND/OR GE BREADTH AREA</th>
<th>SEMESTER CREDITS TOWARD GE BREADTH CERTIFICATION</th>
<th>MINIMUM SEMESTER CREDITS EARNED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Music Theory (taken before Fall 2009)</td>
<td>C1</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Physics 1 ++</td>
<td>B1 and B3</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Physics 2 ++</td>
<td>B1 and B3</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Physics B (taken before Fall 2009) ++</td>
<td>B1 and B3</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Physics B (taken from Fall 2009 through Fall 2013) ++</td>
<td>B1 and B3</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Physics C (Electricity/Magnetism) ++</td>
<td>B1 and B3</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Physics C (Mechanics) ++</td>
<td>B1 and B3</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Psychology</td>
<td>D9</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Seminar</td>
<td>N/A</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Spanish Language (taken before Spring 2014)</td>
<td>C2</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Spanish Language and Culture</td>
<td>C2</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Spanish Literature (taken before Spring 2013)</td>
<td>C2</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Spanish Literature and Culture</td>
<td>C2</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Statistics</td>
<td>B4</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Studio Art – 2D Design</td>
<td>N/A</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Studio Art – 3D Design</td>
<td>N/A</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Studio Art – Drawing</td>
<td>N/A</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>US Government and Politics</td>
<td>D8 and US-2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>US History</td>
<td>(C2 or D6) and US-1</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>World History</td>
<td>C2 or D6</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

* If a student passes more than one AP exam in calculus or computer science, then only one examination may be applied to the CSU baccalaureate.

** If a student passes more than one AP exam in physics, then only six units of credit may be applied to the CSU baccalaureate and only four units of credit may be applied to CSU general education.

### AP Credit Toward IGETC

This table describes how a passing AP score of 3, 4, or 5 meets Intersegmental General Education Transfer Curriculum (IGETC) requirements as well as how they translate into credit.

<table>
<thead>
<tr>
<th>AP EXAM</th>
<th>IGETC AREA</th>
<th>SEMESTER CREDITS TOWARD CSU GE BREADTH</th>
<th>TOTAL UC QUARTER UNITS AWARDED</th>
<th>TOTAL UC SEMESTER UNITS AWARDED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art History</td>
<td>3A or 3B</td>
<td>3</td>
<td>8 quarter</td>
<td>5.3 semester</td>
</tr>
<tr>
<td>Biology</td>
<td>5B and 5C</td>
<td>4</td>
<td>8 quarter</td>
<td>5.3 semester</td>
</tr>
</tbody>
</table>
AP Credit Toward IGETC

This table describes how a passing AP score of 3, 4, or 5 meets Intersegmental General Education Transfer Curriculum (IGETC) requirements as well as how they translate into credit.

<table>
<thead>
<tr>
<th>AP EXAM</th>
<th>IGETC AREA</th>
<th>SEMESTER CREDITS TOWARD CSU GE BREADTH</th>
<th>TOTAL UC QUARTER UNITS AWARDED</th>
<th>TOTAL UC SEMESTER UNITS AWARDED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calculus AB</td>
<td>2A</td>
<td>3</td>
<td>4 quarter @</td>
<td>2.6 semester @</td>
</tr>
<tr>
<td>Calculus BC</td>
<td>2A</td>
<td>3</td>
<td>8 quarter @</td>
<td>5.3 semester @</td>
</tr>
<tr>
<td>Calculus AB Subscore from BC Exam</td>
<td>2A</td>
<td>3</td>
<td>4 quarter @</td>
<td>2.6 semester @</td>
</tr>
<tr>
<td>Chemistry</td>
<td>5A and 5C</td>
<td>4</td>
<td>8 quarter</td>
<td>5.3 semester</td>
</tr>
<tr>
<td>Chinese Language and Culture</td>
<td>3B and 6A</td>
<td>3</td>
<td>8 quarter</td>
<td>5.3 semester</td>
</tr>
<tr>
<td>Comparative Government and Politics</td>
<td>4</td>
<td>3</td>
<td>4 quarter</td>
<td>2.6 semester</td>
</tr>
<tr>
<td>Computer Science A</td>
<td>N/A</td>
<td>N/A</td>
<td>8 quarter</td>
<td>5.3 semester</td>
</tr>
<tr>
<td>Computer Science AB</td>
<td>N/A</td>
<td>N/A</td>
<td>4 quarter</td>
<td>2.6 semester</td>
</tr>
<tr>
<td>Computer Science Principles</td>
<td>N/A</td>
<td>N/A</td>
<td>8 quarter</td>
<td>5.3 semester</td>
</tr>
<tr>
<td>English Language and Composition</td>
<td>1A</td>
<td>3</td>
<td>8 quarter ^</td>
<td>5.3 semester ^</td>
</tr>
<tr>
<td>English Literature and Composition</td>
<td>1A or 3B</td>
<td>3</td>
<td>8 quarter ^</td>
<td>5.3 semester ^</td>
</tr>
<tr>
<td>Environmental Science</td>
<td>5A or 5C %</td>
<td>3</td>
<td>4 quarter</td>
<td>2.6 semester</td>
</tr>
<tr>
<td>European History</td>
<td>3B or 4</td>
<td>3</td>
<td>8 quarter</td>
<td>5.3 semester</td>
</tr>
<tr>
<td>French Language/Culture</td>
<td>3B and 6A</td>
<td>3</td>
<td>8 quarter</td>
<td>5.3 semester</td>
</tr>
<tr>
<td>German Language/Culture</td>
<td>3B and 6A</td>
<td>3</td>
<td>8 quarter</td>
<td>5.3 semester</td>
</tr>
<tr>
<td>Human Geography</td>
<td>4</td>
<td>3</td>
<td>4 quarter</td>
<td>2.6 semester</td>
</tr>
<tr>
<td>Italian Language and Culture</td>
<td>3B and 6A</td>
<td>3</td>
<td>8 quarter</td>
<td>5.3 semester</td>
</tr>
<tr>
<td>Japanese Language and Culture</td>
<td>3B and 6A</td>
<td>3</td>
<td>8 quarter</td>
<td>5.3 semester</td>
</tr>
<tr>
<td>Latin §</td>
<td>3B and 6A</td>
<td>3</td>
<td>8 quarter</td>
<td>5.3 semester</td>
</tr>
<tr>
<td>Macroeconomics</td>
<td>4</td>
<td>3</td>
<td>4 quarter</td>
<td>2.6 semester</td>
</tr>
<tr>
<td>Microeconomics</td>
<td>4</td>
<td>3</td>
<td>4 quarter</td>
<td>2.6 semester</td>
</tr>
<tr>
<td>Music Theory</td>
<td>N/A</td>
<td>N/A</td>
<td>8 quarter</td>
<td>5.3 semester</td>
</tr>
<tr>
<td>Physics 1</td>
<td>5A and 5C</td>
<td>4</td>
<td>8 quarter ~</td>
<td>5.3 semester ~</td>
</tr>
<tr>
<td>Physics 2</td>
<td>5A and 5C</td>
<td>4</td>
<td>8 quarter ~</td>
<td>5.3 semester ~</td>
</tr>
<tr>
<td>Physics B</td>
<td>5A and 5C</td>
<td>4</td>
<td>8 quarter ~</td>
<td>5.3 semester ~</td>
</tr>
<tr>
<td>Physics C (Electricity/Magnetism)</td>
<td>5A and 5C %</td>
<td>3</td>
<td>4 quarter ~</td>
<td>2.6 semester ~</td>
</tr>
<tr>
<td>Physics C (Mechanics)</td>
<td>5A and 5C %</td>
<td>3</td>
<td>4 quarter ~</td>
<td>2.6 semester ~</td>
</tr>
<tr>
<td>Psychology</td>
<td>4</td>
<td>3</td>
<td>4 quarter</td>
<td>2.6 semester</td>
</tr>
<tr>
<td>Seminar</td>
<td>N/A</td>
<td>0</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>
**AP Credit Toward IGETC**

This table describes how a passing AP score of 3, 4, or 5 meets Intersegmental General Education Transfer Curriculum (IGETC) requirements as well as how they translate into credit.

<table>
<thead>
<tr>
<th>AP EXAM</th>
<th>IGETC AREA</th>
<th>SEMESTER CREDITS TOWARD CSU GE BREADTH</th>
<th>TOTAL UC QUARTER UNITS AWARDED</th>
<th>TOTAL UC SEMESTER UNITS AWARDED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spanish Literature and Culture</td>
<td>3B and 6A</td>
<td>3</td>
<td>8 quarter</td>
<td>5.3 semester</td>
</tr>
<tr>
<td>Spanish Language and Culture</td>
<td>3B and 6A</td>
<td>3</td>
<td>8 quarter</td>
<td>5.3 semester</td>
</tr>
<tr>
<td>Spanish Language</td>
<td>3B and 6A</td>
<td>3</td>
<td>8 quarter</td>
<td>5.3 semester</td>
</tr>
<tr>
<td>Spanish Literature</td>
<td>3B and 6A</td>
<td>3</td>
<td>8 quarter</td>
<td>5.3 semester</td>
</tr>
<tr>
<td>Statistics</td>
<td>2A</td>
<td>3</td>
<td>4 quarter</td>
<td>2.6 semester</td>
</tr>
<tr>
<td>Studio Art – 2D Design</td>
<td>N/A</td>
<td>N/A</td>
<td>8 quarter</td>
<td>5.3 semester</td>
</tr>
<tr>
<td>Studio Art – 3D Design</td>
<td>N/A</td>
<td>N/A</td>
<td>8 quarter</td>
<td>5.3 semester</td>
</tr>
<tr>
<td>Studio Art – Drawing</td>
<td>N/A</td>
<td>N/A</td>
<td>8 quarter</td>
<td>5.3 semester</td>
</tr>
<tr>
<td>US Government and Politics</td>
<td>4 and US-2 **</td>
<td>3</td>
<td>4 quarter</td>
<td>2.6 semester</td>
</tr>
<tr>
<td>US History</td>
<td>(3B or 4) and US-1 **</td>
<td>3</td>
<td>8 quarter</td>
<td>5.3 semester</td>
</tr>
<tr>
<td>World History</td>
<td>3B or 4</td>
<td>3</td>
<td>8 quarter</td>
<td>5.3 semester</td>
</tr>
</tbody>
</table>

© The maximum UC credit for AP calculus exams is 8 quarter units or 5.3 semester units.

^The maximum UC credit for both AP English tests is 8 quarter units or 5.3 semester units.

% AP test meets IGETC science course and lab requirement but only grants three units toward IGETC. Student will need to earn at least seven units in IGETC Area 5 to be certified.

$ Offered May 2013 and beyond.

` The maximum UC credit for all AP physics exams is 8 quarter units or 5.3 semester units.

** Students need to complete a course that covers California State and Local Government to complete CSU American Institutions requirement.

For more information about transferring to the University of California (UC), see how UC campuses accept AP credit (http://admission.universityofcalifornia.edu/counselors/exam-credit/ap-credits/index.html).
American River College grants credit for College-Level Examination Program (CLEP) examinations. CLEP scores may be used to meet American River College AA/AS general education requirements and California State University (CSU) general education requirements; they do not fulfill graduation competencies, requirements for any major at American River College, or enrollment limitations (such as prerequisite requirements) for any course at American River College.

A student may receive credit for CLEP exams they have successfully passed once the following requirements are met:

- Official copies of test scores are on file with Admissions and Records
- Student has completed twelve (12) units of credit and has a minimum 2.0 grade point average (GPA)

Visit College Board's College-Level Examination Program (https://clep.collegeboard.org/) website to learn more.

CLEP scores are not accepted for transfer to the University of California. Students should be aware that other colleges and universities have the right to accept, modify, or reject the use of CLEP scores towards their graduation requirements. Check with your counselor to determine whether these test results will be accepted at the transfer institution of your choice.

### CLEP Credit Toward American River College General Education Requirements

This table describes how passing CLEP scores translate into college credit at American River College, and which general education (GE) areas they satisfy (if any).

<table>
<thead>
<tr>
<th>CLEP EXAM</th>
<th>CLEP SCORE</th>
<th>ARC COURSE EQUIVALENCY</th>
<th>ARC GE AREA</th>
<th>UNITS EARNED AT ARC</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Government</td>
<td>50</td>
<td>N/A</td>
<td>V(a)</td>
<td>3</td>
</tr>
<tr>
<td>American Literature</td>
<td>50</td>
<td>N/A</td>
<td>I</td>
<td>3</td>
</tr>
<tr>
<td>Analyzing and</td>
<td>50</td>
<td>N/A</td>
<td>I</td>
<td>3</td>
</tr>
<tr>
<td>Interpreting Literature</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biology</td>
<td>50</td>
<td>N/A</td>
<td>IV</td>
<td>3</td>
</tr>
<tr>
<td>Calculus</td>
<td>50</td>
<td>MATH 400</td>
<td>II(b)</td>
<td>3</td>
</tr>
<tr>
<td>Chemistry</td>
<td>50</td>
<td>N/A</td>
<td>IV</td>
<td>3</td>
</tr>
<tr>
<td>College Algebra</td>
<td>50</td>
<td>MATH 120</td>
<td>II(b)</td>
<td>3</td>
</tr>
<tr>
<td>College Algebra –</td>
<td>50</td>
<td>MATH 330</td>
<td>II(b)</td>
<td>3</td>
</tr>
<tr>
<td>Trigonometry</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English Literature</td>
<td>50</td>
<td>N/A</td>
<td>I</td>
<td>3</td>
</tr>
<tr>
<td>French</td>
<td>59</td>
<td>N/A</td>
<td>I</td>
<td>3</td>
</tr>
<tr>
<td>German</td>
<td>60</td>
<td>N/A</td>
<td>I</td>
<td>3</td>
</tr>
<tr>
<td>History, US I</td>
<td>50</td>
<td>N/A</td>
<td>V(a)</td>
<td>3</td>
</tr>
<tr>
<td>History, US II</td>
<td>50</td>
<td>N/A</td>
<td>V(a)</td>
<td>3</td>
</tr>
<tr>
<td>Human Growth</td>
<td>50</td>
<td>N/A</td>
<td>III(b)</td>
<td>3</td>
</tr>
<tr>
<td>Development</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td>50</td>
<td>N/A</td>
<td>I</td>
<td>3</td>
</tr>
</tbody>
</table>
## CLEP Credit Toward American River College General Education Requirements

This table describes how passing CLEP scores translate into college credit at American River College, and which general education (GE) areas they satisfy (if any).

<table>
<thead>
<tr>
<th>CLEP EXAM</th>
<th>CLEP SCORE</th>
<th>ARC COURSE EQUIVALENCY</th>
<th>ARC GE AREA</th>
<th>UNITS EARNED AT ARC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to Psychology</td>
<td>50</td>
<td>PSYC 300</td>
<td>V(b)</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Sociology</td>
<td>50</td>
<td>N/A</td>
<td>V(b)</td>
<td>3</td>
</tr>
<tr>
<td>Natural Sciences</td>
<td>50</td>
<td>N/A</td>
<td>IV</td>
<td>3</td>
</tr>
<tr>
<td>Pre-Calculus</td>
<td>50</td>
<td>MATH 370</td>
<td>II(b)</td>
<td>3</td>
</tr>
<tr>
<td>Principles of Macroeconomics</td>
<td>50</td>
<td>N/A</td>
<td>V(b)</td>
<td>3</td>
</tr>
<tr>
<td>Principles of Microeconomics</td>
<td>50</td>
<td>N/A</td>
<td>V(b)</td>
<td>3</td>
</tr>
<tr>
<td>Spanish</td>
<td>63</td>
<td>N/A</td>
<td>I</td>
<td>3</td>
</tr>
<tr>
<td>Trigonometry</td>
<td>50</td>
<td>MATH 330</td>
<td>II(b)</td>
<td>3</td>
</tr>
<tr>
<td>Western Civilization I</td>
<td>50</td>
<td>N/A</td>
<td>I or V(b)</td>
<td>3</td>
</tr>
<tr>
<td>Western Civilization II</td>
<td>50</td>
<td>N/A</td>
<td>V(b)</td>
<td>3</td>
</tr>
</tbody>
</table>

### Exceptions

American River College does not offer credit for the following CLEP exams, and these exams do not satisfy associate degree general education requirements:

- College Composition
- College Composition – Modular
- College Mathematics
- English Composition (with or without essay)
- Financial Accounting
- Freshman College Composition
- German
- Information Systems and Computer Applications
- Introduction to Educational Psychology
- Introduction to Business Law
- Principles of Accounting
- Principles of Management
- Principles of Marketing
- Social Sciences and History

## CLEP Credit Toward California State University General Education Requirements

This table describes how passing CLEP scores meet California State University (CSU) general education (GE) breadth requirements as well as how they translate into credit.
<table>
<thead>
<tr>
<th>CLEP EXAM</th>
<th>CLEP SCORE</th>
<th>CSU GE AREA</th>
<th>SEMESTER UNITS OF GE CREDIT</th>
<th>SEMESTER UNITS *</th>
<th>REMOVAL DATE FOR GE BREADTH **</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Government</td>
<td>50</td>
<td>D</td>
<td>3</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>American Literature</td>
<td>50</td>
<td>C2</td>
<td>3</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>Analyzing and Interpreting Literature</td>
<td>50</td>
<td>C2</td>
<td>3</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>Biology</td>
<td>50</td>
<td>B2 (no lab credit)</td>
<td>3</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>Calculus</td>
<td>50</td>
<td>B4</td>
<td>3</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>Chemistry</td>
<td>50</td>
<td>B1 (no lab credit)</td>
<td>3</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>College Algebra</td>
<td>50</td>
<td>B4</td>
<td>3</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>College Algebra – Trigonometry</td>
<td>50</td>
<td>B4</td>
<td>3</td>
<td>3</td>
<td>N/A</td>
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<tr>
<td>English Literature</td>
<td>50</td>
<td>C2</td>
<td>3</td>
<td>3</td>
<td>Fall 2011</td>
</tr>
<tr>
<td>Financial Accounting</td>
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<tr>
<td>French Level I ***</td>
<td>50</td>
<td>N/A</td>
<td>0</td>
<td>6</td>
<td>N/A</td>
</tr>
<tr>
<td>French Level II ***</td>
<td>59</td>
<td>C2</td>
<td>3</td>
<td>9</td>
<td>N/A</td>
</tr>
<tr>
<td>French Level II ***</td>
<td>59</td>
<td>C2</td>
<td>3</td>
<td>12</td>
<td>Fall 2015</td>
</tr>
<tr>
<td>German Level I ***</td>
<td>50</td>
<td>N/A</td>
<td>0</td>
<td>6</td>
<td>N/A</td>
</tr>
<tr>
<td>German Level II ***</td>
<td>60</td>
<td>C2</td>
<td>3</td>
<td>9</td>
<td>N/A</td>
</tr>
<tr>
<td>German Level II ***</td>
<td>60</td>
<td>C2</td>
<td>3</td>
<td>12</td>
<td>Fall 2015</td>
</tr>
<tr>
<td>History, US I</td>
<td>50</td>
<td>D and US-1</td>
<td>3</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>History, US II</td>
<td>50</td>
<td>D and US-1</td>
<td>3</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>Human Growth and Development</td>
<td>50</td>
<td>E</td>
<td>3</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>Humanities</td>
<td>50</td>
<td>C</td>
<td>3</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>Information Systems and Computer Applications</td>
<td>50</td>
<td>N/A</td>
<td>0</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>Introduction to Educational Psychology</td>
<td>50</td>
<td>N/A</td>
<td>0</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>Introduction to Business Law</td>
<td>50</td>
<td>N/A</td>
<td>0</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>Introduction to Psychology</td>
<td>50</td>
<td>D</td>
<td>3</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>Introduction to Sociology</td>
<td>50</td>
<td>D</td>
<td>3</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>Natural Sciences</td>
<td>50</td>
<td>B1 or B2 (no lab credit)</td>
<td>3</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>Pre-Calculus</td>
<td>50</td>
<td>B4</td>
<td>3</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>Principles of Accounting</td>
<td>50</td>
<td>N/A</td>
<td>0</td>
<td>3</td>
<td>N/A</td>
</tr>
</tbody>
</table>
CLEP Credit Toward California State University General Education Requirements

This table describes how passing CLEP scores meet California State University (CSU) general education (GE) breadth requirements as well as how they translate into credit.

<table>
<thead>
<tr>
<th>CLEP EXAM</th>
<th>CLEP SCORE</th>
<th>CSU GE AREA</th>
<th>SEMESTER UNITS OF GE CREDIT</th>
<th>SEMESTER UNITS *</th>
<th>REMOVAL DATE FOR GE BREADTH **</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principles of Macroeconomics</td>
<td>50</td>
<td>D</td>
<td>3</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>Principles of Management</td>
<td>50</td>
<td>N/A</td>
<td>0</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>Principles of Marketing</td>
<td>50</td>
<td>N/A</td>
<td>0</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>Principles of Microeconomics</td>
<td>50</td>
<td>D</td>
<td>3</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>Spanish Level I ***</td>
<td>50</td>
<td>N/A</td>
<td>0</td>
<td>6</td>
<td>N/A</td>
</tr>
<tr>
<td>Spanish Level II ***</td>
<td>63</td>
<td>C2</td>
<td>3</td>
<td>9</td>
<td>N/A</td>
</tr>
<tr>
<td>Spanish Level II ***</td>
<td>63</td>
<td>C2</td>
<td>3</td>
<td>12</td>
<td>Fall 2015</td>
</tr>
<tr>
<td>Trigonometry</td>
<td>50</td>
<td>B4</td>
<td>3</td>
<td>3</td>
<td>Fall 2006</td>
</tr>
<tr>
<td>Western Civilization I</td>
<td>50</td>
<td>C2 or D</td>
<td>3</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>Western Civilization II</td>
<td>50</td>
<td>D</td>
<td>3</td>
<td>3</td>
<td>N/A</td>
</tr>
</tbody>
</table>

* These unit values are used only in determination of eligibility for admissions to CSU and should not be confused with the unit values applied toward GE Certification.

** Students seeking certification in GE Breadth prior to transfer must have passed the CLEP exam before this date.

*** If a student passes more than one CLEP examination in the same language other than English (such as two exams in Spanish), then only one examination may be applied to the baccalaureate (BA or BS). For each examination in a language other than English, a passing score of 50 is considered “Level I” and earns six units of credit towards the baccalaureate (BA or BS); the higher score listed for each test is considered “Level II” and earns additional units of credit and placement in Area C2 of GE Breadth, as noted.

Exceptions

CSU does not offer credit for the following CLEP exams, and these exams do not satisfy CSU GE breadth requirements:

- College Composition
- College Composition – Modular
- College Mathematics
- English Composition (with or without essay)
- Freshman College Composition
- Social Sciences and History
American River College may award college credit for international baccalaureate (IB) higher-level (HL) course completion, if the course work is compatible with the college’s curriculum. IB test scores may be used to meet American River College AA/AS general education requirements, California State University (CSU) general education requirements, and Intersegmental General Education Transfer Curriculum (IGETC). No credit will be granted for lower-level course work completed in the IB program.

A student may receive credit for IB tests they have successfully passed once the following requirements are met:

- Official copies of test scores are on file with Admissions and Records
- Student has completed twelve (12) units of credit and has a minimum 2.0 grade point average (GPA)

Students should be aware that other colleges and universities have the right to accept, modify, or reject the use of IB scores towards their graduation requirements. Check with your counselor to determine whether these test results will be accepted at the transfer institution of your choice.

Students who have earned credit from an IB exam should not take a comparable college course because transfer credit will not be granted for both.

### IB Credit Toward American River College General Education Requirements

This table describes how passing IB scores translate into college credit at American River College, and which general education areas they satisfy (if any).

<table>
<thead>
<tr>
<th>IB EXAM</th>
<th>PASSING SCORE</th>
<th>ARC COURSE EQUIVALENCY</th>
<th>ARC GE AREA</th>
<th>UNITS FOR ARC GE</th>
<th>SEMESTER UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology HL</td>
<td>5</td>
<td>N/A</td>
<td>IV</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Chemistry HL</td>
<td>5</td>
<td>CHEM 305 or CHEM 310</td>
<td>IV</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Chemistry HL</td>
<td>6</td>
<td>CHEM 400</td>
<td>IV</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Economics HL</td>
<td>5</td>
<td>ECON 302 and ECON 304</td>
<td>V(b)</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Geography HL</td>
<td>5</td>
<td>N/A</td>
<td>V(b)</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>History (any region) HL</td>
<td>5</td>
<td>N/A</td>
<td>I or V(b)</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Language A (any language) HL</td>
<td>5</td>
<td>N/A</td>
<td>I</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Language A: Language and Literature HL (any language)</td>
<td>5</td>
<td>N/A</td>
<td>I</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Language A: Language and Literature HL (any language except English)</td>
<td>5</td>
<td>N/A</td>
<td>I</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Language A: Language and Literature HL (English)</td>
<td>5</td>
<td>ENGWR 300</td>
<td>I</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>
IB Credit Toward American River College General Education Requirements

This table describes how passing IB scores translate into college credit at American River College, and which general education areas they satisfy (if any).

<table>
<thead>
<tr>
<th>IB EXAM</th>
<th>PASSING SCORE</th>
<th>ARC COURSE EQUIVALENCY</th>
<th>ARC GE AREA</th>
<th>UNITS FOR ARC GE</th>
<th>SEMESTER UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language A: Literature HL (any language except English)</td>
<td>5</td>
<td>N/A</td>
<td>I</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Language A1 (any language) HL</td>
<td>5</td>
<td>N/A</td>
<td>I</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Language A2 (any language) HL</td>
<td>5</td>
<td>N/A</td>
<td>I</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics: Further Mathematics SL (taken before 2012)</td>
<td>5</td>
<td>MATH 400</td>
<td>II(b)</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Mathematics HL</td>
<td>5</td>
<td>MATH 400</td>
<td>II(b)</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Physics HL</td>
<td>5</td>
<td>N/A</td>
<td>IV</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Psychology HL</td>
<td>5</td>
<td>PSYC 300</td>
<td>V(b)</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Theatre HL</td>
<td>5</td>
<td>N/A</td>
<td>I</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

1 With department approval upon review of lab reports.

Exceptions

American River College does not offer credit for the following IB tests, and these tests do not satisfy associate degree general education requirements:

- Language B (any language) HL

IB Credit Toward California State University General Education Requirements

This table describes how passing IB test scores meet California State University (CSU) general education (GE) breadth requirements as well as how they translate into credit.

<table>
<thead>
<tr>
<th>IB TEST</th>
<th>PASSING SCORE</th>
<th>CSU GE AREA</th>
<th>SEMESTER UNITS FOR GE CERTIFICATION</th>
<th>MINIMUM SEMESTER CREDITS EARNED</th>
<th>REMOVAL DATE FOR GE BREADTH *</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology HL</td>
<td>5</td>
<td>B2</td>
<td>3</td>
<td>6</td>
<td>N/A</td>
</tr>
<tr>
<td>Chemistry HL</td>
<td>5</td>
<td>B1</td>
<td>3</td>
<td>6</td>
<td>N/A</td>
</tr>
<tr>
<td>Economics HL</td>
<td>5</td>
<td>D2</td>
<td>3</td>
<td>6</td>
<td>N/A</td>
</tr>
<tr>
<td>Geography HL</td>
<td>5</td>
<td>D5</td>
<td>3</td>
<td>6</td>
<td>N/A</td>
</tr>
<tr>
<td>History (any region) HL</td>
<td>5</td>
<td>C2 or D6</td>
<td>3</td>
<td>6</td>
<td>N/A</td>
</tr>
<tr>
<td>Language A (any language) HL</td>
<td>4</td>
<td>C2</td>
<td>3</td>
<td>6</td>
<td>N/A</td>
</tr>
<tr>
<td>Language A: Language and Literature HL (any language)</td>
<td>4</td>
<td>C2</td>
<td>3</td>
<td>6</td>
<td>N/A</td>
</tr>
</tbody>
</table>
IB Credit Toward California State University General Education Requirements

This table describes how passing IB test scores meet California State University (CSU) general education (GE) breadth requirements as well as how they translate into credit.

<table>
<thead>
<tr>
<th>IB TEST</th>
<th>PASSING SCORE</th>
<th>CSU GE AREA</th>
<th>SEMESTER UNITS FOR GE CERTIFICATION</th>
<th>MINIMUM SEMESTER CREDITS EARNED</th>
<th>REMOVAL DATE FOR GE BREADTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language A: Language and Literature HL (any language except English)</td>
<td>4</td>
<td>C2</td>
<td>3</td>
<td>6</td>
<td>N/A</td>
</tr>
<tr>
<td>Language A: Literature HL (any language except English)</td>
<td>4</td>
<td>C2</td>
<td>3</td>
<td>6</td>
<td>N/A</td>
</tr>
<tr>
<td>Language A1 (any language) HL</td>
<td>4</td>
<td>C2</td>
<td>3</td>
<td>6</td>
<td>Fall 2013</td>
</tr>
<tr>
<td>Language A2 (any language) HL</td>
<td>4</td>
<td>C2</td>
<td>3</td>
<td>6</td>
<td>Fall 2013</td>
</tr>
<tr>
<td>Language B (any language) HL **</td>
<td>4</td>
<td>N/A</td>
<td>0</td>
<td>6</td>
<td>N/A</td>
</tr>
<tr>
<td>Mathematics HL</td>
<td>4</td>
<td>B4</td>
<td>3</td>
<td>6</td>
<td>N/A</td>
</tr>
<tr>
<td>Physics HL</td>
<td>5</td>
<td>B1</td>
<td>3</td>
<td>6</td>
<td>N/A</td>
</tr>
<tr>
<td>Psychology HL</td>
<td>5</td>
<td>D9</td>
<td>3</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>Theatre HL</td>
<td>4</td>
<td>C1</td>
<td>3</td>
<td>6</td>
<td>N/A</td>
</tr>
</tbody>
</table>

* Students seeking certification in GE Breadth prior to transfer must have passed the test before this date.

** For CSU only – the IB curriculum offers language at various levels for native and non-native speakers. Language B courses are offered at the intermediate level for non-natives. Language A1 and A2 (any language) HL are advanced courses in literature for native and non-native speakers, respectively.

IB Credit Toward IGETC Requirements

This table describes how passing IB test scores meet Intersegmental General Education Transfer Curriculum (IGETC) requirements as well as how they translate into credit.

<table>
<thead>
<tr>
<th>IB TEST</th>
<th>PASSING SCORE</th>
<th>IGETC AREA</th>
<th>SEMESTER UNITS FOR IGETC CERTIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology HL</td>
<td>5</td>
<td>5B (no lab)</td>
<td>3</td>
</tr>
<tr>
<td>Chemistry HL</td>
<td>5</td>
<td>5A (no lab)</td>
<td>3</td>
</tr>
<tr>
<td>Economics HL</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Geography HL</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>History (any region) HL</td>
<td>5</td>
<td>3B or 4</td>
<td>3</td>
</tr>
<tr>
<td>Language A: Language and Literature HL (any language)</td>
<td>5</td>
<td>3B</td>
<td>3</td>
</tr>
<tr>
<td>Language A: Language and Literature HL (any language except English)</td>
<td>5</td>
<td>3B and 6A</td>
<td>3</td>
</tr>
<tr>
<td>Language A: Literature HL (any language except English)</td>
<td>5</td>
<td>3B and 6A</td>
<td>3</td>
</tr>
</tbody>
</table>
IB Credit Toward IGETC Requirements

This table describes how passing IB test scores meet Intersegmental General Education Transfer Curriculum (IGETC) requirements as well as how they translate into credit.

<table>
<thead>
<tr>
<th>IB TEST</th>
<th>PASSING SCORE</th>
<th>IGETC AREA</th>
<th>SEMESTER UNITS FOR IGETC CERTIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language A: Literature HL (any language)</td>
<td>5</td>
<td>3B</td>
<td>3</td>
</tr>
<tr>
<td>Language B (any language) HL</td>
<td>5</td>
<td>6A</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics HL</td>
<td>5</td>
<td>2A</td>
<td>3</td>
</tr>
<tr>
<td>Physics HL</td>
<td>5</td>
<td>5A (no lab)</td>
<td>3</td>
</tr>
<tr>
<td>Psychology HL</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Theatre HL</td>
<td>5</td>
<td>3A</td>
<td>3</td>
</tr>
</tbody>
</table>
College Safety and Security | American River College

At American River College, we are committed to maintaining a safe learning environment and supporting an ongoing comprehensive safety program. The Los Rios Police Department (LRPD) employs sworn police officers who are certified through California Peace Officers Standards and Training (POST) and are responsible for protecting life and property across the district.

LRPD has excellent working relationships with other law enforcement agencies and emergency service providers in our neighboring communities. These strong partnerships help support more effective responses in emergency situations.

Learn more about Los Rios Police Department (https://police.losrios.edu).

In This Section

- **Crime Prevention** (/2020-2021-catalog/while-you-are-here/college-safety-and-security/crime-prevention)
  Learn about crime prevention programs at American River College.

- **Campus Traffic Regulations** (/2020-2021-catalog/while-you-are-here/college-safety-and-security/campus-traffic-regulations)
  Learn about campus traffic regulations enforced by Los Rios Police Department.

  Learn how to report an on-campus crime or incident to Los Rios Police Department.

- **Clery Report** (/2020-2021-catalog/while-you-are-here/college-safety-and-security/clery-report)
  Each year, the Los Rios Police Department publishes the Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Report.
Crime Prevention | American River College

American River College actively supports crime prevention through a number of programs, including:

Emergency Automobile Assistance

Though they are not mechanics, Los Rios Police officers are equipped and trained to start cars with dead batteries or unlock non-electric car doors. Proper identification is required for the performance of these services.

Firearms

California Penal Code Section 626.9 (h) prohibits the possession of a firearm on college grounds.

Alcohol

Consumption of, or being under the influence of, alcohol while on campus is strictly prohibited. Violators are subject to suspension, expulsion, and/or criminal prosecution (Los Rios Policy P-2443 (/shared/doc/board/policies/P-2443.pdf)).

Emergency Telephones

Outdoor, emergency telephones have been installed at strategic locations throughout the campuses. These blue phones, when accessed, will automatically connect the caller to the Los Rios Police Department.

Illegal Drugs

American River College is committed to being a drug-free campus. Violators will be subject to disciplinary procedures. The use, sale, or possession on campus of, or presence on campus under the influence of, any controlled substance is strictly prohibited. Violators are subject to suspension, expulsion, and/or criminal prosecution (Los Rios Policy P-2441 (/shared/doc/board/policies/P-2441.pdf) and Los Rios Policy P-2443 (/shared/doc/board/policies/P-2443.pdf)).

Children on Campus

It is not appropriate for children to attend classes with their parents. All children on campus must be under the direct supervision of a parent, guardian, or other authorized adult. Unattended or disruptive children will be reported to the proper authorities.

Parking

Vehicles that do not have a valid semester parking decal or daily permit properly displayed will be issued a parking citation. There is a $283 fine for parking in designated disabled spaces (including hatch marks next to disabled spaces) without a state-issued disabled decal or plate.

Sexual Harassment

Sexual harassment in any situation is unacceptable and is in violation of state and federal laws and regulations. Corrective action will be taken where evidence of sexual harassment is found (Los Rios Policy P-2424 (/shared/doc/board/policies/P-2424.pdf)).
Los Rios Police Department (LRPD) enforces the California Vehicle Code (CVC) and board-approved regulations on grounds designated for vehicle parking and traffic.

For more information, see parking regulations (https://police.losrios.edu/parking-resources/parking-regulations).
To report an on-campus crime or incident, see crime and reporting (https://police.losrios.edu/crime-and-reporting) on the Los Rios Police Department website.
Each year, the Los Rios Police Department publishes the Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Report (also known as the Annual Clery Report). This report includes information about our safety and security policies and specific crime statistics.

In This Section

The classroom is the essential part of any college where freedom to learn should flourish. Learn about student rights and responsibilities.

Access to Student Records (FERPA) (/2020-2021-catalog/while-you-are-here/student-rights-and-responsibilities/access-to-student-records-(ferpa))
Learn about the use and release of student information.

Learn about our policy regarding alcohol, drugs, and smoking.

Computer and Internet Use Policy (/2020-2021-catalog/while-you-are-here/student-rights-and-responsibilities/computer-and-internet-use-policy)
Learn about our policies for the use of computers and the internet on campus.

Copyright and Piracy Policy (/2020-2021-catalog/while-you-are-here/student-rights-and-responsibilities/copyright-and-piracy-policy)
Learn about Folsom Lake College's copyright and piracy policies.

Learn about the student disciplinary procedures and due process at American River College.

Learn about Folsom Lake College's stance on plagiarism, cheating, and academic integrity.

Right-to-Know Program Completion (/2020-2021-catalog/while-you-are-here/student-rights-and-responsibilities/right-to-know-program-completion)
In compliance with the Student Right-to-Know and Campus Security Act of 1990, completion and transfer rates for students attending American River College can be found on the California Community College State Chancellor’s Office website.

Service Animals on Campus (/2020-2021-catalog/while-you-are-here/student-rights-and-responsibilities/service-animals-on-campus)
See guidelines for bringing service animals onto Folsom Lake College's campuses and centers.

Social Media Policy (/2020-2021-catalog/while-you-are-here/student-rights-and-responsibilities/social-media-policy)
Learn about Folsom Lake College's social media policy.

Standards of Conduct (/2020-2021-catalog/while-you-are-here/student-rights-and-responsibilities/standards-of-conduct)
Learn about American River College's code of conduct and disciplinary offenses.

Student Grievance and Class-Related Concerns (/2020-2021-catalog/while-you-are-here/student-rights-and-responsibilities/student-grievance-and-class-related-concerns)
See information related to student grievances, how to file a formal grievance at American River College, and steps to resolution.
The classroom (including laboratories, field trips, independent study, and so on) is the essential part of any college where freedom to learn should flourish. The instructor has the responsibility for the manner of instruction and the conduct of the classroom. The instructor should not act in any way that denies the rights of students as set forth below (Los Rios Regulation R-2411 (/shared/doc/board/regulations/R-2411.pdf)).

**Student Academic Rights**

**Student Publications**

In preparing student publications, the editorial staff and faculty advisors shall be free from censorship and advance copy approval except as provided by published district policy, statutes, or college regulation. These publications should do the following:

- Adhere to canons of responsible journalism, such as avoidance of libel, indecency, undocumented allegations, attacks on personal integrity, and the techniques of harassment and innuendo.
- State on the editorial page that the opinions expressed are not necessarily those of the college or the student body.

**Support Causes**

Students shall have the right to:

- Take stands on issues
- Examine and discuss questions of interest to them
- Support causes by orderly means which are in harmony with the regular functioning of the institution

**Free Assembly and Free Speech**

Students shall have the right to hear speakers on any subject and college recognized student organizations shall have the right to present speakers on any subject. In addition, students shall have the right of free assembly on each campus subject to regulations that assure the regular functioning of the institution.

The policies and regulations shall include reasonable provisions for the time, place, and manner of conducting these activities, but shall not prohibit the right of students to exercise free expression including, but not limited to, the use of bulletin boards, the distribution of printed materials or petitions, and the wearing of buttons, badges, and other insignia.

Expression which is obscene, libelous, or slanderous according to current legal standards, or which so incites students as to create a clear and present danger of the commission of unlawful acts on college premises, or the violation of lawful district or college regulations, or the substantial disruption of the orderly operation of the college, shall be prohibited.

**Free to Organize**

Students shall have the right to form an organization around any particular interest. This right includes the freedom to organize and to join student organizations subject to published college and district regulations.

**Voice in Decision-Making**

Students shall have the right to be informed on all college matters that can be shown to be directly relevant to them by having a voice in decision making that affects their academic future, with the exception of staff appointment, termination, and tenure.

In case of conflict in determining what college matters are relevant to students, the determination will be made by a college-designated student, faculty, and administrative committee.

In addition, student representatives shall be members of all faculty and administrative committees related to students’ concerns; such student representatives shall have a vote as committee members.
Confidentiality

Students shall have the right to have their academic records treated in a confidential and responsible manner with due regard to the personal nature of the information these records contain. Students' records will be released only on the written consent of the students or as provided by law. Learn more about access to student records [here](https://arc.losrios.edu/access-to-student-records).

Academic Evaluation

Students shall have the right of protection against prejudiced or capricious academic evaluation. At the same time, students are responsible for maintaining standards of academic performance established in advance for each course in which they are enrolled.

Grievance Procedure

Students shall have the right to file a grievance as outlined in [Los Rios Regulation R-2412](https://arc.losrios.edu/shared/doc/board/regulations/R-2412.pdf), in the event of an alleged breach of their rights. American River College's designated grievance officer will hear grievances of students who believe their academic rights have been denied or violated.

Student Responsibilities

The Expectations of the College

Admission to college assumes the expectation that the student will:

- Be a responsible member of the college community
- Obey the law
- Comply with the published rules and regulations of the college
- Respect the rights, privileges, and property of the other members of the college community
- Not interfere with legitimate college affairs

Students enrolled in a class are responsible for meeting standards of performance and conduct established by the Los Rios Community College District and the instructor. Students are responsible for registering, "adding," and "dropping" classes in a timely fashion to make sure that other students have an opportunity to take classes. Students are responsible for completing and submitting all class assignments, examinations, tests, projects, reports, and so on by scheduled due dates, or face penalties.

If any problem arises regarding coursework or attendance, the student will be held responsible for initiating communication and contact with the instructor. In addition, students will be held responsible for behavior and conduct adverse to the preservation of order as established by the college and the instructor. Students are responsible for meeting their degree requirements as provided in the college catalog.

In the case of student conduct that involves an alleged or proven violation of criminal law, the disciplinary authority of the college will not be used to duplicate the function of criminal authority. Disciplinary action may be taken if the conduct also involves a violation of district or college policy.

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See [Students Standards of Conduct](https://arc.losrios.edu/standards-of-conduct)

See [Student Disciplinary Procedures](https://arc.losrios.edu/student-discipline)
Access to Student Records (FERPA) | American River College

Use and Release of Student Information

The Family Educational Rights and Privacy Act of 1974 (FERPA) was designed to protect the privacy of educational records and to establish the rights of students to inspect and review their educational records. It also provides control over the release of educational record information. The original intent of this legislation was to keep elementary and high school records private and to give parents access to their child's school records.

After a student turns eighteen or attends an institution of higher education (a college or university), the rights of access to the student's records transfer to the student. This means that all academic information regarding a college student goes directly to the student unless the student has given specific, written permission to release that information to someone else.

While parents understandably have an interest in their child's academic progress, they are not automatically granted access to a student's records without written consent of the student. Parents are encouraged to consult with the student if academic information is needed.

A student can give permission for a third party to access their records by filing a Student Consent for Release of Records Form (/shared/doc/admissions-records/forms/student-consent-for-release-of-student-records.pdf) (PDF) with the Admissions and Records office.
Alcohol, Drug, and Smoking Policy | American River College

Alcohol and Drug Policy

The abuse of illicit drugs and alcohol disrupts classes, compromises your physical and mental health, subjects you to criminal penalties, and impairs your ability to benefit from the learning experience. We therefore ask the college community to actively support a drug- and alcohol-free learning environment by knowing and making others aware of college policies and the substantial health and legal consequences of abuse.

District Policy

Policy P-2443: Drug and Alcohol-Free Workplace and College Premises (/shared/doc/board/policies/P-2443.pdf) states that the district “is committed to maintaining a drug- and alcohol-free workplace in accordance with the requirements of the US Drug-Free Workplace Act of 1988, and a drug- and alcohol-free college environment for students and employees in accordance with the requirements of the Drug-Free Schools and Community Act Amendment of 1989.”

Legal Sanctions

The Los Rios Standards of Student Conduct prohibit the use, sale, or possession on campus of, or presence on campus under the influence of, any controlled substance. Controlled substances include cocaine, marijuana, LSD, heroin, methadone, mescaline, peyote, and methaqualone, among others.

If you abuse drugs or alcohol on campus, or appear on campus or at a college-sponsored function under the influence of drugs or alcohol, you can be suspended, expelled, and/or criminally prosecuted. The penalties for the more common offenses are:

- Possession or use of alcohol: year in jail and/or fine
- Possession of marijuana: criminal citation and fine
- Possession of cocaine: imprisonment in a state prison
- Sales of any illegal drug: imprisonment in a state prison
- Possession or use of alcohol by a minor: one year in jail and/or fine
- If you are a student employee, you may be terminated
- You are required to report any convictions within five days of the occurrence
- You will be ineligible for financial aid

Smoking Policy

Per section 2.23 of Regulation R-1411: Use of Facilities (/shared/doc/board/regulations/R-1411.pdf), smoking, vaping, and the use of tobacco is prohibited on all district/college property. Smoking is defined as inhaling, exhaling, burning, or carrying any lighted or heated cigar, cigarette, pipe, or any other lighted or heated tobacco or other product intended for inhalation, in any matter or in any form. Smoking also includes the use of e-cigarettes. An e-cigarette is any oral device that provides a vapor of nicotine or any other substance for inhalation. E-cigarettes do not include products approved by the United States Department of Food and Drug Administration for medical treatment.
Computer and Internet Use Policy | American River College

Computer Use Policy

The following rules apply to all computer labs on campus. Specific labs may have additional rules.

General Rules

- Equipment use in the lab is intended for class assignments only – use of computers is closely monitored for compliance with acceptable use standards
- Computers are available on a first-come, first-served basis
- Food and/or drinks (including water bottles) are not allowed in computer labs at any time
- Children (under 18) are not allowed to use computer equipment unless they are current American River College students
- Report problems with computers and/or printers to computer lab staff
- A valid login may be used for assigned purposes only – sharing access with others is not permitted
- All downloading and saving must be to removable media
- Playing games on college computers is prohibited except for class assignments
- When you're done, log off the computer but don't turn the computer off
- Directions from any lab assistant or instructor concerning equipment/facilities or student conduct must be followed in order to continue use of the facilities

Respect Those Around You

- Bring your own headphones for sound control.
- Pets are not allowed, except for service animals.
- Keep noise to a minimum
- Use one workstation per person
- Keep backpacks out of the walkways
- Turn off or silence cell phones and pagers and answer phone calls outside of the lab

Software

- Software may not be copied from computers or network drives
- Installing software or games on computers is prohibited

Internet Use Policy

Internet access is limited to classroom assignments only.

The acceptable use standards concerning internet use must be followed where applicable. The following activities are not allowed:

- Transmitting unsolicited information, which contains profane language or panders to bigotry, sexism, or other forms of discrimination
- Using the internet to gain unauthorized access to any computer
- Engaging in personal attacks (writing bullying, intimidating, threatening, or harassing entries)
- Making threats (directed towards others or yourself) without expecting the recipients of those threats, the college, and the police to consider them real
- Transmitting information that contains obscene, indecent, lewd, or lascivious material or other material that explicitly or implicitly refers to sexual conduct. This includes displaying such material where other individuals could potentially view it.
- Inappropriate mass mailing, which includes multiple mailing to news groups, mailing lists, or individuals

Attempts by students to obtain, manipulate, delete, or change the contents of another user's files, passwords, etc. are regarded as infractions of the California Computer Crime Penal Code. Attempts to "break" the operating system constitute a felony under this law.
Copyright and Piracy Policy | American River College

What is a Copyright?

A copyright is a legal protection that gives the developer of an original piece of work (intellectual or artistic) exclusive rights for a certain time period. Copyright infringement is the unauthorized use of copyrighted material.

What is Piracy?

Piracy is the recreational downloading of copyrighted materials. Piracy is a violation of both federal law and college policy. The Recording Industry Association of America (RIAA) and Motion Pictures Association of America (MPAAP) have been cracking down on piracy in the US and targeting university and college networks, since this is where the highest amount of copyright infringements occur.

What is Peer-to-Peer (P2P) Software?

Peer-to-Peer (P2P) software allows users to download and distribute files from computer to computer across networks using P2P protocols, regardless of whether the user has paid for the files. When users have not paid for these files, they break federal and international copyright laws.

Piracy is not the only downside of using P2P software. P2P software allows users to access your computer and potentially hack into your private data. The result is exposure of your computer to significant security risks from viruses, worms, and hackers that could lead to possible loss of data, identity theft, and other liabilities.

College Actions for Violation

Sharing music, videos, or other copyrighted materials using Peer-to-Peer (P2P) applications over the network exposes you and anyone you share files with to legal action.

If a notice is sent from a trusted agency to American River College, then the student's account will be blocked from accessing the WiFi network. The student in question may have to go through the college's disciplinary process to regain access.

Summary of Civil and Criminal Penalties for Violation of Federal Copyright Laws

Copyright infringement is the act of exercising, without permission or legal authority, one or more of the exclusive rights granted to the copyright owner under section 106 of the Copyright Act (Title 17 of the United States Code). These rights include the right to reproduce or distribute a copyrighted work. In the file-sharing context, downloading or uploading substantial parts of a copyrighted work without authority constitutes an infringement.

Penalties for copyright infringement include civil and criminal penalties. In general, anyone found liable for civil copyright infringement may be ordered to pay either actual damages or “statutory” damages affixed at not less than $750 and not more than $30,000 per work infringed. For "willful" infringement, a court may award up to $150,000 per work infringed. A court can, in its discretion, also assess costs and attorneys’ fees. For details, see Title 17, United States Code, Sections 504, 505.

Willful copyright infringement can also result in criminal penalties, including imprisonment of up to five years and fines of up to $250,000 per offense.

Additional Resources

- Policy P-8861: Copyright (/shared/doc/board/policies/P-8861.pdf)
- US Copyright Office (http://www.copyright.gov)
- Recording Industry Association of America (RIAA) (https://www.riaa.com/resources-learning/about-piracy/)
- Motion Picture Association (MPA) (https://www.motionpictures.org)
- Business Software Alliance (BSA) (http://www.bsa.org/anti-piracy)
Disciplinary Procedures and Due Process
| American River College

The following are the disciplinary and due process procedures for when a student is referred to the Office of Student Conduct.

1. A student who is referred for discipline is required to meet with the Student Conduct Officer. This referral means the student's alleged behavior is believed to have been a violation of the Los Rios Student Standards of Contact.

2. The student will receive a certified letter via US standard mail notifying them of their referral. In the notification, the student is instructed to make an appointment for an investigative meeting with the Student Conduct Officer.

3. At the informal, investigative meeting, the Student Conduct Officer shall interview the student for the purpose of discussing the alleged misconduct and the disciplinary action that should be taken (if any).

4. At the investigative meeting, the parties shall have the right to present statements, testimony, evidence, and witnesses, except that neither party shall have the right to be represented by an attorney.

5. The investigative meeting is mandatory. If the student fails to make an appointment and/or does not attend the meeting, then the Student Conduct Officer may review the case and initiate disciplinary action without input from the student.

6. After the investigative meeting, the Student Conduct Officer may initiate disciplinary action by filing a notice with the Vice President of Student Services and serving such notice on the student charged. This decision depends entirely on the information obtained during the investigation.

7. The student has the right to request an appeal to the disciplinary action with the Vice President of Student Services no later than seven (7) days after the service of the notice of disciplinary action. A copy of the appeal form will be mailed to you along with your notice of disciplinary action.

8. After an appeal hearing, a written decision will be mailed to the student from the Office of the President within ten days of the conclusion of the hearing.

9. At this point, the final decision for disciplinary action rests with the college president. The president may approve, reject, or modify the written decision. The decision of the college president for disciplinary action is final.

Refer to Regulation R-2442: Due Process (/shared/doc/board/regulations/R-2442.pdf) for complete information regarding student standards of conduct and due process.

Contact

For additional information on student conduct, please contact the Student Conduct Officer:

Chad Funk (Associate Vice President, Student Services)
Email: funkc@arc.losrios.edu (mailto:funkc@arc.losrios.edu)
Phone: (916) 484-8452
Academic Integrity and Responsibility

Academic integrity and responsibility mean acting honestly, conscientiously, and honorably in all academic endeavors. Students are accountable for all that they say and write. Since trust is the foundation of an intellectual community, and since student work is the basis for instructors to evaluate student performance in courses, students should not misrepresent their work nor give or receive unauthorized assistance.

Academic Dishonesty

In contrast to academic integrity and responsibility, academic dishonesty takes the form of plagiarism and/or cheating.

Plagiarism

The word plagiarism comes from the Latin word “plagiarius,” meaning kidnapper. Plagiarism is generally the taking of words, sentences, organization, and ideas from another source without acknowledging that source.

Plagiarism may include:

- Submitting papers, examinations, or assignments written/completed entirely or in part by others
- Directly copying portions of another's work without enclosing the copied passage in quotation marks for written work or without citing appropriately in an oral presentation and without acknowledging the source in the appropriate scholarly convention whether the work is presented in written or oral form
- Using a unique term or concept without acknowledging the source
- Paraphrasing or summarizing a source’s ideas without acknowledging the source
- Replicating a visual presentation, representation, or performance without acknowledging the source

Cheating

Cheating is similar to plagiarism in that it involves representing another's work as one's own. However, cheating often involves more overtly deceptive or fraudulent acts of academic dishonesty designed to gain credit for academic work that is not one's own.

Cheating may include:

- Giving or receiving unauthorized assistance during an examination
- Fabricating or altering a source of data in a laboratory or experiment
- Collaborating with others when collaboration is not permitted, or when the contributions of others are not made clear
- Using unauthorized materials or aids during an examination, including calculators, dictionaries, or information accessed via any electronic devices
- Acquiring, without permission, tests or other academic material belonging to a member of the college faculty or staff
In compliance with the Student Right-to-Know and Campus Security Act of 1990, completion and transfer rates for students attending American River College can be found on the California Community College State Chancellor's Office Student Right-to-Know Rate Disclosure Website (http://srtk.cccco.edu/index.asp).
Students and employees with a disability* who need a service animal may use a service animal (including a service animal in training) on district and college property. Therapy animals and pets are not allowed.

*Disability must be consistent with guidelines set forth by the Americans with Disabilities Act (ADA) and the Fair Employment and Housing Act (FEHA).

Service Animal Guidelines

Service animals are subject to the following guidelines:

1. A service animal is any dog or a miniature horse that is trained to do work or perform tasks for an individual with a disability.

2. Faculty, staff or student owners of service animals that wish to bring the animal to campus, are requested, but not required, to register their service animal with the Vice President of Student Services or Vice President of Administrative Services. Registration provides a quick way to demonstrate the service animal is properly on campus.

3. If owner applies for registration, owner must provide documentation of their service animal’s current shot/vaccination records at the time of registration. Visitors should check in with the Vice President’s offices.

4. If owner applies for registration, owner must provide documentation of appropriate licenses.

5. If owner applies for registration, owner should carry proof of service animal registration when accompanied by that service animal on campus.

6. The service animal must be in good health, and free of fleas and external parasites.

7. The service animal must be on a leash at all times.

8. Owner is responsible for all cleanup of animal feces.

9. Service animals that disrupt the learning environment and the ability of others to learn may be excluded from campus.

10. Service animals that are ill, unclean, noisy, or bedraggled will not be allowed on campus.

11. Service animals that show unprovoked aggressive tendencies or are deemed potentially dangerous will not be allowed on campus.

12. Service animals are not permitted to be in the following areas: mechanical rooms/custodial closets, any room where protective gear is worn, or any room that poses a potential danger to the animal.

13. Owner will be financially responsible for any damage or cleaning costs resulting from the animal being brought on to campus. Animals that cause damage may be excluded from the campus.

Individuals who bring a service animal to campus must extend courtesy and respect to colleagues, students, and visitors in the area. Owners are required to keep service animals on a leash and should consider safety, health, and the possible fears others may have in the presence of animals.
Social Media Participation Guidelines

As an institution of higher learning, American River College – by its very nature – embraces the free and open exchange of ideas. To that end, we are committed to the community’s First Amendment rights and the core values of free speech.

We believe in fostering a thriving online community. We support the various channels of social networking – Facebook, Twitter, YouTube, Instagram, and so on – as valuable tools for engaging students, staff, faculty, alumni, friends, and supporters in a constructive two-way dialogue about American River College and its mission.

At the same time, the long-term value, vibrancy, and success of any social media community depends on a shared philosophy of how to behave. It's important that members of our community become familiar with Facebook's Terms of Service (https://www.facebook.com/legal/terms), Twitter's Rules and Policies (https://help.twitter.com/en/rules-and-policies), YouTube's Policies (https://www.youtube.com/about/policies/#community-guidelines), Instagram's Terms of Use (https://help.instagram.com/581066165581870), and similar support sites for social media. The emphasis for all participants – including site administrators – should always be transparency, honesty, respect, and civility.

All content, information, and views expressed on social media belong to the individuals posting the content. These view do not necessarily reflect the official policies or positions of the college, district, or Board of Trustees. We are not responsible for unanswered posts or inaccurate information posted by others.

Here are guidelines for engaging in American River College social media platforms:

- Be respectful of the rights and opinions of others. Be willing to agree to disagree and move on.
- Stay on topic. Our social media sites are established as forums for the open and honest discussion of matters and developments related to – and limited to – our mission (https://arc.losrios.edu/about-us/our-values).
- Be transparent and honest.
- Add value. Be part of the conversation but don’t take it over.
- Avoid hateful speech, personal attacks, flaming, profanity, vulgarity, pornography, nudity, and abusive language.
- Keep personal information (for example, your phone number and address) out of your posts.
- Think before you post. Almost everything you write or post to a social media site – words, pictures, video – is public or can be discovered. If you post on any of our social media sites, then you consent that what you post can be published and you waive any expectation of privacy regarding the post. What you choose to add to the conversation today will live on long after the subject matter has come and gone as a topic of conversation.
- We encourage you to post comments and “like” articles, photos, and videos you enjoy.

On our Facebook, Twitter, YouTube, and Instagram pages and other social media platforms, our goal is to post interesting, entertaining, and educational content. We welcome your comments and suggestions. We encourage conversation and dialogue, but we want to ensure a respectful online environment and invigorating conversation for the broader college community. Our page administrators review posts and comments regularly to ensure any issues or concerns are addressed in a timely manner.

We may or may not reply to comments, but if it's provocative, fair, and insightful, chances are others will engage in the conversation.

We reserve the right to determine and remove from American River College social media sites any of the following:

- Comments, links, images, or videos that are illegal or encourage illegal activity, or are obscene, defamatory/libellous/slanderous, indecent, lewd, lascivious, sexually harassing or explicit in nature, or pose risks to the health or safety of individuals
- Comments that personally attack or threaten any person
- For students, anything that would violate District policies regarding student regulations (https://losrios.edu/about-los-rios/board-of-trustees/policies-and-regulations)
- For staff and faculty, anything that would violate District policies regarding staff and faculty regulations (https://losrios.edu/about-los-rios/board-of-trustees/policies-and-regulations)
- Successive off-topic posts by one or more individuals or groups
- Repetitive posts copied and pasted or duplicated by one or more individuals or groups
- Solicitations or advertisements
- Any materials that infringe upon the intellectual property or other rights of any third party
A student who enrolls at American River College may rightfully expect that students, faculty, and administrators will maintain an environment in which there is freedom to learn.

Student conduct must comply with federal and state laws, college rules and regulations, and Regulation R-2441: Standards of Conduct (/shared/doc/board/regulations/R-2441.pdf). Students who violate such rules and regulations are subject to disciplinary action.

**Disciplinary Offenses**

Any student found to have committed, or to have attempted to commit, the following misconduct is subject to appropriate disciplinary action:

- Continued disruptive behavior, continued willful disobedience, habitual profanity or vulgarity, or the open and persistent defiance the authority of, or persistent abuse of, members of the college community
- Assault, battery, or any threat of force or violence upon members of the college community
- Willful misconduct which results in injury or death to members of the college community, or which results in cutting, defacing, or other injury to any real or personal property owned by the district
- The use, sale, or possession on campus of, or presence on campus under the influence of, any controlled substance (See alcohol, drug, and smoking policies (https://arc.losrios.edu/about-us/our-values/student-rights-and-responsibilities/alcohol-drug-and-smoking-policies))
- Willful or persistent smoking in any area where smoking has been prohibited by law or district policy (See alcohol, drug, and smoking policies (https://arc.losrios.edu/about-us/our-values/student-rights-and-responsibilities/alcohol-drug-and-smoking-policies))
- Persistent, serious misconduct where other means of correction have failed to bring about proper conduct
- Violation of College rules and regulations including those concerning student organizations, the use of college facilities, or the time, place and manner of public expression and distribution of materials
- Obstruction or disruption of teaching, research, administrative disciplinary procedures or other college activities, including its community service activity, or of other authorized activities on college-controlled premises
- Theft of or non-accidental damage to property of the college or a member of the college community while on campus or at college-sponsored events
- Unauthorized entry to or use of college facilities
- Dishonesty, such as cheating, plagiarism, or furnishing false information to the college; forgery, alteration, or misuse of college documents, records, or identifications (See plagiarism and cheating policies (https://arc.losrios.edu/about-us/our-values/student-rights-and-responsibilities/plagiarism-and-cheating))
- Knowing possession or use of explosives, dangerous chemicals or deadly weapons on college property or at a college function without prior authorization of the college president or designated representative
- Use, possession, distribution or being under the influence of alcoholic beverages, narcotics or dangerous drugs on college property or at college-sponsored events (See alcohol, drug, and smoking policies (https://arc.losrios.edu/about-us/our-values/student-rights-and-responsibilities/alcohol-drug-and-smoking-policies))
- Soliciting or assisting another to do any act which would subject a student to expulsion, suspension, probation or other discipline pursuant to Regulation R-2441: Standards of Conduct (/shared/doc/board/regulations/R-2441.pdf)
- Violation of any order of a college president, notice of which has been given prior to such violation, and which order is not inconsistent with any of the other provisions of this policy. This notice may be given by publication in the college newspaper, by posting on an official bulletin board designated for this purpose or by any other means reasonably calculated to inform students of its provisions.
- Attempting to commit an act that would be cause for disciplinary action identified above
Student Grievance and Class-Related Concerns
| American River College

Steps to Resolution

1. Students should speak with their professor about the concern.
2. Students who feel as though they are unable to speak with their professor or resolve the situation, should then contact the instructional division area dean.

Note: Most complaints, grievances, or disciplinary matters should be resolved at the campus level. This is the quickest and most successful way of resolving issues involving the college. You are encouraged to work through the campus complaint process first.

Contact

For information on how to file a formal grievance, please contact the Student Grievance Officer:

Nisha Beckhorn (Interim Dean, Student Services, Counseling and Transfer Services)
Email: beckhon@arc.losrios.edu
Phone: (916) 484-8376

Additional Grievance Information

Issues that are not resolved at the college or district level may be presented via resources provided by the California Community Colleges Chancellor's Office. Complainants are encouraged to use the official form provided by the Chancellor's office (https://www.cccco.edu/Complaint-Process-Notice), however, that form is not required and complaints will not be considered defective or rejected if you do not use the form.

A student may file a grievance or grieve an action or decision of the district or one of its colleges when the student's status and/or rights have been adversely affected.

Grievances relating to grades are subject to Education Code Section 76224(a), which reads:

"When grades are given for any course of instruction taught in a community college district, the grade given to each student shall be the grade determined by the instructor of the course and the determination of the student's grade by the instructor, in the absence of mistake, fraud, bad faith, or incompetence, shall be final."

In addition to complaints being filed by students or employees, complaints may be initiated by other individuals or entities, such as a family member, representative, organization, or other third party wishing to file on behalf of an individual or group alleged to have suffered unlawful discrimination or harassment (Los Rios Regulation R-2423 (shared/doc/board/regulations/R-2423.pdf)).
In This Section

Equal Opportunity (/2020-2021-catalog/while-you-are-here/equal-opportunity-equity-discrimination-and-harassment/equal-opportunity)
Learn about American River College's commitment to equal opportunity.

At American River College, we value equity and diversity. No person shall be unlawfully discriminated against, harassed, or excluded from any benefits, activities, or programs because they possess certain characteristics (actual or perceived).

Sexual Harassment or Assault (/2020-2021-catalog/while-you-are-here/equal-opportunity-equity-discrimination-and-harassment/sexual-harassment-or-assault)
Learn about American River College's policies against sexual harassment and assault. This includes gender harassment, sexual violence, domestic violence, dating violence, and stalking.

Types of Harassment (/2020-2021-catalog/while-you-are-here/equal-opportunity-equity-discrimination-and-harassment/types-of-harassment)
It is a priority of American River College to prevent and respond to all forms of harassment, including bullying, psychological harassment, racial harassment, religious harassment, stalking, mobbing, hazing, and backlash.

Learn about American River College's discrimination and harassment complaint procedures and resolution process.
Equal Opportunity | American River College

Equal Opportunity is the Law

American River College is an equal opportunity employer/program. Auxiliary aids and services are available upon request to individuals with disabilities through Disability Services and Programs for Students (https://arc.losrios.edu/dsps).

As a recipient of federal financial assistance, it is against the law for American River College to discriminate against any individual in the US based on the following: race, color, religion, sex (including pregnancy, childbirth, and related medical conditions, sex stereotyping, transgender status, and gender identity), national origin (including limited English proficiency), age, disability, or political affiliation or belief, or, against any beneficiary of, applicant to, or participant in programs financially assisted under Title I of the Workforce Innovation and Opportunity Act, on the basis of the individual's citizenship status or participation in any WIOA Title I-financially assisted program or activity.

American River College must not discriminate in any of the following areas:

- Deciding who will be admitted, or have access, to any WIOA Title I-financially assisted program or activity
- Providing opportunities in, or treating any person with regard to, such a program or activity
- Making employment decisions in the administration of, or in connection with, such a program or activity

Recipients of federal financial assistance must take reasonable steps to ensure that communications with individuals are as effective as communications with others. This means that, upon request and at no cost to the individual, American River College is required to provide appropriate auxiliary aids and services to qualified individuals with disabilities.

What to Do If You Believe You Have Experienced Discrimination

If you think that you have been subjected to discrimination under a Workforce Innovation and Opportunity Act (WIOA) Title I financially assisted program or activity, then you may file a complaint within 180 days from the date of the alleged violation with either American River College's Equal Opportunity Officer (or the person whom the recipient has designated for this purpose) or the Civil Rights Center.

American River College Equity Officer
Nicolas Daily
(916) 484-8163
dailyn@arc.losrios.edu (mailto:dailyn@arc.losrios.edu)

Civil Rights Center (https://www.dol.gov/agencies/oasam/centers-offices/civil-rights-center)
US Department of Labor
200 Constitution Avenue NW, Room N-4123
Washington, DC 20210

If you file your complaint with American River College, then you must wait either until American River College issues a written Notice of Final Action, or until 90 days have passed (whichever is sooner), before filing with the Civil Rights Center (see address above).

If American River College does not give you a written Notice of Final Action within 90 days of the day on which you filed your complaint, then you may file a complaint with Civil Rights Center before receiving that notice. However, you must file your Civil Rights Center complaint within 30 days of the 90-day deadline (in other words, within 120 days after the day on which you filed your complaint with the recipient).

If American River College does give you a written Notice of Final Action on your complaint, but you are dissatisfied with the decision or resolution, then you may file a complaint with the Civil Rights Center. You must file your Civil Rights Center complaint within 30 days of the date on which you received the Notice of Final Action.

La Igualdad De Oportunidades Es La Ley

Es contra la ley que este beneficiario de asistencia financiera federal discrimine de la siguiente manera: contra cualquier individuo en los Estados Unidos, sobre la base de raza, color, religión, sexo (incluyendo embarazo, parto y afecciones médicas relacionadas, estereotipos sexuales, estatus de transsexualidad e identidad de género), origen nacional (incluyendo la competencia limitada en inglés), edad, incapacidad, o afiliación o creencia política o contra cualquier beneficiario de, solicitante o participante en programas con asistencia financiera bajo el Título I del Workforce Innovation and Opportunity Act (WIOA), sobre la base del estatus de ciudadanía del individuo o la participación en cualquier programa o actividad con asistencia financiera del Título de WIOA.

El destinatario no debe discriminar en ninguna de las siguientes áreas: decidir quién será admitido, o tendrá acceso, a cualquier programa o actividad con asistencia financiera del Título 1 de WIOA; proporcionar oportunidades o el tratar a cualquier persona con respecto a dicho programa o actividad; o, tomar decisiones de empleo en la
administra de, o en relación con, tal programa o actividad.

Los destinarios de la asistencia financiera federal deben tomar medidas razonables para garantizar que las comunicaciones con las personas sean tan efectivas como las comunicaciones con los demás. Esto significa, previa solicitud y sin costo para el individuo, se requiere que los destinarios proporcionen ayuda y servicios auxiliares adecuados a personas calificadas con discapacidades.

Qué Hacer Si Usted Cree Que Ha Experimentado Discriminación

Si usted piensa que ha sido sometido a discriminación bajo una ley de Workforce Innovation and Opportunity Act I (WIOA) Titulo I programa o actividad asistida financieramente, usted puede presentar una queja dentro de 180 días a partir de la fecha de la presunta violación con cualquier.

El funcionario de Igualdad de Oportunidades del destinario (o la persona a la que el destinatario ha designado para este propósito):

American River College Oficial de Equidad
Nicolas Daily
(916) 484-8163
dailyn@arc.losrios.edu

Civil Rights Center (https://www.dol.gov/agencies/oasam/centers-offices/civil-rights-center)

US Department of Labor
200 Constitution Avenue NW, Room N-4123
Washington, DC 20210

Si presenta su queja con el destinatario, debe esperar hasta que el destinatario emita una Notificación por escrito de la Acción Final, o hasta que hayan pasado 90 días (lo que ocurra primero), antes de presentar su queja con el Civil Rights Center (véase la dirección anterior).

Si el destinatario no le da una Notificación por escrito de la Acción Final dentro de los 90 días del día en que usted presento su queja, usted puede presentar una queja ante el Civil Rights Center antes de recibir ese aviso. Sin embargo, usted debe presentar su queja de Civil Rights Center dentro de 30 días de la fecha límite de 90 días (en otras palabras, dentro de los 120 días después del día en que usted presento su queja con el destinatario).

Si el destinatario le da una Notificación por escrito de la Acción Final sobre su queja, pero usted no está satisfecho con la decisión o resolución, usted puede presentar una queja ante el Civil Rights Center. Usted debe presentar su queja de Civil Rights Center dentro de 30 días de la fecha en que recibió Notificación de la Acción Final.
At American River College, we value equity and diversity. That’s why we work toward just and fair inclusion into a society in which all people can participate, prosper, and reach their full potential.

No person shall be unlawfully discriminated against, harassed, or excluded from any benefits, activities, or programs because they possess any of the following characteristics (actual or perceived):

- Ethnic group identification
- National origin or ancestry
- Race or color
- Physical or mental disability
- Sex, gender, gender identity, or gender expression
- Medical condition
- Pregnancy or childbirth-related condition
- Political affiliation or belief
- Sexual orientation or sexual identity
- Military and veteran status
- Religion or religious creed
- Marital status
- Age (over forty)

In addition, retaliation against a person who files a complaint, refers a matter for investigation, participates in an investigation, or serves as an advocate for a complainant or respondent is prohibited by district policy.

For more information or to file a complaint, contact the American River College Equity Officer, Nicolas Daily, at dailyn@arc.losrios.edu or (916) 484-8163.
Sexual Harassment or Assault | American River College

Title IX (Sex Discrimination)

Title IX of the Educational Amendments of 1972 and subsequent amendments bans sex discrimination in schools, whether it be in academics or athletics. Title IX states:

“No person in the United States shall, on the basis of sex, be excluded from participation in, be denied benefits of, or be subjected to discrimination under any education program or activity receiving federal financial assistance.”

The underlying intent of Title IX is to eliminate any form of discrimination based on gender that may interfere with a student's physical well-being, emotional well-being, and academic performance. Colleges and universities receiving federal funds bear an affirmative duty to ensure that no student (male or female) is deprived of an educational opportunity or benefit due to such discrimination.

Gender Harassment

Sex discrimination in the form of gender harassment consists primarily of repeated comments, jokes, and innuendoes directed at persons because of their gender or sexual orientation. This behavior typically is not aimed at eliciting sexual cooperation, but, like racial harassment, it contaminates the learning and work environment and has no place at American River College.

Examples of gender harassment include the following:

- Disparaging women's intellectual abilities and potential
- Using sexist statements in classroom discussions
- Disparaging the lifestyles or behaviors of gays or lesbians

Sexual Harassment Policy

It is the desire of the Los Rios Community College District Board of Trustees to provide for all students and employees an educational environment and workplace free from sexual harassment. Sexual harassment in any situation is unacceptable and is in violation of state and federal laws and regulations. Where evidence of harassment is found, appropriate corrective action shall be taken.

Definition of Sexual Harassment

Sexual harassment means unwelcome sexual advances, requests for sexual favors, and other verbal, visual, or physical conduct of a sexual nature, made by someone from or in the work or educational setting, under any of the following conditions:

- Submission to the conduct is explicitly or implicitly made a term or a condition of an individual's employment, academic status, or progress
- Submission to, or rejection of, the conduct by the individual is used as the basis of employment or an academic decision affecting the individual
- The conduct has the purpose or effect of having a negative impact upon the individual's work or academic performance, or of creating an intimidating, hostile, or offensive work or educational environment
- Submission to, or rejection of, the conduct by the individual is used as the basis for any decision affecting the individual regarding benefits and services, honors, programs, or activities available at or through the educational institution.

Sexual harassment includes, but is not limited to:

- Making unsolicited written, verbal, visual, or physical contact with sexual overtones. Some examples are:
  - Epithets
  - Derogatory comments or slurs of a sexual nature
  - Impeding or blocking movements or any physical interference with normal work
  - Derogatory posters or cartoons
- Continuing to express sexual interest after being informed that the interest is unwelcome (reciprocal attraction is not considered sexual harassment)
- Within the work environment, engaging in explicit or implicit coercive sexual behavior which controls, influences, or affects the career, salary, and/or work environment,
or any other term or condition of employment

- Within the educational environment, engaging in explicit or implicit coercive sexual behavior which controls, influences, or affects the educational opportunities, grades, and/or learning environment of the student
- Making reprisals, threats of reprisal, or implied threats of reprisal following a negative response to a sexual advance. For example, within the work environment, either suggesting or actually withholding support for an appointment, promotion, or change of assignment; suggesting a poor performance report will be prepared; or suggesting probation will be failed. Within the educational environment, either suggesting or actually withholding grades earned or deserved; suggesting a poor performance evaluation will be prepared; or suggesting a scholarship recommendation or college application will be denied
- Offering favors of educational or employment benefits, such as grades or promotions, favorable performance evaluations, favorable assignments, favorable duties or shifts, recommendations, reclassifications, and so on, in exchange for sexual favors.

**Sexual Assault**

Sexual assault includes, but is not limited to:

- Rape
- Forced sodomy
- Forced oral copulation
- Rape by a foreign object
- Sexual battery
- Domestic violence
- Dating violence
- Stalking
- Threat of sexual assault

Sexual assault is a form of sexual harassment and should be reported under the district's Discrimination and Harassment Procedures Policy P-2423 (/shared/doc/board/policies/P-2423.pdf) and Regulation R-2423 (/shared/doc/board/regulations/R-2423.pdf).

**Sexual Violence**

Sexual violence means physical sexual acts perpetrated against a person's will or where a person is incapable of giving consent due to the victim's use of drugs or alcohol. An individual also may be unable to give consent due to an intellectual or other disability. Sexual violence includes, but is not limited to, rape, sexual assault, sexual battery, and sexual coercion.

**Consent**

Consent is the informed, affirmative, conscious decision by each participant to engage in mutually agreed-upon sexual activity.

Consent must be voluntary, and given without coercion, force, threats, or intimidation. Consent requires positive cooperation in a particular sexual act, or expression of intent to engage in that sexual act through the exercise of free will.

Consent can be withdrawn or revoked. Consent to one form of sexual activity (or one sexual act) does not constitute consent to other forms of sexual activity (or other sexual acts). Consent to sexual activity given on one occasion does not constitute consent to sexual activity on another occasion. The fact that two people are, or were in, a dating or sexual relationship does not constitute consent to engage in sexual activity. Consent to a sexual act may be withdrawn or revoked at any time, including after penetration. The victim’s request for the perpetrator to use a condom or birth control does not, in and of itself, constitute consent. Once consent is withdrawn or revoked, the sexual activity must stop immediately.

Consent cannot be given by a person who is incapacitated. For example, a person cannot give consent if she/he is unconscious or coming in and out of consciousness. A person is incapacitated if she/he lacks the physical and/or mental ability to make informed, rational judgments. Examples of incapacitation include unconsciousness, sleep, and blackouts. Whether an intoxicated person (as a result of using alcohol or other drugs) is incapacitated depends on the extent to which the alcohol or other drugs impact the person's decision-making capacity, awareness of consequences, and ability to make fully informed judgments. A person with a medical or mental disability may also lack the capacity to give consent.

Being intoxicated by drugs or alcohol does not diminish a person's responsibility to obtain consent from the other party before engaging in sexual activity. Factors to be considered include whether the person knew, or whether a reasonable person in the accused's position should have known, that the victim did not give, or revoked, consent; was incapacitated; or was otherwise incapable of giving consent.

Sexual intercourse with a minor is never consensual when the victim is under 18 years old, because the victim is considered incapable of giving legal consent due to age.

**Domestic Violence**

Domestic violence is a form of sexual violence and is abuse committed against someone who is a current or former spouse, current or former cohabitant, someone with whom the abuser has a child, someone with whom the abuser has or had a dating or engagement relationship, or a person similarly situated under California domestic or
family violence law.

Cohabitant means two unrelated persons living together for a substantial period of time, resulting in some permanency of relationship. Factors that may determine whether persons are cohabiting include, but are not limited to:

1. Sexual relations between the parties while sharing the same living quarters
2. Sharing of income or expenses
3. Joint use or ownership of property
4. Whether the parties hold themselves out as husband and wife
5. The continuity of the relationship
6. The length of the relationship

Dating Violence

Dating violence is a form of sexual violence and is abuse committed by a person who is, or has been, in a social or dating relationship of a romantic or intimate nature with the victim. This may include someone the victim just met; for example, a person they met at a party, were introduced to through a friend, or met on a social networking website.

Stalking

Stalking means a repeated course of conduct directed at a specific person (when based on gender or sex) that places that person in reasonable fear for his/her or others’ safety, or to suffer substantial emotional distress.

Resources

For issues regarding sexual harassment and assault, the following resources are available:

- Los Rios Police, (916) 558-2221
- WEAVE Confidential Advocate, (916) 568-3011 or WEAVE@losrios.edu (mailto:WEAVE@losrios.edu)
- Nicolas Daily, Title IX Coordinator, (916) 484-8163 or dailyn@arc.losrios.edu (mailto:dailyn@arc.losrios.edu)
Types of Harassment | American River College

It is a priority of American River College to prevent and respond to all forms of harassment, including bullying, psychological harassment, racial harassment, religious harassment, stalking, mobbing, hazing, and backlash.

Bullying

Bullying is physical and psychological harassing behavior perpetrated against an individual, by one or more persons. Bullying can occur on the playground, in school, on the job, or any other place.

HB 1576 defines bullying as recklessly or intentionally endangering the health or safety of a student by exposing the student repeatedly and over time to physical aggression or intimidation, whether through direct physical contact or through the use of information or communication technology, resulting in bodily injury or other harm to person or property. This definition does not supersede or limit any definition of bullying developed by the Board of Education or the actual codes of student conduct adopted by school boards pursuant to Section 22.1-279.6. Bullying is punishable as a Class 1 misdemeanor.

Workplace bullying is repeated, health-harming mistreatment of one or more persons (the targets) by one or more perpetrators that takes one or more of the following forms:

- Verbal abuse
- Offensive conduct/behaviors (including nonverbal) which are threatening, humiliating, or intimidating
- Work interference (sabotage) which prevents work from getting done

Psychological Harassment

Psychological harassment is humiliating or abusive behavior that lowers a person’s self-esteem or causes them torment. This can take the form of verbal comments, actions, or gestures. Workplace mobbing is considered psychological harassment.

Racial Harassment

Racial harassment is the targeting of an individual because of their race or ethnicity. The harassment includes words, deeds, and actions that are specifically designed to make the target feel degraded due to their race of origin or ethnicity.

Religious Harassment

Religious harassment is verbal, psychological, or physical harassment used against targets because they choose to practice a specific religion. Religious harassment can also include forced and involuntary conversions.

Stalking

Stalking is the unauthorized following and surveillance of an individual, to the extent that the person’s privacy is unacceptably intruded upon and the victim fears for their safety.

Mobbing

Mobbing is violence committed directly or indirectly by a loosely affiliated and organized group of individuals to punish or even execute a person for an alleged offense without a lawful trial. The “offense” can range from a serious crime, like murder to simple expression of ethnic, cultural, or religious attitudes. The issue of the victim’s actual guilt or innocence is often irrelevant to the mob, since the mob relies on contentions that are unverifiable, unsubstantiated, or completely fabricated.

Hazing

Hazing is persecuting, harassing, or torturing in a deliberate, calculated, planned manner. Typically the targeted individual is a subordinate, for example, a fraternity pledge, a first-year military cadet, or somebody who is considered “inferior” or an “outsider.” Hazing is illegal in many instances.

Backlash

Backlash or “victim blaming” occurs when the harasser or other people in the environment blame the victim for the harassment or the resulting controversies and conflicts.
after the harassment is reported or discovered.

Backlash results when people erroneously believe the victim could stop the harassment if they really tried, or that the victim must have done something to cause the harassment. The victim may be accused of trying to get attention, covering for incompetence, or in cases where the harassment is proven, lying about the extent of the effects.

Outdated attitudes about certain kinds of harassment remain and there is often social pressure for victims to keep quiet about abuse or suffer the consequences.
Discrimination and Harassment Complaint Procedures
| American River College

How to File a Complaint

To file a complaint, fill out a Discrimination Complaint Form (/rccd/shared/doc/legal/discrimination-complaint-form.pdf) (PDF) and submit it to your equity officer. This form is not required and a complaint will not be rejected based on failure to use the form.

For more information or to file a complaint, contact the American River College Equity Officer, Nicolas Daily, at dailyn@arc.losrios.edu or (916) 484-8163.

Complaint Resolution

If it is determined that misconduct occurred, then American River College will take immediate steps to halt misconduct and remedy any effects of that misconduct.

An equity officer will hold an informal conference if the complainant wants to try and resolve the complaint informally. The equity officer will provide information about applicable laws and rules. If an informal resolution is not reached or if the complainant disagrees with the recommendation made, then the complainant may engage in a formal resolution process.
Graduation and Transfer | American River College

Make a Plan for Transfer Success

Students who plan to transfer to the California State University (CSU) system, the University of California (UC) system, or to a private or out-of-state college or university should make an education plan with a counselor. This will ensure you meet the requirements for the specific institution you plan to attend.

Transfer eligibility is based on transferable college units and/or high school records and test scores. Each institution has its own admission requirements. To prepare for transfer:

1. Decide where you want to transfer
2. Talk to a counselor about that school's specific requirements
3. Create an education plan

In This Section

Graduation Requirements (/2020-2021-catalog/graduation-and-transfer/graduation-requirements)
Learn about graduating from American River College, including how to petition for a degree or certificate and annual commencement ceremonies.

Commencement (/2020-2021-catalog/graduation-and-transfer/commencement)
American River College has one commencement ceremony in May of each year, at the end of the spring semester.

While You Are Here (/2020-2021-catalog/graduation-and-transfer/preparing-to-transfer)
Students who plan to transfer should make an education plan with a counselor to ensure they meet the requirements for the specific institution they plan to attend.
## In This Section

- **Petition for a Certificate** ([2020-2021-catalog/graduation-and-transfer/graduation-requirements/petition-for-a-certificate](#))
  Learn how to petition for a certificate at American River College.

- **Petition for a Degree** ([2020-2021-catalog/graduation-and-transfer/graduation-requirements/petition-for-a-degree](#))
  Learn how to petition for a degree at American River College.

- **Associate Degree Graduation Requirements** ([2020-2021-catalog/graduation-and-transfer/graduation-requirements/associate-degree-graduation-requirements](#))
  See the requirements for graduating with an associate degree (AA or AS) from American River College.
Petition for a Certificate | American River College

How to Petition for a Certificate

Students can file a petition for a certificate using our online certificate petition form (https://apps.arc.losrios.edu/GraduationPetition), or they can meet with a counselor (https://arc.losrios.edu/counseling) to file a certificate petition. American River College does not automatically confer certificates because requirements vary from program to program.

Requirements

To petition for a certificate, students must:

1. Know their catalog year*
2. Complete all certificate requirements with a minimum grade point average (GPA) of 2.0
3. Complete at least 12 units toward the certificate at American River College (this does not apply to certificates that are less than 12 units)

* Usually, students follow the current catalog year. However, if you are following certificate requirements from an old catalog, then you must have maintained catalog rights (/2020-2021-catalog/graduation-and-transfer/graduation-requirements/petition-for-a-certificate#catalog-rights).

Required Documentation

The following must be on file in the Admissions and Records Office for a certificate petition to be processed:

- Official transcripts of all coursework completed at colleges outside of the Los Rios Community College District
- Official copies of AP/IB/CLEP test scores, if applicable
- A copy of DD214-military discharge papers, if veteran desires credit for military units
- List of courses in progress if attending another college
- Official final transcripts will be required at the end of the semester for final certificate evaluation
- Copy of any required competency tests, if applicable

Students must complete all certificate requirements by the end of the semester in which they petition for a certificate.

Petition Deadlines for 2020-2021

- Summer 2020: Friday, June 26, 2020
- Fall 2020: Friday, October 2, 2020
- Spring 2021: Friday, March 5, 2021

Approval or Denial

You will be notified via email if your petition is approved or denied.

If denied, then you will be notified of the missing requirements and advised to submit a new petition. If approved, then your certificate of achievement will be posted to your transcript at the end of the semester.

We mail certificates to the address listed on your petition, unless you choose to pick up your certificate. You will be notified when your certificate is available for pick-up.

<table>
<thead>
<tr>
<th>PETITION SEMESTER</th>
<th>PETITION DEADLINE</th>
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Catalog Rights

For the purpose of graduating or earning a certificate from any college in the Los Rios Community College District, a student who attends at least one session (whether quarter, semester, or summer) in each calendar year at any California community college, California State University, University of California, or any regionally accredited institution of higher education, may choose to meet the requirements in effect at the Los Rios college from which the student intends to graduate, as follows:

- Requirements that were in effect at the time the student was admitted to a Los Rios college
- Requirements that were in effect at the time the student originally enrolled in an accredited college
- Requirements that were in effect at the intended date of graduation from a Los Rios college

Certificate of Achievement vs. Department Certificate

A Certificate of Achievement requires 18 or more units, while a Department Certificate requires fewer than 18 units. In addition, a Certificate of Achievement is posted to a student’s transcript, while a Department Certificate is not. A Department Certificate cannot be posted to a student’s transcript unless it has been approved by the California Community College Chancellor’s Office, per Title 5 Regulation 55070.b.
Petition for a Degree | American River College

How to Petition for a Degree

Students can file a petition for a degree using our [online degree petition form](https://apps.arc.losrios.edu/GraduationPetition), or they can meet with a counselor [here](https://arc.losrios.edu/counseling) to file a petition for degree.

Requirements

To petition for a degree, students must:

1. Know their catalog year*
2. Complete all degree requirements with a minimum grade point average (GPA) of 2.0
3. Complete at least 12 units toward the degree at American River College

* Usually, students follow the current catalog year. However, if a student is following certificate requirements from an old catalog, then they must have maintained catalog rights ([2020-2021-catalog/graduation-and-transfer/graduation-requirements/petition-for-a-degree#catalog-rights](https://arc.losrios.edu/)).

Required Documentation

The following must be on file in the Admissions and Records Office for a degree petition to be processed:

- Official transcripts of all coursework completed at colleges outside of the Los Rios Community College District
- Official copies of AP/IB/CLEP test scores, if applicable
- A copy of DD214-military discharge papers, if veteran desires credit for military units
- List of courses in progress if attending another college
- Official final transcripts will be required at the end of the semester for final degree evaluation
- Copy of any required competency tests, if applicable

Students must complete all degree requirements by the end of the semester in which they petition for a degree.

Petition Deadlines for 2020-2021

- Summer 2020: Friday, June 26, 2020
- Fall 2020: Friday, October 2, 2020
- Spring 2021: Friday, March 5, 2021

Approval or Denial

You will be notified via email if your petition is approved or denied.

If denied, then you will be notified of the missing requirements and advised to submit a new petition. If approved, then your degree will be posted to your transcript at the end of the semester.

We mail degrees to the address listed on your petition, unless you choose to pick up your degree. You will be notified when your degree is available for pick-up.

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Catalog Rights

For the purpose of graduating or earning a certificate from any college in the Los Rios Community College District, a student who attends at least one session (whether quarter, semester, or summer) in each calendar year at any California community college, California State University, University of California, or any regionally accredited institution of higher education, may choose to meet the requirements in effect at the Los Rios college from which the student intends to graduate, as follows:

- Requirements that were in effect at the time the student was admitted to a Los Rios college
- Requirements that were in effect at the time the student originally enrolled in an accredited college
- Requirements that were in effect at the intended date of graduation from a Los Rios college
Students may graduate from American River College with the Associate in Arts (AA) or the Associate in Science (AS) degree by fulfilling the following five requirements:

1. Satisfactory completion of 60 units of collegiate work with a "C" (2.0) grade point average in a curriculum that the district accepts toward the degree. At least 12 of the 60 units must be earned at American River College.

2. Major: Complete an AA or AS Major Program of Study offered at American River College. Courses used to complete requirements for the major must be completed with a grade of "C" or better.

3. Completion of American River College's general education requirements with a minimum GPA of 2.0 in courses used for general education (21 units minimum) or possession of a Baccalaureate Degree or higher from a regionally accredited college or university in the US.*

4. All students who wish to receive an AA or AS degree from American River College must demonstrate competency in writing, reading, and mathematics, as listed in the following tables.

5. Students are held to the graduation requirements established at the time they begin college as long as they maintain their catalog rights (2020-2021_catalog/graduation-and-transfer/graduation-requirements/associate-degree-graduation-requirements#catalog-rights).

* See District Policy P-7241 (/shared/doc/board/policies/P-7241.pdf) and Regulation R-7241 (/shared/doc/board/regulations/R-7241.pdf).

Reading, Writing, and Mathematics Competencies

Catalog Rights

For the purpose of graduating or earning a certificate from any college in the Los Rios Community College District, a student who attends at least one session (whether quarter, semester, or summer) in each calendar year at any California community college, California State University, University of California, or any regionally accredited institution of higher education, may choose to meet the requirements in effect at the Los Rios college from which the student intends to graduate, as follows:

- Requirements that were in effect at the time the student was admitted to a Los Rios college
- Requirements that were in effect at the time the student originally enrolled in an accredited college
- Requirements that were in effect at the intended date of graduation from a Los Rios college
American River College has one commencement ceremony in May of each year, at the end of the spring semester. Student who meet satisfy the graduation requirements during the prior summer semester (August), prior fall semester (December), or during the spring semester may participate in the graduation commencement exercise.

All students who are eligible for an associate degree must petition for graduation.
While You Are Here | American River College

Make a Plan for Transfer Success

Students who plan to transfer to the California State University (CSU) system, the University of California (UC) system, or to a private or out-of-state college or university should make an education plan with a counselor. This will ensure you meet the requirements for the specific institution you plan to attend. Transfer eligibility is based on transferable college units and/or high school records and test scores. Each institution has its own admission requirements. To prepare for transfer:

1. Decide where you want to transfer
2. Talk to a counselor about that school’s specific requirements
3. Create an education plan

In This Section

Transfer to California State University (/2020-2021-catalog/graduation-and-transfer/preparing-to-transfer/transfer-to-california-state-university)
Learn about transferring from American River College to a California State University (CSU).

Transfer to University of California (/2020-2021-catalog/graduation-and-transfer/preparing-to-transfer/transfer-to-university-of-california)
Learn about transferring from American River College to the University of California (UC) system.

Transfer to Private Colleges (/2020-2021-catalog/graduation-and-transfer/preparing-to-transfer/transfer-to-private-colleges)
Learn how to transfer from American River College to a private or out-of-state college or university.

California State University General Education Requirements (/2020-2021-catalog/graduation-and-transfer/preparing-to-transfer/california-state-university-general-education-requirements)
See the California State University (CSU) general education/breadth requirements, for students who intend to transfer from American River College to a CSU.

Intersegmental General Education Transfer Curriculum Requirements (/2020-2021-catalog/graduation-and-transfer/preparing-to-transfer/intersegmental-general-education-transfer-curriculum-requirements)
See the Intersegmental General Education Transfer Curriculum Requirements (IGETC) general education requirements, for students who intend to transfer from American River College to a California State University (CSU) or University of California (UC).

Transfer Degree Requirements (/2020-2021-catalog/graduation-and-transfer/preparing-to-transfer/transfer-degree-requirements)
Learn about transfer degrees, which provide a clear pathway from American River College to a California State University major and bachelor's degree.

Course Transferability and C-ID (/2020-2021-catalog/graduation-and-transfer/preparing-to-transfer/course-transferability-and-c-id)
Learn about the course identification numbering system (C-ID) and how to identify which courses are transferable.
Transfer to California State University | American River College

Transfer Requirements

Students who plan to transfer to the California State University (CSU) system must meet certain requirements. The requirements differ based on whether you:

1. Were eligible for admission to a CSU directly after high school
2. Are only now eligible for admission through community college transfer

CSU accepts a maximum of 70 transferable semester units completed at a community college.

Eligible for Transfer After High School

High school eligibility is based on test scores, grade point averages, and completion of specific subject area requirements.

If you were eligible for admission to a CSU when you graduated from high school – but you decided to attend a community college first – then you can transfer to certain CSUs at any time, as long as you maintain a 2.0 grade point average for all transferable coursework.

Eligible for Transfer Through Community College

If you were not eligible for admission to a CSU when you graduated from high school, then you may be eligible for transfer after you complete the following at a California community college:

1. A minimum of 60 transferable units with a 2.0 grade point average*
2. Either of the following general education requirements:
   a. At least 30 units of CSU general education requirements, including:
      a. Area A1, A2, and A3
      b. Area B4
   b. Intersegmental General Education Transfer Curriculum (IGETC) requirements

In addition to general education and graduation requirements, we encourage you to complete lower-division preparatory courses for your major as required by the CSU to which you want to transfer. You can find lower-division major requirements at assist.org, the official state-wide repository for transfer and course articulation information.

* GPA requirements are higher for campuses or majors that are impacted or more competitive. The minimum GPA for international or non-resident students is 2.4 instead of 2.0.

Application Dates and Deadlines

Priority application deadlines for CSU:

- For fall admission, October 1 to November 30 of the prior year
- For spring admission, August 1 to 31 of the prior year
Transfer to University of California | American River College

Transfer Requirements

Students who plan to transfer to the University of California (UC) system must meet certain requirements. The requirements are slightly different, based on whether you:

- Were eligible for admission to a UC directly after high school
- Are only now eligible through community college transfer

Eligible for Transfer After High School

If you were eligible for admission to a particular UC when you graduated from high school, then you are eligible to transfer at any time if you maintain a 2.0 grade point average in transferable coursework.

Eligible for Transfer Through Community College

Subject Requirement

If you met the scholarship requirement after high school – but not the subject requirement – then you must do all of the following to transfer to a UC:

1. Take transferable college courses in the missing subject areas
2. Earn a C or better in each required course
3. Have a 2.0 grade point average (GPA) in all transferable coursework

Examination Requirement

If you met the scholarship requirement – but not the examination requirement – then you must complete a minimum of 12 semester units of transferable work and maintain a 2.0 grade point average in transferable coursework.

Scholarship Requirement

If you did not meet the scholarship requirement, then you must do the following:

1. Complete 60 units of UC-transferable college credit with a grade point average of at least 2.4 (for California residents) or 2.8 (for non-residents)
2. Complete the following course pattern, earning a grade of C or better in each course:^1
   - Two transferable courses (3 units each) in English composition
   - One transferable course (3 units) in mathematical concepts and quantitative reasoning
   - Four transferable courses (3 units each) chosen from at least two of the following subject areas: the arts and humanities, the social and behavioral sciences, or the physical and biological sciences

^1 Students who satisfy the Intersegmental General Education Transfer Curriculum prior to transferring to UC will satisfy number 2 above.

Intersegmental General Education Transfer Curriculum (IGETC)

When you complete the IGETC pattern, you partially fulfill the 60-unit requirement for transfer to UC and complete the lower division general education breadth requirements. You should request your IGETC certification from the community college you last attended when your final transcript is sent to the UC campus.

The IGETC is best if you have not yet chosen a major or a campus. Once you have selected a major, it is important to begin fulfilling any required preparatory classes for that major. This is especially true for professional or “high-unit” majors. If you are preparing for an engineering or a high-unit science major at a UC campus, then it is not advisable to use the IGETC. Instead you should concentrate on fulfilling the 60-unit admission requirement by completing lower division major preparation courses as well as the basic admission requirements listed above.

Helpful Hints
- Connect with a counselor regularly to monitor your transfer progress.

- Many courses other than the ones listed in the IGETC will transfer to UC. The units from those other courses will count toward the 60 units required to transfer as a junior. Check the catalog for the transfer status of any course.

- Though transfers do not require an associate degree, it is easy to complete one while preparing to transfer. Learn about [associate degree graduation requirements](https://arc.losrios.edu/2020-2021-catalog/graduation-and-transfer/graduation-requirements/associate-degree-graduation-requirements).

- Check with your counselor about other courses needed for your major. In many cases, it is to your advantage to complete all pre-major requirements as well as general education requirements before you transfer.
Even if American River College does not have a transfer agreement with a private or out-of-state college to which you want to transfer, you can probably receive academic credit for most of your community college classes. Most four-year institutions give full credit for general education courses and other courses designated for transfer at community college.

In addition, many out-of-state colleges participate in the Western Undergraduate Exchange (WUE) [https://www.wiche.edu/WUE/students], which offers discounts to California students in certain majors.

Find Out Transfer Requirements

Many colleges require transfer students to have completed a certain number of units, so make sure you check the requirements of the college to which you want to transfer. Transfer requirements are generally outlined in a college's catalog.
California State University General Education Requirements  
| American River College

The following American River College courses fulfill California State University (CSU) lower-division general education requirements.

A. English Language Communication and Critical Thinking

Choose one course from each area for a minimum of nine units.

<table>
<thead>
<tr>
<th>AREA</th>
<th>COURSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>SPEECH 301, 331, 361</td>
</tr>
<tr>
<td>A2</td>
<td>ENGRD 310; ENGWR 301, 302, 303, 481, 482; ESL 350; PHIL 320; SPEECH 302, 311</td>
</tr>
</tbody>
</table>

B. Scientific Inquiry and Quantitative Reasoning

Choose one course from each area for a minimum of nine units. Courses in area B3 may also be used in areas B1 or B2 where appropriate. Related lecture courses must be completed prior to or concurrently with lab courses.

<table>
<thead>
<tr>
<th>AREA</th>
<th>COURSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>B1</td>
<td>ASTR 300, 310, 320, 330, 481; CHEM 305, 306, 309, 400, 401, 423; GEOG 300, 305, 306, 307, 308; GEOL 300, 305, 310, 320, 325, 330, 345; PHYS 310, 311, 350, 360, 410</td>
</tr>
<tr>
<td>B2</td>
<td>ANTH 300, 303, 480; BIOL 300, 301, 303, 305, 310, 332, 342, 352, 370, 375, 400, 410, 415, 420, 430, 440, 442, 482; HEED 308; NATR 302, 305, 306, 310, 320; PSYC 310</td>
</tr>
<tr>
<td>B3</td>
<td>ANTH 301; ASTR 400, 481; BIOL 303, 305, 310, 332, 370, 400, 410, 415, 420, 430, 440, 442, 482; CHEM 305, 306, 309, 400, 401, 423; GEOG 301, 309; GEOL 301, 306, 311, 331; NATR 302, 305, 310, 320; PHYS 312, 350, 360, 410; PSYC 311</td>
</tr>
<tr>
<td>B4</td>
<td>CISP 440; MATH 300, 310, 311, 325, 336, 340, 342, 355, 356, 370, 372, 373, 400, 401, 402, 410, 420; PSYC 330; STAT 300, 305, 480</td>
</tr>
</tbody>
</table>

C. Arts and Humanities

Choose one course from each area, plus an additional course from either area, for a minimum of nine units.

<table>
<thead>
<tr>
<th>AREA</th>
<th>COURSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1</td>
<td>ART 300, 320, 324, 370, 372, 390, 420, 430; ARTH 300, 302, 305, 308, 310, 318, 322, 333, 334, 335; ARTNM 305; ARTPH 300, 345; DANCE 403, 433; FASHN 330; IDES 310, 312; MUFHL 300, 308, 310, 311, 315, 321, 330, 400, 401, 410, 411; MUIVI 310, 340, 370, 385; MUP 310, 320, 330, 340, 350, 360, 400; MUSM 342; TA 300, 302, 303, 306, 350, 390, 406, 435; TAFILM 300, 302, 303, 304, 307</td>
</tr>
<tr>
<td>C2</td>
<td>DEAF 314, 316, 318, 380; ENGLT 300, 304, 308, 310, 311, 320, 321, 327, 335, 338, 340, 341, 345, 360, 365, 370, 378, 380, 382, 392, 403, 494; FREN 401, 402, 411, 412; GERM 401, 402, 411, 412; HIST 300, 302, 305, 307, 308, 340, 341, 364, 365, 367, 373, 399, 480, 481; HUM 300, 301, 302, 310, 320, 324, 326, 330, 355, 360, 365; IDES 310; ITAL 401, 402, 411, 412; PHIL 300, 310, 315, 330, 331, 350, 360; RUSS 402, 411, 413; SPAN 401, 402, 411, 412, 427; TA 302, 303; TAFILM 320</td>
</tr>
</tbody>
</table>

D. Social Sciences

Choose three courses from at least two different disciplines for a minimum of nine units.
E. Lifelong Learning and Self Development

Choose at least one course for a minimum of three units.

<table>
<thead>
<tr>
<th>AREA</th>
<th>COURSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>E1</td>
<td>ECE 312; GERON 300, 302; HCD 310, 382; HEED 300; HSER 330, 340; NUTRI 300; PSYC 340, 342, 354, 356, 358, 359, 365, 370, 372, 373, 374, 390, 400, 481; SOC 335; SPEECH 321</td>
</tr>
</tbody>
</table>

* Consult a counselor or [assist.org](https://assist.org) to see if a specific physical education activity course is appropriate for CSU general education Area E.

F. US History, Constitution, and American Ideals

This is a CSU graduation requirement only – it is not required for CSU general education certification. Choose one course from each group for a total of two courses. These courses can also be used to satisfy Area D.

<table>
<thead>
<tr>
<th>AREA</th>
<th>COURSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>F1</td>
<td>POLS 301, 481</td>
</tr>
<tr>
<td>F2</td>
<td>HIST 310, 311, 318, 320, 321, 323, 325, 327, 330, 483, 484</td>
</tr>
</tbody>
</table>
Completion of all the requirements in the Intersegmental General Education Transfer Curriculum (IGETC) meet lower-division general education requirements at either a California State University (CSU) or University of California (UC) without the need after transfer to take additional lower division general education courses. All courses must be completed with grades of "C" or better.

Students can also visit assist.org (https://assist.org) to see which courses will complete lower-division major preparation requirements. Students must see a counselor to have the IGETC pattern certified before transferring. Students who have selected a specific campus for transfer should consult with a counselor before following the IGETC pattern.

Advanced Placement (AP) and International Baccalaureate (IB) examinations are appropriate for inclusion on the IGETC pattern.

Area 1: English Communication

Choose one course from each area for a total of six to nine units.

<table>
<thead>
<tr>
<th>AREA</th>
<th>COURSES</th>
<th>NOTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 A</td>
<td>ENGWR 300, 480</td>
<td>For UC only: ENGWR 300 and 480 combined: maximum credit – one course.</td>
</tr>
<tr>
<td>1 B</td>
<td>ENGWR 301, 302, 303, 481, 482</td>
<td>For UC only: ENGWR 301 and 481 combined: maximum credit – one course; or ENGWR 302 and 482 combined: maximum credit – one course.</td>
</tr>
<tr>
<td>1 C</td>
<td>SPEECH 301, 331, 361</td>
<td>This is a CSU requirement only and is required for all associate degrees for transfers (ADTs).</td>
</tr>
</tbody>
</table>

Area 2: Mathematical Concepts and Quantitative Reasoning

Choose one course for a total of three units.

<table>
<thead>
<tr>
<th>AREA</th>
<th>COURSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 A</td>
<td>MATH 300, 336, 340, 342, 355, 356, 370, 372, 400, 401, 402, 410, 420; PSYC 330; STAT 300, 305</td>
</tr>
</tbody>
</table>

Area 3: Arts and Humanities

Choose one course from each area, plus an additional course from either area, for a total of nine units.

<table>
<thead>
<tr>
<th>AREA</th>
<th>COURSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 A  Arts</td>
<td>ARTH 300, 302, 308, 310, 318, 322, 333, 334, 335; ARTPH 345; MUFHL 300, 308, 310, 311, 315, 321, 330, 400, 401, 410, 411; TA 300, 302, 303, 306, 350, 435; TAFILM 300, 302, 303, 304, 307, 320</td>
</tr>
<tr>
<td>3 B  Humanities</td>
<td>DEAF 314, 316, 318; ENGLT 300, 304, 308, 310, 311, 320, 321, 327, 335, 338, 340, 341, 345, 360, 365, 378, 380, 382, 386, 403; FREN 411, 412; GERM 401, 402, 411, 412; HIST 300, 302, 305, 307, 308, 340, 341, 364, 365, 367, 373, 399, 480, 481; HUM 300, 301, 302, 310, 320, 324, 326, 330, 355, 360, 365; ITAL 411, 412; PHIL 300, 310, 315, 330, 331, 350; RUSS 402, 411, 413; SPAN 402, 411, 412, 427</td>
</tr>
</tbody>
</table>

Area 4: Social and Behavioral Sciences

Choose three courses from at least two different areas for a total of nine units.
Area 5: Physical and Biological Sciences

Choose one course from each area for a total of seven to nine units. Lecture courses must be completed prior to or concurrently with labs. Courses used in 5C may also be used in 5A or 5B if listed in these areas.

<table>
<thead>
<tr>
<th>AREA</th>
<th>COURSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>5A Physical Science</td>
<td>ASTR 300, 310, 320, 330, 481; CHEM 305, 306, 309, 400, 401, 423; GEOG 300, 305, 306, 307, 308; GEOL 300, 305, 310, 320, 325, 330, 345; PHYS 310, 311, 350, 360, 410</td>
</tr>
<tr>
<td>5B Biological Science</td>
<td>ANTH 300, 303, 480; BIOL 300, 301, 303, 305, 310, 332, 342, 352, 370, 375, 400, 410, 415, 420, 430, 440, 442, 482; HEED 308; NATR 302, 320; PSYC 310</td>
</tr>
<tr>
<td>5C Lab</td>
<td>ANTH 301; ASTR 400, 481; BIOL 303, 305, 310, 332, 370, 400, 410, 415, 420, 430, 440, 442, 482; CHEM 305, 306, 309, 400, 401, 423; GEOG 301, 309; GEOL 301, 306, 311, 331; NATR 302, 320; PHYS 312, 350, 360, 410; PSYC 311</td>
</tr>
</tbody>
</table>

Area 6: Language Other Than English

This is a UC requirement only. Student must demonstrate proficiency equivalent to two years of high school study in a single language. The following courses also fulfill this requirement. Consult a counselor for more information on how to fulfill this requirement.

<table>
<thead>
<tr>
<th>AREA</th>
<th>COURSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>6A</td>
<td>DEAF 310, 312, 314, 316, 318; FREN 401, 402, 411, 412; GERM 401, 402, 411, 412; ITAL 401, 402, 411, 412; RUSS 401, 402, 411, 413; SPAN 401, 402, 411, 412</td>
</tr>
</tbody>
</table>

US History, Constitution, and American Ideals

This is a CSU graduation requirement only – it is not required for IGETC certification. Choose one course from each group for a total of two courses.

<table>
<thead>
<tr>
<th>GROUP</th>
<th>COURSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1</td>
<td>POLS 301, 481</td>
</tr>
<tr>
<td>Group 2</td>
<td>HIST 310, 310, 311, 318, 320, 321, 323, 325, 327, 330, 483, 484</td>
</tr>
</tbody>
</table>
American River College offers associate degrees for transfer (AD-T) to the California State University (CSU) system. Transfer degrees provide a clear pathway to a CSU major and bachelor's degree. Associate of arts for transfer (AA-T) and associate of science for transfer (AS-T) are types of transfer degrees.

Benefits of a Transfer Degree

Students who receive an AA-T or AS-T degree are guaranteed:

- Admission to a CSU with junior standing
- Priority admission consideration to their local CSU campus or to a program that is similar to their community college major

\* This priority does not guarantee admission to specific majors or campuses.

Students who have been awarded an AA-T or AS-T are able to complete their remaining requirements for the 120-unit baccalaureate degree within 60 semester or 90 quarter units at a CSU campus.

Current and prospective community college students are encouraged to meet with a counselor to review their options for transfer and explore additional degrees which may be under development at this time.

Requirements for a Transfer Degree

AA-T or AS-T degrees require the following:

1. Complete 60 semester units or 90 quarter CSU-transferable units, including both of the following:
   a. One of the following GE patterns (check with your counselor to determine the appropriate pattern for the degree you are pursuing):
      - The Intersegmental General Education Transfer Curriculum (IGETC)
      - The Intersegmental General Education Transfer Curriculum (IGETC) for STEM (see counselor)
      - The CSU General Education Requirements
      - The CSU General Education Requirements for STEM (see counselor)
   b. A minimum of 18 semester or 27 quarter units in a major or area of emphasis, as determined by the college

2. Obtain a minimum grade point average of 2.0 in 60 CSU-transferable units. AD-T degrees also require that students must earn a C or better in all courses used in the major or area of emphasis. Pass grades can be used from colleges where Pass denotes a C or better.

American River College offers the following Associate Degrees for Transfer:

- Administration of Justice, AST
- Anthropology, AAT
- Art History, AAT
- Studio Art, AAT
- Biology, AST
- Business Administration, AST
- Early Childhood Education for Transfer, AST
- Economics, AAT
- Elementary Teacher Education, AAT
- English, AAT
- Spanish, AAT
- Geography, AAT
- Geology, AST
- History, AAT
- Global Studies, AAT
- Journalism and Mass Communications, AAT
- Kinesiology, AAT
- Mathematics, AST
- Music, AAT
- Nutrition and Dietetics, AST
- Philosophy, AAT
- Physics, AST
- Political Science, AAT
- Psychology, AAT
- Social Justice Studies: Race and Ethnicity, AAT
- Social Justice Studies: Women, Gender, and LGBTQ Studies, AAT
- Sociology, AAT
- Communication Studies, AAT
- Theatre Arts, AAT
Transfer Credit

Courses accepted for transfer by the University of California (UC) and/or California State University (CSU) systems are identified as such in the course details next to "Transferable." Students who have questions regarding transferability of credit for specific courses to specific institutions should consult a counselor.

Course Identification Numbering System (C-ID)

The C-ID system is a statewide numbering system designed to identify comparable courses and facilitate articulation. Any community college course that bears a C-ID number signifies that it is equivalent in content, rigor, and student learning outcomes. Any course with a C-ID number can be assured that it will be accepted at other participating community college or CSU campuses. For example: C-ID COMM 110 at American River College will be accepted by any other college that has been approved for the same C-ID COMM 110 number.

Students should consult a counselor for specific information and help evaluating course transferability. In addition, students should visit assist.org to confirm how each college's course will be accepted for the following:

1. Majors at CSU and UC campuses
2. CSU general education requirements
3. IGETC general education requirements

Please consult a counselor to find out if your courses meet requirements at private and out-of-state colleges and universities. See an up-to-date listing of American River College C-ID approved courses at www.c-id.net.
In This Section

**Description of Courses** ([2020-2021-catalog/programs-of-study/description-of-courses](/2020-2021-catalog/programs-of-study/description-of-courses))
Learn more about course numbering, course prefixes, prerequisites, corequisites, advisories, course transferability, and more.

**Course Prefixes** ([2020-2021-catalog/programs-of-study/course-prefixes](/2020-2021-catalog/programs-of-study/course-prefixes))
See an A to Z listing of course prefixes and the subjects they represent.

**Cross-Listed Courses** ([2020-2021-catalog/programs-of-study/cross-listed-courses](/2020-2021-catalog/programs-of-study/cross-listed-courses))
When a course is listed under two different departments in the catalog, the course is referred to as "cross-listed." See all cross-listed courses offered at American River College.

**List of Programs** ([2020-2021-catalog/programs-of-study/list-of-programs](/2020-2021-catalog/programs-of-study/list-of-programs))
See all of the programs – including degrees, certificates, and courses – offered at American River College.
2020-2021 Unofficial Catalog Preview

Description of Courses | American River College

In This Section

Course Numbering (/2020-2021-catalog/programs-of-study/description-of-courses/course-numbering)
American River College has a standardized course numbering system.

Prerequisites, Corequisites, and Advisories (/2020-2021-catalog/programs-of-study/description-of-courses/prerequisites-corequisites-and-advisories)
Learn about prerequisite courses, corequisite courses, advisory courses, and the challenge process.

To Be Arranged Scheduling (/2020-2021-catalog/programs-of-study/description-of-courses/to-be-arranged-scheduling)
Learn about courses scheduled as TBA, or To Be Arranged.
Course Numbering System

American River College has a standardized course numbering system. The following numbers are designed to provide students with general information regarding the focus and intent of courses.

Course Number 1 to 99

Courses numbered 1 to 99 are credit courses that are considered developmental or basic skills and are not acceptable for the associate degree or transfer credit.

Course Number 100 to 299

Courses numbered 100 to 299 are applicable to an associate degree, but not transferable to a four-year institution.

Course Number 300 to 499

Courses numbered 300 to 499 are articulated for transfer with four-year institutions and are intended to meet major, general education, or elective credit requirements.
Prerequisites, Corequisites, and Advisories
| American River College

Enrollment Conditions

Many courses and educational programs have enrollment conditions, such as prerequisites, corequisites, or advisories on recommended preparation. These faculty-approved conditions are considered necessary and appropriate to ensure that students are adequately prepared to succeed in the course or educational program. It is the student's responsibility to meet any and all enrollment conditions.

Students may challenge a prerequisite requirement through the challenge process (/2020-2021-catalog/programs-of-study/description-of-courses/prerequisites-corequisites-and-advisories#challenge).

Prerequisite

A prerequisite is a course that a student is required to take to demonstrate current readiness for enrollment in another course or educational program. For example, in order to take ENGWR 301, a student must have already completed ENGWR 300 with a grade of C or better.

Corequisite

A corequisite is a course that a student is required to take during the same semester as another course, or prior to another course. For example, a student needs to take GEOL 300 at the same time as GEOL 301 (or before taking GEOL 301).

Advisory

An advisory is a condition of enrollment when a student is advised, but not required to meet before, or in conjunction with, enrollment in a course or educational program.

Verifying Prerequisites

Students enrolled in courses that have a prerequisite must provide verification to the instructor that they have met the prerequisite. Supporting evidence includes:

- A transcript that verifies the student has earned a C or better in the prerequisite course. Students can print an unofficial transcripts in eServices (https://ps.losrios.edu/student/signon.html). Instructors have access to this information on their roster if the class was taken within Los Rios Community College District since 2003 (prior course information cannot be viewed).
- English and/or math placement results from Los Rios Community College District

If a student enrolls in a course and does not meet the prerequisite, then the instructor must drop the student from the course.

Verifying Corequisites

Your current class schedule provides verification of current enrollment in a corequisite course. Alternatively, if you took the corequisite previously, then your transcript shows prior completion of the corequisite course.

Challenge Process

If you do not have the supporting evidence to verify a prerequisite or corequisite but you believe that you should qualify to enroll in the course, then you may challenge a prerequisite or corequisite.

Criteria for challenging a prerequisite or corequisite include:

- You have knowledge or ability to succeed in the course with the prerequisite.
- The prerequisite course is not readily available.
- You believe that the prerequisite is discriminatory or being applied in a discriminatory manner.
- You believe that the prerequisite was established in violation of regulations and/or the established district-approved policy and procedures.
To challenge a prerequisite or corequisite:

1. Submit a Prerequisite Equivalency Form ([arc/main/doc/ARC02-Admissions/ARC-Prerequisite-Equivalency.pdf](PDF)) – along with any supporting documentation – to the instructional department (locations are listed on form) at least one week prior to the start of instruction.

2. Your challenge will be reviewed by the department's prerequisite challenge committee.

3. You will be informed in writing of the committee's determination within five working days of the review.

**Exception to the Prerequisite Process – English and Math**

The prerequisite for all 300-level English courses (ENGWR, ENGED, and ENGCW) and mathematics courses (MATH and STAT) must be cleared prior to enrollment.

You will be automatically cleared to enroll in an English or math class if:

- You are currently enrolled in the appropriate prerequisite course at a Los Rios college (you must earn a C or better grade or you will be automatically dropped from the higher level course before the new semester begins).
- You have completed and passed the appropriate prerequisite course at a Los Rios college.
- You have been placed into the math or English course you want to add.

If you completed the equivalent prerequisite course with a grade of C or better at a college or university that is on the [Approved Math External Equivalency List](PDF) or [Approved English External Equivalency List](PDF) then:

- Submit unofficial or official transcripts (unless already on file with the Admissions and Records office) along with the Prerequisite Equivalency Form ([arc/main/doc/ARC02-Admissions/ARC-Prerequisite-Equivalency.pdf](PDF)) to the Admissions and Records office. Please Note: In-progress coursework cannot be used.
- If verified through a transcript, then the external course will be posted as transfer credit on your unofficial transcript, which will clear enrollment for math courses. This process may take three to five business days, so plan ahead.

If you did not find your course on the approved equivalency lists above – but you believe you have the knowledge or ability to succeed in an English or math course through other college/university coursework (or other credentials) – then you may challenge the prerequisite via the challenge process.
Some or all of the class hours for courses may be offered using the "To Be Arranged" (TBA) course scheduling option. Please refer to the class schedule listing for sections of courses for specific TBA weekly or daily class hour requirements that may apply.
# Course Prefixes | American River College

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Cross-Listed Courses | American River College

When a course is listed under two (or more) different departments in the catalog, the course is referred to as "cross-listed," "cross-referenced," or "same as." The cross-listed course has identical content under both departments' catalog listing.

If two (or more) courses are cross-listed, then a student can only earn credit for one of those courses. Students who are not sure which cross-listed they should enroll in are encouraged to consult with a counselor.

When a cross-listed course is repeatable, the course may be taken (under either name) the total number of times stated in the catalog descriptions of the cross-listed course.

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<td>N/A</td>
<td>Small Gas Engines, Outdoor Power Equipment</td>
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<tr>
<td>HSER 310</td>
<td>GERON 304</td>
<td>N/A</td>
<td>Ethical Issues and Client's Rights</td>
</tr>
<tr>
<td>HSER 330</td>
<td>PSYC 365</td>
<td>N/A</td>
<td>Issues of Diverse Populations</td>
</tr>
<tr>
<td>HSER 340</td>
<td>PSYC 400</td>
<td>N/A</td>
<td>Introduction to Chemical Dependency</td>
</tr>
<tr>
<td>HSER 341</td>
<td>PSYC 401</td>
<td>N/A</td>
<td>Physiology and Pharmacology: Alcohol &amp; Other Drugs</td>
</tr>
<tr>
<td>HSER 342</td>
<td>PSYC 402</td>
<td>N/A</td>
<td>Alcoholism: Intervention, Treatment &amp; Recovery</td>
</tr>
<tr>
<td>KINES 402</td>
<td>NUTRI 307</td>
<td>N/A</td>
<td>Nutrition for Fitness</td>
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<tr>
<td>MATH 320</td>
<td>PHIL 324</td>
<td>N/A</td>
<td>Symbolic Logic</td>
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<tr>
<td>MGMT 142</td>
<td>CISA 160</td>
<td>N/A</td>
<td>Project Management Techniques and Software</td>
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<td>MUP 370</td>
<td>TA 466</td>
<td>N/A</td>
<td>Rehearsal and Performance - Musical Ensemble</td>
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<td>NATR 303</td>
<td>ENERGY 303</td>
<td>ET 303</td>
<td>Energy and Sustainability</td>
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<tr>
<td>NURSE 391</td>
<td>HLACT 301</td>
<td>N/A</td>
<td>Supporting the Mother-Baby Connection: Evidence-Based Practices for Perinatal Care</td>
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<td>KINES 402</td>
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<td>Nutrition for Fitness</td>
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<td>NUTRI 320</td>
<td>ECE 415</td>
<td>N/A</td>
<td>Children's Health, Safety and Nutrition</td>
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<tr>
<td>NUTRI 321</td>
<td>HLACT 322</td>
<td>N/A</td>
<td>Nutrition and Biochemistry of Human Lactation</td>
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<td>NUTRI 324</td>
<td>GERON 340</td>
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<td>Nutrition for Healthy Aging</td>
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<td>PHIL 324</td>
<td>MATH 320</td>
<td>N/A</td>
<td>Symbolic Logic</td>
</tr>
<tr>
<td>PSYC 365</td>
<td>HSER 330</td>
<td>N/A</td>
<td>Issues of Diverse Populations</td>
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<tr>
<td>PSYC 372</td>
<td>ECE 312</td>
<td>N/A</td>
<td>Child Development</td>
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<tr>
<td>PSYC 374</td>
<td>GERON 302</td>
<td>N/A</td>
<td>Psychology of Aging: Adult Development and Aging</td>
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<tr>
<td>PSYC 378</td>
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<td>Communicating with and Validating Older Adults</td>
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<td>PSYC 379</td>
<td>GERON 334</td>
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<td>Reminiscence Therapy</td>
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<td>HSER 340</td>
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<td>Introduction to Chemical Dependency</td>
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<td>Physiology and Pharmacology: Alcohol &amp; Other Drugs</td>
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<td>PSYC 402</td>
<td>HSER 342</td>
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<td>Alcoholism: Intervention, Treatment &amp; Recovery</td>
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<td>SOC 335</td>
<td>GERON 300</td>
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<td>Sociology of Aging</td>
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<td>TA 434</td>
<td>FASHN 334</td>
<td>N/A</td>
<td>Vintage Costuming</td>
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<td>AT 107</td>
<td>ET 250</td>
<td>Employability Skills for Technical Careers</td>
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American River College Programs

**Accounting** ([/2020-2021-catalog/programs-of-study/list-of-programs/accounting](/2020-2021-catalog/programs-of-study/list-of-programs/accounting))
Learn more about the Accounting program.

**Administration of Justice** ([/2020-2021-catalog/programs-of-study/list-of-programs/administration-of-justice](/2020-2021-catalog/programs-of-study/list-of-programs/administration-of-justice))
Learn more about the Administration of Justice program.

**Anthropology** ([/2020-2021-catalog/programs-of-study/list-of-programs/anthropology](/2020-2021-catalog/programs-of-study/list-of-programs/anthropology))
Learn more about the Anthropology program.

**Apprenticeship** ([/2020-2021-catalog/programs-of-study/list-of-programs/apprenticeship](/2020-2021-catalog/programs-of-study/list-of-programs/apprenticeship))
Learn more about the Apprenticeship program.

**Art** ([/2020-2021-catalog/programs-of-study/list-of-programs/art](/2020-2021-catalog/programs-of-study/list-of-programs/art))
Learn more about the Art program.

**Art New Media** ([/2020-2021-catalog/programs-of-study/list-of-programs/art-new-media](/2020-2021-catalog/programs-of-study/list-of-programs/art-new-media))
Learn more about the Art New Media program.

**ASL-English Interpreting** ([/2020-2021-catalog/programs-of-study/list-of-programs/asl-english-interpreting](/2020-2021-catalog/programs-of-study/list-of-programs/asl-english-interpreting))
Learn more about the ASL-English Interpreting program.

**Astronomy** ([/2020-2021-catalog/programs-of-study/list-of-programs/astronomy](/2020-2021-catalog/programs-of-study/list-of-programs/astronomy))
Learn more about the Astronomy program.

**Automotive Collision Technology** ([/2020-2021-catalog/programs-of-study/list-of-programs/automotive-collision-technology](/2020-2021-catalog/programs-of-study/list-of-programs/automotive-collision-technology))
Learn more about the Automotive Collision Technology program.

**Automotive Technology** ([/2020-2021-catalog/programs-of-study/list-of-programs/automotive-technology](/2020-2021-catalog/programs-of-study/list-of-programs/automotive-technology))
Learn more about the Automotive Technology program.

**Biology** ([/2020-2021-catalog/programs-of-study/list-of-programs/biology](/2020-2021-catalog/programs-of-study/list-of-programs/biology))
Learn more about the Biology program.

**Business** ([/2020-2021-catalog/programs-of-study/list-of-programs/business](/2020-2021-catalog/programs-of-study/list-of-programs/business))
Learn more about the Business program.

**Business Technology** ([/2020-2021-catalog/programs-of-study/list-of-programs/business-technology](/2020-2021-catalog/programs-of-study/list-of-programs/business-technology))
Learn more about the Business Technology program.

**Chemistry** ([/2020-2021-catalog/programs-of-study/list-of-programs/chemistry](/2020-2021-catalog/programs-of-study/list-of-programs/chemistry))
Learn more about the Chemistry program.

**Community Services Education** ([/2020-2021-catalog/programs-of-study/list-of-programs/community-services-education](/2020-2021-catalog/programs-of-study/list-of-programs/community-services-education))
Learn more about the Community Services Education program.

**Computer Information Science** ([/2020-2021-catalog/programs-of-study/list-of-programs/computer-information-science](/2020-2021-catalog/programs-of-study/list-of-programs/computer-information-science))
Learn more about the Computer Information Science program.

**Dance** ([/2020-2021-catalog/programs-of-study/list-of-programs/dance](/2020-2021-catalog/programs-of-study/list-of-programs/dance))
Learn more about the Dance program.

Deaf Culture & ASL Studies (/2020-2021-catalog/programs-of-study/list-of-programs/deaf-culture-and-american-sign-language-studies)
Learn more about the Deaf Culture & ASL Studies program.

Diesel/Clean Diesel Technology (/2020-2021-catalog/programs-of-study/list-of-programs/diesel/clean-diesel-technology)
Learn more about the Diesel/Clean Diesel Technology program.

Early Childhood Education (/2020-2021-catalog/programs-of-study/list-of-programs/early-childhood-education)
Learn more about the Early Childhood Education program.

Economics (/2020-2021-catalog/programs-of-study/list-of-programs/economics)
Learn more about the Economics program.

Electronics Technology (/2020-2021-catalog/programs-of-study/list-of-programs/electronics-technology)
Learn more about the Electronics Technology program.

Emergency Medical Technology (/2020-2021-catalog/programs-of-study/list-of-programs/emergency-medical-technology)
Learn more about the Emergency Medical Technology program.

Energy (/2020-2021-catalog/programs-of-study/list-of-programs/energy)
Learn more about the Energy program.

Engineering (/2020-2021-catalog/programs-of-study/list-of-programs/engineering)
Learn more about the Engineering program.

English (/2020-2021-catalog/programs-of-study/list-of-programs/english)
Learn more about the English program.

English as a Second Language (/2020-2021-catalog/programs-of-study/list-of-programs/english-as-a-second-language)
Learn more about the English as a Second Language program.

Fashion (/2020-2021-catalog/programs-of-study/list-of-programs/fashion)
Learn more about the Fashion program.

Fire Technology (/2020-2021-catalog/programs-of-study/list-of-programs/fire-technology)
Learn more about the Fire Technology program.

Foreign Languages (/2020-2021-catalog/programs-of-study/list-of-programs/foreign-languages)
Learn more about the Foreign Languages program.

Funeral Service Education (/2020-2021-catalog/programs-of-study/list-of-programs/funeral-service-education)
Learn more about the Funeral Service Education program.

Geography (/2020-2021-catalog/programs-of-study/list-of-programs/geography)
Learn more about the Geography program.

Geology (/2020-2021-catalog/programs-of-study/list-of-programs/geology)
Learn more about the Geology program.

Gerontology (/2020-2021-catalog/programs-of-study/list-of-programs/gerontology)
Learn more about the Gerontology program.

Health Education (/2020-2021-catalog/programs-of-study/list-of-programs/health-education)
Learn more about the Health Education program.

Healthcare Interpreting (/2020-2021-catalog/programs-of-study/list-of-programs/healthcare-interpreting)
Learn more about the Healthcare Interpreting program.

History (/2020-2021-catalog/programs-of-study/list-of-programs/history)
Learn more about the History program.

Humanities (/2020-2021-catalog/programs-of-study/list-of-programs/humanities)
Learn more about the Humanities program.
Horticulture (/2020-2021-catalog/programs-of-study/list-of-programs/horticulture)
Learn more about the Horticulture program.

Hospitality Management (/2020-2021-catalog/programs-of-study/list-of-programs/hospitality-management)
Learn more about the Hospitality Management program.

Human Career Development (/2020-2021-catalog/programs-of-study/list-of-programs/human-career-development)
Learn more about the Human Career Development program.

Human Lactation (/2020-2021-catalog/programs-of-study/list-of-programs/human-lactation)
Learn more about the Human Lactation program.

Human Services (/2020-2021-catalog/programs-of-study/list-of-programs/human-services)
Learn more about the Human Services program.

Interdisciplinary Studies (/2020-2021-catalog/programs-of-study/list-of-programs/interdisciplinary-studies)
Learn more about the Interdisciplinary Studies program.

Interior Design (/2020-2021-catalog/programs-of-study/list-of-programs/interior-design)
Learn more about the Interior Design program.

International Studies (/2020-2021-catalog/programs-of-study/list-of-programs/international-studies)
Learn more about the International Studies program.

Journalism (/2020-2021-catalog/programs-of-study/list-of-programs/journalism)
Learn more about the Journalism program.

Kinesiology & Athletics (/2020-2021-catalog/programs-of-study/list-of-programs/kinesiology-and-athletics)
Learn more about the Kinesiology & Athletics program.

Learning Resource Center (/2020-2021-catalog/programs-of-study/list-of-programs/learning-resource-center)
Learn more about the Learning Resource Center program.

Legal Studies (/2020-2021-catalog/programs-of-study/list-of-programs/legal-studies)
Learn more about the Legal Studies program.

Library (/2020-2021-catalog/programs-of-study/list-of-programs/library)
Learn more about the Library program.

Management (/2020-2021-catalog/programs-of-study/list-of-programs/management)
Learn more about the Management program.

Marketing (/2020-2021-catalog/programs-of-study/list-of-programs/marketing)
Learn more about the Marketing program.

Learn more about the Mathematics & Statistics program.

Music (/2020-2021-catalog/programs-of-study/list-of-programs/music)
Learn more about the Music program.

Natural Resources (/2020-2021-catalog/programs-of-study/list-of-programs/natural-resources)
Learn more about the Natural Resources program.

Nursing and Allied Health (/2020-2021-catalog/programs-of-study/programs/nursing-and-allied-health)
Learn more about the Nursing and Allied Health program.

Nutrition & Foods (/2020-2021-catalog/programs-of-study/programs/nutrition-and-foods)
Learn more about the Nutrition & Foods program.

Paramedic (/2020-2021-catalog/programs-of-study/list-of-programs/paramedic)
Learn more about the Paramedic program.

Philosophy (/2020-2021-catalog/programs-of-study/list-of-programs/philosophy)
Learn more about the Philosophy program.

Physics (/2020-2021-catalog/programs-of-study/list-of-programs/physics)
Learn more about the Physics program.
Political Science (/2020-2021-catalog/programs-of-study/list-of-programs/political-science)
Learn more about the Political Science program.

Psychology (/2020-2021-catalog/programs-of-study/list-of-programs/psychology)
Learn more about the Psychology program.

Real Estate (/2020-2021-catalog/programs-of-study/list-of-programs/real-estate)
Learn more about the Real Estate program.

Recreation (/2020-2021-catalog/programs-of-study/list-of-programs/recreation)
Learn more about the Recreation program.

Respiratory Care (/2020-2021-catalog/programs-of-study/list-of-programs/respiratory-care)
Learn more about the Respiratory Care program.

Science – General (/2020-2021-catalog/programs-of-study/list-of-programs/science—general)
Learn more about the Science – General program.

Social Justice Studies (/2020-2021-catalog/programs-of-study/list-of-programs/social-justice-studies)
Learn more about the Social Justice Studies program.

Social Science (/2020-2021-catalog/programs-of-study/list-of-programs/social-science)
Learn more about the Social Science program.

Sociology (/2020-2021-catalog/programs-of-study/list-of-programs/sociology)
Learn more about the Sociology program.

Speech Communication (/2020-2021-catalog/programs-of-study/list-of-programs/speech-communication)
Learn more about the Speech Communication program.

Speech-Language Pathology (/2020-2021-catalog/programs-of-study/list-of-programs/speech-language-pathology)
Learn more about the Speech-Language Pathology program.

Student Government (/2020-2021-catalog/programs-of-study/list-of-programs/student-government)
Learn more about the Student Government program.

Teacher Education (/2020-2021-catalog/programs-of-study/list-of-programs/teacher-education)
Learn more about the Teacher Education program.

Theatre Arts (/2020-2021-catalog/programs-of-study/list-of-programs/theatre-arts)
Learn more about the Theatre Arts program.

Theatre Arts Film (/2020-2021-catalog/programs-of-study/list-of-programs/theatre-arts-film)
Learn more about the Theatre Arts Film program.

Theatre Arts Performance (/2020-2021-catalog/programs-of-study/list-of-programs/theatre-arts-performance)
Learn more about the Theatre Arts Performance program.

Welding Technology (/2020-2021-catalog/programs-of-study/list-of-programs/welding-technology)
Learn more about the Welding Technology program.

Work Experience (/2020-2021-catalog/programs-of-study/list-of-programs/work-experience)
Learn more about the Work Experience program.

Sacramento Regional Public Safety Training Center (/2020-2021-catalog/programs-of-study/list-of-programs/sacramento-regional-public-safety-training-center)
Learn more about the Sacramento Regional Public Safety Training Center program.
Accounting | American River College

This degree focuses on preparation for careers in various accounting professions. It develops a common foundation in accounting and business, and provides various courses covering both fundamental and specialized accounting topics to meet individual career goals.

The Accounting certificate provides occupational training and preparation for entry-level clerical and technical positions in various accounting careers. It provides a strong background in fundamental accounting concepts and typical accounting computer applications. In addition, it provides various specialized accounting topics to meet career individual goals.

Division Dean | Kirsten Corbin
Department Chairs | Margaret Pollard

(916) 484-8361

Associate Degree

A.A. in Accounting

This degree focuses on preparation for careers in various accounting professions. It develops a common foundation in accounting and business, and provides various courses covering both fundamental and specialized accounting topics to meet individual career goals.

Catalog Date: June 1, 2020

Degree Requirements

<table>
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<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>ACCT 103</td>
<td>Intermediate Accounting - Part I</td>
<td>4</td>
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<tr>
<td>ACCT 104</td>
<td>Intermediate Accounting - Part II</td>
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<tr>
<td>ACCT 107</td>
<td>Auditing</td>
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<td>ACCT 111</td>
<td>Cost Accounting</td>
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<tr>
<td>ACCT 301</td>
<td>Financial Accounting</td>
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<tr>
<td>ACCT 311</td>
<td>Managerial Accounting</td>
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<tr>
<td>ACCT 361</td>
<td>Ethics, Fraud, and Legal Issues for Accountants</td>
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<tr>
<td>BUS 110</td>
<td>Business Economics (3)</td>
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<tr>
<td>or ECON 302</td>
<td>Principles of Macroeconomics (3)</td>
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A minimum of 8 units from the following:

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<tr>
<td>ACCT 101</td>
<td>Fundamentals of College Accounting (3)</td>
</tr>
<tr>
<td>ACCT 121</td>
<td>Payroll Accounting (3)</td>
</tr>
<tr>
<td>ACCT 122</td>
<td>Sales and Use Taxes (1)</td>
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<td>ACCT 125</td>
<td>Federal and State Individual Taxation (4)</td>
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<td>ACCT 128</td>
<td>Taxation of Corporations, Partnerships, Estates, and Trusts (4)</td>
</tr>
<tr>
<td>ACCT 132</td>
<td>Intermediate Payroll Administration (1.5)</td>
</tr>
<tr>
<td>ACCT 153</td>
<td>Governmental Accounting (3)</td>
</tr>
<tr>
<td>ACCT 160</td>
<td>Volunteer Income Tax Assistance (2)</td>
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</table>
The Accounting Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- evaluate and perform all steps in the financial accounting cycle.
- compile and analyze costs within a company.
- analyze and communicate appropriate information to managers, investors, creditors, and other interested parties utilizing a variety of reports.
- audit financial statements and express appropriate opinions on those statements.
- integrate the principles of business, business law, ethics, and economics into accounting functions.
- apply accounting standards and techniques to one or more specialized areas of accounting.

Career Information

This degree is designed for a variety of student objectives. It includes courses required for immediate employment in accounting positions. The courses meet the requirements of governmental employers for promotional exams. Students seeking transfer to four-year universities will meet the transfer requirements of financial accounting (ACCT 301) and managerial accounting (ACCT 311). Individuals with existing bachelor's degrees can also use these courses to meet the requirements to take the exam for Certified Public Accountant.

Certificates of Achievement

Accounting Clerk Certificate

This certificate provides fundamental occupational training and preparation for entry level accounting clerk positions. The program includes basic accounting and specialized courses designed for the accounting workplace, including small business accounting, technology, and basic business principles.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tr>
<td>ACCT 121</td>
<td>Payroll Accounting</td>
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<tr>
<td>ACCT 341</td>
<td>Computerized Accounting</td>
<td>3</td>
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<tr>
<td>BUS 105</td>
<td>Business Mathematics</td>
<td>3</td>
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<tr>
<td>BUS 310</td>
<td>Business Communications</td>
<td>3</td>
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<tr>
<td>CISA 315</td>
<td>Introduction to Electronic Spreadsheets</td>
<td>2</td>
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<td>ACCT 343</td>
<td>Computer Spreadsheet Applications for Accounting</td>
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<tr>
<td>BUSTEC 310</td>
<td>Introduction to Word/Information Processing</td>
<td></td>
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<tr>
<td>CISA 305</td>
<td>Beginning Word Processing</td>
<td></td>
</tr>
<tr>
<td>CISA 316</td>
<td>Intermediate Electronic Spreadsheets</td>
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</table>
Student Learning Outcomes

Upon completion of this program, the student will be able to:

- analyze and record accounting transactions
- prepare appropriate management reports
- process payroll and complete appropriate reports
- maintain small business records using accounting computer programs
- incorporate basic business and communication skills into the accounting workplace

Accounting Certificate

This certificate provides occupational training and preparation for entry-level clerical and technical positions in various accounting careers. It provides a strong background in fundamental accounting concepts and typical accounting computer applications. In addition, it provides various specialized accounting topics to meet career individual goals.

Catalog Date: June 1, 2020

Certificate Requirements

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<td>Intermediate Accounting - Part I</td>
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<tr>
<td>ACCT 104</td>
<td>Intermediate Accounting - Part II</td>
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<tr>
<td>ACCT 107</td>
<td>Auditing</td>
<td>3</td>
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<td>ACCT 111</td>
<td>Cost Accounting</td>
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<tr>
<td>ACCT 301</td>
<td>Financial Accounting</td>
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<tr>
<td>ACCT 311</td>
<td>Managerial Accounting</td>
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</tr>
<tr>
<td>ACCT 361</td>
<td>Ethics, Fraud, and Legal Issues for Accountants</td>
<td>3</td>
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<tr>
<td>BUS 110</td>
<td>Business Economics (3)</td>
<td>3</td>
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<tr>
<td>or ECON 302</td>
<td>Principles of Macroeconomics (3)</td>
<td></td>
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<td>A minimum of 8 units from the following:</td>
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<tr>
<td>ACCT 101</td>
<td>Fundamentals of College Accounting (3)</td>
<td></td>
</tr>
<tr>
<td>ACCT 121</td>
<td>Payroll Accounting (3)</td>
<td></td>
</tr>
<tr>
<td>ACCT 125</td>
<td>Federal and State Individual Taxation (4)</td>
<td></td>
</tr>
<tr>
<td>ACCT 128</td>
<td>Taxation of Corporations, Partnerships, Estates, and Trusts (4)</td>
<td></td>
</tr>
<tr>
<td>ACCT 153</td>
<td>Governmental Accounting</td>
<td></td>
</tr>
<tr>
<td>ACCT 341</td>
<td>Computerized Accounting (3)</td>
<td></td>
</tr>
<tr>
<td>CISA 316</td>
<td>Intermediate Electronic Spreadsheets (2)</td>
<td></td>
</tr>
<tr>
<td>or ACCT 343</td>
<td>Computer Spreadsheet Applications for Accounting (2)</td>
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</tr>
<tr>
<td>PROPTX 310</td>
<td>Introduction to Appraising for Property Tax Purposes (1.5)</td>
<td></td>
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<tr>
<td>PROPTX 311</td>
<td>Appraisal of Machinery &amp; Equipment for Property Tax Purposes (1.5)</td>
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A minimum of 3 units from the following:

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<tr>
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<th>UNITS</th>
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<tbody>
<tr>
<td>ACCT 101</td>
<td>Fundamentals of College Accounting (3)</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 301</td>
<td>Financial Accounting (4)</td>
<td>4</td>
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<td>Total Units:</td>
<td></td>
<td>19</td>
</tr>
</tbody>
</table>
Student Learning Outcomes

Upon completion of this program, the student will be able to:

- evaluate and perform all steps in the financial accounting cycle.
- compile and analyze costs within a company.
- analyze and communicate appropriate information to managers, investors, creditors, and other interested parties utilizing a variety of reports.
- audit financial statements and express appropriate opinions on those statements.
- integrate the principles of business, business law, ethics, and economics into accounting functions.
- apply accounting standards and techniques to one or more specialized areas of accounting.

Career Information

This certificate includes courses required for immediate employment in accounting positions. The courses meet the requirements of governmental employers for promotional exams. Students seeking transfer to four-year universities will meet the transfer requirements of financial accounting (ACCT 301) and managerial accounting (ACCT 311). Individuals with existing bachelor's degrees can also use these courses to meet the requirements to take the Certified Public Accountant exam.

Taxation Certificate

This certificate provides occupational training and education in the areas of individual and business income tax preparation and consulting. Courses in this program provide a background in individual, corporate, partnership, and estate taxes.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>ACCT 125</td>
<td>Federal and State Individual Taxation</td>
<td>4</td>
</tr>
<tr>
<td>ACCT 128</td>
<td>Taxation of Corporations, Partnerships, Estates, and Trusts</td>
<td>4</td>
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<tr>
<td>ACCT 301</td>
<td>Financial Accounting</td>
<td>4</td>
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<td>A minimum of 2 units from the following:</td>
<td>2</td>
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<tr>
<td>ACCT 121</td>
<td>Payroll Accounting (3)</td>
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<tr>
<td>ACCT 341</td>
<td>Computerized Accounting (3)</td>
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<tr>
<td>ACCT 343</td>
<td>Computer Spreadsheet Applications for Accounting (2)</td>
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<tr>
<td>ACCT 498</td>
<td>Work Experience in Accounting (1 - 4)</td>
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<tr>
<td>CISA 315</td>
<td>Introduction to Electronic Spreadsheets (2)</td>
<td></td>
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<tr>
<td>PROPTX 310</td>
<td>Introduction to Appraising for Property Tax Purposes (1.5)</td>
<td></td>
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<tr>
<td>PROPTX 311</td>
<td>Appraisal of Machinery &amp; Equipment for Property Tax Purposes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1.5)</td>
<td></td>
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<td>Total Units:</td>
<td>14</td>
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</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- complete federal and California individual income tax returns.
- prepare federal and California corporate and partnership income tax returns.
- prepare federal estate, gift, and trust tax returns.
Accounting (ACCT)

ACCT 101 Fundamentals of College Accounting

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: BUS 105, MATH 100, MATH 104, or MATH 132; AND eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300, OR ESLR 340 AND ESLW 340.

Catalog Date: June 1, 2020

This introductory course in small business accounting covers the accounting cycle for service and merchandising businesses. Topics include the general journal, the general and subsidiary ledgers, and adjusting, correcting, and closing journal entries. Income statements, statements of owner equity, balance sheets for service and merchandising businesses are prepared and analyzed. Additional topics include cash management and bank reconciliations, accounting for sales and purchase discounts, sales taxes, merchandise inventory, and payroll.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- define the purpose and process of accounting and list the functions of accounting.
- define accounting elements and construct the accounting equation; analyze and record daily transactions in the general journal and post to general and subsidiary ledgers.
- complete the accounting cycle in a manual accounting system which includes journalizing, posting, trial balance, adjusting entries, adjusted trial balance, financial statements, closing entries and post-closing trial balance, and the preparation of a worksheet.
- prepare financial statements which include income statement, statement of owners' equity, and balance sheet for service and merchandising businesses.
- construct a bank reconciliation and record the entries necessary to update the accounts.
- prepare a payroll register and make appropriate journal entries to correctly record wage/salary expenses, and employer payroll tax expenses.
- record merchandise sales transactions by using merchandise sales accounts, record merchandise purchase transactions by using merchandise purchase accounts, and compute gross profit for a merchandise business.
- compute ending inventory and cost of goods sold under four different merchandise inventory valuation methods.
- prepare adjusting entries, closing entries, and multiple-step income statements for a merchandising business.
- assess financial statements by computing basic financial ratios and explaining the meanings of ratios.

ACCT 103 Intermediate Accounting - Part I

Units: 4
Hours: 72 hours LEC
Prerequisite: ACCT 301 with a grade of "C" or better
Catalog Date: June 1, 2020

This course continues the study and application of accounting principles and techniques used in preparing and reporting the financial results of business corporations. Areas of study include cash and receivables, inventory, long-term assets, and analysis of time value of money.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- examine the concepts, principles, and practices of financial accounting, including discussion of Generally Accepted Accounting Principles (U.S. GAAP) and International Financial Reporting Standards (IFRS) on selected topics
- prepare financial statements and related disclosures, including classified balance sheets, multiple step income statements with presentation of discontinued operations, extraordinary items, and accounting changes
• identify accounting topics where the time value of money is relevant, including calculating and comparing future and present value of cash flows
• apply the objectives and principles for managing and accounting for cash, cash equivalents, and accounts receivable
• account for inventory using alternative techniques and procedures for valuation and reporting within the financial statements
• account for acquisition, depreciation, depletion, impairment, and disposition of property, plant, and equipment
• identify and account for costs to be included in the valuation of intangible assets, including amortization, issues of impairment and presentation within financial statements
• analyze and account for complex business transactions

ACCT 104 Intermediate Accounting - Part II

Units: 4
Hours: 72 hours LEC
Prerequisite: ACCT 301 with a grade of "C" or better
Advisory: ACCT 103
Catalog Date: June 1, 2020

This course continues the study and application of accounting principles and techniques used in preparing and reporting the financial results of business corporations. Areas of study include liabilities and contingencies, stockholders’ equity and earnings per share, investments, revenue recognition, income taxes, pensions, leases, accounting changes and error analysis, and cash flows.

Student Learning Outcomes

Upon completion of this course, the student will be able to:
• examine the concepts, principles, and practices of financial accounting, including discussion of Generally Accepted Accounting Principles (U.S. GAAP) and International Financial Reporting Standards (IFRS) on selected topics
• account for current liabilities, distinguish and present accounting treatments for contingencies
• account for bonds and long-term notes, and describe disclosures for long-term debt in various forms
• evaluate and account for transactions affecting the components of stockholders’ equity
• analyze and account for transactions affecting the components of stockholders’ equity
• analyze and account for convertible securities, stock compensation plan and earnings per share
• analyze and account for complex business transactions
• distinguish between different types of pension plans, record pension expense, and balance sheet presentation of pension asset/liability
• contrast capital leases with operating leases including the accounting procedures for both the lessee and lessor, and the financial statement presentation and disclosure requirements
• compare and contrast accounting changes versus accounting estimates, and the accounting procedures for each, including the accounting for correction of errors and analyzing the effect of errors
• contrast the direct and indirect methods of calculating cash flow from operating activities, and preparation of statement of cash flows under each method
• analyze and account for income tax liabilities currently payable and deferred

ACCT 107 Auditing

Units: 3
Hours: 54 hours LEC
Prerequisite: ACCT 301 with a grade of "C" or better
Advisory: ACCT 103; ACCT 104; BUS 105 or MATH 100, 104 or 132; AND eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300, OR ESLR 340 AND ESLW 340.
Catalog Date: June 1, 2020

This course on auditing practice and theory emphasizes attestation audits of financial statements and the accompanying footnotes. Topics include Generally Accepted Auditing Standards (GAAS), ethics, legal issues, audit planning and methodology, internal control analysis, sampling, and auditors’ reports. Additional topics include specific auditing objectives and tests of assets, liabilities, equity, revenues, and expenses.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- evaluate the roles of financial reporting and auditing in the modern business environment.
- compare and contrast the "Generally Accepted Auditing Standards" (GAAS) of the American Institute of Certified Public Accountants (AICPA) with "Auditing Standards" issued by the Public Company Accounting Oversight Board (PCAOB).
- analyze the six principles of the AICPA Code of Professional Conduct.
- assess the various components of audit risk.
- evaluate the structure of audit working papers documentation.
- compare and contrast the three methods of documenting and assessing internal controls.
- evaluate statistical and non-statistical sampling methodologies including how sample size is affected by audit risk and population size.
- ascertain appropriate audit tests for assets, liabilities, stockholders' equity, revenues, and expenses.
- evaluate resulting audit evidence for assets, liabilities, stockholders' equity, revenues, and expenses.
- distinguish the types of auditor's reports/opinions and when to apply each type of report/opinion.

ACCT 111 Cost Accounting

Units: 3  
Hours: 54 hours LEC  
Prerequisite: ACCT 311 with a grade of "C" or better  
Catalog Date: June 1, 2020

This course covers advanced managerial accounting. Topics include recording, classifying, reporting, and analyzing costs as well as examining different costing systems. The course focuses on understanding costs, appropriate accounting for them, and using them to analyze, plan, operate, and evaluate manufacturing, merchandising, and service businesses. It utilizes the industry-standard software, Excel, to do so.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- examine the role of cost accounting in planning and making business decisions.
- differentiate between cost behaviors and use them to predict costs.
- differentiate between, account for, and report product and period costs.
- evaluate and plan profitability using cost behavior.
- use costs to make pricing and other types of business decisions.
- compare, contrast, and use process and job-order costs systems in accounting for product costs.
- prepare budgets and evaluate financial performance using variance analysis.
- evaluate organizational structure, use responsibility accounting, and allocate joint, by-product, and service department costs.
- use Excel software to account for and analyze costs.

ACCT 121 Payroll Accounting

Units: 3  
Hours: 54 hours LEC  
Prerequisite: ACCT 101 or 301 with a grade of "C" or better  
Catalog Date: June 1, 2020

This course covers current practices in payroll accounting and tax reporting, including federal and state laws that affect payroll records and reports. Topics include both manual and computer payroll systems with hands-on computer applications.

Student Learning Outcomes

Upon completion of this course, the student will be able to:
• evaluate and prepare the payroll records required of employers
• identify and apply the federal and state laws that affect payroll accounting and employment practices
• prepare payroll transactions, accounting entries, and payroll tax returns
• analyze and interpret payroll data to determine total costs to the employer of wages, taxes, and fringe benefits
• record payroll transactions in an automated payroll system, using a personal computer and payroll software
• evaluate automated payroll reports
• analyze and prepare various payroll forms

ACCT 125 Federal and State Individual Taxation

Units: 4
Hours: 72 hours LEC
Prerequisite: None.
Advisory: ACCT 101 or 301; AND eligible for ENGRD 116 AND ENGRWR 102; OR ESLR 320 AND ESLW 320.
Catalog Date: June 1, 2020

This course covers basic Federal and State Income Tax regulations with an emphasis on the skills necessary for the preparation of individual income tax returns. Topics include filling requirements, determination of taxable income, allowable deductions, tax computation, tax credits, other taxes, payment methods, and audit procedures. The course is a California Tax Education Council (CTEC) qualifying education course, and is offered to members of the community to enable them to become a California Registered Tax Return Preparer (CRTTP).

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• describe the constitutional origins, statutory requirements, and other legislative and administrative underpinnings of the income tax systems of the United States and California.
• compute the federal and state tax formula for individuals: gross income, adjusted gross income, taxable income, and income tax.
• describe what constitutes "substantial authority" with respect to a position taken on a tax return, and be able to locate substantial authority for such a position.
• identify where each item of income and deduction belongs on federal and state income tax returns for individuals.
• prepare basic, intermediate, and advanced federal and state individual income tax returns.
• conduct basic tax research using publicly-available research tools.
• describe the basics of income tax administration, including the audit process, reporting requirements, and taxpayer and preparer penalties, particularly California tax practitioner requirements.
• calculate state and federal taxes using applicable laws and standard forms.
• identify and calculate tax credits taxpayers are entitled to claim on their tax return.
• prepare written communication to IRS and/or clients analyzing tax issues and making appropriate recommendations.
• apply professional ethical behavior in accounting, taxation, and business.

ACCT 128 Taxation of Corporations, Partnerships, Estates, and Trusts

Units: 4
Hours: 72 hours LEC
Prerequisite: ACCT 125 and 301 with grades of "C" or better
Catalog Date: June 1, 2020

This course provides a continuing study of federal income tax compliance with an emphasis on the taxation of business entities including corporations, partnerships, limited liability companies, S-corporations, estates, and trusts. Topics include tax and non-tax characteristics of business entities, income tax filing requirements, differences in book and taxable income, selection of accounting methods and periods, tax computation, and available credits.

Student Learning Outcomes

Upon completion of this course, the student will be able to:
list the decisions about accounting periods and methods that the various business entities must make.

describe the income tax issues that are faced by non-profit organizations.

identify the income tax issues in creating, operating, and liquidating a corporation.

prepare a corporation's federal income tax return.

identify the income tax issues in creating, operating, and liquidating a partnership and an S-corporation.

prepare partnership and S-corporation income tax returns.

describe the income tax issues in making taxable gifts and prepare a gift tax return.

describe the estate and trust income tax issues and prepare a trust tax return.

identify the primary types of state and local taxes and when they are applicable to a business entity.

cite the basic U.S. framework for taxing multinational transactions and the role of the foreign tax credit.

apply professional ethical behavior in accounting, taxation, and business.

ACCT 153 Governmental Accounting

Units: 3
Hours: 54 hours LEC
Prerequisite: ACCT 301 with a grade of "C" or better
Advisory: ENGWR 102 and ENGRD 116, OR ESLR 320 and ESLW 320; ESLL 320; MATH 100, 104 132 or BUS 105
Catalog Date: June 1, 2020

This course covers accounting and financial reporting for governmental units and institutions with emphasis on the accounting standards prescribed by the Governmental Accounting Standards Board (GASB). Additional topics include governmental budgeting and budgetary controls.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- evaluate the environment of governmental budgeting, accounting, and financial reporting
- evaluate the role of the budget and budgetary process in the management of governmental organizations
- compare and contrast the objectives of financial reporting of governmental and corporate accounting
- compare and contrast the modified accrual basis of accounting and the full accrual basis of accounting
- evaluate the role of each fund in the fund financial statements
- compare and contrast the fund financial statements and the government-wide financial statements
- evaluate the content of a typical Comprehensive Annual Financial Report

ACCT 295 Independent Studies in Accounting

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

ACCT 301 Financial Accounting

Units: 4
Hours: 72 hours LEC
Prerequisite: None.
Advisory: ACCT 101; AND BUS 105 or MATH 100, 104, or 132; AND eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300, OR ESLR 340 AND ESLW
This is the study of accounting as an information system, examining why it is important and how it is used by investors, creditors, and others to make decisions. The course covers the accounting information system, including recording and reporting of business transactions with a focus on the accounting cycle, the application of generally accepted accounting principles, the financial statements, and statement analysis. It includes issues relating to asset, liability, and equity valuation, revenue and expense recognition, cash flow, internal controls, and ethics.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain the nature and purpose of generally accepted accounting principles (GAAP) and International Financial Reporting Standards (IFRS).
- explain and apply the components of the conceptual framework for financial accounting and reporting, including the qualitative characteristics of accounting information, the assumptions underlying accounting, the basic principles of financial accounting, and the constraints and limitations on accounting information.
- define and use accounting and business terminology.
- explain what a system is and how an accounting system is designed to satisfy the needs of specific businesses and users.
- summarize the purpose of journals and ledgers.
- apply transaction analysis, input transactions into the accounting system, process this input, and prepare and interpret the four basic financial statements.
- distinguish between cash basis and accrual basis accounting and explain their impact on the financial statements, including the revenue recognition and matching principles.
- identify and illustrate how the principles of internal control are used to manage and control a firm’s resources and minimize risk.
- explain the content, form, and purpose of basic financial statements (including footnotes) and annual reports, and how they satisfy the information needs of investors, creditors, and other users.
- explain the nature of current assets and related issues, including the measurement and reporting of cash and cash equivalents, receivables and bad debts, and inventory and cost of goods sold.
- explain the valuation and reporting of current liabilities, estimated liabilities, and other contingencies.
- identify and illustrate issues relating to long-term asset acquisition, use, cost allocation, and disposal.
- distinguish between capital and revenue expenditures.
- identify and illustrate issues relating to long-term liabilities, including issuance, valuation, and retirement of debt (including the time value of money).
- identify and illustrate issues relating to stockholders’ equity, including issuance, repurchase of capital stock, and dividends.
- explain the importance of operating, investing, and financing activities reported in the Statement of Cash Flows.
- interpret company activity, profitability, liquidity and solvency through selection and application of appropriate financial analysis tools.
- identify the ethical implications inherent in financial reporting and be able to apply strategies for addressing them.

### ACCT 311 Managerial Accounting

**Units:** 4  
**Hours:** 72 hours LEC  
**Prerequisite:** ACCT 301 with a grade of "C" or better  
**Transferable:** CSU; UC  
**C-ID:** C-ID ACCT 120  
**Catalog Date:** June 1, 2020

This course covers how managers use accounting information in decision-making, planning, directing operations, and controlling. It focuses on cost terms and concepts, cost behavior, cost structure, and cost-volume-profit analysis. Topics include issues relating to cost systems, cost control, profit planning, and performance analysis in manufacturing and service environments.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify and illustrate the primary activities and information needs of managers and explain the role of the managerial accountant as a member of the management team.
• compare and contrast financial and managerial accounting.
• define and illustrate various cost terms, concepts, and behaviors, and evaluate their relevancy for different decision-making purposes.
• distinguish between product and period costs and prepare and evaluate a Schedule of Cost of Goods Manufactured, Schedule of Cost of Goods Sold, and Income Statement.
• prepare traditional and contribution-margin income statements and define related terms.
• explain cost-volume-profit analysis, degree of operating leverage, and safety margin and employ each as an analytical tool.
• describe the traditional types of product costing systems (including job-order and process), illustrate the flow of costs in each, and prepare related accounting records and reports.
• discuss the impact of technology on the business environment, its implications for product and service costs, and the development of activity-based costing and management.
• explain the purposes of budgeting, prepare a master budget and its component schedules, and relate the budget to planning and control.
• explain the development and use of standard costs and flexible budgets, prepare and interpret variance analysis reports, and relate them to responsibility accounting and control.
• explain the nature of and need for segment reporting and its relationship to cost, revenue, profit, and investment centers; prepare and analyze related segment reports.
• compare and contrast absorption costing and variable costing, prepare income statements using both methods, and reconcile the resulting net incomes.
• define relevant costs and benefits and prepare analyses related to special decisions.
• explain the nature of capital expenditure decisions and apply and evaluate various methods used in making these decisions; including the time value of money.
• identify the ethical implications inherent in managerial accounting and reporting and apply strategies for addressing them.

ACCT 341 Computerized Accounting

Units: 3
Hours: 54 hours LEC
Prerequisite: ACCT 101 or 301 with a grade of "C" or better
Advisory: CISC 100 or 300
Transferable: CSU
Catalog Date: June 1, 2020

This course covers major areas of computerized accounting system for small business using QuickBooks Online (QBO). Topics include setting up a new company in QBO, creating a chart of accounts, banking, recording customer and vendor transactions, using QBO inventory tracking, paying employees, making adjusting entries, and generating financial and management reports for service and merchandising businesses. This course provides students with hands-on experience in using QBO and prepares students to take Intuit certified QB certification exam.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• identify differences between manual and computerized accounting systems.
• set up a new company chart of accounts as well as customer, vendor, and employee master files.
• record transactions related to sales, purchases, and payroll for service and merchandising companies.
• complete the full accounting cycle for service and merchandise business in a computerized accounting system.
• perform bank reconciliation of checking, saving, and credit card accounts
• analyze end-of-period account balances and create appropriate adjusting and closing journal entries.
• generate and evaluate financial statements and other accounting reports.

ACCT 343 Computer Spreadsheet Applications for Accounting

Units: 2
Hours: 27 hours LEC; 27 hours LAB
Prerequisite: None
Corequisite: ACCT 301
Advisory: CISA 315; ENGWR 102 and ENGRD 116 OR ESLR 320 and ESLW 320; ESLL 320; MATH 100, 104, 132 or BUS 105
This course combines the study of accounting and computer spreadsheets. Projects include topics in financial accounting, managerial accounting, and financial analysis. The course focuses on accuracy, clarity, creativity, adaptability, and presentation skills.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- create computerized spreadsheets from start to finish for accounting applications
- construct complex spreadsheet formulas and functions to develop accounting spreadsheets
- design spreadsheets that communicate accurate, succinct, and useful accounting information
- compare and contrast commonly used spreadsheet software currently used in business and industry

ACCT 361 Ethics, Fraud, and Legal Issues for Accountants

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<tr>
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<tbody>
<tr>
<td>Hours:</td>
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<tr>
<td>Prerequisite:</td>
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<tr>
<td>Advisory:</td>
<td>ACCT 107 and 301</td>
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<tr>
<td>Transferable:</td>
<td>CSU</td>
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<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
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</table>

This course explores ethics, fraud, and legal issues that must be addressed by accountants, including exploration through case studies. Topics in ethics include ethical foundations as well as the unique ethical requirements of professional organizations and the California Board of Accountancy. The course also examines the legal liability of accountants. A variety of case studies are evaluated to gain perspective into ethical lapses, fraud, and legal liability.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- evaluate the ethical guidelines of the American Institute of Certified Public Accountants (AICPA) and other professional accounting organizations.
- evaluate the California Accountancy Act and the implementing rules and regulations of the California Board of Accountancy.
- explore the ethical standards of the International Ethics Standards Board for Accountants (IESBA).
- assess potential legal liability for professional conduct.
- identify the common characteristics and causes of ethical lapses, fraud, and inadequate audits.
- evaluate and apply the Sarbanes-Oxley Act of 2002.

ACCT 495 Independent Studies in Accounting

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<th>Units:</th>
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<tr>
<td>Hours:</td>
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<tr>
<td>Prerequisite:</td>
<td>None.</td>
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<tr>
<td>Transferable:</td>
<td>CSU</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
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</table>

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

ACCT 498 Work Experience in Accounting

<table>
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<tr>
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<tbody>
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<td>Hours:</td>
<td>60 - 300 hours LAB</td>
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<tr>
<td>Prerequisite:</td>
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</tr>
<tr>
<td>Enrollment Limitation:</td>
<td>Students must be in a paid or unpaid internship, volunteer position, or job related to accounting with a cooperating site supervisor. Students</td>
</tr>
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</table>
This course provides students with opportunities to develop marketable skills in preparation for employment or advancement within the field of accounting. It is designed for students interested in work experience and/or internships in transfer-level degree occupational programs. Course content includes understanding the application of education to the workforce, completion of Title 5 required forms which document the student’s progress and hours spent at the work site, and developing workplace skills and competencies. During the semester, the student is required to complete 75 hours of related paid work experience, or 60 hours of related unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. All students are required to attend the first class meeting, a mid-semester meeting, and a final meeting. Additionally, students who have not already successfully completed a Work Experience course will be required to attend weekly orientations while returning participants may meet individually with the instructor as needed. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate application of industry knowledge and theoretical concepts in the field of accounting related to a transfer degree level career as written in the minimum three (3) learning objectives created by the student and his/her employer or work site supervisor at the start of the course

- make effective decisions, use workforce information, and manage his/her personal career plans.

- behave professionally, ethically, and legally at work, consistent with applicable laws, regulations, and organizational norms.

- behave responsibly at work, exhibiting initiative and self-management in situations where it is needed.

- apply effective leadership styles at work, with consideration to group dynamics, team and individual decision making, and workforce diversity.

- communicate in oral, written, and other formats, as needed, in a variety of contexts at work.

- locate, organize, evaluate, and reference information at work.

- demonstrate originality and inventiveness at work by combining ideas or information in new ways, making connections between seemingly unrelated ideas, and reshaping goals in ways that reveal new possibilities using critical and creative thinking skills such as logical reasoning, analytical thinking, and problem-solving.

---

**Property Tax (PROPTX)**

**PROPTX 310 Introduction to Appraising for Property Tax Purposes**

<table>
<thead>
<tr>
<th>Units:</th>
<th>1.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>30 hours LEC</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None</td>
</tr>
<tr>
<td>Advisory:</td>
<td>MATH 100, 104, or 132; AND eligible for ENGRD 310 or ENGRD 312 AND ENGRD 300, OR ESLR 340 AND ESLW 340.</td>
</tr>
<tr>
<td>Transferable:</td>
<td>CSU</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course introduces the basic principles of property tax appraisal. It covers the economic aspects and legal definitions of market value, California Property Tax Laws and Regulations, the appraisal process, and methods of valuation. It is designed to meet the California Board of Equalization training requirements for county property tax appraisers.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply property tax laws as they pertain to the appraisal of property for tax purposes.

- analyze the appraisal process in preparation to value property for tax purposes.

- analyze data to determine land value and land allocation for tax purposes.

- analyze comparable sales information in order to value property by the sales comparable approach.

- determine appropriate costs to include in the preparation of the cost approach to value.

- evaluate income information to determine appropriate process to value property by the income approach.

- apply appraisal principles and valuation methodology to value real and personal property for property tax purposes.
This course covers the principles of property tax appraisal for tax assessment of personal property and fixtures. Topics include the economic aspects and legal definitions of market value, California Property Tax Laws and Regulations, the appraisal process, and methods of valuation. It is designed to meet the California Board of Equalization training requirements for county property tax auditor-appraisers and appraisers.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- appraise personal property and fixtures for property tax purposes.
- classify property as real property, personal property, or improvements, including determining whether an improvement is a structure or fixture improvement.
- determine the taxability of personal property and fixture items in compliance with the California Constitution, Revenue & Taxation Code provisions, property tax rules, and case law.
- evaluate the factors determining value.
- evaluate the concept of Trade Level.
- apply the cost approach to determine value.
- apply equipment index factors and percent good factors in the valuation of personal property and fixtures.
Administration of Justice | American River College

ARC's Administration of Justice program offers both Associate's and Associate's for Transfer degrees. The Associate's degree covers the prevention, discovery, control and treatment of crimes, criminals, and criminality. Students desiring to enter a career concerned with the administration of justice will find that this curriculum has flexibility that allows them to prepare for specific fields included in that broad category. The Transfer degree provides students with a major that fulfills the general requirements of the California State University for transfer. Students with this degree will receive priority admission with junior status to the California State University system.

Division Dean
Byron G. Gustafson, Ph.D.

Department Chairs
Charissa Gorre

(916) 570-5000

Associate Degrees for Transfer

A.S.-T. in Administration of Justice

The Associate in Science in Administration of Justice for Transfer provides students with a major that fulfills the general requirements of the California State University for transfer. Students with this degree will receive priority admission with junior status to the California State University system.

The Associate in Science in Administration of Justice for Transfer (A.S.-T.) may be obtained by the completion of 60 transferable, semester units with a minimum of a 2.0 GPA, including (a) the major or area of emphasis described in the Required Program outlined below (earning a C or better in these courses), and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

Students desiring to enter a career concerned with administration of justice will find that this curriculum has flexibility that allows them to prepare for specific fields included in that broad category.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADMJ 300</td>
<td>Introduction to Administration of Justice</td>
<td>3</td>
</tr>
<tr>
<td>ADMJ 320</td>
<td>Concepts of Criminal Law</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A minimum of 6 units from the following:</td>
<td></td>
</tr>
<tr>
<td>ADMJ 302</td>
<td>Community Relations: Multicultural Issues (3)</td>
<td>3</td>
</tr>
<tr>
<td>ADMJ 304</td>
<td>Juvenile Delinquency (3)</td>
<td></td>
</tr>
<tr>
<td>ADMJ 323</td>
<td>Legal Aspects of Evidence (3)</td>
<td></td>
</tr>
<tr>
<td>ADMJ 330</td>
<td>Criminal Investigation (3)</td>
<td></td>
</tr>
<tr>
<td>ADMJ 340</td>
<td>Introduction to Correctional Services (3)</td>
<td></td>
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<td>A minimum of 6 units from the following:</td>
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<tr>
<td>PSYC 300</td>
<td>General Principles (3)</td>
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<td>PSYC 480</td>
<td>Honors General Principles (3)</td>
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<tr>
<td>SOC 300</td>
<td>Introductory Sociology (3)</td>
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<tr>
<td>SOC 480</td>
<td>Introductory Sociology - Honors (3)</td>
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<td>STAT 300</td>
<td>Introduction to Probability and Statistics (4)</td>
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<td>Total Units:</td>
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<td>18</td>
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</table>
The Associate in Science in Administration of Justice for Transfer (AS-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- evaluate various local, state, and federal law enforcement career options.
- research the law enforcement application and hiring processes.
- critique the ethical philosophy of the American justice system.
- analyze crime causation, criminal statutes and elements of particular crimes.
- describe the various levels of punishment and corrections.
- evaluate the legal aspects of criminal investigations, constitutional law, and case law.
- identify various controlled substances and interpret their impact on society and law enforcement.
- apply laws and procedures for the collection and use of evidence.
- identify ethical standards placed on law enforcement professionals.
- communicate effectively in written and oral formats.

Career Information

Police Officer; Deputy Sheriff; Crime Scene Investigator; Identification Technician; Community Services Officer; Corrections Officer; Parole Officer; Probation Officer and a variety of support service occupations. Potential employers include: Federal, State and local law enforcement agencies (Sheriff, Police, California Highway Patrol, Federal Bureau of Investigations, Drug Enforcement Administration, Department of Justice, Crime Scene Investigations, and California Department of Corrections and Rehabilitation).

Associate Degrees

A.S. in Administration of Justice

This degree covers the prevention, discovery, control and treatment of crimes, criminals, and criminality. Students desiring to enter a career concerned with the administration of justice will find that this curriculum has flexibility that allows them to prepare for specific fields included in that broad category. The program also provides courses to prepare students for transfer to a four-year institution. Opportunities for graduates include positions as federal and state parole officers, probation officers, and correctional administrators.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
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<tr>
<td>ADMJ 300</td>
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<td>ADMJ 302</td>
<td>Community Relations: Multicultural Issues</td>
<td>3</td>
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<tr>
<td>ADMJ 304</td>
<td>Juvenile Delinquency</td>
<td>3</td>
</tr>
<tr>
<td>ADMJ 320</td>
<td>Concepts of Criminal Law</td>
<td>3</td>
</tr>
<tr>
<td>ADMJ 322</td>
<td>Criminal Procedures</td>
<td>3</td>
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<tr>
<td>ADMJ 323</td>
<td>Legal Aspects of Evidence</td>
<td>3</td>
</tr>
<tr>
<td>ADMJ 330</td>
<td>Criminal Investigation</td>
<td>3</td>
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<tr>
<td>ADMJ 301</td>
<td>Investigative Report Writing (3)</td>
<td>3</td>
</tr>
<tr>
<td>ADMJ 309</td>
<td>Career Preparation for Law Enforcement Occupations (3)</td>
<td></td>
</tr>
<tr>
<td>ADMJ 331</td>
<td>Patrol Procedures (3)</td>
<td></td>
</tr>
</tbody>
</table>

A minimum of 3 units from the following:
The Administration of Justice Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- evaluate various local, state, and federal law enforcement career options.
- research the law enforcement application and hiring processes and develop an effective career strategy.
- critique the ethical philosophy of the American justice system and all participants.
- analyze crime causation, criminal statutes and elements of particular crimes and criminal procedures.
- recognize the complexities of punishment, corrections, community and human relations.
- evaluate the complex legal aspects of criminal investigations, procedures, constitutional law, and case law.
- identify various controlled substances and interpret their addictive properties, influences, and impact on society and law enforcement.
- apply laws and procedures for the collection and use of evidence.
- identify and adapt to ethical standards placed on law enforcement professionals.
- communicate effectively in written and oral formats.

Career Information

Police Officer; Deputy Sheriff; Crime Scene Investigator; Identification Technician; Community Services Officer; Corrections Officer; Parole Officer; Probation Officer and a variety of support service occupations. Potential employers include: Federal, State and local law enforcement agencies (Sheriff, Police, California Highway Patrol, Federal Bureau of Investigations, Drug Enforcement Administration, Department of Justice, Crime Scene Investigations, and California Department of Corrections and Rehabilitation).

Certificate

Homeland Security Certificate

This certificate examines the roots of terrorism, weapons of mass destruction, intelligence analysis, response methods, natural disaster incidents, threat mitigation, crisis negotiation, and conflict resolution. It explores topics directly associated with border security and security for transportation infrastructure, including: seaports, ships, aircraft, trains, train stations, highways, bridges, rail lines, pipelines, and bus systems.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLS 300</td>
<td>Introduction to Homeland Security</td>
<td>3</td>
</tr>
<tr>
<td>HLS 302</td>
<td>Intelligence Analysis and Security Management</td>
<td>3</td>
</tr>
<tr>
<td>HLS 304</td>
<td>Transportation and Border Security</td>
<td>3</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>9</td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- construct a historical time-line reflecting significant terrorist threats and events in the United States and globally.
- classify the roles, functions of, and interdependency among local, federal and international law enforcement and military agencies to counter and combat terrorism.
Administration of Justice (ADMJ)

ADMJ 300 Introduction to Administration of Justice

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ELSR 340 AND ELSW 340.
Transferable: CSU; UC
General Education: AA/AS Area V(b); CSU Area D8; IGETC Area 4H
C-ID: C-ID AJ 110
Catalog Date: June 1, 2020

This course introduces the characteristics of the American criminal justice system, U.S. Constitutional Rights, criminal activity, crime causation, domestic and international criminal threats, law enforcement response to criminal activity, and future law enforcement trends. It emphasizes the components of the American justice system, due process, courts and correctional services, ethics, and leadership.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- research the history, structure, and function of law enforcement, courts, and correctional systems in the United States.
- explain the interaction between law enforcement, courts, and correctional systems.
- explain due process and the protections provided by the U.S. Constitution.
- analyze ethical decision making and leadership ability.
- explain crime and criminality using criminological theories.
- explain the methods, theories, and concepts associated with the sources of crime data, the emerging patterns of criminal activity, and the costs of crime.
- describe the extent of the crime problem in America.

ADMJ 301 Investigative Report Writing

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESL 340
Transferable: CSU
Catalog Date: June 1, 2020

This course provides techniques of writing facts, information, and ideas effectively in a simple, clear, and logical manner in the various types of criminal justice system reports. It emphasizes criminal justice terminology, organization of information, investigative note taking, and thorough documentation of witness statements and evidence.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze and organize data for use in report writing.
write a report communicating facts and ideas in a simple, clear, and logical manner.

use vocabulary commonly used in the criminal justice system.

take notes in an interview or interrogation situation in a logical and organized manner.

discuss police ethical responsibilities and mandatory reporting requirements.

ADMJ 302 Community Relations: Multicultural Issues

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ELSR 340 AND ELSW 340.
Transferable: CSU; UC
General Education: AA/AS Area V(b); AA/AS Area VI; CSU Area D3; CSU Area D7; IGETC Area 4
C-ID: C-ID AJ 160
Catalog Date: June 1, 2020

This course examines the complex, dynamic relationship between communities and the institutions of the justice system in addressing crime and conflict with an emphasis on the challenges and prospects of administering justice within a diverse, multicultural population. It addresses the role that race, ethnicity, gender, sexual orientation, social class, culture, and the criminal justice professional play in shaping these relationships. It also examines new strategies, skills, tools, and cultural knowledge necessary for personnel engaged in all aspects of the criminal justice system. Special topics include how terrorism and the need for homeland security have changed the dynamics of police-community relations.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze how community perceptions of the justice system have evolved historically.
- formulate ways in which law enforcement professionals should respond to multicultural communities with a greater need for consideration, sensitivity, and improved communication skills.
- describe the changing law enforcement agency, including ethnic and racial issues within the workforce and women in law enforcement.
- describe the impact of cultural diversity on law enforcement’s duty to combat terrorism and maintain homeland security.
- examine emerging strategies, roles, and technologies for peace officers in multicultural law enforcement.
- describe the impact multiculturalism has on the courts and corrections.

ADMJ 304 Juvenile Delinquency

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ELSR 340 AND ELSW 340.
Transferable: CSU
General Education: AA/AS Area V(b); CSU Area D0
C-ID: C-ID AJ 220
Catalog Date: June 1, 2020

This course examines juvenile delinquency from a variety of perspectives, including the concept of delinquency, theories of delinquency, social, community, and environmental influences on delinquency and the juvenile justice system (past and present). An overview of adolescent problems and current approaches being utilized to confront these problems is discussed. It examines a variety of the causes of juvenile delinquency, as well as suggestions for the treatment of delinquency at both the state and local levels. It also examines the nature and extent of delinquency with relation to gender differences, family dynamics, peer and gang groups, schools, drug use, and the juvenile justice courts.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- differentiate the many diverse views and perspectives that characterize the study of juvenile delinquency.
- analyze the balance of theory, law, policy, and practice as they relate to juvenile delinquency.
- examine the concept of delinquency and status offending, the measurement of delinquency, and the trends and patterns in the delinquency rate.
assess the merits of the various theoretical models that have been used to explain the onset of delinquent behavior with a focus on choice, biology, psychology, economic, cultural, and environmental influences affecting delinquency.

explain the various treatment approaches utilized to curb the onset of delinquency.

examine juvenile delinquency abroad and compare how juvenile justice systems in other nations compare with the system in the United States.

describe how gender differences, peer groups, family dynamics, schools, drug use, and abuse impact delinquency rates.

ADMJ 309 Career Preparation for Law Enforcement Occupations

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU
Catalog Date: June 1, 2020

This course is designed for students who are pursuing careers in law enforcement and corrections. It covers employment and career search techniques, application processes, resume development, and cover letter writing. This course prepares students for pre-employment testing, interviews, background investigations, polygraph examinations, medical screening, conditional job offers, and hiring processes.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- research the current law enforcement labor market and develop job search skills.
- generate a completed law enforcement employment application package, including resume and cover letter.
- describe the complexity and thoroughness of the law enforcement background investigation process and identify potential career disqualifiers.
- accurately complete the California Commission on Peace Officer Standards and Training personal history statement documents.
- demonstrate ethical decision making and leadership ability.

ADMJ 320 Concepts of Criminal Law

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC
General Education: AA/AS Area V(b); CSU Area D8; IGETC Area 4H
C-ID: C-ID AJ 120
Catalog Date: June 1, 2020

This course examines the philosophy and structure of criminal law in the United States. Special emphasis is placed on the classification of crime, the general elements of crime, the definitions of common and statutory law, and the nature of acceptable evidence. It utilizes case studies to introduce students to criminal law and the classification of crimes against persons, property, morals, and public welfare. It also includes discussion of prosecution and defense decision making, criminal culpability, and defenses to crimes.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- research the philosophical and historical evolution of criminal law.
- explain the adversary system and sources of criminal law.
- identify elements of offenses against the person, property, morals, and public welfare.
- analyze a criminal court case and identify elements of offenses and criminal defenses applicable to the case.
- classify crimes according to severity.
- explain capacity to commit crime, causation, and culpability.
- examine the effects of ethical conduct of government officials and the relationship to the enforcement of criminal laws.
ADMJ 322 Criminal Procedures

This course is an in-depth study of criminal procedures used to enforce substantive law at both the federal and state level. Every step of the criminal process, from arrest to appeal, is thoroughly explored.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- list each step in the criminal justice process from arrest to trial.
- analyze the roles played by prosecutors, criminal defense attorneys, and judges in the criminal justice process.
- distinguish between the authority, jurisdiction, and organization of state and federal courts.

ADMJ 323 Legal Aspects of Evidence

This course examines the origins, development, philosophy, and constitutional foundations of the rules of evidence as applied in United States law. Emphasis is placed on the types of evidence and the laws governing admissibility of evidence into criminal procedures. Topics include search and seizure, hearsay evidence, witness competency, and direct and circumstantial evidence.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- distinguish between direct and circumstantial evidence and explain the impact that each has on a criminal procedure.
- recognize situations where a search warrant is required.
- distinguish among different types of evidence.
- identify the laws governing the admissibility of evidence into a criminal procedure.
- analyze the laws of search and seizure.
- critically evaluate and apply the rules of evidence to specific case facts.
- identify circumstances when a search warrant is not required.

ADMJ 330 Criminal Investigation

This course introduces basic investigative responsibilities and procedures as applied to criminal investigations. Topics include crime scene management, forensic and physical evidence handling, search and seizure, property crimes, violent crimes, organized criminal enterprises, gangs, and domestic and international terrorist
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify basic investigative responsibilities, including note taking, photographic documentation, preserving and processing evidence, and crime scene sketching.
- identify and explain the role of documentation in the criminal investigative process.
- recognize, identify, and explain the implications of a given piece of evidence in a criminal process.
- identify critical ethical issues related to criminal investigation.
- identify procedures for first responders to crime scenes.
- describe successive evolutionary stages of the criminal investigative process.
- describe the duties related to the basic functions of crime scene management including control, searching, evidence processing, and general area investigation.
- identify the role of forensic examination in a criminal investigative process.
- compare and contrast the legalities and strategies of interview and interrogation.
- research the protections granted under the fourth amendment to the U.S. Constitution including various exceptions to the rule.
- analyze activities of criminal enterprise organizations, criminal gangs, and terrorist organizations.
- identify key information sources and data systems available to investigators.
- explain the role of the investigator in the judicial process.

ADMJ 331 Patrol Procedures

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU
Catalog Date: June 1, 2020

This course explores the early development and present-day role of patrol operations and techniques used by local law enforcement agencies. Major topics include community policing, effective patrol strategies, gang awareness, and key factors affecting deployment of patrol resources, such as community involvement and meeting department objectives.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the patrol division organization in a law enforcement agency
- analyze the rules governing a patrol officer's conduct
- differentiate the techniques and methods used by the police to cope with the situations encountered while on patrol

ADMJ 340 Introduction to Correctional Services

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU
C-ID: C-ID AJ 200
Catalog Date: June 1, 2020

This course provides an overview of the history and trends of adult and juvenile corrections including probation and parole. It focuses on the legal issues, specific laws, and general operation of correctional institutions. The relationship between corrections and other components of the judicial system is examined.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- describe the history and development of corrections in the United States.
- research the legal issues, specific laws, and general issues encountered in a corrections facility.
- explain the relationship between corrections and other components of the administration of justice system.
- distinguish between adult and juvenile corrections, probation, and parole.
- analyze current trends and contemporary issues within the corrections field.
Anthropology is the study of humankind around the world and throughout time, with the goal of understanding our evolutionary origins, our biological distinction as a species, and our diverse manifestations of culture. This degree provides students with basic skills in critical analysis, application of the scientific method, and cross-cultural understanding.

Division Dean
Kathy Sorensen (Interim)

Department Chairs
Katrina Worley

(916) 484-8283

Associate Degrees for Transfer

A.A.-T. in Anthropology

The Associate in Arts degree in Anthropology for Transfer provides students with a major that fulfills the general requirements of the California State University for transfer. Students with this degree will receive priority admission with junior status to the California State University system. The Associate in Arts degree in Anthropology for Transfer (AA-T) may be obtained by the completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program outlined below (earning a C or better in these courses) and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education Breadth Requirements.

Anthropology is the study of humankind around the world and throughout time, with the goal of understanding our evolutionary origins, our biological distinction as a species, and our diverse manifestations of culture. A degree in anthropology provides the student with basic skills in critical analysis, application of the scientific method, and cross-cultural understanding.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 300</td>
<td>Biological Anthropology (3)</td>
<td>3</td>
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<tr>
<td>or ANTH 480</td>
<td>Honors Biological Anthropology (3)</td>
<td>1</td>
</tr>
<tr>
<td>ANTH 301</td>
<td>Biological Anthropology Laboratory</td>
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</tr>
<tr>
<td>ANTH 310</td>
<td>Cultural Anthropology (3)</td>
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</tr>
<tr>
<td>or ANTH 481</td>
<td>Honors Cultural Anthropology (3)</td>
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</tr>
<tr>
<td>ANTH 320</td>
<td>Introduction to Archaeology and World Prehistory</td>
<td>3</td>
</tr>
<tr>
<td>STAT 300</td>
<td>Introduction to Probability and Statistics (4)</td>
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<tr>
<td>or PSYC 330</td>
<td>Introductory Statistics for the Behavioral Sciences (3)</td>
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A minimum of 6 units from the following:

A minimum of 3 units must come from the Anthropology Major Prep electives. The other 3 units may come from either the Anthropology Major Prep electives or the General electives listed below.

Anthropology Major Prep Electives

<table>
<thead>
<tr>
<th>COURSE CODE</th>
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<tbody>
<tr>
<td>ANTH 303</td>
<td>Introduction to Forensic Anthropology (3)</td>
</tr>
<tr>
<td>ANTH 330</td>
<td>Magic, Witchcraft, and Religion (3)</td>
</tr>
<tr>
<td>ANTH 333</td>
<td>American Indians of California (3)</td>
</tr>
<tr>
<td>ANTH 334</td>
<td>Native Peoples of North America (3)</td>
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<tr>
<td>ANTH 341</td>
<td>Introduction to Linguistics (3)</td>
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**General Electives**

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<tr>
<th>COURSE CODE</th>
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<td>ANTH 319</td>
<td>Visual Anthropology: Introduction to Ethnographic Film (3)</td>
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<td>ANTH 321</td>
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<td>Human Geography: Exploring Earth’s Cultural Landscapes (3)</td>
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<td>World Music (3)</td>
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<td>SOC 320</td>
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The Associate in Arts in Anthropology for Transfer (AA-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- apply the science of anthropology towards a holistic understanding of human nature.
- synthesize the principles that form the foundation of anthropology.
- analyze social and ethical issues using anthropological concepts and methods.
- assess the cultural, physical, and linguistic diversity expressed in our species.

**Career Information**

The AA-T degree provides students with a solid foundation in anthropology as well as the standard prerequisites for upper division coursework leading to the baccalaureate degree. Anthropologists with graduate degrees work in archaeological excavation and museum management, the analysis of cultures, linguistics, forensics, primatology, and education. They also consult with governmental, business, and educational institutions.

**Associate Degrees**

**A.S. in Anthropology**

Anthropology is the study of humankind around the world and throughout time, with the goal of understanding our evolutionary origins, our biological distinction as a species, and our diverse manifestations of culture. This degree provides students with basic skills in critical analysis, application of the scientific method, and cross-cultural understanding.

**Catalog Date:** June 1, 2020

**Degree Requirements**

<table>
<thead>
<tr>
<th>COURSE CODE</th>
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<th>UNITS</th>
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<tr>
<td>ANTH 300</td>
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<tr>
<td>or ANTH 480</td>
<td>Honors Biological Anthropology (3)</td>
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</tr>
<tr>
<td>ANTH 301</td>
<td>Biological Anthropology Laboratory</td>
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</table>
The Anthropology Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- apply the science of anthropology towards a holistic understanding of human nature.
- synthesize the principles that form the foundation of anthropology.
- analyze social and ethical issues related to the field of anthropology and its practical applications.
- analyze the cultural, physical, and linguistic diversity expressed in our species.

Career Information

This degree provides students with a solid foundation in anthropology as well as the standard prerequisites for upper division coursework leading to the baccalaureate degree. Anthropologists with graduate degrees work in occupations ranging from archaeological excavation, exploration, and museum management to the analysis of cultures, linguistics, forensics, primatology, teaching, and consulting with governmental and educational institutions.

A.S. in General Science

This program provides a broad study in the fields of biological and physical sciences in preparation for transfer to a four-year program and continuation of studies in upper division science courses.

Catalog Date: June 1, 2020

Degree Requirements

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<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
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Physical Science Courses

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<tr>
<td>ASTR 310</td>
<td>The Solar System (3)</td>
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<td>ASTR 320</td>
<td>Stars, Galaxies, and Cosmology (3)</td>
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<td>ASTR 330</td>
<td>Introduction to Astrobiology (3)</td>
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<td>ASTR 400</td>
<td>Astronomy Laboratory (1)</td>
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<td>ASTR 481</td>
<td>Honors Astronomy: Stars, Galaxies, and Cosmology (4)</td>
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<td>ASTR 495</td>
<td>Independent Studies in Astronomy (1 - 3)</td>
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<td>ASTR 499</td>
<td>Experimental Offering in Astronomy (0.5 - 4)</td>
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<td>CHEM 305</td>
<td>Introduction to Chemistry (5)</td>
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<td>CHEM 306</td>
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<td>Physical Geography: Exploring Earth's Environmental Systems (3)</td>
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<td>GEOG 305</td>
<td>Global Climate Change (3)</td>
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<td>GEOG 306</td>
<td>Weather and Climate (3)</td>
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<td>GEOG 307</td>
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<td>Field Studies in Geography: Mountain Landscapes (1 - 4)</td>
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<td>ANTH 303</td>
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<td>Water Resources and Conservation (3)</td>
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1must be transfer-level and must include one laboratory course in a physical science and one laboratory course in a biological science

The General Science Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- evaluate new and accepted ideas about the natural universe using scientific methods.
- analyze a wide variety of natural phenomena using basic definitions and fundamental theories of biological or physical sciences.
- apply appropriate quantitative and qualitative methods to interpret and analyze pertinent data.
- outline the basic concepts and fundamental theories of a natural science.
- articulate orally and/or in writing the importance of continuous examination and modification of accepted ideas as a fundamental element in the progress of science.
Anthropology (ANTH)

ANTH 300 Biological Anthropology

Units: 3  
Hours: 54 hours LEC  
Prerequisite: None.  
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340  
Transferable: CSU; UC (ANTH 300 & 480 combined: maximum credit - one course)  
General Education: AA/AS Area IV; CSU Area B2; IGETC Area 5B  
C-ID: C-ID ANTH 110  
Catalog Date: June 1, 2020

This course covers the concepts, methods, and theory of biological evolution and its application to the human species. There is a specific focus on molecular, Mendelian, and population genetics as well as on the mechanisms of evolution primatology, paleoanthropology, biocultural adaptations, human variation, and current bioethical issues. The philosophy of science and the scientific method serve as foundations to this course. This course is not open to students who have completed ANTH 480.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the scientific process as a methodology for understanding the natural world
- evaluate the nature and origins of the science of biological anthropology
- examine the basic concepts of evolution
- analyze the evidence to support evolution
- survey the various methods for dating the fossil evidence of human evolution
- compare and contrast the living primates
- explain the current hypotheses relevant to an understanding of human evolution
- analyze the fossil record evidence for human evolution
- assess the nature and causes of human diversity

ANTH 301 Biological Anthropology Laboratory

Units: 1  
Hours: 54 hours LAB  
Prerequisite: None.  
Corequisite: ANTH 300  
Transferable: CSU; UC  
General Education: CSU Area B3; IGETC Area 5C  
C-ID: C-ID ANTH 115L  
Catalog Date: June 1, 2020

This introductory laboratory course provides opportunities to become familiar with the scientific methods of biological anthropology by investigating topics in laboratory and field situations. Topics covered in the course include the scientific method, sources of biological variation and forces of evolution, human osteology, human variation, taxonomy and comparative osteology of the primates, and the fossil evidence for human evolution. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- formulate and test simple hypotheses using the scientific method
- describe the sources of biological variation
- identify the bones and important markings of the human skeleton
- calculate sex-related and age-related variations present in human populations
• differentiate the skeletons of prosimians, monkeys, apes, and humans
• recognize the locomotor patterns used by primates
• identify and date the significant anthropoid, hominoid, and hominin fossils
• evaluate problems in interpreting the fossil evidence
• evaluate mechanisms of evolution

ANTH 303 Introduction to Forensic Anthropology

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: BIOL 102, BIOL 115, BIOL 430, OR ANTH 300 and 301; AND eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC
General Education: AA/AS Area IV; CSU Area B2; IGETC Area 5B
Catalog Date: June 1, 2020

This course is an overview of forensic anthropology, an applied field of physical anthropology. Forensic anthropology uses the analysis of human skeletal remains to answer medico-legal questions. This course emphasizes current techniques used in analysis of human skeletal remains, medico-legal procedures, and the role of the anthropologist in the investigative process. It examines the basics of bone biology, methods of skeletal analysis, and recognition of bone pathology and trauma.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• describe the methods and approaches of a forensic anthropologist
• apply the techniques for determining sex, age, and ethnicity from human skeletal remains
• examine a human skeleton and infer possible trauma and pathology
• discuss the legal and ethical issues of working with human remains
• apply the processes for establishing positive identification using human remains
• explain the role of the forensic anthropologist in a criminal investigation
• describe the dynamics of dental anthropology in positive identification
• evaluate the significance of human skeletal remains to overall crime scene investigation

ANTH 310 Cultural Anthropology

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340
Transferable: CSU; UC
General Education: AA/AS Area V(b); AA/AS Area VI; CSU Area D1; IGETC Area 4A
C-ID: C-ID ANTH 120
Catalog Date: June 1, 2020

This course explores the various customs, traditions, and forms of social organizations from a global perspective. Topics include subsistence methods, belief and religious systems, linguistics, trade and economic systems, arts, kinship systems, marriage and family systems, technology, and changes due to internal and external forces. Gender, race, and ethnic identity are examined as well as the role of society in defining these terms. Using ethnographic case studies, this course examines how anthropological ethics, methods, and theories are applied to the study of human culture. This course is not open to students who have already completed ANTH 481.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• describe the nature of anthropology as a discipline.
• explain the history and development of cultural anthropology.
• evaluate the impact of cultural diversity on cross-cultural communication.
• identify the consequences of ethnocentrism and/or racism on social interactions.
• assess the role of applied anthropology in addressing current global conditions.
• identify cross-cultural examples of ethnic conflict and explain its role in warfare and violence.
• assess global trends of socio-cultural change in the areas of economic and social development.
• create a chart demonstrating kin relationships.
• explain the role of ethnographic fieldwork in the study of culture.

ANTH 319 Visual Anthropology: Introduction to Ethnographic Film

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340
Transferable: CSU; UC
General Education: AA/AS Area V(b); CSU Area D1; IGETC Area 4
Catalog Date: June 1, 2020

This course introduces the use of film by anthropologists as a research and educational tool. A series of films depicting different cultures from around the world are viewed and evaluated. Various attributes of ethnographic film and its treatment by a number of anthropological filmmakers are examined.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• evaluate the work of anthropologists in fieldwork settings
• identify the multi-dimensional, sensory experience of culture
• evaluate ethnographic films by analyzing specific elements: i.e. narration, sound, editing, degree of subject involvement, distortions and bias, and ethnographic context
• systematize the historical development of ethnographic film-making
• compare the style, form, and focus of different films
• analyze ethnographic films as they pertain to controversial issues in the discipline of anthropology and in popular culture
• discuss the shift away from the outsider’s point of view to visual sovereignty since the 1980s

ANTH 320 Introduction to Archaeology and World Prehistory

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340
Transferable: CSU; UC
General Education: AA/AS Area V(b); CSU Area D1; IGETC Area 4
C-ID: C-ID ANTH 150
Catalog Date: June 1, 2020

This course is an introduction to the theories, concepts, and methods employed by the archaeologist in the study of human history and pre-history. The development and diverse evolution of social and cultural systems are emphasized. The challenges and achievements of non-literate and traditional cultures, diverse communities, and social classes over time are also explored.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• describe the concept of culture as used by social scientists.
• discuss the role of archaeology within the broader discipline of anthropology.
• apply the scientific method in the study of archaeological record as it pertains to human history and pre-history.
• distinguish between the various forms of dating technology and how they apply to the analysis of archaeological sites and artifacts.
incorporate archaeological evidence into an understanding of historical records and cultural behaviors.

discuss scientifically responsible and culturally respectful methods of archaeological retrieval and preservation including Cultural Resource Management (CRM) and adherence to Native American Grave Protection and Repatriation Act (NAGPRA) guidelines.

identify the various archaeological theories, methods, and techniques used to investigate the human past.

illustrate the use of archaeological methods with reference to cultural sequences.

ANTH 321 Ancient Technology

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ANTH 320; Eligible for ENGRD 310 or ENGRD 312 AND ENGR 300; OR ESLR 340 AND ESLW 340
Transferable: CSU; UC
General Education: AA/AS Area V(b)
Catalog Date: June 1, 2020

This course examines technological capabilities of pre-industrial societies using ethnographic and archaeological examples and an experimental approach. Topics include construction techniques of temporary and permanent structures, pottery construction, glassmaking, metallurgy, textile production, as well as bone, stone, wood, and other technologies crucial to human survival. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the relationship between technology and subsistence.
- describe the differences between extractive/reductive and transformative crafts.
- analyze textile structures for differences in construction techniques.
- compare pottery construction and firing methods.
- define basic lithic terminology.
- compare smelting and working techniques for copper, bronze, and iron.
- categorize types of structures according to construction technique.
- design an experimental project to replicate at least one of the technologies addressed in the course.

ANTH 330 Magic, Witchcraft, and Religion

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGR 300; OR ESLR 340 AND ESLW 340
Transferable: CSU; UC
General Education: AA/AS Area V(b); AA/AS Area VI; CSU Area D1; IGETC Area 4A
Catalog Date: June 1, 2020

This course is a cross-cultural study of supernatural beliefs and associated rituals in traditional societies. Emphasis is on understanding the role of beliefs within the broader social context. In addition, this course examines the general functions of ritual and mythology in reinforcing cultural ideals and ethics. Similarities and differences between traditional beliefs and world religions are also explored.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the range of religious, ritual, and magical beliefs throughout the world and over time.
- analyze the socio-cultural context of religious and magical beliefs.
- describe and explain the value of diverse belief systems.
- assess anthropological approaches to data gathering and the analysis of ceremonial, magical, and supernatural practices and beliefs.
- integrate the role of belief and ritual in an understanding of medical and curing practices.
• evaluate the international and inter-ethnic implications of diverse belief systems and practices in contemporary societies.

ANTH 333 American Indians of California

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESSLW 340.
Transferable: CSU; UC
General Education: AA/AS Area V(b); AA/AS Area VI; CSU Area D; IGETC Area 4
Catalog Date: June 1, 2020

This course surveys the sociocultural systems of California Indians from the prehistoric period to the present. In addition to offering an overview of the diversity and complexity of aboriginal California, it includes environmental adaptations, material culture, social structure, ideology, and response to change. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• describe major culture areas of Native California; the environments, ecological adaptations, and features which distinguish those areas
• contrast California Indian socioculture systems with the Spanish, Russian, and U.S. systems
• describe the linguistic diversity and complexity of California Indians
• evaluate the archaeological record of California Indians
• evaluate the methods of anthropological study of California Indians and its history
• describe the impact of European contact on California Indians
• describe U.S. government policies on California Indians and how those policies affected Native communities

ANTH 334 Native Peoples of North America

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESSLW 340.
Transferable: CSU; UC
General Education: AA/AS Area V(b); AA/AS Area VI; CSU Area D1; IGETC Area 4A
Catalog Date: June 1, 2020

This course is an introductory survey of traditional Native American societies. It describes the peoples and cultures of North America and emphasizes native ecological adaptations, languages, social organizations, religions, mythologies and world views, and artistic representations. It also explores the interrelatedness of Indigenous Native American groups through trade, intermarriage, and other forms of cultural exchange. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• describe the unique, major native culture areas of North America as well as the environments, the native ecological adaptations, and the major cultural features which distinguish those areas.
• contrast social or cultural systems within Native North America and between the Native American and the Euro-American systems.
• describe the linguistic diversity and complexity of Native North America.
• explain the archaeological record of Native Peoples of North America.
• compare Native and Western systems of categorization.
• evaluate the history and methods of anthropological study of North American Native Peoples.
• examine current issues among Native Peoples of North America.
• analyze the relationship between Indigenous Native American groups and the French trappers, the various European colonists (including French, English, Russian, and Spanish), and the Mexican government.
• analyze the role of ethnicity, ethnocentrism, and/or racism in shaping the ethnic experience of Native Americans.

ANTH 335 Research Methods in Anthropology

Units: 3
Hours: 54 hours LEC
Prerequisite: ANTH 300 or 310 with a grade of "C" or better
Transferable: CSU; UC
General Education: CSU Area D; IGETC Area 4
Catalog Date: June 1, 2020

This course introduces research methods for the field of anthropology. It emphasizes familiarization with specific observational research methods and the practical application of these methods in a contemporary setting. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• conduct qualitative observational research on both human and non-human primates
• distinguish the participant-observation method from other observational methodologies
• formulate a testable hypothesis
• measure outcomes that support or refute a hypothesis by creating research applications in field settings
• distinguish an ethogram from an ethnography
• analyze patterns in research data

ANTH 336 Anthropology of Sex, Sexuality and Gender

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC
General Education: AA/AS Area V(b); AA/AS Area VI; CSU Area D1; CSU Area D3; IGETC Area 4A
Catalog Date: June 1, 2020

The course is an introductory overview from a global anthropological perspective of the relationship between sexual behavior and sexuality as well as gender and other socially ascribed statuses. Diverse modern and past human and non-human primate communities are compared bio-culturally. Integrating the basic branches of anthropology -- cultural, biological, linguistic and archaeological anthropology -- the course examines the role, function, and evolution of sex in the human primate. It examines the relationship between sex, sexuality, gender to adaptation as well as to social behavior and to cultural variation. The implications of research methodologies and theory in investigating sex, sexuality, culture and biology are evaluated.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• explain and synthesize the goals, methods and distinctive features of the discipline of anthropology.
• predict general ethical concerns in anthropological research.
• evaluate specific ethical dilemmas in anthropological research on sex, sexuality and gender.
• apply linguistic anthropology concepts to the study of sex, sexuality and gender.
• describe the range of variations in sexual norms across primate species and cross-culturally across human societies.
• analyze the difference between genetic/biological/essentialist definitions of gender and cultural ascriptions of genders.
• compare and contrast sexual selection hypotheses and evolutionary adaptation hypotheses about both specific, non-human primate sexual traits or behavior and human sexual traits or behaviors.
• evaluate the successes and limitations of reconstructing prehistoric gendered or sexuality phenomena.
• deconstruct a current topical issue in the anthropology of sex, sexuality and gender.
• recount core theoretical claims about sex, sexuality and gender in the behavioral sciences with special reference to the anthropological perspective and contribution.
• review changes in the role of gender or sexual identities in anthropology as a profession.

ANTH 341 Introduction to Linguistics

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340
Transferable: CSU; UC
General Education: AA/AS Area V(b); AA/AS Area II(b); AA/AS Area VI; CSU Area D1; IGETC Area 4A
C-ID: C-ID ANTH 130
Catalog Date: June 1, 2020

This introductory course serves as a foundation for understanding language from an anthropological perspective. It addresses such core questions as how, what, when, where, why, and with whom humans communicate. The course topics are formed along three core areas:
(1) structural linguistics, which include phonetics, phonology, morphology, syntax, and semantics;
(2) historical linguistics, which include language origin and evolution, structural change, and language genetics; and
(3) sociocultural linguistics, which include child and adult language acquisition, and cultural and psychological constraints within the context of linguistic ethnography.

Student Learning Outcomes

Upon completion of this course, the student will be able to:
• demonstrate an understanding of anthropological linguistics, methods, and theory.
• evaluate in cross-cultural perspective how paralanguage and nonverbal communication alter and enhance social communication in humans, as well as in non-human primates.
• describe the biocultural origins of language and the development of language over time.
• interpret language using structural linguistic techniques.
• recognize the dynamic interrelationship between language and culture, including their acquisition.
• examine the relevance of language in sociocultural issues.
• assess factors and consequences of language change and extinction.

ANTH 370 Primatology

Units: 3
Hours: 54 hours LEC
Prerequisite: ANTH 300
Advisory: CSU; UC
Transferable: CSU Area D1; IGETC Area 4A
Catalog Date: June 1, 2020

This course provides an analysis of nonhuman primate comparative morphology, behavior, and ecology. Areas of study include general primate morphology, diet and ecology, behavior including reproduction and social systems, cognition and intelligence, and primate conservation issues. Primates in both captive and free-ranging settings are examined. Field trips for primate observations may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:
• compare the physical characteristics of the three major categories of nonhuman primates: prosimians, monkeys, and apes
• describe the different social and mating systems of nonhuman primates
• relate various behavioral patterns with the specific ecology associated with these nonhuman primates
• critique current conservation strategies for primates in captivity and in the wild to determine viability

ANTH 372 Primatology Field Studies

Units: 2
This course provides practical experience in non-human primate observational studies. The Sacramento Zoo serves as the field site where observations on non-human primates are conducted. Focus is on training in research methodology and observational techniques. Field trips to the Sacramento Zoo are required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- collect behavioral observations on non-human primates
- differentiate behaviors of non-human primates and establish an ethogram
- contrast the behavior of captive with wild non-human primates
- distinguish characteristics of individual non-human primates
- apply different research designs in observational methodology

ANTH 391 Life and Culture Study Abroad

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Enrollment Limitation: The student must complete the pre-enrollment process into the Los Rios Community College District Study Abroad program as required by the American Institute for Foreign Studies (AIFS).
Transferable: CSU
Catalog Date: June 1, 2020

This course allows students to acquire a level of global competence while enrolled in the Los Rios Study Abroad program. Global competence is a continuing process of acquiring specific economic, historical, and geopolitical knowledge, which supports the intercultural communication skills and authentic lived experiences that allow a person to function in another culture, and result in attitudes of cultural appreciation and interdependence. While participating in a specific Study Abroad program the student will have opportunities to study and generally survey the host country's historical, cultural, and geopolitical influences, as well as the societal structures, to develop an understanding and appreciation of the host culture as different from U.S. American culture. Students may find information about the pre-enrollment meetings at the Study Abroad website, located at: http://www.arc.losrios.edu/Study_Abroad.htm

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify aspects of social, physical, and/or emotional well-being for the local community students are studying in, while considering present and future conditions in societies across the globe.
- incorporate specific cultural, geopolitical, economic, and social knowledge into academic and personal contexts for an understanding of global competence.
- analyze personal beliefs, values, and attitudes about the host culture that the student had prior to an intercultural experience and aspects of ethnocentric behavior that can occur within intercultural communication and relations.
- demonstrate an understanding of concepts of physical and emotional wellness to make wise lifestyle choices and develop these skills and competencies to understand oneself as a whole person (integral to one's environment).
- identify and explain aspects of culture shock and techniques to cope with and reduce its effects on physical and emotional wellness.
- describe the value of international travel as a part of lifelong learning and personal wellness.
- undertake thoughtful consideration of divergent points of view and utilize multiple perspectives in considering information.
- develop a foundation for cultural pluralism, a rejection of previous personal prejudices, and knowledge of and comfort with others unlike one's self.
- participate in the larger community beyond campus in a positive manner demonstrating an understanding of personal responsibility in the larger context.

ANTH 480 Honors Biological Anthropology

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
This course is an introduction to the science of biological anthropology. It is a seminar-style honors course which approaches the topical material through class discussion which encourages problem solving techniques focusing on current anthropological issues. Weekly topical issues are presented in a case study format. Critical thinking skills are emphasized in responding to these issues. Topics include evolutionary theory, heredity, human variation, taxonomy and behavior of the living primates, and the fossil evidence of human evolution. This course differs from ANTH 300 in that it is offered as a seminar-style class with an emphasis on academic journal articles. This course is not open to students who have completed ANTH 300.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify the nature and origins of the science of biological anthropology
- identify the evidence that supports the evolution, genetics, and heredity of the human species
- critique diverse hypotheses presented to explain human evolution
- assess the diversity of living primates and describe how the study of these animals helps scientists understand human evolution
- describe the fossil record evidence for human evolution
- explain the current hypotheses and factors that are relevant to understanding human evolution
- identify the nature and causes of human diversity
- define problem-solving techniques applicable to current issues relevant to biological anthropology
- synthesize anthropological concepts from primary reading sources
- critique theories regarding human behavioral ecology and the continuing influence of human activity on the environment

ANTH 481 Honors Cultural Anthropology

Units: 3
Hours: 54 hours LEC
Prerequisite: Placement into ENGWR 480 through the assessment process.
Transferable: CSU; UC
General Education: AA/AS Area V(b); AA/AS Area VI; CSU Area D1; IGETC Area 4A
C-ID: C-ID ANTH 120
Catalog Date: June 1, 2020

This course is an introduction to the various customs, traditions, and forms of social organization in both Western and non-Western societies. Multicultural perspectives are examined for such topics as subsistence methods, belief and religious systems, linguistics, trade and economic systems, arts, kinship systems, marriage and family systems, technology, and changes due to internal and external forces. This seminar-style honors course approaches the topical material through class discussion which encourages problem-solving techniques focusing on current anthropological issues. This course is not open to students who have completed ANTH 310.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the 4-field nature of anthropology and the importance of fieldwork in the discipline
- explain how the history and development of cultural anthropology as a discipline has affected its current theoretical perspectives
- generalize the relationship between subsistence patterns and their impact on other aspects of culture such as marriage, religion, and political and social organization
- analyze and interpret kinship charts
- identify the role of enculturation in personality development and in the interpretation of gender and gender roles
- assess global trends of socio-cultural change in the areas of economic and social development
- analyze cross-cultural examples of ethnic conflict and ethnic identity
- compare the contributions and social experiences of non-Western, non-Eurocentric cultures
- identify the consequences of ethnocentrism and/or racism on social interactions
• assess the impact of cultural diversity on cross-cultural interaction

• apply the concepts of cultural anthropology in daily life

ANTH 494 Topics in Anthropology

Units: 1 - 3
Hours: 18 - 54 hours LEC
Prerequisite: None.
Advisory: ENGWR 102 or 103, and ENGRD 116; OR ESLR 320 and ESLW 320; OR placement through assessment process.
Transferable: CSU
Catalog Date: June 1, 2020

This course is a concentrated study of current anthropological issues. Topics reflect contemporary issues and problems in the four traditional fields as well as an applied approach where appropriate. Issues in the area of physical anthropology are approached from a biological and ecological perspective; issues in cultural anthropology, linguistics, and archaeology are approached from a multi-cultural and international platform.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• analyze and evaluate contemporary anthropological issues as they relate to human biology and culture

• recognize the dynamic nature of the field of anthropology

• evaluate contemporary issues from an anthropological perspective

• demonstrate an awareness of and an appreciation for our increasingly diverse population

• evaluate the effects of the biological or cultural past on current issues

ANTH 495 Independent Studies in Anthropology

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.
American River College conducts, in cooperation with industry, a number of apprenticeship programs. An apprenticeship program is a formal system of occupational training from one to five years, that combines paid employment, on-the-job training and job related college instruction in order to develop skilled workers.

Apprenticeship programs are a cooperative effort between employers, the Department of Labor (DOL) and/or the Division of Apprenticeship Standards (DAS), and the college.

Enrollment in an apprenticeship course is limited to registered apprentices. Information on admission to apprenticeship status can be obtained from the local trade in which you are interested, or from the office of the Dean of Technical Education.

Associate VP
Dr. Frank Kobayashi

Department Chairs
Raquel Arata

(916) 484-8236
KongB@arc.losrios.edu

Associate Degrees

A.A. in Pile Driver Apprenticeship

This program concentrates on training pile driver apprentices to the specific levels required for the construction industry and has been approved by the State of California Division of Apprenticeship Standards. It includes safety, blueprint reading, commercial construction processes, building codes, estimation, welding, and various pile driving topics.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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</thead>
<tbody>
<tr>
<td>A minimum of 22 units from the following:</td>
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<tr>
<td>CARPT 240</td>
<td>Piledriver Safety and Tools (1.5)</td>
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<tr>
<td>CARPT 241</td>
<td>Pile Driver Math Applications (2)</td>
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<tr>
<td>CARPT 242</td>
<td>Piledriver Rigging (2)</td>
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<tr>
<td>CARPT 243</td>
<td>Form Detailing, Construction, and Erection for Pile Drivers (1.5)</td>
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<tr>
<td>CARPT 244</td>
<td>Welding I: Introduction to SMAW (1.5)</td>
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<tr>
<td>CARPT 245</td>
<td>Introduction to Land and Water Pile Driving (1.5)</td>
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<tr>
<td>CARPT 246</td>
<td>Welding II: SMAW Flat Position and Forklift Certification (1.5)</td>
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<tr>
<td>CARPT 247</td>
<td>Advanced Land and Water Pile Driving (1)</td>
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<td>CARPT 248</td>
<td>Wharfage and Marine Structures (1)</td>
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<td>CARPT 249</td>
<td>Welding III: Advanced SMAW (1.5)</td>
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<tr>
<td>CARPT 250</td>
<td>Introduction to Structural Blueprints &amp; Layout Instruments (1.5)</td>
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<tr>
<td>CARPT 251</td>
<td>Advanced Structural Blueprints and Bridge Building (1.5)</td>
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<tr>
<td>CARPT 252</td>
<td>Falsework, Shoring, and Heavy Timber Framing (1.5)</td>
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<td>CARPT 253</td>
<td>Advanced Formwork (1.5)</td>
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<tr>
<td>CARPT 254</td>
<td>Welding IV: SMAW 4G Certification (1.5)</td>
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<td>CARPT 255</td>
<td>Welding V: FCAW 3G Certification (1.5)</td>
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<td>CARPT 256</td>
<td>Welding VI: FCAW 4G Certification (1.5)</td>
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<td></td>
<td>A minimum of 16 units from the following:</td>
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<tr>
<td>CARPT 298</td>
<td>Work Experience in Carpenters Apprenticeship (1 - 4)</td>
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<td>Total Units:</td>
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</table>

The Pile Driver Apprenticeship Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

**Enrollment Eligibility**

To be eligible for enrollment in the program, the student must meet the following criteria:

- Be a registered Pile Driver apprentice.

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- demonstrate safe working practices in a field construction environment.
- demonstrate proper selection, use, care, preparation, and handling of the pile driver’s tools of the trade.
- analyze, interpret, and apply national building codes relating to pile driving.
- analyze and interpret construction blueprints.
- evaluate, lay out, and construct various project types.
- identify and select appropriate materials for each phase of construction.

**Career Information**

Upon completion of this certificate, students may find employment in the following sectors: government, residential and commercial construction, and utilities.

**A.A. in Acoustical Installer Apprenticeship**

This degree concentrates on training apprentices to the specific levels required for the acoustical installer industry and has been approved by the State of California Department of Apprenticeship Standards. Training emphasis includes safety, blueprint reading, residential and commercial acoustical installer processes, building codes, estimation, and various carpentry topics.

**Degree Requirements**

<table>
<thead>
<tr>
<th>COURSE CODE</th>
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<td>CARPT 140</td>
<td>Interior Systems (1.5)</td>
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<td>CARPT 141</td>
<td>Suspended Framing Ceiling Systems (1.5)</td>
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<td>CARPT 144</td>
<td>Introduction to Grid Ceiling Installation (1.5)</td>
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<td>CARPT 146</td>
<td>Integrated Ceilings and Special Techniques (1.5)</td>
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<td>CARPT 147</td>
<td>Advanced Grid Ceilings (1.5)</td>
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<tr>
<td>CARPT 148</td>
<td>Access Floor Systems (1.5)</td>
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<tr>
<td>CARPT 160</td>
<td>Blueprint Reading-Residential (1.5)</td>
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### COURSE REQUIREMENTS

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<tr>
<td>CARPT 162</td>
<td>Blueprint Reading-Commercial (1.5)</td>
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<td>CARPT 164</td>
<td>Acoustical Blueprint Reading (1.5)</td>
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<tr>
<td>CARPT 190</td>
<td>Introduction to Welding and Cutting (1.5)</td>
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<tr>
<td>CARPT 210</td>
<td>The Acoustical Apprentice, Safety, and the Trade (1.5)</td>
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<td>CARPT 211</td>
<td>Acoustical Installer Safety (1.5)</td>
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<tr>
<td>CARPT 212</td>
<td>Infection Control Risk Assessment and Hospital Code for Acoustical Installers (1.5)</td>
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<td>CARPT 213</td>
<td>Acoustical Exterior Systems (1.5)</td>
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<tr>
<td>CARPT 215</td>
<td>Acoustical Specialty Systems (1.5)</td>
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A minimum of 16 units from the following:

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<tbody>
<tr>
<td>CARPT 298</td>
<td>Work Experience in Carpenters Apprenticeship (1 - 4)</td>
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</tbody>
</table>

Total Units: 36

The Acoustical Installer Apprenticeship Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

### Enrollment Eligibility

To be eligible for enrollment in the program, the student must meet the following criteria:

- Be a registered Acoustical Installer apprentice.

### Student Learning Outcomes

Upon completion of this program, the student will be able to:

- identify the components of a personal fall protection system (PFPS) and a personal fall arrest system (PFAS).
- calculate elevations from information obtained from residential plot and foundation plans.
- calculate contributory leg loads.
- formulate proper layout, cutting, and material installation procedures for the installation of braced and unbraced soffits.
- explain how to install stringer system reinforced perimeter locations, bridge obstructions, and additional bracing.
- extract the information necessary to construct a Photovoltaic support structure using a set of blueprints.
- install an acoustical ceiling conforming with the regulations of the Office of Statewide Health Planning and Development.
- analyze and perform methods of joining and welding plastic materials.
- describe the importance of a construction schedule and daily job log and organize labor in conjunction with the construction schedule.

### Career Information

Acoustical technicians are in high demand. The acoustical industry is not able to hire the amount of certified employees needed to fill the workforce and meet the needs of the industry. Students that are in this apprenticeship program are currently working in the Acoustical industry.

### A.A. in Carpenter Apprenticeship

This program concentrates on training apprentices to the specific levels required for the construction industry and has been approved by the State of California Department of Apprenticeship Standards. Training emphasis includes safety, blueprint reading, residential and commercial construction processes, building codes, estimation, and various carpentry topics.

Catalog Date: June 1, 2020

### Degree Requirements
<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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</thead>
<tbody>
<tr>
<td>A minimum of 20 units from the following:</td>
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<tr>
<td>CARPT 101</td>
<td>Aerial Lift Safety, Construction Math, and the Apprentice (1.5)</td>
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<tr>
<td>CARPT 106</td>
<td>Introduction to Apprenticeship (1.5)</td>
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<tr>
<td>CARPT 107</td>
<td>Rigging (1.5)</td>
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<tr>
<td>CARPT 110</td>
<td>Foundations and Floors (1.5)</td>
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<tr>
<td>CARPT 112</td>
<td>Structural Framing (1.5)</td>
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<tr>
<td>CARPT 114</td>
<td>Form Detailing, Construction &amp; Erection (1.5)</td>
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<tr>
<td>CARPT 120</td>
<td>Exterior Finish (1.5)</td>
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<tr>
<td>CARPT 122</td>
<td>Interior Finish (1.5)</td>
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<tr>
<td>CARPT 130</td>
<td>Layout/Leveling Construction Site Practice (1.5)</td>
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<tr>
<td>CARPT 140</td>
<td>Interior Systems (1.5)</td>
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<tr>
<td>CARPT 142</td>
<td>Engineered Structural Systems (1.5)</td>
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<td>CARPT 150</td>
<td>Concrete - Precast and Prestressed (1.5)</td>
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<td>CARPT 155</td>
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<td>CARPT 160</td>
<td>Blueprint Reading-Residential (1.5)</td>
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<tr>
<td>CARPT 162</td>
<td>Blueprint Reading-Commercial (1.5)</td>
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<tr>
<td>CARPT 170</td>
<td>Roof Framing (1.5)</td>
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<td>CARPT 180</td>
<td>Stair Building (1.5)</td>
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<td>CARPT 190</td>
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<td>A minimum of 16 units from the following:</td>
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<tr>
<td>CARPT 298</td>
<td>Work Experience in Carpenters Apprenticeship (1 - 4)</td>
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<tr>
<td>Total Units:</td>
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</table>

The Carpenter Apprenticeship Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

**Enrollment Eligibility**

To be eligible for enrollment in the program, the student must meet the following criteria:

- Be a registered Carpenter apprentice.

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- demonstrate safe working practices in a field construction environment.
- demonstrate proper selection, use, care, preparation, and handling of the carpenter’s tools of the trade.
- analyze, interpret, and apply national building codes relating to carpentry.
- analyze and interpret residential and commercial construction blueprints.
- evaluate, layout, and construct various systems such as floor, wall, roof, and concrete form.
- evaluate and layout a building site using architectural drawings.
- calculate elevations by using an engineer’s rod and various leveling devices.
- estimate and order material for construction projects.
- identify and select appropriate materials for each phase of construction.
- develop interpersonal skills with customers, co-workers, and different trades-workers.
• plan projects with given information such as blueprints, specifications, and contract documents.

Career Information

Carpenter technicians are in high demand. The carpenters industry is not able to hire the amount of certified employees needed to fill the workforce and meet the needs of the industry. Students that are in this apprenticeship program are currently working in the carpenters industry.

A.A. in Drywall/Lathing Apprenticeship

The drywall/lathing apprenticeship degree concentrates on training apprentices to the specific levels required for the drywall/lathing industry and has been approved by the State of California Department of Apprenticeship Standards. Training emphasis includes safety, metal framing, blueprint reading, exterior/interior wall finishes, welding, residential and commercial construction process, building codes, estimation, and various construction topics.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<td>DRLTH 100</td>
<td>Introduction to the Trade (2)</td>
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<tr>
<td>DRLTH 102</td>
<td>Basic Applications (1.5)</td>
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<td>DRLTH 103</td>
<td>Drywall Lathing Trade Safety (1.5)</td>
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<td>DRLTH 105</td>
<td>Mathematics for Drywall/Lathers (2)</td>
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<tr>
<td>DRLTH 110</td>
<td>Residential Metal Framing (1.5)</td>
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<tr>
<td>DRLTH 112</td>
<td>Doors, Windows, Exterior Systems/Building Documents (1.5)</td>
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<tr>
<td>DRLTH 120</td>
<td>Blueprint Reading I (1.5)</td>
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<td>DRLTH 121</td>
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<td>DRLTH 122</td>
<td>Blueprint Reading III (1.5)</td>
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<td>Welding I (1.5)</td>
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<td>DRLTH 131</td>
<td>Welding II (1.5)</td>
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<tr>
<td>DRLTH 140</td>
<td>Exterior/Advanced Fire Control System and Partitions (1.5)</td>
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<td>DRLTH 142</td>
<td>Exterior Systems and Trims (1.5)</td>
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<td>Interior Metal Lathing System, Sound Control (1.5)</td>
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<td>Ceilings, Shaft Protection and Demountable Partitions (1.5)</td>
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<td>DRLTH 162</td>
<td>Arches, Furring and Advanced Systems (1.5)</td>
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<tr>
<td>DRLTH 170</td>
<td>Advanced Construction Techniques (1.5)</td>
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<td>A minimum of 16 units from the following:</td>
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<tr>
<td>DRLTH 298</td>
<td>Work Experience Drywall/Lathing Apprenticeship (1 - 4)</td>
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</table>

The Drywall/Lathing Apprenticeship Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Enrollment Eligibility

To be eligible for enrollment in the program, the student must meet the following criteria:

• Be a registered Drywall/Lathing apprentice.

Student Learning Outcomes
Upon completion of this program, the student will be able to:

- demonstrate safe working practices in a field construction environment.
- demonstrate proper selection, use, care, preparation, and handling of the drywall/lathing craftsman's tools of the trade.
- analyze, interpret, and apply national building codes relating to the drywall/lathing profession.
- analyze and interpret residential commercial construction blueprints.
- evaluate, lay out, and construct various metal framing systems such as floor, wall, roof, and arches.
- calculate elevations using various leveling devices.
- identify and select appropriate material for each phase of construction.
- estimate and order material for construction projects.
- plan projects with given information such as blueprints, specifications, and verbal and written information.
- install advanced lathing and drywall systems.

Career Information

Drywall/lathing technicians are in high demand. The drywall/lathing industry is not able to hire the amount of certified employees needed to fill the workforce and meet the needs of the industry. Students that are in this apprenticeship program are currently working in the drywall/lathing industry.

A.A. in Electrical Apprenticeship

This program provides instruction in the installation, operation, and maintenance of the electrical distribution systems in commercial and industrial sites. Topics include safety training, AC and DC electrical theory, metering, electronics, use of electrical codes, raceways, conductors, grounding, motors, transformers, fire alarm systems, fiber optics, instrumentation, building automation and heating, ventilating and air conditioning (HVAC) systems.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
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<td>ELECT 121</td>
<td>Electrical Apprenticeship IV</td>
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<td>ELECT 130</td>
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<td>ELECT 131</td>
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<td>Electrical Apprenticeship VII</td>
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<tr>
<td>ELECT 151</td>
<td>Electrical Apprenticeship X</td>
<td>3</td>
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</tbody>
</table>

A minimum of 16 units from the following:

- ELECT 298  Work Experience in Electricians Apprenticeship (1 - 4)  

Total Units: 48.6

The Electrical Apprenticeship Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Enrollment Eligibility

To be eligible for enrollment in the program, the student must meet the following criteria:
• Be a registered electrical apprentice.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

• apply commercial and industrial safety procedures on job sites.
• analyze, interpret and apply national, state and local electrical codes.
• apply electrical mathematics in calculating resistance, current, voltage, and power in a DC series circuit.
• demonstrate use of meters to confirm electrical calculations and to troubleshoot AC and DC circuits.
• analyze, identify, and evaluate electrical mathematics in RL, RC, LC, and RLC series, parallel, and combination circuits.
• describe and apply the requirements of Occupational Safety and Health Administration (OSHA) and National Fire Protection Association (NFPA) 70E work practices.
• define principles of basic AC and DC motor theory.

Career Information

Upon completion of this certificate, students may find employment in the following sectors: government, residential and commercial construction, and utilities.

A.A. in Ironworkers Apprenticeship

This program includes training for Field Ironworkers and Reinforcing Ironworkers, provided in major ironworker components to meet Division of Apprenticeship Standards (DAS) guidelines.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
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<tbody>
<tr>
<td>IW 100</td>
<td>Orientation and History of the Trade</td>
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<td>IW 110</td>
<td>Mixed Base</td>
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<tr>
<td>IW 120</td>
<td>Rigging</td>
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<tr>
<td>IW 130</td>
<td>Reinforcing I</td>
<td>1.5</td>
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<td>IW 131</td>
<td>Reinforcing II/Post Tensioning</td>
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<tr>
<td>IW 140</td>
<td>Precast Concrete and Metal Buildings</td>
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<td>IW 150</td>
<td>Welding I</td>
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<td>IW 151</td>
<td>Welding II</td>
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<td>IW 152</td>
<td>Welding III</td>
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<td>IW 160</td>
<td>Lead Hazard</td>
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<td>Structural I</td>
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<td>IW 171</td>
<td>Structural II</td>
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<td>IW 180</td>
<td>Architectural/Ornamental I</td>
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<td>IW 183</td>
<td>The History of Ironworkers</td>
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<tr>
<td>IW 298</td>
<td>Work Experience in Ironworkers Apprenticeship (1 - 4)</td>
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Total Units: 38

The Ironworkers Apprenticeship Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.
Student Learning Outcomes

Upon completion of this program, the student will be able to:

- demonstrate safely working in a field construction environment.
- analyze and interpret blueprints.
- interpret and apply welding codes.
- demonstrate proper selection, use, care, preparation, and handling of fiber lines, steel cables, wire ropes, chains, slings, cranes, ladders, scaffolds, and helicopter rigging.
- define, identify, interpret, and analyze uniform building codes (UBC), classifications, plans, schedules, charts, and specifications commonly used in the ironworker trade.
- describe and apply reinforcing techniques and principles to concrete structures using steel, bar supports, bar splicing, and welding.
- perform proper structural steel erection on bridges, overpasses, and large buildings.
- weld various ferrous metals using common welding processes and safety guidelines.
- set cable tensions and pre-stress reinforcing steel to industry standards.

A.S. in Plumbers/Pipefitters Apprenticeship

This degree includes the training for plumbers to meet the Division of Apprenticeship Standards (DAS) journey worker guidelines for the plumbers apprenticeship program.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>PLUMB 100</td>
<td>Introduction to the Trade</td>
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<tr>
<td>PLUMB 110</td>
<td>Plumbing Science, Fixtures, and Rigging</td>
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<tr>
<td>PLUMB 120</td>
<td>Gas Welding and Brazing</td>
<td>2</td>
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<td>PLUMB 121</td>
<td>Basic Arc Welding and Drawings</td>
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<td>PLUMB 122</td>
<td>Advanced Arc Welding</td>
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<td>PLUMB 130</td>
<td>Gas and Water Supply</td>
<td>4.5</td>
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<tr>
<td>PLUMB 140</td>
<td>Advanced Drawings and Drainage</td>
<td>4</td>
</tr>
<tr>
<td>PLUMB 150</td>
<td>Steamfitting and Pipefitting</td>
<td>6</td>
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<tr>
<td>PLUMB 160</td>
<td>Uniform Plumbing Code and Medical Gas</td>
<td>5.5</td>
</tr>
<tr>
<td>PLUMB 170</td>
<td>Job Supervision and Foreman Training</td>
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<td>PLUMB 298</td>
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<tr>
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The Plumbers/Pipefitters Apprenticeship Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Enrollment Eligibility

To be eligible for enrollment in the program, the student must meet the following criteria:

- Be a registered Plumbers and Pipefitters apprentice.

Student Learning Outcomes
Upon completion of this program, the student will be able to:

- apply hot pass and cover pass procedures.
- identify personality traits to work effectively with others.
- negotiate difficult workplace situations.
- practice conflict resolution.
- evaluate and develop project schedules.
- draft and properly complete construction documents.
- demonstrate uphill pipe welding method.
- list National Inspection Testing Certification (NITC) requirements for medical gas systems.
- demonstrate ability to apply applicable plumbing codes.

Career Information

Plumbers and pipefitters are in high demand. The plumber and pipefitters industry is not able to hire the amount of certified employees needed to fill the workforce and meet the needs of the industry. Students that are in this apprenticeship program are currently working in the plumbing industry.

A.A. in Sheet Metal Apprenticeship

The Sheet Metal Apprenticeship certificate concentrates on training apprentices to the specific levels required for the construction industry and has been approved by the State of California Department of Apprenticeship Standards. Training emphasis includes safety, blueprint reading, residential and commercial processes, building codes, estimation, and various sheet metal topics.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>SHME 100</td>
<td>Sheet Metal Apprenticeship I</td>
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<tr>
<td>SHME 110</td>
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<td>SHME 131</td>
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<td>SHME 141</td>
<td>Sheet Metal Apprenticeship X</td>
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<tr>
<td>SHME 150</td>
<td>Sheet Metal Welding I</td>
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<tr>
<td>SHME 151</td>
<td>Sheet Metal Welding II</td>
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A minimum of 16 units from the following:

<table>
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<th>COURSE CODE</th>
<th>COURSE TITLE</th>
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<tr>
<td>SHME 298</td>
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</table>

The Sheet Metal Apprenticeship Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes
Upon completion of this program, the student will be able to:

- demonstrate safe working practices in a field construction environment.
- demonstrate proper selection, use, care, preparation, and handling of the sheet metal worker’s tools of the trade.
- analyze, interpret, and apply national building codes relating to sheet metal construction.
- analyze and interpret residential and commercial construction blueprints.
- acquire skills and knowledge to make a successful transition to a journey-level position in the sheet metal worker trade.
- demonstrate the ability to apply mathematical concepts to the sheet metal trade.
- demonstrate proficiency in the principles, concepts and applications in metal fabrication methods.

Career Information

Upon completion of the Sheet Metal Apprenticeship certificate, students may find employment in the following sectors: government, residential and commercial construction and maintenance, utilities, and facilities management. Students may further their career as a licensed contractor.

A.A. in Sheet Metal Service Technician Apprenticeship

The Sheet Metal Service Technician Apprenticeship Associate of Arts concentrates on training apprentices to the specific levels required for the construction and the heating, ventilation, and air conditioning (HVAC) industries. This program has been approved by the State of California Department of Apprenticeship Standards. Training emphasis includes safety, blueprint reading, residential and commercial processes, building codes, estimation, and various sheet metal topics. It includes the servicing, start-up, and balancing of HVAC systems.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
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<tbody>
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<td>SHME 100</td>
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<td>Sheet Metal Service Technician Apprenticeship I</td>
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The Sheet Metal Service Technician Apprenticeship Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes
Upon completion of this program, the student will be able to:

- demonstrate safe working practices in a field construction environment.
- demonstrate proper selection, use, care, preparation, and handling of the sheet metal worker's tools of the trade.
- analyze, interpret, and apply national building codes relating to sheet metal and mechanical construction.
- analyze and interpret residential and commercial construction blueprints.
- demonstrate the proper start-up and balancing of different HVAC systems.
- demonstrate troubleshooting techniques on various HVAC systems.

Career Information

Upon completion of the Sheet Metal Service Technician Apprenticeship certificate, students may find employment in the following sectors: government, residential and commercial construction and maintenance, HVAC servicing, utilities, facilities management, and central plant operations. Students may further their career as a licensed contractor.

Certificates of Achievement

Acoustical Installer Apprenticeship Certificate

This program concentrates on training apprentices to the specific levels required for the acoustical installer industry and has been approved by the State of California Department of Apprenticeship Standards. Training emphasis includes safety, blueprint reading, residential and commercial acoustical installer processes, building codes, estimation, and various carpentry topics.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tr>
<td>CARPT 140</td>
<td>Interior Systems (1.5)</td>
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<td>Suspended Framing Ceiling Systems (1.5)</td>
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<td>Introduction to Grid Ceiling Installation (1.5)</td>
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<td>CARPT 145</td>
<td>Specialty Ceiling Systems (1.5)</td>
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<td>CARPT 146</td>
<td>Integrated Ceilings and Special Techniques (1.5)</td>
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<td>CARPT 147</td>
<td>Advanced Grid Ceilings (1.5)</td>
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<td>CARPT 148</td>
<td>Access Floor Systems (1.5)</td>
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<td>Blueprint Reading-Residential (1.5)</td>
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<td>CARPT 162</td>
<td>Blueprint Reading-Commercial (1.5)</td>
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<td>CARPT 164</td>
<td>Acoustical Blueprint Reading (1.5)</td>
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<td>CARPT 190</td>
<td>Introduction to Welding and Cutting (1.5)</td>
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<td>CARPT 210</td>
<td>The Acoustical Apprentice, Safety, and the Trade (1.5)</td>
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<td>CARPT 211</td>
<td>Acoustical Installer Safety (1.5)</td>
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<td>CARPT 212</td>
<td>Infection Control Risk Assessment and Hospital Code for Acoustical Installers (1.5)</td>
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<td>CARPT 213</td>
<td>Acoustical Exterior Systems (1.5)</td>
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<td>CARPT 215</td>
<td>Acoustical Specialty Systems (1.5)</td>
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<td>CARPT 298</td>
<td>Work Experience in Carpenters Apprenticeship (1 - 4)</td>
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Enrollment Eligibility
To be eligible for enrollment in the program, the student must meet the following criteria:

- Be a registered Acoustical Installer apprentice.

Student Learning Outcomes
Upon completion of this program, the student will be able to:

- identify the components of a personal fall protection system (PFPS) and a personal fall arrest system (PFAS).
- calculate elevations from information obtained from residential plot and foundation plans.
- calculate contributory leg loads.
- formulate proper layout, cutting, and material installation procedures for the installation of braced and unbraced soffits.
- explain how to install stringer system reinforced perimeter locations, bridge obstructions, and additional bracing.
- extract the information necessary to construct a Photovoltaic support structure using a set of blueprints.
- install an acoustical ceiling conforming with the regulations of the Office of Statewide Health Planning and Development.
- analyze and perform methods of joining and welding plastic materials.
- describe the importance of a construction schedule and daily job log and organize labor in conjunction with the construction schedule.

Career Information
Acoustical technicians are in high demand. The Acoustical industry is not able to hire the amount of certified employees needed to fill the workforce and meet the needs of the industry. Students that are in this apprenticeship program are currently working in the Acoustical industry.

Carpenter Apprenticeship Certificate
This program concentrates on training apprentices to the specific levels required for the construction industry and has been approved by the State of California Department of Apprenticeship Standards. It includes safety, blueprint reading, residential and commercial construction processes, building codes, estimation, and various carpentry topics.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
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<td>CARPT 101</td>
<td>Aerial Lift Safety, Construction Math, and the Apprentice (1.5)</td>
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<tr>
<td>CARPT 106</td>
<td>Introduction to Apprenticeship (1.5)</td>
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<tr>
<td>CARPT 107</td>
<td>Rigging (1.5)</td>
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<td>CARPT 110</td>
<td>Foundations and Floors (1.5)</td>
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<td>CARPT 112</td>
<td>Structural Framing (1.5)</td>
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<td>CARPT 114</td>
<td>Form Detailing, Construction &amp; Erection (1.5)</td>
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<tr>
<td>CARPT 120</td>
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<td>CARPT 122</td>
<td>Interior Finish (1.5)</td>
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<tr>
<td>CARPT 130</td>
<td>Layout/Leveling Construction Site Practice (1.5)</td>
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<td>CARPT 140</td>
<td>Interior Systems (1.5)</td>
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<td>CARPT 142</td>
<td>Engineered Structural Systems (1.5)</td>
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<td>Concrete - Precast and Prestressed (1.5)</td>
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<td>CARPT 155</td>
<td>Commercial Concrete (1.5)</td>
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</table>
### Enrollment Eligibility

To be eligible for enrollment in the program, the student must meet the following criteria:

- Be a registered Carpenter apprentice.

### Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Demonstrate safe working practices in a field construction environment.
- Demonstrate proper selection, use, care, preparation, and handling of the carpenter's tools of the trade.
- Analyze, interpret, and apply national building codes relating to carpentry.
- Analyze and interpret residential and commercial construction blueprints.
- Evaluate, layout, and construct various systems such as floor, wall, roof, and concrete form.
- Evaluate and layout a building site using architectural and other related drawings.
- Calculate elevations by using an engineer's rod and various leveling devices.
- Estimate and order material for construction projects.
- Identify and select appropriate materials for each phase of construction.

### Career Information

Carpenter technicians are in high demand. The carpenters industry is not able to hire the amount of certified employees needed to fill the workforce and meet the needs of the industry. Students that are in this apprenticeship program are currently working in the carpenters industry.

### Drywall/Lathing Apprenticeship Certificate

The drywall/lathing apprenticeship certificate concentrates on training apprentices to the specific levels required for the construction industry and has been approved by the State of California Department of Apprenticeship Standards. Training emphasis includes safety, metal framing, blueprint reading, exterior/interior wall finishes, welding, residential and commercial construction process, building codes, estimation, and various construction topics.

**Catalog Date:** June 1, 2020

### Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
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<td>DRLTH 100</td>
<td>Introduction to the Trade (2)</td>
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<tr>
<td>DRLTH 102</td>
<td>Basic Applications (1.5)</td>
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<td>DRLTH 103</td>
<td>Drywall Lathing Trade Safety (1.5)</td>
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<td>DRLTH 105</td>
<td>Mathematics for Drywall/Lathers (2)</td>
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<td>DRLTH 110</td>
<td>Residential Metal Framing (1.5)</td>
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<td>DRLTH 112</td>
<td>Doors, Windows, Exterior Systems/Building Documents (1.5)</td>
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<td>DRLTH 120</td>
<td>Blueprint Reading I (1.5)</td>
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<td>DRLTH 122</td>
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<td>DRLTH 131</td>
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<td>DRLTH 140</td>
<td>Exterior/Advanced Fire Control System and Partitions (1.5)</td>
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<td>Exterior Systems and Trims (1.5)</td>
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<td>Interior Metal Lathing System, Sound Control (1.5)</td>
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<td>Ceilings, Shaft Protection and Demountable Partitions (1.5)</td>
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<td>DRLTH 162</td>
<td>Arches, Furring and Advanced Systems (1.5)</td>
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<td>Advanced Construction Techniques (1.5)</td>
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<td>DRLTH 298</td>
<td>Work Experience Drywall/Lathing Apprenticeship (1 - 4)</td>
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<tr>
<td>Total Units</td>
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</table>

**Enrollment Eligibility**

To be eligible for enrollment in the program, the student must meet the following criteria:

- Be a registered Drywall/Lathing apprentice.

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- demonstrate safe working practices in a field construction environment.
- demonstrate proper selection, use, care, preparation, and handling of the drywall/lathing craftsman's tools of the trade.
- analyze, interpret, and apply national building codes relating to the drywall/lathing profession.
- analyze and interpret residential commercial construction blueprints.
- evaluate, lay out, and construct various metal framing systems such as floor, wall, roof, and arches.
- calculate elevations using various leveling devices.
- identify and select appropriate material for each phase of construction.
- estimate and order material for construction projects.
- plan projects with given information such as blueprints, specifications, and verbal and written information.
- install advanced lathing and drywall systems.

**Career Information**

Drywall/lathing technicians are in high demand. The drywall/lathing industry is not able to hire the amount of certified employees needed to fill the workforce and meet the needs of the industry. Students that are in this apprenticeship program are currently working in the drywall/lathing industry.
Electrical Apprenticeship Certificate

This program provides instruction in the installation, operation, and maintenance of the electrical distribution systems in commercial and industrial sites. Topics include safety training, AC and DC electrical theory, metering, electronics, use of electrical codes, raceways, conductors, grounding, motors, transformers, fire alarm systems, fiber optics, instrumentation, building automation and heating, ventilating and air conditioning (HVAC) systems.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
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Enrollment Eligibility

To be eligible for enrollment in the program, the student must meet the following criteria:

- Be a registered electrical apprentice.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- apply commercial and industrial safety procedures on job sites.
- analyze, interpret and apply national, state and local electrical codes.
- apply electrical mathematics in calculating resistance, current, voltage, and power in a DC series circuit.
- demonstrate use of meters to confirm electrical calculations and to troubleshoot AC and DC circuits.
- analyze, identify, and evaluate electrical mathematics in RL, RC, LC, and RLC series, parallel, and combination circuits.
- describe and apply the requirements of Occupational Safety and Health Administration (OSHA) and National Fire Protection Association (NFPA) 70E work practices.
- define principles of basic AC and DC motor theory.

Career Information

Upon completion of this certificate, students may find employment in the following sectors: government, residential and commercial construction, and utilities.

Ironworkers Apprenticeship Certificate

This program includes training for Field Ironworkers and Reinforcing Ironworkers, provided in major ironworker components to meet Division of Apprenticeship Standards (DAS) guidelines.
Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
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<tbody>
<tr>
<td>IW 100</td>
<td>Orientation and History of the Trade</td>
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<tr>
<td>IW 110</td>
<td>Mixed Base</td>
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<tr>
<td>IW 120</td>
<td>Rigging</td>
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<td>IW 130</td>
<td>Reinforcing I</td>
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<td>IW 131</td>
<td>Reinforcing II/Post Tensioning</td>
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<tr>
<td>IW 140</td>
<td>Precast Concrete and Metal Buildings</td>
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<tr>
<td>IW 150</td>
<td>Welding I</td>
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<tr>
<td>IW 151</td>
<td>Welding II</td>
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<td>IW 152</td>
<td>Welding III</td>
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<td>IW 160</td>
<td>Lead Hazard</td>
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<td>IW 170</td>
<td>Structural I</td>
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<td>Structural II</td>
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<td>IW 180</td>
<td>Architectural/Ornamental I</td>
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<td>IW 183</td>
<td>The History of Ironworkers</td>
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A minimum of 16 units from the following:

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<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
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<tbody>
<tr>
<td>IW 298</td>
<td>Work Experience in Ironworkers Apprenticeship (1 - 4)</td>
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</table>

Total Units: 38

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- demonstrate safe working practices in a field construction environment.
- analyze and interpret blueprints.
- interpret and apply welding codes.
- demonstrate proper selection, use, care, preparation, and handling of fiber lines, steel cables, wire ropes, chains, slings, cranes, ladders, scaffolds, and helicopter rigging.
- define, identify, interpret, and analyze universal building codes (UBC), classifications, plans, schedules, charts, and specifications commonly used in the ironworker trade.
- describe and apply reinforcing techniques and principles to concrete structures using steel, bar supports, bar splicing, and welding.
- perform proper structural steel erection on bridges, overpasses, and large buildings.
- weld various ferrous metals using common welding processes and safety guidelines.
- set cable tensions and pre-stress reinforcing steel to industry standards.

Mill and Cabinet Maker Apprenticeship Certificate

This program trains apprentices on the specific levels required for the construction industry and has been approved by the State of California Department of Apprenticeship Standards. It includes safety, blueprint reading, construction processes, building codes, estimation, and various mill and cabinet carpentry topics.
### COURSE CODE  COURSE TITLE  UNITS

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<thead>
<tr>
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<td>CARPT 271</td>
<td>The Mill Cabinet Apprentice and the Trade (1.5)</td>
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<tr>
<td>CARPT 272</td>
<td>Math for the Trades (2)</td>
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<tr>
<td>CARPT 273</td>
<td>Basic Cabinet Making (1.5)</td>
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<tr>
<td>CARPT 274</td>
<td>Basic Blueprint Reading Mill Cabinet (1.5)</td>
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<td>CARPT 275</td>
<td>Machinery Maintenance for Mill Cabinet (1.5)</td>
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<td>CARPT 276</td>
<td>Cabinet Hardware Installation (1.5)</td>
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<td>CARPT 277</td>
<td>Sanding, Stains, and Finish Preparation (1.5)</td>
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<td>CARPT 278</td>
<td>Advanced Machinery Operation (1.5)</td>
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<td>Veneers, Laminate, and Finishing (1.5)</td>
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<td>CAD Basics for Mill Cabinetry (1.5)</td>
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<td>CARPT 283</td>
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<td>Solid Surface Material, Fabrication, and Installation (1.5)</td>
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<td>Advanced Project for Mill Cabinet (1.5)</td>
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<tr>
<th>Course Code</th>
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<tr>
<td>CARPT 298</td>
<td>Work Experience in Carpenters Apprenticeship (1 - 4)</td>
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**Total Units:** 37

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**Enrollment Eligibility**

To be eligible for enrollment in the program, the student must meet the following criteria:

- Must be a state registered Mill and Cabinet apprentice.

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- Demonstrate safe working practices in a field construction environment.
- Demonstrate proper selection, use, care, preparation, and handling of the mill and cabinet carpenter's tools of the trade.
- Analyze, interpret, and apply national building codes relating to mill and cabinet carpentry.
- Analyze and interpret residential and commercial construction blueprints.
- Identify and select appropriate materials for each phase of construction.
- Construct and complete an advanced project demonstrating journeymen-level skills.
- Apply design elements and principles to create functional and attractive cabinets.

**Career Information**

Mill and cabinet maker technicians are in high demand. The industry is not able to hire the amount of certified employees needed to fill the workforce and meet the needs of the industry. Students that are in this apprenticeship program are currently working in the mill and cabinet maker industry.

**Millwright Apprenticeship Certificate**
Certificate Requirements

<table>
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<th>COURSE CODE</th>
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<td>The Millwright Apprentice and the Trade (2)</td>
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<td>CARPT 222</td>
<td>Millwright Math Applications and Fall Protection (1.5)</td>
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<td>CARPT 223</td>
<td>Cutting and Welding I (1.5)</td>
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<td>Materials of Construction (1.5)</td>
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<td>CARPT 226</td>
<td>Precision Optical Instruments (1.5)</td>
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<td>CARPT 227</td>
<td>Blueprint Reading and Aerial Lift (1.5)</td>
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</tr>
<tr>
<td>CARPT 228</td>
<td>Millwright Rigging (2)</td>
<td></td>
</tr>
<tr>
<td>CARPT 229</td>
<td>Cutting and Welding II (1.5)</td>
<td></td>
</tr>
<tr>
<td>CARPT 230</td>
<td>Monorails (1.5)</td>
<td></td>
</tr>
<tr>
<td>CARPT 231</td>
<td>Conveyors for Millwrights (1)</td>
<td></td>
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<tr>
<td>CARPT 232</td>
<td>Machinery Installation (1.5)</td>
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<tr>
<td>CARPT 233</td>
<td>Machinery Maintenance for Millwrights (1.5)</td>
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<tr>
<td>CARPT 234</td>
<td>Precision Tools for Millwrights (1.5)</td>
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<tr>
<td>CARPT 235</td>
<td>Turbines (1.5)</td>
<td></td>
</tr>
<tr>
<td>CARPT 236</td>
<td>Cutting and Welding III (1.5)</td>
<td></td>
</tr>
</tbody>
</table>

A minimum of 16 units from the following:                                                                                     |
| CARPT 298   | Work Experience in Carpenters Apprenticeship (1 - 4)                        | 16    |

Total Units:                                                                                                                  | 38    |

Enrollment Eligibility

To be eligible for enrollment in the program, the student must meet the following criteria:

- Be a registered Millwright apprentice.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- demonstrate proper procedure for working on turbines.
- prepare a one-inch-thick vertical groove joint that meets AWS standards.
- produce the AWS 3G and 4G unlimited thickness practice test with FCAW.
- distinguish alternative energy sources, such as wind, nuclear, and tidal power.
- install machinery safely and effectively at the proper elevation.
- explain the layout and fabrication of header steel and methods for connecting and attaching support steel.
- explain the layout and fabrication of a monorail system.
- identify and explain plasma welding and cutting processes, components, and safety issues.
- demonstrate safe rigging practices, including hand and voice signals.
Career Information

Millwright technicians are in high demand. The millwright industry is not able to hire the amount of certified employees needed to fill the workforce and meet the needs of the industry. Students that are in this apprenticeship program are currently working in the millwright industry.

Pre-Apprenticeship Certificate

This program prepares students for entry into an apprenticeship program in the commercial and industrial building and construction industries. Topics include Leadership in Energy and Environmental Design (LEED) processes, green technologies, green building techniques, infrastructure, and transportation projects.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PREAP 111</td>
<td>Infrastructure Pre-Apprenticeship</td>
<td>7</td>
</tr>
<tr>
<td>PREAP 141</td>
<td>Green Technology Pre-Apprenticeship</td>
<td>7</td>
</tr>
<tr>
<td>FITNS 101</td>
<td>Green Technology Workforce Wellness</td>
<td>1</td>
</tr>
<tr>
<td>FITNS 102</td>
<td>Infrastructure Workforce Wellness</td>
<td>1</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>16</td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- describe basic skills required for the construction of roads, bridges, levees, and rail.
- describe the Leadership in Energy and Environmental Design (LEED) rating process.
- identify green alternatives to conventional building practices and describe the pros and cons of those alternatives.
- apply proper lifting/movement techniques applicable to green technology workforce occupations.
- determine the validity of fitness and health information using the scientific method and the relationship between scientific research and established knowledge.
- implement a personal fitness plan using proper strength and cardiovascular training.

Residential/Commercial Electrician Trainee Certificate

This program provides instruction in the installation, operation, and maintenance of the electrical distribution systems in residential and commercial sites. Topics include safety training, AC/DC electrical theory, metering, electronics, use of electrical codes, raceways, conductors, grounding, motors, transformers, fire alarm systems, fiber optics, and Heating, Ventilation, and Air Conditioning (HVAC) systems. It complies with state regulations to become an electrician trainee.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
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<tbody>
<tr>
<td>ELTRN 110</td>
<td>Electrician Trainee I</td>
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</tr>
<tr>
<td>ELTRN 111</td>
<td>Electrician Trainee II</td>
<td>4</td>
</tr>
<tr>
<td>ELTRN 120</td>
<td>Electrician Trainee III</td>
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</tr>
<tr>
<td>ELTRN 121</td>
<td>Electrician Trainee IV</td>
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</tr>
<tr>
<td>ELTRN 130</td>
<td>Electrician Trainee V</td>
<td>4</td>
</tr>
<tr>
<td>ELTRN 131</td>
<td>Electrician Trainee VI</td>
<td>4</td>
</tr>
</tbody>
</table>
Student Learning Outcomes
Upon completion of this program, the student will be able to:

- apply residential and commercial safety procedures on job-sites.
- analyze, interpret, and apply national, state, and local electrical codes.
- apply electrical mathematics in calculating AC/DC series, parallel, and combination circuits.
- identify different wiring methods for conductors, cables, and conduits.
- analyze functions of blueprints, specifications, schedules, addenda, and revisions in construction.
- describe the function, operation, and characteristics of a system and individual components of the system such as burglar alarms, fire alarms, information transport, HVAC, etc.

Career Information
Upon completion of the Residential/Commercial Electrician Trainee program, students may find employment in the following industry sectors: government, residential and commercial construction and maintenance, utilities, and facilities management.

Sheet Metal Apprenticeship Certificate
The Sheet Metal Apprenticeship certificate concentrates on training apprentices to the specific levels required for the construction industry and has been approved by the State of California Department of Apprenticeship Standards. Training emphasis includes safety, blueprint reading, residential and commercial processes, building codes, estimation, and various sheet metal topics.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
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<tbody>
<tr>
<td>SHME 100</td>
<td>Sheet Metal Apprenticeship I</td>
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<tr>
<td>SHME 101</td>
<td>Sheet Metal Apprenticeship II</td>
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<tr>
<td>SHME 110</td>
<td>Sheet Metal Apprenticeship III</td>
<td>3.3</td>
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<tr>
<td>SHME 111</td>
<td>Sheet Metal Apprenticeship IV</td>
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</tr>
<tr>
<td>SHME 120</td>
<td>Sheet Metal Apprenticeship V</td>
<td>3.3</td>
</tr>
<tr>
<td>SHME 121</td>
<td>Sheet Metal Apprenticeship VI</td>
<td>3.3</td>
</tr>
<tr>
<td>SHME 130</td>
<td>Sheet Metal Apprenticeship VII</td>
<td>3.3</td>
</tr>
<tr>
<td>SHME 131</td>
<td>Sheet Metal Apprenticeship VIII</td>
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</tr>
<tr>
<td>SHME 140</td>
<td>Sheet Metal Apprenticeship IX</td>
<td>3.3</td>
</tr>
<tr>
<td>SHME 141</td>
<td>Sheet Metal Apprenticeship X</td>
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<tr>
<td>SHME 150</td>
<td>Sheet Metal Welding I</td>
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<tr>
<td>SHME 151</td>
<td>Sheet Metal Welding II</td>
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<tr>
<td>SHME 298</td>
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<tr>
<td></td>
<td>Total Units:</td>
<td>54</td>
</tr>
</tbody>
</table>
Student Learning Outcomes

Upon completion of this program, the student will be able to:

- demonstrate safe working practices in a field construction environment.
- demonstrate proper selection, use, care, preparation, and handling of the sheet metal worker’s tools of the trade.
- analyze, interpret, and apply national building codes relating to sheet metal construction.
- analyze and interpret residential and commercial construction blueprints.
- acquire skills and knowledge to make a successful transition to a journey-level position in the sheet metal worker trade.
- demonstrate the ability to apply mathematical concepts to the sheet metal trade.
- demonstrate proficiency in the principles, concepts and applications in metal fabrication methods.

Career Information

Upon completion of the Sheet Metal Apprenticeship certificate, students may find employment in the following sectors: government, residential and commercial construction and maintenance, utilities, and facilities management.

Sheet Metal Service Technician Apprenticeship Certificate

The Sheet Metal Service Technician Apprenticeship certificate concentrates on training apprentices to the specific levels required for the construction and the heating, ventilation, and air conditioning (HVAC) industries. This program has been approved by the State of California Department of Apprenticeship Standards. Training emphasis includes safety, blueprint reading, residential and commercial processes, building codes, estimation, and various sheet metal topics. It includes the servicing, start-up, and balancing of HVAC systems.

Certificate Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SHME 100</td>
<td>Sheet Metal Apprenticeship I</td>
<td>3.3</td>
</tr>
<tr>
<td>SHME 101</td>
<td>Sheet Metal Apprenticeship II</td>
<td>3.3</td>
</tr>
<tr>
<td>SHME 110</td>
<td>Sheet Metal Apprenticeship III</td>
<td>3.3</td>
</tr>
<tr>
<td>SHME 111</td>
<td>Sheet Metal Apprenticeship IV</td>
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<tr>
<td>SMTEC 100</td>
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<tr>
<td>SMTEC 101</td>
<td>Sheet Metal Service Technician Apprenticeship II</td>
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<td>SMTEC 110</td>
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<tr>
<td>SMTEC 111</td>
<td>Sheet Metal Service Technician Apprenticeship IV</td>
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</tr>
<tr>
<td>SMTEC 120</td>
<td>Sheet Metal Service Technician Apprenticeship V</td>
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<tr>
<td>SMTEC 121</td>
<td>Sheet Metal Service Technician Apprenticeship VI</td>
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<tr>
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<td>Sheet Metal Service Technician Apprenticeship VIII</td>
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<tr>
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<td>2.5</td>
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<tr>
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<td></td>
<td>A minimum of 16 units from the following:</td>
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<td>SHME 298</td>
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<tr>
<td></td>
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</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:
- demonstrate safe working practices in a field construction environment.
- demonstrate proper selection, use, care, preparation, and handling of the sheet metal worker's tools of the trade.
- analyze, interpret, and apply national building codes relating to sheet metal and mechanical construction.
- analyze and interpret residential and commercial construction blueprints.
- demonstrate the proper start-up and balancing of different HVAC systems.
- demonstrate troubleshooting techniques on various HVAC systems.

Career Information

Upon completion of the Sheet Metal Service Technician Apprenticeship certificate, students may find employment in the following sectors: government, residential and commercial construction and maintenance, HVAC servicing, utilities, facilities management, and central plant operations.

Certificates

Green Technology Pre-Apprenticeship Certificate

This certificate prepares students for entry into an apprenticeship program in the commercial and industrial building and construction industries. Topics include green building practices, construction job site safety requirements, construction mathematics, and apprenticeship entry requirements.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>FITNS 101</td>
<td>Green Technology Workforce Wellness</td>
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<tr>
<td>PREAP 141</td>
<td>Green Technology Pre-Apprenticeship</td>
<td>7</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>8</td>
</tr>
</tbody>
</table>

1This course replaces FITNS 358

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- explain safety regulations and safe working conditions for apprenticeship training.
- identify construction practices used by different building trades such as sheet metal workers, electricians, plumbers, pipe-fitters, and carpenters.
- describe the life cycle phases of a building and impacts on the green environment over its life cycle.

Infrastructure Pre-Apprenticeship Certificate

This certificate prepares students for entry into an apprenticeship program in the infrastructure industries such as bridge, levee, and road construction. Topics include bridge construction practices, construction job site safety requirements, construction mathematics, and apprenticeship entry requirements.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>FITNS 102</td>
<td>Infrastructure Workforce Wellness</td>
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<tr>
<td>PREAP 111</td>
<td>Infrastructure Pre-Apprenticeship</td>
<td>7</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>8</td>
</tr>
</tbody>
</table>
Student Learning Outcomes

Upon completion of this program, the student will be able to:

- explain safety regulations and safe working conditions for apprenticeship training.
- identify construction practices used by different building trades such as carpenters, bricklayers, pile-drivers, cement masons, laborers, operating engineers, and surveyors.
- describe the construction processes involved in a typical bridge building.

Utilities Worker Pre-Apprenticeship Certificate

This certificate prepares students for entry into an apprenticeship program in the utility industry. Topics include job-site safety requirements, electrical and gas principles, blueprint reading, electrical power distribution, utility pole climbing, and apprenticeship preparation.

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PREAP 122</td>
<td>Pre-Apprenticeship for Utility Workers</td>
<td>8</td>
</tr>
<tr>
<td>MATH 145</td>
<td>Mathematics for the Trades</td>
<td>1.5</td>
</tr>
<tr>
<td>FITNS 100</td>
<td>Utility Workforce Wellness</td>
<td>1</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>10.5</td>
</tr>
</tbody>
</table>

Upon completion of this program, the student will be able to:

- explain electrical fundamentals such as Ohm’s and Watt’s Law.
- define terms and vocabulary used in the utility industry.
- explain electrical and gas distribution for the utility industry.
- identify safety laws, regulations, and safe working conditions for apprenticeship.
- describe effective conflict resolution methods.
- describe the functions of transformers, electrical generators, and electrical equipment.

Career Information

This program provides opportunities for entry into the utility industry where there is high demand for trained entry level workers.

Carpentry (CARPT)

CARPT 101 Aerial Lift Safety, Construction Math, and the Apprentice

Units: 1.5
Hours: 24 hours LEC; 12 hours LAB
Prerequisite: None.
Enrollment Limitation: Must be a registered carpenter apprentice.
Catalog Date: June 1, 2020

This course introduces the beginning carpenter apprentice to industry safety procedures for aerial lift use, and hand and power tool safety and maintenance. It also covers construction math, financial literacy, and the role and responsibilities of the apprentice.
Upon completion of this course, the student will be able to:

- explain allowable loads for various types of aerial lifts.
- describe load capacity.
- list requirements for pre-shift inspection of aerial lifts.
- describe aerial lift operator responsibilities.
- describe safe aerial lift use.
- explain the meaning of discrimination.
- describe the different types of discrimination.
- demonstrate knowledge of the importance of financial literacy.
- describe the responsibilities of the apprentice as required by Joint Apprenticeship and Training Committee (JATC) and other governing agencies.
- calculate area, volume, and circumference.
- apply multiplication and division of fractions to construction tasks.
- convert fractions, decimals, inches, feet, fractions of inches, and non-metric to metric units.
- identify safe use and basic maintenance of hand and power tools.
- identify safe use and basic maintenance of heavy equipment.

**CARPT 106 Introduction to Apprenticeship**

**Units:** 1.5  
**Hours:** 22 hours LEC; 15 hours LAB  
**Prerequisite:** None  
**Enrollment Limitation:** Registered Carpenter Apprentice  
**Catalog Date:** June 1, 2020  

This course is an introduction to apprenticeship, tools, safety, and construction job sites in the commercial and industrial building sectors.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- describe the hazards on a construction job site.
- demonstrate the proper safe use of a worm-drive saw.
- identify the conduct that characterizes workplace discrimination and harassment.
- demonstrate the proper use of personal fall protection equipment and anchor points.
- measure and layout different objects with a measuring tape.
- determine the perimeter, area, and volume of rectangular, triangular, and circular objects.

**CARPT 107 Rigging**

**Units:** 1.5  
**Hours:** 22 hours LEC; 15 hours LAB  
**Prerequisite:** None  
**Enrollment Limitation:** Registered Carpenter Apprentice  
**Catalog Date:** June 1, 2020  

This course familiarizes apprentices with the equipment and the procedures to safely rig and hoist various loads on the job-site. Topics include tying knots, splicing rope, calculating loads, hand signals for cranes, and inspecting rigging hardware.

**Student Learning Outcomes**
Upon completion of this course, the student will be able to:

- describe a basic rigging operation.
- calculate the working load limit for a specific wire rope.
- inspect wire rope using industry standard criteria.
- select the proper type sling for a specific rigging operation.
- identify the construction and purpose of shackles, hooks, eye-bolts, turnbuckles, sheaves, wedge sockets, wire rope clips, rigging beams, master links, chain falls, and come-alongs.
- identify various common knots, bends, hitches, and splices.
- calculate the center of gravity and the weight of a load on a sling.
- calculate the stress loads on the slings.
- identify standard types of cranes used in rigging.

CARPT 108 Modular System Installer Safety

Units: 1.5
Hours: 24 hours LEC; 12 hours LAB
Prerequisite: None.
Enrollment Limitation: Must be a registered carpentry modular systems installer apprentice.
Catalog Date: June 1, 2020

This course is an introduction to apprenticeship, tools, safety, and construction job sites in the commercial and industrial building sectors. It also covers discrimination and harassment on the jobsite.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify safe use and basic maintenance of hand and power tools.
- apply OSHA regulations.
- explain the meaning of discrimination and harassment.
- describe how hearing loss occurs and how to protect hearing.
- describe the importance of fall protection and falling object protection.
- identify modular components.
- describe the responsibilities of the apprentice as required by Joint Apprenticeship and Training Committee (JATC) and other governing agencies.

CARPT 109 Introduction to Office Modular Systems Installation

Units: 1
Hours: 18 hours LEC; 18 hours LAB
Prerequisite: None.
Enrollment Limitation: Must be a registered carpentry modular systems installer apprentice.
Catalog Date: June 1, 2020

This course introduces the installation of modular systems including major manufacturers of modular systems, applicable math, blueprints, specifications, and the creation of a realistic installation mockup. It also covers site logistics, layout of components, and personal financial literacy.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- use power and hand tools to safely assemble modular systems.
- use manufacturers' catalogs to identify various components of modular systems.
- identify modular components for efficient installation.
- demonstrate the ability to add and subtract fractions and mixed numbers.
- interpret blueprint drawings and specifications.
- create a system mock-up.
- identify personal financial responsibility.

**CARPT 110 Foundations and Floors**

*Units:* 1.5  
*Hours:* 22 hours LEC; 15 hours LAB  
*Prerequisite:* None.  
*Enrollment Limitation:* Must be a registered Carpenter Apprentice.  
*Catalog Date:* June 1, 2020

This course covers layout, forming, framing, joist, sub-flooring, and foundation construction.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- identify appropriate types of forms for concrete foundations.
- apply joist span tables.
- analyze building and green code requirements for construction.
- evaluate, lay out, and construct a floor joist system.

**CARPT 111 Modular Systems Applications**

*Units:* 1  
*Hours:* 15 hours LEC; 21 hours LAB  
*Prerequisite:* None.  
*Enrollment Limitation:* Must be a registered carpentry modular systems installer apprentice.  
*Catalog Date:* June 1, 2020

This course introduces the modular system installer apprentice to proper tool and equipment applications required while assembling and disassembling modular office furniture systems. It also covers personal financial literacy.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- apply safe use of hand and power tools.
- demonstrate the proper application of hand and power tools used during assembly and disassembly of modular components.
- identify and install the custom perimeter trim products.
- create a personal monthly spending plan/budget.
- explain the use of credit and credit scores.

**CARPT 112 Structural Framing**

*Units:* 1.5  
*Hours:* 22 hours LEC; 15 hours LAB  
*Prerequisite:* None.  
*Enrollment Limitation:* Must be a registered Carpenter Apprentice.  
*Catalog Date:* June 1, 2020

This course covers basic framing systems and layout of walls, ceilings, and stairwells with wood as well as metal and alternative “green” materials such as manufactured...
CARPT 114 Form Detailing, Construction & Erection

Upon completion of this course, the student will be able to:

- identify and list appropriate materials for the construction of concrete forms.
- describe the purpose of three or more types of forms and their uses.
- draft a concrete form detail drawing and specify the function of the concrete form.
- build a concrete construction form involving bucks, block-outs, and inserts.
- calculate concrete quantities for model forms.

CARPT 115 Floor to Ceiling Wall System Construction

Upon completion of this course, the student will be able to:

- construct modular system walls and panels.
- construct modular system doors and windows.
- apply proper layout of walls.
- interpret blueprints for modular walls.
CARPT 120 Exterior Finish

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- assess and select the various types of exterior caulking and their uses including the use of VOC free materials.
- justify caulking choices for exterior applications.
- identify and list appropriate exterior materials and alternative materials that are VOC free.
- identify and determine the uses of exterior finish hand tools.
- research the function and application of exterior sheathing, insulation, and weatherproofing materials appropriate to local conditions.
- install an exterior door frame and door.
- identify and describe the application of six styles of windows.

CARPT 122 Interior Finish

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify interior materials and "green" practices that reduce poor indoor air quality.
- build a mockup using appropriate materials and installation methods.
- interpret information on finish materials and tasks from blueprints, schedules, and specifications.
- evaluate and perform tasks using power equipment used in interior trim in a safe manner.
- install interior door frames, doors, and trim.
- build laminated plastic materials.
- analyze the appropriate CalGreen codes that regulate and promote good indoor air quality practices.

CARPT 124 Commercial Door Hardware

Units: 1.5
Hours: 22 hours LEC; 15 hours LAB

Prerequisite: Must be a registered Carpenter Apprentice.

Student Learning Outcomes

1.5 Units: 22 hours LEC; 15 hours LAB

Enrollment Limitation: June 1, 2020

This course covers exterior design, materials, finishes, and methods of application in exterior building construction. Topics include an overview of the hazards of Volatile Organic Compounds (VOCs) and pathogens.

This course covers interior designs, materials, and methods of application in building construction. Topics include techniques of indoor air quality practices in order to reduce Volatile Organic Compounds (VOCs) and pathogens.

This course covers design, materials, finishes, and methods of application in exterior building construction. Topics include an overview of the hazards of Volatile Organic Compounds (VOCs) and pathogens.
This course covers the basic skills necessary to successfully install commercial door hardware. Topics include selecting hardware, hanging and adjusting a door and installing locks, closers, rim devices, door holders, and various accessories. It also covers codes that govern doors and hardware in commercial buildings.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- demonstrate the installation of flush bolts and coordinators so the doors close in proper order.
- demonstrate the installation of door stops at a predetermined angle without damage to door or jamb.
- demonstrate with given mortise lockset, a cylinder lockset and instructions for each, correctly change the hand of each lockset to given standards.
- demonstrate the installation and preparation of a door with a given cylinder lockset so it latches securely and locks the door.
- describe the function of a commercial collection of hardware and correctly identify each piece.

**CARPT 125 Fine Furnishings, Drapery, and Window Coverings**

<table>
<thead>
<tr>
<th>Units:</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
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<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Enrollment Limitation:</td>
<td>Must be a registered carpentry modular systems installer apprentice.</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
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</tbody>
</table>

This course introduces the modular system installer apprentice to high-end and custom furniture, wall installations, draperies, and window coverings. It also covers tool selection, skills for proper installation, and manufacturers' specifications.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- construct custom counters and desks.
- use the proper fasteners for hollow and solid walls.
- apply proper installation techniques for window coverings.
- construct custom solid wood casegoods and furniture.
- assemble and install demountable partition walls.
- describe manufacturers' specifications.

**CARPT 130 Layout/Leveling Construction Site Practice**

<table>
<thead>
<tr>
<th>Units:</th>
<th>1.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>22.5 hours LEC; 13.5 hours LAB</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Enrollment Limitation:</td>
<td>Must be a registered Carpenter Apprentice.</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course covers the use of leveling devices. It includes reading and interpreting an engineer's rod, horizontal and vertical setting circles, and vernier scaling. Additional topics include construction layout of horizontal and vertical angles, and Leadership in Energy and Environmental Design (LEED) practices for erosion control.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- set up and adjust a theodolite instrument, laser, and other leveling devices for proper use.
- evaluate and lay out a building site using architectural drawings.
- identify the parts of a tripod and theodolite instrument.
• measure horizontal distances with a theodolite instrument.
• calculate elevations by using an engineer's rod and various leveling devices.
• lay out horizontal and vertical angles with accuracy.
• identify erosion control measures that prevent water runoff.

CARPT 131 Introduction to Working Drawings, Construction Math and Fire Stop Installation

Units: 1.5
Hours: 24 hours LEC; 12 hours LAB
Prerequisite: None.
Enrollment Limitation: Must be a registered Insulator Apprentice.
Catalog Date: June 1, 2020

This course introduces Insulator Apprentices to construction math, basic blueprint reading, and fire stop installation. It also covers safe use and maintenance of hand tools.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• identify print production and reproduction methods.
• define plan detail views and pictorial drawings and their uses.
• calculate area, volume, and circumference.
• apply multiplication and division of fractions to common insulator tasks.
• convert fractions, decimals, inches, feet, fractions of inches, and non-metric to metric units.
• describe the test standards and the rating systems for fire stopping.
• identify the purpose of proper installation of access doors.
• identify safe use and basic maintenance of hand tools.

CARPT 132 Residential Blueprint Reading and Forklift Safety

Units: 1.5
Hours: 24 hours LEC; 12 hours LAB
Prerequisite: None.
Enrollment Limitation: Must be a registered Insulator Apprentice.
Catalog Date: June 1, 2020

This course introduces Insulator Apprentices to residential blueprint terminology and interpretation. Forklift safety is also included.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• explain the purpose, printing, modifications, and assembly of blueprints.
• interpret abbreviations, schedules, and symbols on prints.
• list the different types of orthographic and pictorial drawings.
• explain the basic use and safe operation of a forklift.

CARPT 133 Residential Insulation and Weatherization

Units: 1.5
Hours: 24 hours LEC; 12 hours LAB
Prerequisite: None.

1.5 Units:
24 hours LEC; 12 hours LAB
Hours:
None.
Prerequisite:
Must be a registered Insulator Apprentice.
Enrollment Limitation:
June 1, 2020
Catalog Date:
Student Learning Outcomes

1.5 Units:
24 hours LEC; 12 hours LAB
Hours:
None.
Prerequisite:
Enrollment Limitation:
June 1, 2020
Catalog Date:
This course introduces the Insulator Apprentice to insulation and weatherization installation. Topics include environmental impact on traditional construction and organizations that provide guidelines and certification for residential insulation and weatherization.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- define the required components of residential insulation and weatherization.
- define the term “R-value” (resistance to heat flow).
- state the benefits of R-value and weatherization.
- describe the impact of typical traditional construction on the environment.
- list the organizations that provide guidelines and certification for residential insulation and weatherization.

CARPT 134 Commercial Blueprint Reading and Mobile Tower Scaffolds

Units: 1.5
Hours: 24 hours LEC; 12 hours LAB
Prerequisite: None.
Enrollment Limitation: Must be a registered Insulator Apprentice.
Catalog Date: June 1, 2020

This course introduces Insulator Apprentices to commercial blueprint terminology and interpretation. It also covers the erection of and safe practices for welded frame mobile and rolling tower scaffolds.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- explain the purpose, printing, modifications, and assembly of blueprints.
- interpret abbreviations, schedules, and symbols on commercial and structural prints.
- list the different types of orthographic and pictorial drawings.
- interpret dimensions on structural prints.
- list criteria for welded frame and rolling tower scaffold.
- calculate contributory leg loads.
- list requirements for platform construction.
- explain the safe use and erection of welded frame and rolling tower scaffolds, materials, fall protection, and falling object protection.
- describe safe scaffold access and egress.

CARPT 135 Commercial and Industrial Insulation and Aerial Lift

Units: 1.5
Hours: 24 hours LEC; 12 hours LAB
Prerequisite: None.
Enrollment Limitation: Must be a registered Insulator Apprentice.
Catalog Date: June 1, 2020

This course introduces the Insulator Apprentice to commercial and industrial insulation installation. It also covers the rules and regulations governing the safe use of aerial lifts.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- list the required components of commercial and industrial insulation.
- state the benefits of (resistance to heat flow) R-value
- describe the impact of typical traditional construction on the environment.
- list the organizations that provide guidelines and certification for commercial and industrial insulation.
- describe the characteristics of self-propelled and manually-propelled aerial lifts and work platforms.
- demonstrate a pre-shift inspection of an aerial lift.

CARPT 136 Energy Conservation Codes and Standards

Units: 1.5
Hours: 24 hours LEC; 12 hours LAB
Prerequisite: None.
Enrollment Limitation: Must be a registered Insulator Apprentice.
Catalog Date: June 1, 2020

This course introduces the Insulator Apprentice to energy conservation codes and standards. It also covers Green Advantage certification and CalGreen building code requirements.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- interpret energy conservation codes and standards.
- list the required components of green building.
- state the benefits of green building to the environment.
- describe the impact of typical traditional construction on the environment.
- identify Green Advantage certification requirements.
- interpret CalGreen building code requirements.

CARPT 137 Modular Systems Construction I

Units: 1
Hours: 18 hours LEC; 18 hours LAB
Prerequisite: None.
Enrollment Limitation: Must be a registered carpentry modular systems installer apprentice.
Catalog Date: June 1, 2020

This course introduces the modular system installer apprentices to safe and productive ways to handle modular components on a job site using the proper equipment. It also covers the proper way to lift and move modular components, protection of office equipment, basic furniture assembly, and manufacturers' specifications.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify the proper equipment for moving different components.
- apply safe and ergonomic movements of material.
- apply proper floor protection during unloading and staging operations.
- identify the various hardware elements in furniture assembly.

CARPT 138 Modular System Construction II

Units: 1
Hours: 14 hours LEC; 22 hours LAB
Prerequisite: None.
This course introduces the modular system installer apprentices to advanced modular system construction with a focus on panelized furniture and cubicle partitions including electrical diagrams. It also covers forklift operation and safety per regulations mandated by the Occupational Safety and Health Administration (OSHA).

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- assemble modular cubicle walls.
- properly disassemble modular cubicle walls.
- use proper handling and storage techniques of modular cubicle components.
- assemble panelized furniture.
- properly disassemble panelized furniture.
- use proper handling and storage techniques of panelized furniture.
- interpret electrical connection diagrams.
- operate a forklift per OSHA regulations.

**CARPT 140 Interior Systems**

**Units:** 1.5  
**Hours:** 22 hours LEC; 15 hours LAB  
**Prerequisite:** None.  
**Enrollment Limitation:** Must be a registered Carpenter Apprentice.  
**Catalog Date:** June 1, 2020

This course is a comprehensive study of materials, work processes, and the proper use of tools necessary to install gypsum wallboard and interior metal studs. Topics include green practices used in construction.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- identify the different compositions of gypsum materials used in the construction of specific wallboard products including "green" methods of installation.
- evaluate and demonstrate proper handling and storage techniques for wallboard and metal studs.
- select the appropriate fastener used for metal stud and wallboard construction.
- demonstrate the proper use of tools and equipment used in metal stud and wallboard construction.
- evaluate proper and practical cutting and fitting techniques when installing metal studs and gypsum wallboard.
- formulate proper lay out, cutting, and material installation procedures for the installation of braced and unbraced soffits.

**CARPT 141 Suspended Framing Ceiling Systems**

**Units:** 1.5  
**Hours:** 24 hours LEC; 12 hours LAB  
**Prerequisite:** None.  
**Enrollment Limitation:** Must be a registered Acoustical Apprentice.  
**Catalog Date:** June 1, 2020

This course introduces the acoustical apprentice to the installation of suspended framing ceiling systems and situations which require special installation techniques. It also covers industry standards and manufacturers' recommendations for proper installation of engineered ceilings, and proper tool selection and safety.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- identify the custom perimeter trim products.
• identify the use of reference points for the installation of suspended framing.
• explain the method for attaching trim to the ceiling system.
• perform pre-shift inspections for tools, equipment, and work area.
• identify metal ceiling systems components.
• demonstrate suspended framing systems-specific installation techniques.

CARPT 142 Engineered Structural Systems

Upon completion of this course, the student will be able to:

• list lamination processes and uses.
• identify three or more truss designs and select appropriate design for a project.
• safely operate heavy timber construction tools.
• interpret a set of engineered nailing and fastening schedules and explain the purpose of such schedules.
• identify disposal of post-building materials codes.
• install a wood and wood-metal truss and its engineered manufactured components following a set of structural blueprints.

CARPT 144 Introduction to Grid Ceiling Installation

Upon completion of this course, the student will be able to:

• identify common grid ceiling components.
• interpret prints and specifications to determine the related electrical and mechanical features and layout.
• demonstrate an understanding of the standards and codes that apply to acoustical ceilings.
• identify the tools needed to install an acoustical ceiling.
• demonstrate the ability to lay out a grid ceiling.
• describe the installation process for exposed grid and concealed grid systems.
• explain the safe use of welded frame and rolling tower scaffolds, including materials, fall protection, and falling object protection.
• calculate contributory leg loads.
• list requirements for platform construction.
CARPT 145 Specialty Ceiling Systems

Upon completion of this course, the student will be able to:

- identify special ceiling systems components.
- interpret prints and specifications to determine the related electrical and mechanical features and layout.
- demonstrate an understanding of the standards and codes that apply to specialty ceilings.
- identify the tools needed to install a specialty ceiling.
- demonstrate the ability to lay out a specialty ceiling.
- describe the installation process for exposed and concealed specialty systems.
- describe the characteristics of self-propelled and manually-propelled aerial lifts and work platforms.
- demonstrate a pre-shift inspection of an aerial lift.

CARPT 146 Integrated Ceilings and Special Techniques

Upon completion of this course, the student will be able to:

- assess and perform specific installation techniques.
- apply the proper installation procedure for each system.
- explain reference points for the installation of curved trim and methods for attaching trim to the ceiling system.
- construct metal ceiling system components.
- identify the custom perimeter trim products.
- describe the tools needed for installing ceilings using special techniques.

CARPT 147 Advanced Grid Ceilings

Upon completion of this course, the student will be able to:

- assess and perform specific installation techniques in suspended framing and grid ceiling systems. It also covers industry standards, manufacturers' recommendations for proper installation of engineered ceilings, and proper tool selection and safety.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain the method for attaching data grid ceiling systems.
- demonstrate specific installation techniques.
- identify perimeter trim products.
- use reference points for the installation of lineal systems.
- identify special tools needed for grid ceiling installation.
- explain the installation procedure used for each specialty system.
- identify reference points used to install building perimeter systems.
- read and write pre-shift inspections for equipment and work area.

CARPT 148 Access Floor Systems

Units: 1.5
Hours: 24 hours LEC; 12 hours LAB
Prerequisite: None.
Enrollment Limitation: Must be a registered Acoustical Installer apprentice.
Catalog Date: June 1, 2020

This course is an introduction to the installation of Access Floor Systems. It also covers hand tool ergonomics, safety, and maintenance.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify the components and materials used for Access Floor Systems.
- explain how to inspect the job site, prepare the existing floor, and layout and level the access floor.
- describe tools used for layout and leveling and identify the proper testing equipment required.
- explain how to install stringer system reinforced perimeter locations, bridge obstructions, and additional bracing.
- describe the process of installing access floor panels, cutting panels, and framing around obstructions.
- explain the procedures used for installing handrails and stairs.
- describe the installation of low-profile wire management floors.
- list the uses, benefits, and code requirements of access floors.

CARPT 150 Concrete - Precast and Prestressed

Units: 1.5
Hours: 22 hours LEC; 15 hours LAB
Prerequisite: None.
Enrollment Limitation: Must be a registered Carpenter Apprentice.
Catalog Date: June 1, 2020

This course covers the use and placement of concrete in residential and commercial construction. Topics include mixing, testing, aggregate, curing, and construction designs, as well as precast and prestressed concrete, materials, forms, molds, handling, lifting devices, and the proper disposal and recycling of materials.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the advantages and disadvantages of precast and prestressed concrete methods.
- evaluate and proportion concrete components to achieve a required slump.
- perform and compare pull-pressure tests on bolts embedded at different depths and in different locations.
• analyze a basic set of bridge plans and tilt-up wall plans.
• calculate, lay out, and construct a girder wall form with a given set of blueprints.
• define the requirements in lifting and bracing tilt-up wall panels.

CARPT 155 Commercial Concrete

Units: 1.5
Hours: 23 hours LEC; 12 hours LAB
Prerequisite: None.
Enrollment Limitation: Must be a registered Carpenter Apprentice
Catalog Date: June 1, 2020

This course covers concepts and practices of commercial concrete construction. Topics include layout and construction of bolt patterns, concrete columns, and gang forms, as well as the types and methods used to safely build, shore, and place column caps and concrete decks.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• translate a set of commercial prints and lay out job grid lines.
• construct a bolt pattern and place it at the proper location and elevation.
• build, set, and brace a round fiber form column and square wood at the correct location.
• assemble, set, and brace a wall using composite metal or plywood panels.
• erect, line, and brace a section of Aluma-wall with taper ties and strongbacks.
• identify the components of a traditional wood-shore deck system, including Ellis shores, stringers, joists, and deck plywood.
• construct a wood shore deck with column caps included.
• assemble a steel post shoring system and set it to the correct elevation.
• identify the safety hazards of silica and the corrective measures to mitigate the danger.
• calculate the amount of concrete needed for various forms.
• exhibit safe work practices in the stripping and storing of forms.

CARPT 160 Blueprint Reading-Residential

Units: 1.5
Hours: 22 hours LEC; 15 hours LAB
Prerequisite: None.
Enrollment Limitation: Must be a registered Carpenter Apprentice.
Catalog Date: June 1, 2020

This course covers residential blueprints. Topics include "green" practices, conventions, lines, symbols, measurements, and specifications used for residential construction.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• identify the symbols and terms used in plot, foundation, floor, elevation, detail, mechanical, and electrical plans.
• interpret technical information given on schedules and written specifications.
• construct building layout and offset construction lines.
• list appropriate steps to complete building permit application.
• project building layout lines from given lot lines.
• identify different "green" practices for residential construction.
• identify Leadership in Energy and Environmental Design (LEED) and other organization requirements for certification.
- calculate elevations from information obtained from residential plot and foundation plans.

CARPT 162 Blueprint Reading-Commercial

- Units: 1.5
- Hours: 22 hours LEC; 15 hours LAB
- Prerequisite: None.
- Enrollment Limitation: Must be a registered Carpenter Apprentice.
- Catalog Date: June 1, 2020

This course covers commercial and industrial blueprints. Topics include conventions, lines, symbols, measurements, and specifications used for commercial and industrial construction. It also covers CalGreen codes.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- compare graphic (blueprint) information with written (specifications) information.
- locate relevant codes in the Construction Safety Orders.
- sketch different architectural lines used on blueprints following a given legend.
- extract the information necessary to construct a photovoltaic support structure using a set of blueprints.
- estimate the quantity and cost of material needed to construct parts of the building.
- extract the information necessary to construct a section of a building using a set of blueprints.

CARPT 163 Modular System Blueprint Reading

- Units: 1
- Hours: 13 hours LEC; 23 hours LAB
- Prerequisite: None.
- Enrollment Limitation: Must be a registered carpentry modular systems installer apprentice.
- Catalog Date: June 1, 2020

This course is an introduction to blueprint reading, project specifications, and layout for modular systems. It also covers union trust fund benefits.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify different lines and symbols used on print drawings.
- demonstrate proper layout of wall locations for modular systems.
- utilize a laser and target to perform elevation readings.
- identify safety hazards of working with a laser layout device.
- understand the union benefit package.

CARPT 164 Acoustical Blueprint Reading

- Units: 1.5
- Hours: 24 hours LEC; 12 hours LAB
- Prerequisite: None.
- Enrollment Limitation: Must be a registered carpentry acoustical apprentice.
- Catalog Date: June 1, 2020

This course introduces the acoustical apprentice to advanced specialized blueprint reading. It also covers basic construction documents, project scheduling, and labor cost estimation.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- explain the purpose, printing, modifications, and assembly of acoustical blueprints.
- identify the various lines, pictorial drawings, views, symbols, and other characteristics that may be found on acoustical blueprints.
- describe the importance of a construction schedule and daily job log and organize labor in conjunction with the construction schedule.
- calculate the progress of a project in terms of completion.
- estimate the labor hours needed to complete various types of work.
- bisect lines and angles for layout purposes.
- layout segmented arches using different methods and procedures.

CARPT 170 Roof Framing

Units: 1.5
Hours: 22 hours LEC; 15 hours LAB
Prerequisite: None.
Enrollment Limitation: Must be a registered Carpenter Apprentice.
Catalog Date: June 1, 2020

This course covers roof framing, layout, and construction. Topics include industry terminology, technical information, and construction materials and methods, all of which are used in planning and building several types of roofs. It also covers industry standards and codes.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- lay out rafters for various types of roofs.
- identify five or more roof designs.
- analyze drawings of different roof types.
- calculate and construct a gable, hip, and intersecting roof.
- identify the components of roof systems.
- explain the functions of different truss designs.

CARPT 180 Stair Building

Units: 1.5
Hours: 22 hours LEC; 15 hours LAB
Prerequisite: None.
Enrollment Limitation: Must be a registered Carpenter Apprentice.
Catalog Date: June 1, 2020

This course covers types, designs, nomenclature, and Uniform Building Code (UBC) requirements for building stairs. Topics include mathematical calculations and layout procedures for constructing stairs, landings, newels, and handrails.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- estimate the cost and materials for various types of stairs.
- determine the dimensions of stair rise and run.
- calculate and lay out risers and treads on a stair stringer with a framing square fitted with stair gauges.
- evaluate, locate, and construct landings and platforms.
- calculate and lay out form work for a self-supporting concrete stair.
- select appropriate UBC codes necessary to design and construct a stairway.
CARPT 181 Tools of the Trade and Installation of Hardwood Floors

This course introduces Hardwood Floor Layer Apprentices to the installation of hardwood floors per industry standards. It covers tool and equipment identification, safety, and proper maintenance procedures.

Upon completion of this course, the student will be able to:

- identify the proper tools and equipment needed for the installation of various hardwood floors.
- practice safe use of tools and equipment.
- apply proper tool and equipment maintenance techniques.
- use tools and equipment to properly install hardwood floors.

CARPT 182 Finishing and Repairing Floors

This course introduces Hardwood Floor Layer Apprentices to the process of finishing and repairing hardwood floors per industry standards. It also covers installation of athletic and parquet flooring.

Upon completion of this course, the student will be able to:

- apply hardwood floor finishing techniques.
- demonstrate proper floor repair processes.
- identify materials needed for athletic flooring and parquet flooring.
- apply athletic flooring installation techniques.
- apply parquet flooring installation techniques.
- identify appropriate baseboard and trim for flooring.

CARPT 190 Introduction to Welding and Cutting

This course covers welding methods, brazing, and flame cutting. Topics include thermoforming and thermosetting plastics applicable to the building construction industry.

Upon completion of this course, the student will be able to:

- explain basic theory in safety and welding techniques used for each welding process.
set up and operate oxy acetylene and arc welding equipment properly.
produce neat and strong welds on metals using oxy acetylene and arc welding equipment.
analyze and perform methods of joining and welding plastic materials.
produce welds to meet industry standards in the carpenter’s profession.

CARPT 210 The Acoustical Apprentice, Safety, and the Trade

This course introduces the acoustical apprentice to fall protection, tool safety and maintenance, and scaffold safety and maintenance. It also covers Occupational Safety and Health Administration (OSHA) 10, First Aid and CPR certifications.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• explain allowable loads for various types of scaffold.
• explain the safe use of scaffolds and materials.
• list requirements for platform construction.
• identify and safely demonstrate use of hand and power tools.
• identify the components of a personal fall protection system (PFPS) and a personal fall arrest system (PFAS).
• explain the rules and regulations of PFPS and PFAS.
• apply CPR and First Aid.
• define OSHA safety regulations.

CARPT 211 Acoustical Installer Safety

This course introduces the beginning acoustical apprentice to safe work practices in the use of rolling scaffold systems, lasers, and hand and power tools. It also covers the necessary skills to obtain a welded frame scaffold qualification card from the United Brotherhood of Carpenters (UBC).

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• interpret Occupational Safety and Health Administration (OSHA) regulations for scaffold, lasers, and tools.
• safely use power and hand tools.
• identify welded frame scaffold components.
• describe the use of welded scaffold.
• explain the method for cutting trim.
• explain the use of top locks on rolling scaffold.
• demonstrate pre-shift inspections for scaffold equipment.
• describe laser safety.
• perform hand tool inspection.

CARPT 212 Infection Control Risk Assessment and Hospital Code for Acoustical Installers

Units: 1.5
Hours: 24 hours LEC; 12 hours LAB
Prerequisite: None.
Enrollment Limitation: Must be a registered Acoustical Installer Apprentice.
Catalog Date: June 1, 2020

This course introduces the acoustical installer apprentice to the safety procedures for hospital work Infection Control Risk Assessment (ICRA). It also covers applicable building codes of acoustical ceiling systems used in hospitals.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• explain how local and state building codes are developed for the State of California
• define the additional installation requirements for acoustical ceilings in buildings deemed for essential services
• install an acoustical ceiling conforming with the regulations of the Office of Statewide Health Planning and Development
• describe how to read load charts
• list requirements for inspection of equipment
• list criteria for contamination from hospital remodels
• describe secondary infections that are contracted during hospital stays

CARPT 213 Acoustical Exterior Systems

Units: 1.5
Hours: 24 hours LEC; 12 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

This course introduces the acoustical apprentice to the installation of acoustical exterior systems. It also covers industry standards and manufacturers’ recommendations for proper installation and safety for exterior systems.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• demonstrate proper installation techniques.
• explain the installation procedure used for each system.
• identify custom perimeter trim products.
• use reference points for the installation of trim.
• identify metal ceiling systems components.
• identify special tools needed exterior acoustical systems.
• perform pre-shift inspections for equipment and work area.

CARPT 215 Acoustical Specialty Systems

Units: 1.5
Hours: 24 hours LEC; 12 hours LAB
Prerequisite: None.
Enrollment Limitation: Must be a registered Acoustical Installer Apprentice.
Catalog Date: June 1, 2020
This course introduces the Acoustical Apprentice to the installation of advanced and specialty ceiling systems. It also covers hand and power tool safety and aerial lift safety.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- identify custom perimeter trim products.
- use reference points for the installation of fabric trim.
- explain the method for attaching sound panels to the ceiling system.
- use reference points for the installation of curved trim.
- install Z-clips.
- interpret OSHA regulations for aerial lifts.

**CARPT 220 Millwright Safety and Tool Skills**

**Units:** 1.5  
**Hours:** 24 hours LEC; 12 hours LAB  
**Prerequisite:** None.  
**Enrollment Limitation:** Must be a registered Millwright apprentice.  
**Catalog Date:** June 1, 2020

This course is an introduction to the safety rules and regulations required to work on job sites. It also provides Millwright 16-hour Safety certification.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- employ personal protective equipment.
- understand basic safety practices with hand and power tools, scaffold and fall protection use, fire protection, respiratory protection, and confined spaces as required by the Occupational Safety and Health Administration's regulations.
- identify hazards of construction like asbestos and chemicals use.

**CARPT 221 The Millwright Apprentice and the Trade**

**Units:** 2  
**Hours:** 36 hours LEC  
**Prerequisite:** None.  
**Enrollment Limitation:** Must be a registered Millwright apprentice.  
**Catalog Date:** June 1, 2020

This course informs Millwright apprentices about the structure of their union, as well as their responsibilities and rights. It also covers union history and the development of a proper work ethic.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- identify and explain the roles and responsibilities of union officers.
- describe the responsibilities of the apprentice as required by Joint Apprenticeship and Training Committee (JATC) and other governing agencies.
- maintain the responsibilities required by the local union's constitution.
- identify the characteristics of a proper work ethic.

**CARPT 222 Millwright Math Applications and Fall Protection**
This course reviews math applications needed by Millwright apprentices and introduces the United Brotherhood of Carpenters (UBC) Fall Protection certification.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- add, subtract, multiply, and divide whole numbers, fractions, and decimals.
- convert fractions, decimals, inches, feet, fractions of inches, and non-metric to metric units.
- calculate area, volume, ratio, proportion, and circumference.
- demonstrate basic layout methods for establishing a right angle.
- identify and explain the components of a Personal Fall Arrest System (PFAS), methods of restraint, and the complications from suspension trauma.
- explain the requirements of a guardrail system.
- describe fall protection anchorage points for scaffolding.

CARPT 223 Cutting and Welding I

This course introduces the safe use of hand and power tools to perform shielded metal arc welding (SMAW), oxy-fuel welding, and plasma cutting. It also covers proper ergonomics.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify common hazards in welding and cutting and the proper methods to eliminate them.
- explain the appropriate applications for each type of welding and associated equipment and tools.
- discuss the electrode classification system and the electrode folder components.
- properly use various electrode holders.
- demonstrate the proper usage of an inverter and rectifier.
- explain the different processes for cutting steel.

CARPT 224 Materials of Construction

This course introduces, at a basic level, the hardware Millwrights encounter on the job site. It also covers different seals, structural materials, and appropriate application.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe threads and threaded fasteners.
• identify and explain various types of threaded fasteners and appropriate applications for each.
• identify and explain various unthreaded fasteners and alignment hardware, as well as appropriate applications for each.
• describe commonly used seals and their usage.
• outline external and internal retaining rings and explain the proper usage of each.
• identify the characteristics of a variety of shapes of structural materials and appropriate applications of each.

CARPT 225 Layout Procedures for Millwrights

Units: 1
Hours: 22 hours LEC; 14 hours LAB
Prerequisite: None.
Enrollment Limitation: Must be a registered Millwright Apprentice.
Catalog Date: June 1, 2020

This course introduces the Millwright Carpentry Apprentice to layout procedures using applied blueprint techniques. It also covers the safe use of lift trucks and rough terrain lift practices.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• identify layout tolerances as specified in plans.
• calculate and lay out angles using appropriate methods.
• locate and transfer benchmarks and establish elevations.
• identify the factors and equipment that contribute to lift truck stability.
• demonstrate standard hand signals and safe operations used for lift truck operations.
• apply safe practices for industrial and rough terrain lifts.

CARPT 226 Precision Optical Instruments

Units: 1.5
Hours: 24 hours LEC; 12 hours LAB
Prerequisite: None.
Enrollment Limitation: Must be a registered Millwright Apprentice.
Catalog Date: June 1, 2020

This course introduces the Millwright Apprentice to the precision optical instruments currently used by contractors for shaft alignment. It also covers General Electric (GE) turbine familiarization as well as blueprint reading.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• explain how to set up and calibrate optical instruments.
• identify and troubleshoot optical instruments.
• analyze faulty readings from optical instruments.
• list the required components of GE turbines.
• identify the information provided on mechanical prints.
• identify the characteristics and uses of assembly prints.

CARPT 227 Blueprint Reading and Aerial Lift

Units: 1.5
This course introduces Millwright apprentices to blueprint terminology and interpretation. It also covers the rules and regulations governing the safe use of aerial lifts.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- explain the purpose, printing, modifications, and assembly of blueprints.
- identify the various lines, pictorial drawings, and views that may be found on blueprints.
- interpret mechanical blueprints and welding symbols.
- describe the characteristics of self-propelled and manually-propelled aerial lifts and work platforms.
- perform a pre-shift inspection of an aerial lift.

**CARPT 228 Millwright Rigging**

- Units: 2
- Hours: 35 hours LEC; 5 hours LAB
- Prerequisite: None.
- Enrollment Limitation: Must be a registered Millwright apprentice.
- Catalog Date: June 1, 2020

This course introduces the Millwright Apprentice to rigging. It addresses the safety regulations and practices related to rigging and rigging hardware.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- describe the purpose of rigging and the components used.
- identify and demonstrate various types of knots, and state the limitations of each.
- describe the selection of rigging equipment and hardware to perform safe rigging practices.
- demonstrate safe rigging practices, including hand and voice signals.
- list and describe the different types of cranes used for rigging operations.
- describe the safety limits of equipment used in rigging.
- explain the rigger’s responsibility for safety on the job site.
- describe basic chain construction and design.

**CARPT 229 Cutting and Welding II**

- Units: 1.5
- Hours: 24 hours LEC; 12 hours LAB
- Prerequisite: None.
- Enrollment Limitation: Must be a registered Millwright apprentice.
- Catalog Date: June 1, 2020

This course expands on CARPT 223 and furthers the Millwright apprentice’s knowledge of shielded metal arc welding (SMAW) procedures and welding equipment. It also covers the safe use of welding and cutting with plasma and carbon arc equipment, as well as the American Welding Society (AWS) requirements for welding 2G, 3G, and 4G, horizontal, vertical, and overhead groove joints with SMAW.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- identify and explain the SMAW process, components, and safety issues.
• identify and explain the specifications and usage of electrodes.
• identify and explain carbon arc welding and cutting processes, components, and safety issues.
• identify and explain plasma welding and cutting processes, components, and safety issues.
• analyze and interpret weld bead examples.
• prepare a one-inch-thick groove joint that meets AWS standards.
• perform the AWS 3G unlimited thickness practice test with SMAW.

CARPT 230 Monorails

Units: 1.5
Hours: 24 hours LEC; 12 hours LAB
Prerequisite: None.
Enrollment Limitation: Must be a registered Millwright apprentice.
Catalog Date: June 1, 2020

This course introduces Millwright apprentices to various types of monorails, the materials, safety hazards, and the safe use of hand and power tools on job sites.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• describe the types, applications, and components of monorails.
• identify basic truss designs.
• explain the layout and fabrication of a monorail system.
• describe the methods for connecting support steel.
• identify the different types of fasteners used in support steel.
• describe an overhead monorail path layout.

CARPT 231 Conveyors for Millwrights

Units: 1
Hours: 16 hours LEC; 20 hours LAB
Prerequisite: None.
Enrollment Limitation: Must be a registered Millwright Apprentice.
Catalog Date: June 1, 2020

This course introduces the Millwright Apprentice to various types of conveyor systems including the major components and applications. It covers the methods and components used to install conveyor systems per industry standards.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• identify various types of conveyor systems and their installation procedures.
• describe common applications of conveyor systems.
• identify basic truss designs.
• describe the major components of a conveyor system.
• explain the layout and fabrication of header steel and methods for connecting and attaching support steel.
• construct an overhead conveyor system path.

CARPT 232 Machinery Installation
This course introduces the Millwright Apprentice to the proper installation of machinery per industry standards.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- apply proper site preparation and layout.
- identify and calculate anchoring devices.
- identify reference points.
- install machinery safely and effectively at the proper elevation.
- describe safety hazards during installation and during maintenance operations.

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**CARPT 233 Machinery Maintenance for Millwrights**

Units: 1.5  
Hours: 24 hours LEC; 12 hours LAB  
Prerequisite: None.  
Enrollment Limitation: Must be a registered Millwright Apprentice.  
Catalog Date: June 1, 2020

This course covers the basics of millwright machinery maintenance, troubleshooting, and repair.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- select and operate various millwright equipment.
- apply maintenance recordkeeping and reports.
- apply maintenance techniques for millwright machinery.
- describe possible safety hazards associated with maintenance tasks.
- calculate wear on components to determine if replacement is needed.
- identify resources for manufacturers’ specifications on scheduled maintenance and pre-startup requirements.

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**CARPT 234 Precision Tools for Millwrights**

Units: 1.5  
Hours: 24 hours LEC; 12 hours LAB  
Prerequisite: None.  
Enrollment Limitation: Must be a registered Millwright Apprentice.  
Catalog Date: June 1, 2020

This course introduces Millwright Apprentices to precision tools, accurate measurements for layout, leveling practices, and alignment per manufacturer and industry standards.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- identify various precision tools and describe their proper use and maintenance.
- demonstrate setup and use of laser alignment tools and optical instruments.
- demonstrate the proper use of an inside and outside micrometer.
explain the process of testing and setting up precision tools for accuracy.
calculate conversions for alignment.

CARPT 235 Turbines

This course introduces Millwright Apprentices to hydro, gas, and steam turbines. It covers proper assembly, installation, and maintenance per manufacturer and industry standards.

Upon completion of this course, the student will be able to:

- identify basic mechanical principles for power generation.
- list efficient hydroelectric power facilities and types of power generation.
- distinguish alternative energy sources, such as wind, nuclear, and tidal power.
- demonstrate proper procedure for working on turbines.
- identify causes of rotation in a steam turbine.
- identify different sections of a turbine.

CARPT 236 Cutting and Welding III

This course expands on CARPT 229 and furthers the Millwright Apprentice's knowledge of shielded Flux Core Arc Welding (FCAW) procedures and welding equipment. It also covers the safe use of welding and cutting with plasma and carbon arc equipment, as well as the American Welding Society (AWS) requirements for welding 3G and 4G, horizontal, vertical, and overhead groove joints with FCAW.

Upon completion of this course, the student will be able to:

- list and define the FCAW process, components, and safety issues.
- identify and explain the specifications and usage of electrodes.
- identify and explain arc welding and cutting processes, components, and safety issues.
- prepare a one-inch-thick vertical groove joint that meets AWS standards.
- produce the AWS 3G and 4G unlimited thickness practice test with FCAW.

CARPT 240 Piledriver Safety and Tools

This course introduces Piledriver apprentices to the ergonomics, safety, and maintenance of hand and power tools. It also covers hazard recognition in fall protection.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify and safely demonstrate hand tools usage.
- identify and safely demonstrate power tools usage.
- perform a hand and power tool safety check prior to use.
- identify the components of a personal fall protection system (PFPS) and a personal fall arrest system (PFAS).
- explain the rules and regulations of PFPS and PFAS.

CARPT 241 Pile Driver Math Applications

Units: 2
Hours: 36 hours LEC
Prerequisite: None.
Enrollment Limitation: Must be a registered Pile Driver Apprentice.
Catalog Date: June 1, 2020

This course covers mathematical processes in the construction trade with specific focus on the pile driving industry. It also covers personal financial responsibilities.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply mathematics such as addition, subtraction, multiplication, and division with whole numbers, fractions, and decimals.
- convert fractions, decimals, inches, feet, fractions of inches, and non-metric to metric units.
- calculate area, volume, ratios, proportion, and circumference.
- demonstrate basic layout methods for establishing a right angle.
- apply personal financial responsibilities including credit scores, budgets creation, and credit building.

CARPT 242 Piledriver Rigging

Units: 2
Hours: 35 hours LEC; 5 hours LAB
Prerequisite: None.
Enrollment Limitation: Must be a registered Piledriver apprentice.
Catalog Date: June 1, 2020

This course addresses the safety regulations and practices related to rigging and rigging hardware. It exceeds the requirements of OSHA Subpart CC, ANSI A10.42.2000 "Qualified Rigger," and ANSI B30.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the purpose of rigging and the components used.
- identify and demonstrate various types of knots and state the limitations of each.
- explain the selection of rigging equipment and hardware to perform safe rigging practices.
- demonstrate safe rigging practices, including hand and voice signals.
- list and describe the different types of cranes used for rigging operations.
- describe the safety limits of equipment used in rigging.
- explain the riggers responsibility for safety on the job site.
- describe basic chain construction and design.
CARPT 243 Form Detailing, Construction, and Erection for Pile Drivers

This course introduces the Pile Driver Apprentice to planning and building of form work, construction and erection of various concrete forms, and the materials and methods used. It also covers new building materials such as recycled and alternative materials.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify and list appropriate materials for the construction of concrete forms.
- describe the purpose of three or more types of forms and their uses.
- draft a concrete form detail drawing and specify the function of the concrete form.
- build a concrete construction form involving bucks, block-outs, and inserts.
- calculate concrete quantities for model forms.

CARPT 244 Welding I: Introduction to SMAW

This course introduces the Pile Driver Apprentice to the safety procedures while performing Shielded Metal Arc Welding (SMAW). It also covers equipment identification and welding consumables.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify appropriate personal protection equipment including proper clothing.
- identify common hazards and the proper performance methods in welding and cutting.
- explain the appropriate applications of SMAW welding, and the associated equipment, consumables, and tools.
- describe the electrode classification system and the electrode folder components.
- explain the different processes for cutting steel.

CARPT 245 Introduction to Land and Water Pile Driving

This course introduces the Pile Driver Apprentice to pile driving practices on land and in water. Topics covered include safety, pile driving equipment, aerial lifts, cranes, and booms.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify hazards and safe practices for pile driving on land or water.
- identify pile driving equipment and accessories.
- list pile driving equipment used in land and water applications.
- identify booms and cranes and their uses.
- apply aerial lift safety practices and proper operation techniques.

CARPT 246 Welding II: SMAW Flat Position and Forklift Certification

Units: 1.5
Hours: 24 hours LEC; 12 hours LAB
Prerequisite: None.
Enrollment Limitation: Must be a registered Piledriver apprentice.
Catalog Date: June 1, 2020

This course expands on CARPT 244 and the Piledriver apprentice's knowledge of the appropriate safety procedures when using shielded metal arc welding (SMAW) and oxy-fuel cutting and the associated components. This course focuses on welding groove joints, flat V-groove (1G), and horizontal V-groove (2G). It also provides certification as a Power Industrial Truck Operator.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe safety issues and the personal protective equipment used with shielded metal arc welding and oxy-fuel welding and cutting processes.
- describe electrode use and classification.
- demonstrate a knowledge of the types of electrode classifications and joint configurations and the welding techniques used.
- interpret weld bead examples.
- identify hazards associated with welding and cutting and power industrial truck operation.
- demonstrate an understanding of safely operating a power industrial truck and the factors that contribute to lift truck stability.

CARPT 247 Advanced Land and Water Pile Driving

Units: 1
Hours: 18 hours LEC; 18 hours LAB
Prerequisite: None.
Enrollment Limitation: Must be a registered Pile Driver Apprentice.
Catalog Date: June 1, 2020

This course introduces the Pile Driver Apprentice to advanced pile driving practices on land and in water. Topics covered include understanding pile driving equipment, cranes and booms, rigs, accessories, and pile driving hammers.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- list pile driving rig applications and safe practices.
- explain the advantages and disadvantages of using various cranes or booms.
- describe the similarities and differences of tieback walls and bulkheads.
- define pile driving accessories and their appropriate uses.

CARPT 248 Wharfage and Marine Structures

Units: 1
Hours: 18 hours LEC; 18 hours LAB
Prerequisite: None.
Enrollment Limitation: Must be a registered Pile Driver Apprentice.
Catalog Date: June 1, 2020
This course introduces the Pile Driver Apprentice to pile driving practices used in bridge erection, and the construction of wharf and marine structures. Topics include various types of lumber and heavy timber, their selection, proper application, natural defects, and basic repair work.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify wharf and marine structures.
- explain bridge erection applications.
- identify lumber and heavy timber grades used in bridge, wharf, and marine construction.
- list natural occurring defects in lumber and heavy timber.
- explain force loads and timber orientation.
- apply proper fastening and joining techniques.
- describe basic repair work.

CARPT 249 Welding III: Advanced SMAW

Units: 1.5  
Hours: 24 hours LEC; 12 hours LAB  
Prerequisite: None.  
Enrollment Limitation: Must be a registered Pile Driver Apprentice.  
Catalog Date: June 1, 2020

This course expands on CARPT 246 and the Pile Driver Apprentice's knowledge of the appropriate safety procedures when using Shielded Metal Arc Welding (SMAW) and oxy-fuel cutting and the associated components. This course focuses on welding vertical groove joints (3G). It also covers American Welding Society (AWS) requirements for achieving a welder certification in 3G with SMAW.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe hazards and the personal protective equipment used with SMAW and oxy-fuel welding and cutting processes.
- define specific electrode classifications.
- demonstrate knowledge of oxy-fuel cutting applications.
- examine weld beads for accuracy.
- prepare a one-inch vertical joint groove meeting AWS requirements.
- practice the AWS 3G unlimited thickness test using the SMAW process.

CARPT 250 Introduction to Structural Blueprints & Layout Instruments

Units: 1.5  
Hours: 24 hours LEC; 12 hours LAB  
Prerequisite: None.  
Enrollment Limitation: Must be a registered Pile Driver Apprentice.  
Catalog Date: June 1, 2020

This course introduces Piledriver apprentices to structural blueprint reading and layout.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain the purpose, printing, modifications, and assembly of structural blueprints.
- identify the various lines, pictorial drawings, views, and other characteristics that may be found on structural blueprints.
- interpret structural blueprints and symbols.
- explain and perform basic math in the ship builder's method.
- set up and use an automatic builder's level.

**CARPT 251 Advanced Structural Blueprints and Bridge Building**

**Units:** 1.5  
**Hours:** 24 hours LEC; 12 hours LAB  
**Prerequisite:** None.  
**Enrollment Limitation:** Must be a registered Pile Driver Apprentice.  
**Catalog Date:** June 1, 2020

This course introduces Pile Driver Apprentices to advanced structural blueprint reading and bridge building. Topics include bridge building practices, safety, pre-stressing, post-tensioning, and steel reinforcement of concrete. Basic concrete testing is also covered.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- interpret structural blueprint symbols, pictorial drawings, and specification details.
- explain steel reinforcement, pre-stressing, and post-tensioning reinforcement.
- list the major types of concrete bridges, including their design features and components.
- describe construction processes including cast-in-place, precast, segmental, cantilever, caisson, and cofferdam.
- identify safe practices for working both on land and over water.
- conduct basic concrete testing.

**CARPT 252 Falsework, Shoring, and Heavy Timber Framing**

**Units:** 1.5  
**Hours:** 24 hours LEC; 12 hours LAB  
**Prerequisite:** None.  
**Enrollment Limitation:** Must be a registered Piledriver apprentice.  
**Catalog Date:** June 1, 2020

This course introduces Piledriver apprentices to the construction of advanced concrete forms for bridges and shoring with the use of heavy timbers for support, known as falsework. It also covers the various building materials used to create formwork for elaborate decorative architectural designs.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- identify and explain the purpose, components, and construction of concrete falsework.
- name the structural components that can be fabricated from formwork and concrete.
- describe channel safety guidelines followed on the job site when doing falsework.
- identify and explain form hardware and its general purpose.
- identify the most commonly used types of form ties.
- compare the five methods contractors can use to control the related costs of formwork.
- explain why support steel elements and heavy timbers are used in concrete shoring and falsework.

**CARPT 253 Advanced Formwork**

**Units:** 1.5  
**Hours:** 24 hours LEC; 12 hours LAB  
**Prerequisite:** None.  
**Enrollment Limitation:** Must be a registered Piledriver apprentice.  
**Catalog Date:** June 1, 2020
This course introduces Piledriver apprentices to the construction of advanced concrete forms used in all types of installations.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify and explain the purpose, components, and construction of concrete formwork.
- name the structural components that can be fabricated from formwork and concrete.
- describe channel safety guidelines followed on the job site.
- identify and explain form hardware and its general purpose.
- identify the most commonly used types of form ties.
- compare the five methods contractors can use to control the related costs of formwork.
- explain why support steel elements such as rebar are used in concrete.

CARPT 254 Welding IV: SMAW 4G Certification

Units: 1.5
Hours: 24 hours LEC; 12 hours LAB
Prerequisite: None.
Enrollment Limitation: Must be a registered Piledriver apprentice.
Catalog Date: June 1, 2020

This course expands the Piledriver apprentice’s knowledge of the appropriate safety procedures when using shielded metal arc welding (SMAW) and oxy-fuel cutting and the associated components. It covers the American Welding Society (AWS) requirements for 4G certification, overhead groove joints with SMAW.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify and explain the SMAW process, components, safety issues, and appropriate protective personal equipment (PPE).
- identify and explain the specifications, classifications, and usage of electrodes.
- describe the hazards associated with overhead welding.
- analyze and interpret weld bead examples.
- perform the AWS 4G practice test with SMAW.

CARPT 255 Welding V: FCAW 3G Certification

Units: 1.5
Hours: 24 hours LEC; 12 hours LAB
Prerequisite: None.
Enrollment Limitation: Must be a registered Piledriver apprentice.
Catalog Date: June 1, 2020

This course expands on CARPT 254 and furthers the Piledriver apprentice’s knowledge of appropriate safety procedures when using flux core arc welding (FCAW) and oxy-fuel cutting and the associated components. It covers the American Welding Society (AWS) requirements for 3G certification, vertical groove joints with FCAW.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify and explain the entire FCAW process, components, safety issues, and appropriate protective personal equipment (PPE).
- identify and explain the specifications, classifications, and usage of electrodes.
- describe the hazards associated with vertical welding.
- analyze and interpret weld bead examples.
perform the AWS 3G practice test with FCAW.

CARPT 256 Welding VI: FCAW 4G Certification

Units: 1.5  
Hours: 24 hours LEC; 12 hours LAB  
Prerequisite: None.  
Enrollment Limitation: Must be a registered Pile Driver Apprentice.  
Catalog Date: June 1, 2020

This course expands on CARPT 255 and the Pile Driver Apprentice's knowledge of the appropriate safety procedures when using Flux Core Arc Welding (FCAW) and oxy-fuel cutting and the associated components. This course focuses on welding vertical groove joints (4G). It also covers American Welding Society (AWS) requirements for achieving a welder certification in 4G with FCAW.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe hazards and the personal protective equipment used with FCAW and oxy-fuel welding and cutting processes.
- define specific electrode classifications.
- demonstrate knowledge of oxy-fuel cutting applications.
- examine weld bead examples.
- prepare overhead groove joints meeting AWS requirements.
- practice the AWS 4G unlimited thickness test using the FCAW process.

CARPT 260 Introduction to Scaffolds and Confined Space

Units: 1.5  
Hours: 24 hours LEC; 12 hours LAB  
Prerequisite: None.  
Enrollment Limitation: Must be a registered Scaffold Erector apprentice.  
Catalog Date: June 1, 2020

This course introduces Scaffold Erector apprentices to the appropriate safety procedures when using scaffolds and working in a confined space. It also covers the proper use and maintenance of hand tools.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain allowable loads for various types of scaffolds.
- calculate contributory leg loads.
- describe the requirements for platform construction.
- list the criteria for supported scaffold systems.
- describe the assembly and disassembly of scaffolds.
- compare the responsibilities of a competent person versus a qualified person.
- explain the safe use of scaffolds, materials, and proper means of access and egress.
- describe the importance of fall protection and falling object protection.
- explain the atmospheric hazards in a confined space and methods to monitor and adjust the oxygen content.

CARPT 261 Welded Frame and Mobile Tower Scaffold

Units: 1.5  
Hours: 24 hours LEC; 12 hours LAB
This course introduces the Scaffold Erector apprentice to the industry safety procedures when assembling welded frame and rolling scaffolds.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- explain allowable loads for welded frame and rolling tower scaffold.
- calculate contributory leg loads.
- list requirements for platform construction.
- list criteria for welded frame and rolling tower scaffold.
- describe safe scaffold access and egress.
- compare the responsibilities of a competent person versus a qualified person.
- explain the safe use of welded frame and rolling tower scaffolds and materials.
- describe the importance of fall protection and falling object protection.
- explain the importance of building scaffolds on suitable surfaces.
- identify allowable height-to-base ratios.

**CARPT 262 System Scaffold**

Units: 1.5
Hours: 24 hours LEC; 12 hours LAB
Prerequisite: None.
Enrollment Limitation: Must be a registered Scaffold Erector apprentice.
Catalog Date: June 1, 2020

This course introduces the Scaffold Erector apprentice to industry safety procedures when erecting system scaffold, rolling scaffold, and supported scaffold.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- explain allowable loads for various types of scaffolds.
- calculate contributory leg loads.
- list requirements for platform construction.
- list criteria for supported scaffolds.
- describe safe scaffold access and egress.
- compare the responsibilities of a competent person versus a qualified person.
- explain the safe use of scaffolds and materials.
- describe the importance of fall protection and falling object protection.
- identify the main parts of the scaffold stair unit.
- explain the differences between safe access for users and erectors.

**CARPT 263 Hazard Awareness for Scaffold Erectors**

Units: 1.5
Hours: 26 hours LEC; 10 hours LAB
Prerequisite: None.
Enrollment Limitation: Must be a registered Scaffold Erector Apprentice.
Catalog Date: June 1, 2020
This course introduces the Scaffold Erector Apprentice to hazards of erecting and dismantling scaffolds. It also covers aerial lift rules and regulations per industry standards.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify hazards and safety precautions in the scaffold industry.
- list and define types of hazards and preventative safety precautions.
- interpret Occupational Safety and Health Administration (OSHA) regulations for aerial lifts.
- identify the characteristics and uses of aerial lifts.
- describe equipment in accordance with pre-shift inspection standards.

CARPT 264 Suspended Scaffolds and Shoring Systems

Units: 1
Hours: 20 hours LEC; 16 hours LAB
Prerequisite: None
Enrollment Limitation: Must be a registered Scaffold Erector Apprentice.
Catalog Date: June 1, 2020

This course introduces the Scaffold Erector Apprentice to the safety procedures and industry rules and regulations for suspended scaffolds.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- list the advantages and disadvantages of suspended scaffolds.
- describe the different types of suspended scaffolds and suspension equipment and devices.
- explain and identify the requirements for outrigger beams and anchorage connections.
- identify hazards and precautions for welding from suspended scaffolds.
- explain and describe platform requirements, load capabilities and fall protection for suspended scaffolds.

CARPT 265 Tube and Clamp Scaffold

Units: 1
Hours: 20 hours LEC; 16 hours LAB
Prerequisite: None
Enrollment Limitation: Must be a registered Scaffold Erector Apprentice.
Catalog Date: June 1, 2020

This course introduces the Scaffold Erector Apprentice to the safety procedures and industry rules and regulations for erecting tube and clamp scaffold systems.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain allowable loads and safe access for users and erectors.
- calculate contributory leg loads.
- demonstrate knowledge of the importance of fall protection and falling object protection.
- demonstrate the safe use of scaffold materials.
- list requirements and criteria for tube and clamp scaffold erection.
CARPT 266 Blueprint Reading for Scaffold Erectors

This course introduces the Scaffold Erector Apprentice to scaffold blueprint reading.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify print production and reproduction methods.
- define detail views and describe their uses.
- interpret blueprint symbols.
- construct a perpendicular line using the shipbuilders' method.
- interpret dimensions on scaffold shop blueprints.
- demonstrate the ability to manually revise blueprints.

CARPT 268 Welding II

This course introduces the Scaffold Erector apprentice to light gauge welding using shielded metal arc welding (SMAW) and flux core arc welding (FCAW). It also covers safety, ergonomics, the safe use of hand and power tools, and tool maintenance.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify welding hazards and safety methods to eliminate them.
- describe various bell resources used with the different kinds of welding and cutting.
- explain the electrode classification system.
- demonstrate the proper use various electrode holders.
- identify the different types of welding machines.
- identify the function of a rectifier and an inverter.
- explain different types of electrode folders and components.
- explain different types of welding.

CARPT 270 Mill Cabinet Safety and Tool Skills

This course introduces Mill Cabinet Apprentices to materials, safety hazards, and the safe use of hand and power tools on job sites.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- identify, select, maintain, and safely operate hand and power tools.
- avoid unsafe conditions and acts, and observe safety laws and regulations.
- discuss, explain, and describe the production process.
- obtain forklift operation and safety certification.

CARPT 271 The Mill Cabinet Apprentice and the Trade

Units: 1.5
Hours: 24 hours LEC; 12 hours LAB
Prerequisite: None.
Enrollment Limitation: Must be a registered Mill Cabinet Apprentice.
Catalog Date: June 1, 2020

This course covers the history of Mill Cabinet Apprentice and the trade. Topics include wages and benefits, workers' compensation, personal finances, job placement, collective bargaining, working conditions, and labor-management relations as they pertain to unions, contractors, and cooperatives.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze federal and state laws governing carpenters apprenticeship.
- evaluate the requirements of a job.
- identify unacceptable and acceptable working conditions.
- define terms and titles common to the construction industry.
- describe and list labor, management, contractors, and cooperatives within the area.
- understand personal financial responsibility.

CARPT 272 Math for the Trades

Units: 2
Hours: 36 hours LEC
Prerequisite: None.
Enrollment Limitation: Must be a registered Mill Cabinet Apprentice.
Catalog Date: June 1, 2020

This course covers mathematics applications in the mill cabinet trade with specific focus on mathematical processes related to the production requirements of the industry.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply mathematics such as addition, subtraction, multiplication, and division with whole numbers.
- convert fractions, decimals, inches, feet, fractions of inches, and non-metric to metric units.
- calculate perimeter, arc, volume, and weight measurements.
- calculate angles, degrees, and basic percentages.

CARPT 273 Basic Cabinet Making

Units: 1.5
Hours: 24 hours LEC; 12 hours LAB
Prerequisite: None.
Enrollment Limitation: Must be a registered Mill Cabinet Apprentice.
Catalog Date: June 1, 2020
This course introduces Mill Cabinet Apprentices to basic cabinetry building procedures per industry standards.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- identify need, function, and process for cabinet making.
- explain and describe the production and function of various cabinet styles.
- apply design elements and principles to create functional and attractive cabinets.
- select appropriate materials and production procedures for joint strength.

**CARPT 274 Basic Blueprint Reading Mill Cabinet**

<table>
<thead>
<tr>
<th>Units:</th>
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This course introduces Mill Cabinet Apprentices to blueprint terminology and interpretation.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- explain the purpose, printing, modifications, and assembly of blueprints.
- identify and describe the types of construction drawings and documents.
- interpret abbreviations, schedules and symbols on prints.
- convert English and metric measurements.

**CARPT 275 Machinery Maintenance for Mill Cabinet**

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This course covers the basics of mill cabinet machinery maintenance, troubleshooting, and repair.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- operate hand and portable power saws.
- select, maintain, and operate stationary power equipment.
- explain the sequence of steps to square work pieces and operate a portable power plane.
- apply maintenance techniques for mill cabinet machinery.

**CARPT 276 Cabinet Hardware Installation**

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</table>


This course introduces new Mill Cabinet Apprentices to basic cabinetry hardware installation procedures.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- select and identify knobs and pulls for function and appearance.
- explain various methods for mounting cabinetry hardware.
- describe and select nails, screws, and fasteners used in cabinetry installation.

CARPT 277 Sanding, Stains, and Finish Preparation

Units: 1.5
Hours: 24 hours LEC; 12 hours LAB
Prerequisite: None.
Enrollment Limitation: Must be a registered Mill Cabinet Apprentice.
Catalog Date: June 1, 2020

This course introduces the Mill Cabinet Apprentice to the processes of surface preparation for the staining and finishing of solid wood and veneered cabinetry.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- select abrasive materials for smoothing surfaces.
- operate portable and stationary power sanding machines.
- inspect material surfaces to determine if abrading is necessary and apply the appropriate process for surface defects such as dents, cracks, and voids.
- identify coatings for finishing wood surfaces and wood products.

CARPT 278 Advanced Machinery Operation

Units: 1.5
Hours: 24 hours LEC; 12 hours LAB
Prerequisite: None.
Enrollment Limitation: Must be a registered Mill Cabinet Apprentice.
Catalog Date: June 1, 2020

This course introduces new Mill Cabinet Apprentices to advanced machinery operation procedures.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- choose, maintain, and operate various saw blades, stationary power equipment, portable power planes, joiners, portable routers and Computer Numerical Control (CNC) machines.
- select, operate, and install shaper cutters, spindle shapers, and router bits.
- identify and select various machines and hand tools including shaping contours and decorative surfaces.

CARPT 279 Advanced Blueprint Reading for Mill Cabinet

Units: 1.5
Hours: 24 hours LEC; 12 hours LAB
Prerequisite: None.
Enrollment Limitation: Must be a registered Mill Cabinet Apprentice.
Catalog Date: June 1, 2020

This course introduces Mill Cabinet Apprentices to advanced blueprint terminology and interpretation.
Upon completion of this course, the student will be able to:

- describe the information found on a site plan and floor plan.
- explain how prints are designated in a set and list the information and specifications.
- explain the purpose of codes and regulations in the construction industry.
- describe what the Americans with Disabilities Act (ADA) is and how it impacts the mill cabinet industry.

CARPT 280 Advanced Cabinet Making

Upon completion of this course, the student will be able to:

- draw isometric, cabinet oblique, and perspective sketches.
- describe specifications and mock-up design analysis.
- identify the effects computers have on producing working drawings and cabinet making.
- create square- or profiled-edge frames and select joints for assembly.

CARPT 281 Veneers, Laminate, and Finishing

Upon completion of this course, the student will be able to:

- describe and apply the techniques of veneer and laminate application.
- identify the effects of different stains and paints on different type of veneers and the importance of specifications.
- use a router to trim edges using different bits.
- create square- or profiled-edge frames and select joints for assembly.
- explain the activities leading to a finished product.
This course introduces the Mill Cabinet Apprentice to computer-aided design and drafting using AutoCAD, Cabinet Vision, and Alphacam software systems.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- use AutoCAD drawing tools and methods to construct accurate 2D drawings.
- create and manage drawing layers, control object properties, and edit and modify files.
- construct and edit polylines and splines.
- use editing tools and grip editing to modify geometry.
- use inquiry commands to obtain drawing information.

CARPT 283 Introduction to CNC

Units: 1.5
Hours: 24 hours LEC; 12 hours LAB
Prerequisite: None.
Enrollment Limitation: Must be a registered Mill Cabinet Apprentice.
Catalog Date: June 1, 2020

This course introduces the Mill Cabinet Apprentice to the operation processes, maintenance, and tooling of Computer Numeric Controlled (CNC) machines.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- use AutoCAD’s precision drawing tools and methods to program CNC machines.
- control, manage, and operate CNC machines.
- construct mill project components.
- use lockout tagout procedures to retool CNC machines.
- use inquiry commands to obtain desired milling.

CARPT 284 Solid Surface Material, Fabrication, and Installation

Units: 1.5
Hours: 24 hours LEC; 12 hours LAB
Prerequisite: None.
Enrollment Limitation: Must be a registered Mill Cabinet Apprentice.
Catalog Date: June 1, 2020

This course introduces the Mill Cabinet Apprentice to constructing counter tops and back splashes, and finishing products according to industry standards.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify the major solid surface manufacturers and their products.
- successfully fabricate an L-shape solid surface counter top.
- demonstrate the safe use of tools and equipment necessary for constructing solid surface products.
- explain why planning is important in fabricating and installing solid surfaces.
- identify patterns and understand how they are used to transfer vital information.
- successfully repair cabinet surfaces.
CARPT 285 Advanced Project for Mill Cabinet

This course introduces the Mill Cabinet Apprentice to advanced cabinetry building procedures per industry standards.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- interpret shop drawings.
- identify material quantities using information contained on plans.
- explain how to lay out a project and the purpose of specifications.
- locate and list information found in project drawings.
- construct and complete an advanced project demonstrating journeymen-level skills.

CARPT 298 Work Experience in Carpenters Apprenticeship

This course provides students the opportunity to work in the carpenters apprenticeship program for the purpose of developing specific skills to meet the goals and objectives of the carpenters Joint Apprenticeship and Training Committee (J.A.T.C.). Students complete work experience hours at approved training sites. Students may take up to 16 units total across all Work Experience course offerings. This course may be repeated when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate competencies for effective and competitive workforce performance in carpenters apprenticeship program.
- demonstrate mastery of specific job skills as written in learning objectives under the supervision of the carpenters Joint Apprenticeship and Training Committee (J.A.T.C.).

Drywall/Lathers (DRLTH)

DRLTH 100 Introduction to the Trade

This course is an introduction to drywall/lathing apprenticeship, state and federal apprenticeship laws, apprenticeship record keeping, apprentice evaluation procedures, general safety, work ethic, sexual harassment issues, and basic tools of the trade.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify and interpret federal and state laws governing drywall/lathing apprentices.
• maintain an apprentice work record book.
• identify and avoid unsafe conditions and unsafe acts and observe safety laws and regulations.
• follow written and verbal directions.
• demonstrate proper procedures in administering first aid and CPR.
• describe drywall/lathing related organizations as they apply to the drywall/lathing apprenticeship.

DRLTH 102 Basic Applications

Units: 1.5
Hours: 21 hours LEC; 18 hours LAB
Prerequisite: None.
Enrollment Limitation: Registered Drywall/Lathing Apprentice
Catalog Date: June 1, 2020

This course is an introduction to basic gypsum wall covering and ceiling applications. It also includes taping installations, knot recognition, and application to rigging on construction job sites.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• identify different wall coverings.
• apply various knots to rigging situations.
• demonstrate basic gypsum wallboard coverings methods.
• apply pre-decorated gypsum wallboard.

DRLTH 103 Drywall Lathing Trade Safety

Units: 1.5
Hours: 24 hours LEC; 12 hours LAB
Prerequisite: None.
Enrollment Limitation: Must be a registered Drywall-Lathing Apprentice.
Catalog Date: June 1, 2020

This course covers trade safety for drywall lathing apprentices including hospital safety, rough terrain lift truck operation, and first aid and CPR.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• list tools, materials, and equipment used in the trade.
• explain proper safety practices when working in hospitals.
• list criteria for contamination from hospital remodels.
• describe secondary infections contracted during hospital stays.
• explain medical emergency recognition.
• define the different illnesses in a medical emergency.
• explain allowable loads for various types of rough terrain lift truck capacities.
• list requirements for equipment inspection.
• demonstrate CPR in a simulated scenario.
• define first aid practices.
DRLTH 105 Mathematics for Drywall/Lathers

Units: 2
Hours: 36 hours LEC
Prerequisite: None.
Enrollment Limitation: Registered Drywall/Lathing Apprentice
Catalog Date: June 1, 2020

This course covers mathematical applications for the drywall and lathing trades. Topics include whole numbers, fractions, decimals, ratios, proportions, percentages, angles and degrees, areas, and volumes.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply mathematics such as addition, subtraction, multiplication, and division with whole numbers, decimals, and fractions used in construction projects.
- convert measurement units used on construction job sites.
- calculate perimeter measurements, arc measurements, volume measurements, and weights.
- calculate angles, degrees, and percentages.

DRLTH 110 Residential Metal Framing

Units: 1.5
Hours: 18 hours LEC; 27 hours LAB
Prerequisite: None.
Enrollment Limitation: Registered Drywall/Lathing Apprentice
Catalog Date: June 1, 2020

This course covers basic residential metal framing. It includes framing of floors, walls, doors, windows, roofs, trusses, and stairs.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify and list the uses of appropriate materials in framing.
- build a framed floor.
- build a framed wall with door and window openings.
- build a roof and stair frames.

DRLTH 112 Doors, Windows, Exterior Systems/Building Documents

Units: 1.5
Hours: 21 hours LEC; 18 hours LAB
Prerequisite: None.
Enrollment Limitation: Registered Drywall/Lathing Apprentice
Catalog Date: June 1, 2020

This course covers the hardware, installation, and framing of doors and windows and exterior wall covering systems. It also covers blueprints and building codes.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify and install door and window frames.
- identify and install various doors.
- identify and install door and window hardware.
- identify, select, and install exterior wall coverings.
- analyze and interpret residential blueprints and relevant building codes.
DRLTH 120 Blueprint Reading I

Upon completion of this course, the student will be able to:

- identify the symbols and terms used in floor, elevation, and detail plans.
- interpret technical information given on schedules and specifications.
- construct building layouts from residential floor plans.
- identify the exterior wall finishes from residential plans.
- identify building codes that relate to plan interpretation.

DRLTH 121 Blueprint Reading II

This course is a continuation of DRLTH 120. Topics include interpretation, problem solving, correlating specifications, prints, addenda, notes, sections, and mathematics used with blueprints.

Upon completion of this course, the student will be able to:

- compare graphic (blueprint) information with written (specifications) information.
- identify structure and terminology used with specifications.
- identify and interpret various sections used on blueprints.
- apply calculations derived from details on blueprints.
- identify solutions for different given problems related to blueprint reading.

DRLTH 122 Blueprint Reading III

This course is a continuation of DRLTH 121. Topics include take-offs, material estimates, material requisition, job costs, and layout from blueprints.

Upon completion of this course, the student will be able to:

- identify procedures for blueprint take-offs.
• estimate the quantity of materials needed to construct requested parts of the building.
• estimate cost of material from given take-offs.
• analyze a set of prints and abstract the information necessary to construct requested sections of the building.

DRLTH 130 Welding I

Units: 1.5
Hours: 21 hours LEC; 18 hours LAB
Prerequisite: None.
Enrollment Limitation: Registered Drywall/Lathing Apprentice
Catalog Date: June 1, 2020

This course covers welding and welding concepts for construction job sites. Topics include welding safety, basic welding terms, definitions, positions, and cutting operations.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• explain basic theory in safety and welding techniques used for each welding process.
• demonstrate proper setup and operation of arc welding equipment.
• identify most commonly used welding electrode types and their basic uses.
• produce neat, strong welds on metals using arc welding equipment.
• demonstrate proper setup and operation of oxyacetylene equipment.

DRLTH 131 Welding II

Units: 1.5
Hours: 21 hours LEC; 18 hours LAB
Prerequisite: None.
Enrollment Limitation: Registered Drywall/Lathing Apprentice
Catalog Date: June 1, 2020

This course is a continuation of DRLTH 130. Topics include safety, concepts, processes, symbols, and certification performance of welding.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• explain the basic theory of safety and welding techniques used for each welding process.
• identify welding polarities and related symbols.
• identify most commonly used welding electrode types and their classifications.
• produce strong welds on metals using shielded metal arc welding (SMAW) and flux core arc welding (FCAW).
• identify and compare SMAW and FCAW job site applications.

DRLTH 140 Exterior/Advanced Fire Control System and Partitions

Units: 1.5
Hours: 21 hours LEC; 18 hours LAB
Prerequisite: None.
Enrollment Limitation: Registered Drywall/Lathing Apprentice
Catalog Date: June 1, 2020

This course covers safety, principles, theory, and application of advanced fire control systems. Topics include principles and applications of partitions and metal framing.
Student Learning Outcomes
Upon completion of this course, the student will be able to:

- interpret the theory and principles of advanced fire control systems.
- identify principles of partitions and metal soffits.
- layout and install different fire-stopping assemblies.
- layout and install different metal stud partitions used as fire control systems.

DRLTH 142 Exterior Systems and Trims

Units: 1.5
Hours: 21 hours LEC; 18 hours LAB
Prerequisite: None.
Enrollment Limitation: Registered Drywall/Lathing Apprentice
Catalog Date: June 1, 2020

This course covers safety, principles, and application of exterior wall framing, coverings, and trims.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- identify the principles of exterior wall framing.
- identify the principles of exterior wall coverings and trims.
- measure, cut, and assemble exterior wall coverings for commercial and residential lathing systems.
- measure, cut, and assemble wall coverings for commercial and residential foam systems.
- apply exterior lathing trims for commercial and residential applications.

DRLTH 150 Interior Metal Lathing System, Sound Control

Units: 1.5
Hours: 21 hours LEC; 18 hours LAB
Prerequisite: None.
Enrollment Limitation: Registered Drywall/Lathing Apprentice
Catalog Date: June 1, 2020

This course covers materials, principles, theory, and application of lath and plaster interior hollow walls and partitions. Topics include principles and application of sound control systems, an introduction to mathematics, and layout for building arches.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- interpret and apply the theory, materials, and principles of sound control systems.
- interpret and apply the theory, materials, and principles of lath, plaster hollow, and pre-fabricated walls.
- install interior lath wall coverings.
- describe the principles of solid lath and plaster partitions.
- interpret the principles and mathematics of arches.

DRLTH 160 Ceilings, Shaft Protection and Demountable Partitions

Units: 1.5
Hours: 21 hours LEC; 18 hours LAB
Prerequisite: None.
This course covers safety, materials, principles, theory, and installation of ceiling systems, demountable partitions, and shaft systems.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- interpret and apply the theory, materials, and principles of ceiling systems.
- interpret and apply the theory, materials, and principles of shaft systems.
- install a ceiling system per specifications.
- install a shaft system per specifications.
- describe and apply the principles of demountable partitions.

DRLTH 162 Arches, Furring and Advanced Systems

Units: 1.5  
Hours: 21 hours LEC; 18 hours LAB  
Prerequisite: None.  
Enrollment Limitation: Registered Drywall/Lathing Apprentice  
Catalog Date: June 1, 2020

This course covers safety, materials, principles, theory, and installation of furring, arch systems, and fire retardant materials.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- interpret and apply the theory, materials, and principles of furring systems.
- interpret and apply the theory, materials, and principles of arch systems.
- build arch systems to given specifications.
- build lathing and drywall furring systems.
- select, apply, and install fire retardant materials.

DRLTH 170 Advanced Construction Techniques

Units: 1.5  
Hours: 21 hours LEC; 18 hours LAB  
Prerequisite: None.  
Enrollment Limitation: Registered Drywall/Lathing Apprentice  
Catalog Date: June 1, 2020

This course covers safety, materials, principles, and theory of advanced construction techniques. Topics also include following written and verbal directions, construction directly from blueprints, and research techniques.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe and apply the theory, materials, and principles of advanced construction techniques.
- interpret blueprint information and apply it to construction projects.
- interpret and follow written and verbal directions in drywall and lathing installations.
- install advanced lathing and drywall systems.
DRLTH 298 Work Experience Drywall/Lathing Apprenticeship

This course provides students the opportunity to work in the drywall/lathing apprenticeship program for the purpose of developing specific skills to meet the goals and objectives of the drywall/lathing Joint Apprenticeship and Training Committee (J.A.T.C.). Students complete work experience hours at approved training sites. Students may take up to 16 units total across all Work Experience course offerings. This course may be repeated when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate competencies for effective and competitive workforce performance in drywall/lathing apprenticeship program.
- demonstrate mastery of specific job skills as written in learning objectives under the supervision of the drywall/lathing Joint Apprenticeship and Training Committee (J.A.T.C.).

Electrical Apprenticeship (ELECT)

ELECT 110 Electrical Apprenticeship I

This course is an introduction to electrical apprenticeship, electrical shop practices, basic electrical layout, tools of the trade, and construction materials. Topics include working with electrical related mathematics and basic electrical formulas.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify and avoid unsafe conditions and unsafe acts, and observe safety laws and regulations on construction jobsites
- apply electrical mathematics in fractions, basic trigonometric functions, square roots, Ohm's law, and power formulas
- identify and fabricate stubs, kicks, offsets, and bend saddles using electrical metallic tubing (EMT)
- apply the metric system and metrication conversions
- apply electrical mathematics in calculating resistance, current, voltage, and power in a DC series circuit
- demonstrate basic wiring devices to specified standards
- demonstrate basic operations of motor-operated personnel lifts
- identify basic electrical materials used on construction jobsites
- identify basic motorized hand tools used on jobsites

ELECT 111 Electrical Apprenticeship II

This course covers DC theory, DC series and parallel circuits, DC combination circuits, principles of electromagnetism, and power generation. Topics include an introduction to the National Electrical Code (NEC) and basic blueprint reading.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- relate voltage, current, resistance, and power functions in DC series, parallel, and combination circuits
- define the principles of magnetism and electromagnetism
- list chapters and basic outline of the NEC
- analyze basic residential blueprints
- demonstrate wiring of loads in series and parallel
- demonstrate proper wiring of 3-way and 4-way switches to control a load
- develop a basic PLC program to control a motor control process
- apply the NEC to calculate cable tray fill

ELECT 120 Electrical Apprenticeship III

Units: 3
Hours: 36 hours LEC; 70 hours LAB
Prerequisite: None.
Enrollment Limitation: Registered Electrical Apprentice
Catalog Date: June 1, 2020

This course covers AC theory, AC generation, use of instruments, and phase and circuit calculations. Topics include codeology and how it applies to the National Electrical Code (NEC).

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze and apply electrical mathematics to AC and DC generation and phase calculations
- apply electrical mathematics to inductance, capacitance, and reactance calculations
- analyze effects of reactance in electrical circuits
- demonstrate use of meters to confirm electrical calculations and to troubleshoot AC and DC circuits
- define the basic principles of codeology
- apply codeology principles to locate information in the NEC
- develop a basic PLC program to control a motor control process
- apply the NEC to calculate cable tray fill

ELECT 121 Electrical Apprenticeship IV

Units: 3
Hours: 36 hours LEC; 70 hours LAB
Prerequisite: None.
Enrollment Limitation: Registered Electrical Apprentice
Catalog Date: June 1, 2020

This course covers AC theory in series, parallel, and combination resistive-inductive (RL), resistive-capacitive (RC), inductive-capacitive (LC), and resistive-inductive-capacitive (RLC) circuits. Topics include conduit bending using a ratcheting and mechanical bender, transformer construction and installation, and applications of the National Electrical Code (NEC).

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate proper conduit bends using a ratcheting and mechanical bender
analyze residential and commercial blueprints and specifications
analyze and identify transformer connections and installations
analyze, identify, and evaluate electrical mathematics in RL, RC, LC, and RLC series, parallel, and combination circuits
apply codeology principles to locate information in the NEC
apply codeology principles to locate information in the NEC
develop a basic PLC program to control a motor control process
apply the NEC to calculate cable tray fill

ELECT 130 Electrical Apprenticeship V

Units: 3
Hours: 36 hours LEC; 70 hours LAB
Prerequisite: None.
Enrollment Limitation: Registered Electrical Apprentice
Catalog Date: June 1, 2020

This course covers electrical safety-related work practices specified by the National Fire Protection Agency publication 70E (NFPA 70E). It covers industrial blueprint reading, conduit bending using electro-hydraulic benders, and introductions to motor control and semiconductors. Additional topics include applying the National Electrical Code (NEC) with emphasis on grounding and bonding.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe and apply the requirements of Occupational Safety and Health Administration (OSHA) and NFPA 70E work practices
- analyze and apply Kirchoff's laws and power factor correction calculations
- demonstrate proper procedure for bending conduit using an electro-hydraulic bender
- analyze industrial blueprints, specifications, schedules, and details
- draw a basic 8-pin and 11-pin relay wiring layout and properly wire it in a simple motor control circuit
- describe how a simple semiconductor operates
- describe how transistors, zener diodes, silicon controlled rectifiers (SCR), triacs, diacs, and amplifiers function
- apply the NEC to grounding and bonding of electrical systems

ELECT 131 Electrical Apprenticeship VI

Units: 3.30
Hours: 36 hours LEC; 70 hours LAB
Prerequisite: None.
Enrollment Limitation: Registered Electrical Apprentice
Catalog Date: June 1, 2020

This course covers advanced grounding topics, transformer operation and theory, and advanced industrial blueprint reading. Topics include applying the National Electrical Code (NEC) and emphasis of over-current protection, transformers and ground fault protection.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Identify grounding system components
- Describe ground fault or short circuit conditions and implications
- Identify requirements for grounding separately derived systems
- Demonstrate proper procedures for earth testing
- Demonstrate proper terminations of a three-phase transformer
• Apply NEC tables to calculate over-current protection
• Demonstrate proper layout of an electrical room using blueprints, specifications, and the NEC
• Demonstrate an exothermic weld for a grounding system

ELECT 140 Electrical Apprenticeship VII

Units: 3.30
Hours: 36 hours LEC; 70 hours LAB
Prerequisite: None.
Enrollment Limitation: Registered Electrical Apprentice
Catalog Date: June 1, 2020

This course covers lightning protection systems, AC and DC motors, motor control systems. Topics include advanced blueprints and electrical room layout, as well as building take-offs.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• Identify different components of lightning protection systems
• Define principles of basic AC and DC motor theory
• Demonstrate proper three-phase motor termination
• Demonstrate proper wiring of 8-pin and 11-pin relay bases
• Analyze motor control diagrams
• Demonstrate proper wiring of motor control systems
• Analyze a complete electrical room layout based on blueprints
• Demonstrate a building take-off based on a set of blueprints

ELECT 141 Electrical Apprenticeship VIII

Units: 3
Hours: 36 hours LEC; 70 hours LAB
Prerequisite: None.
Enrollment Limitation: Registered Electrical Apprentice
Catalog Date: June 1, 2020

This course covers AC motor speed controls, National Electrical Manufacturing Association (NEMA) standards, motor control troubleshooting, digital electronics, and programmable logic controllers (PLCs). Topics include use of the National Electrical Code (NEC) with cable trays, electric welders, phase converters, hazardous locations, and special occupancies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• describe different components of a variable frequency drive (VFD)
• demonstrate proper wiring and basic programming of VFDs
• apply NEMA standards for sizing motor starters and controllers
• demonstrate proper troubleshooting techniques of motor control circuits
• describe the components of PLCs
• demonstrate proper wiring of PLCs
• develop a basic PLC program to control a motor control process
• apply the NEC to calculate cable tray fill
ELECT 150 Electrical Apprenticeship IX

This course covers fire alarms, security, power quality, stewardship training, and photo-voltaic systems. It also includes preparation for the California Electrician Certification examination.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify the functions and parts of a fire alarm system
- explain the difference between a Class A and a Class B fire alarm circuit
- identify different types of smoke and heat detectors and signaling devices
- identify common power quality issues
- interpret data received from a Fluke 43B power quality analyzer
- identify the functions and parts of a security system
- describe functions, components, and installation methods of a typical residential photo-voltaic system
- interpret the National Electrical Code (NEC) and its use for state certification

ELECT 151 Electrical Apprenticeship X

This course covers building automation, structured cabling systems, and an introduction to instrumentation used on industrial process controls. It also covers advanced programmable logic controllers (PLCs) used in motor control circuits.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe a building control network
- describe the physical components which make up a LonWorks network
- define terms associated with structured telecommunications wiring systems
- identify the elements of a structured telecommunications system
- define terms associated with instrumentation used in industrial process controls
- explain the benefits of the National Electrical Benefit Fund (NEBF)
- describe different methods of effective and ineffective leadership styles used on jobsites
- describe different models of effective and ineffective communications styles used on jobsites

ELECT 281 Green Technology High Efficiency Lighting

This course covers the latest in green technology and high efficiency lighting systems. It is designed for students who want to learn about energy-efficient lighting solutions and their applications in various industries.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify the benefits of high efficiency lighting systems
- describe the different types of high efficiency lighting technologies
- explain the role of lighting in energy conservation
- design lighting systems that meet energy efficiency standards
- understand the economic benefits of using high efficiency lighting systems

Units: 2
Hours: 27 hours LEC; 27 hours LAB
Prerequisite: None
Enrollment Limitation: Must be a current California State Certified General Electrician.
Catalog Date: June 1, 2020
This course covers installing, troubleshooting, commissioning and maintaining advanced lighting controls, switching controls, dimming controls, occupancy sensors, photosensors and controllers, distribution relay systems, remote controlled circuit breakers, and wireless systems. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- install green technology lighting controls.
- commission green technology lighting controls.
- maintain and troubleshoot green technology high efficiency lighting controls.
- define and describe the green technology high efficiency light control systems used for energy management.
- identify the components of advanced lighting systems and use of their schematics.
- summarize the energy efficiency legislation that mandates the use of lighting controls.
- identify the energy savings potential of lighting controls.
- identify the appropriate applications for using lighting controls.

ELECT 298 Work Experience in Electricians Apprenticeship

<table>
<thead>
<tr>
<th>Units:</th>
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<tbody>
<tr>
<td>Hours:</td>
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<td>Enrollment Limitation:</td>
<td>Indentured in the electricians apprenticeship program.</td>
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<tr>
<td>General Education:</td>
<td>AA/AS Area III(b)</td>
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<td>Catalog Date:</td>
<td>June 1, 2020</td>
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</table>

This course provides students the opportunity to work in the electricians apprenticeship program for the purpose of developing specific skills to meet the goals and objectives of the electricians Joint Apprenticeship and Training Committee (J.A.T.C.). Students complete work experience hours at approved training sites. Students may take up to 16 units total across all Work Experience course offerings. This course may be repeated when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate competencies for effective and competitive workforce performance in electricians apprenticeship program.
- demonstrate mastery of specific job skills as written in learning objectives under the supervision of the electricians Joint Apprenticeship and Training Committee (J.A.T.C.).

Electrician Trainee (ELTRN)

ELTRN 110 Electrician Trainee I

<table>
<thead>
<tr>
<th>Units:</th>
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</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>63 hours LEC; 27 hours LAB</td>
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<tr>
<td>Prerequisite:</td>
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<tr>
<td>Advisory:</td>
<td>MATH 100 or 132 with a grade of &quot;C&quot; or better</td>
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<td>Catalog Date:</td>
<td>June 1, 2020</td>
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</table>

This course is an introduction to the Commercial/Residential Electrician Trainee Program. It includes safety procedures, Occupational Safety and Health Administration (OSHA) requirements, Environmental Protection Agency (EPA) requirements, basic rigging, basic electrical mathematics, Ohm's Law, Direct Current (DC) theory, and construction related CPR and First Aid. This course meets the State of California requirement to obtain an electrician trainee license. This course was previously known as ELECT 210.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze and avoid unsafe conditions and unsafe acts, and observe safety laws and regulations.
explain the purpose of and demonstrate the safe use and care of both hand and power tools and equipment.

define the more commonly used hand tools.

demonstrate CPR and First Aid on adults for use on construction job sites.

calculate electrical mathematics problems with fractions, basic trigonometric functions, Ohm's Law, square roots, and power formulas.

apply electrical mathematics in calculating resistance, current, and voltage in DC series, parallel, and combination circuits.

integrate the metric system and metrication changes.

ELTRN 111 Electrician Trainee II

Units: 4
Hours: 63 hours LEC; 27 hours LAB
Prerequisite: ELTRN 110 with a grade of "C" or better
Catalog Date: June 1, 2020

This course covers Alternating Current (AC) theory, including AC and Direct Current (DC) generation, phase, and circuit mathematical calculations. It also covers the use of meters in different applications of alternating current, and provides a basic introduction to electronics and application of the National Electrical Code (NEC) to jobsite electrical installations. This course meets the State of California requirement to obtain an electrician trainee license. This course was formerly known as ELECT 211.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• calculate voltage, current, resistance, and power in AC and DC generators and phase calculations.

• apply electrical mathematics in inductance, resistance, and capacitance calculations.

• apply electrical mathematics in calculating inductive and capacitive reactance in series, parallel, and series-parallel circuits.

• apply the principles of magnetism and electromagnetism to circuits.

• define functions, operations, and characteristics of different solid state components.

• identify and apply National Electrical Codes to job-site electrical installations.

ELTRN 120 Electrician Trainee III

Units: 4
Hours: 63 hours LEC; 27 hours LAB
Prerequisite: ELTRN 111 with a grade of "C" or better
Catalog Date: June 1, 2020

This is the third course of the Commercial/Residential Electrician Trainee Program. Topics include conductors, cables, conduits, lighting systems, panelboard, switchboard, and overcurrent devices for residential and commercial installations. This course also covers reading blueprint drawings, making sketches, drawing architectural views, and identifying common blueprint scales and electrical symbols. This course as formerly known as ELECT 220.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• list different types of conductors and insulators with basic application for each type.

• identify different wiring methods for conductors, cables, and conduits.

• calculate wire size based on the National Electrical Code (NEC) ampacity tables for given installations.

• identify conductor and cable fault types and causes.

• apply NEC requirements for selecting conduits.

• demonstrate procedures for fabricating conduit bends with hand benders and power benders.

• list the functions, operations, and characteristics of various lighting systems.

• list the functions, operations, and characteristics of overcurrent devices.
list the functions, operations, and characteristics of panelboards and switchboards.
recognize symbols for electrical blueprints.
analyze functions of blueprints, specifications, schedules, addenda, and revisions in construction.

ELTRN 121 Electrician Trainee IV

Units: 4
Hours: 63 hours LEC; 27 hours LAB
Prerequisite: ELTRN 110 and 111 with grades of "C" or better
Catalog Date: June 1, 2020

This is the fourth course required for the Commercial/Residential Electrician Trainee Program. Topics include electrical grounding systems and lightning protection systems. It also includes jobsite personnel development and jobsite management. This course was formerly known as ELECT 221.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain terminology covering electrical grounding systems.
- identify different components of the grounded system.
- identify the different components of the grounding electrode system.
- calculate ground resistance using the fall-of-potential method of testing.
- identify the different components of a lightning protection system.
- list jobsite chain of command and scope of work performed by crafts.
- describe effective communication methods for jobsites.
- prepare basic documentation for jobsites.

ELTRN 130 Electrician Trainee V

Units: 4
Hours: 63 hours LEC; 27 hours LAB
Prerequisite: ELTRN 111 with a grade of "C" or better
Catalog Date: June 1, 2020

This is the fifth course required for the Commercial/Residential Electrician Trainee Program. Topics include fundamentals of motors, motor controllers, process controllers, generators, and transformers. Topics also include testing of cables, generators, and motors. This course meets the State of California requirement to obtain an electrician trainee license. This course was formerly known as ELECT 230.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the function, operation, and characteristics of various types of motors.
- describe the physical parts of most common motors.
- utilize the information on nameplates for the proper installation and operation of motors.
- demonstrate proper termination of single- and three-phase squirrel cage motors.
- describe the function, operation, and characteristics of motor controllers, circuits, and devices.
- describe the function, operation, and characteristics of motor switches and relays.
- demonstrate proper wiring of various motor control circuits.
- identify the function, operation, and characteristics of basic process control systems.
- describe the function, operation, and characteristics of Alternating Current (AC) and Direct Current (DC) generators.
- describe the function, operation, and characteristics of transformers.
select a proper transformer depending on voltage, current, and power requirements.

describe steps for various testing processes of cables, generators, and motors.

ELTRN 131 Electrician Trainee VI

Units: 4
Hours: 63 hours LEC; 27 hours LAB
Prerequisite: ELTRN 111 with a grade of "C" or better
Catalog Date: June 1, 2020

This is the sixth course required for the Commercial/Residential Electrician Trainee Program. Topics include fire alarm systems, burglar alarm systems, and information transport systems (ITS). This course also covers basic electrical requirements for heating, air conditioning, and refrigeration systems. It meets the State of California requirement to obtain an electrician trainee license. This course was formerly known as ELECT 231.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the function, operation, and characteristics of a fire alarm system and the individual components of the system.
- identify code requirements for fire alarm systems.
- select fire alarm cable and wiring method for various different jobsite conditions.
- demonstrate proper wiring of a basic fire alarm system.
- describe the function, operation, and characteristics of a burglar alarm system and individual components of the system.
- demonstrate proper wiring of a basic burglar alarm system.
- identify code requirements for burglar alarm systems.
- describe the function, operation, and characteristics of different information transport systems (ITS - voice, data, and video applications).
- demonstrate proper termination of various ITS connectors per industry standards.
- demonstrate proper installation techniques and termination procedure of fiber optic used in data communications.
- identify basic components of a heating, air conditioning, and refrigeration system.

ELTRN 180 Electrical Workers State Certification Preparation

Units: 4.5
Hours: 81 hours LEC
Prerequisite: None
Advisory: Completion of ELTRN 110 and 111.
Catalog Date: June 1, 2020

This is a preparatory course for the Electricians’ State Licensing Certification for California. It reviews basic electrical formulas and provides an in-depth review of the National Electrical Code (NEC) and safety. This course was formerly known as ELECT 280.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze the NEC for the State of California as it pertains to licensure.
- apply code requirements to installations and testing procedures.
- identify and describe code terminology.
- identify and correct code infractions.

Iron Workers (IW)
IW 100 Orientation and History of the Trade

Units: 1.5
Hours: 18 hours LEC; 27 hours LAB
Prerequisite: None.
Enrollment Limitation: Registered Ironworkers Apprentice
Catalog Date: June 1, 2020

This course introduces the responsibilities of an Ironworker's Apprentice. It includes the Ironworker's rules and regulations, record keeping, evaluations and advancement, work ethic, sexual harassment issues, and basic tools. It acquaints the Ironworker Apprentice with specifications that constitute a safe working environment under the Occupational Safety and Health Administration (OSHA); including an introduction to the rights and obligations that OSHA imposes. In addition, this course provides an orientation and overview of the history of the Ironworker trade.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- research the historical evolution of legislative laws responsible for the creation and maintenance of safe and healthful working environments.
- employ construction safety standards prescribed by OSHA and apply safe working practices and procedures relevant to iron work.
- discuss the reinforcing iron principle.
- describe the architectural and ornamental components of ironwork.
- discuss a broader understanding of Green Construction techniques.
- discuss honesty, integrity, and basic responsibilities.
- identify structural steel components of ironwork.
- demonstrate welding and burning techniques.
- discuss the history of the Ironworker trade.
- show various rigging methods.

IW 101 OSHA 30 for Ironworkers

Units: 1.5
Hours: 25 hours LEC; 15 hours LAB
Prerequisite: None.
Enrollment Limitation: Must be a state registered ironworker apprentice.
Catalog Date: June 1, 2020

This course provides the ironworker apprentice safety standards and regulations for construction project sites as required by the Occupational Safety and Health Administration (OSHA). Topics include general safety and health provisions, OSHA citation policies, fire protection and prevention, fall protection, personal protection equipment (PPE), safe handling and storage of materials, steel erection, and lifesaving practices and equipment.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify OSHA standards on the jobsite.
- use personal protection equipment properly.
- perform basic first aid and life saving procedures.
- perform proper fire protection and prevention practices.
- use cranes, hoists, elevators and conveyors safely.
- apply steel erection safety practices.

IW 110 Mixed Base

Units: 1.5
Hours: 18 hours LEC; 27 hours LAB
Prerequisite: None.
This course provides an overview of the type of construction blueprints commonly used with emphasis on function and interpretation. It offers a brief review of basic math skills and provides an opportunity to apply these skills in solving typical problems relevant to the Ironworker trade.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate facility, accuracy, and speed in adding, subtracting, multiplying, and dividing whole numbers, fractions, and decimals.
- convert a fraction, a decimal, or a percent to either of the other two forms.
- solve typical problems of the construction trade with the appropriate mathematics.
- read linear measurements accurately with a fractional ruler, a decimal ruler, a metric ruler, and a micrometer.
- read measuring tools calibrated in the metric system and demonstrate the ability to convert between traditional and metric units.
- use blueprints and construction drawings to interpret the various types of drawings used in the Ironworker trade.

IW 120 Rigging

Units: 1.5
Hours: 18 hours LEC; 27 hours LAB
Prerequisite: None.
Enrollment Limitation: Registered Ironworkers Apprentice
Catalog Date: June 1, 2020

This course introduces rigging applications such as wire rope, chains, slings, cranes, helicopters, ladders, and scaffolds. It also includes rigging safety, knot recognition and strength identification, and knot applications within rigging.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify, describe, and tie knots that are most widely used in the Ironworkers' trade.
- describe the various fibers used in making lines and identify characteristics of each.
- define common terms and identify parts and structure of various types of fiber lines and steel cables.
- demonstrate the proper use, care, preparation, and handling of fiber lines and steel cables.
- apply formulas and charts that determine the proper use, care, and selection of steel cable and fiber lines and their accessories.
- demonstrate the use of the various combinations of block and tackles, their components, and compute their mechanical advantage.
- identify various hoisting devices, their anchorage, and principal parts.
- apply common rigging techniques for scaffolds, ladders, and working supports.
- demonstrate the standard hand signals used in rigging.

IW 130 Reinforcing I

Units: 1.5
Hours: 18 hours LEC; 27 hours LAB
Prerequisite: None.
Enrollment Limitation: Registered Ironworkers Apprentice
Catalog Date: June 1, 2020

This course introduces standard codes, code classifications, plans, schedules, charts, and specifications commonly used by Ironworkers. Topics include construction techniques used in reinforcing concrete members with steel, use of bar supports, placement of reinforcing iron, and general principles of bar splicing and welding. Post-tensioning and pre-stressing techniques are also introduced.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- use reinforcing concrete construction methods on foundations, floors, and roofs.
- identify the placement of reinforcing steel.
- use hand tools for the bending and shearing of reinforcing rods.
- tie reinforcing rods and calculate the proper spacing.
- research the placement of reinforcement rods in foundations, footings, floors, and roofs.
- identify bar sizes by color code and other structural symbols.
- demonstrate the unloading, handling, and storage of reinforcing bars.

**IW 131 Reinforcing II/Post Tensioning**

- Units: 1.5
- Hours: 18 hours LEC; 27 hours LAB
- Prerequisite: IW 130 with a grade of "C" or better
- Enrollment Limitation: Registered Ironworkers Apprentice
- Catalog Date: June 1, 2020

This course expands the interpretation of standard codes, code classifications, plans, schedules, charts, and specifications commonly used in the Ironworker trade. Construction techniques, use of bar supports, placement of reinforcing iron, general principles of bar splicing, and welding are presented in depth.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- discuss pre-stressing applications as they relate to structural members.
- identify appropriate materials necessary for post-tensioning systems.
- determine the use of bar supports and placement of reinforcing iron in building structures.
- differentiate wire, bar, and bonded tendons.
- demonstrate the special applications of post-tensioning systems.
- identify types of protective coatings for barrier cables.
- explain blueprint and other drawings related to post-tension.

**IW 140 Precast Concrete and Metal Buildings**

- Units: 1.5
- Hours: 18 hours LEC; 27 hours LAB
- Prerequisite: None.
- Enrollment Limitation: Registered Ironworkers Apprentice
- Catalog Date: June 1, 2020

This course covers the erection of precast concrete and metal buildings. Topics include rigging, handling, and installing of structures in a safe and economical manner. It also covers reading and interpreting charts, tables, and blueprints.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- list equipment commonly used in erecting precast concrete members and metal buildings and cite the advantages and disadvantages of each.
- define rigging arrangements, lifting devices, and picking points commonly used in hoisting precast concrete members into a structure.
- identify the five structure erection blueprint layouts used for the installation of precast concrete members.
- select appropriate equipment and handling procedures for hoisting precast concrete members and metal buildings.
- demonstrate correct safety procedures for transporting, unloading, and erecting precast concrete and metal buildings.
- demonstrate the use of shimming, bearing pads, temporary shoring, bracing, guying, and various leveling techniques.
illustrate three groups of tolerances and the role of each to which precast concrete and metal buildings must conform.

describe appropriate joint design and proper clearance ploys in preset concrete installations.

explain the importance of protecting precast concrete items from stain and damage during and after structural erection.

discuss the history of metal roofing.

assemble secondary framing systems.

troubleshoot scaffold safety.

IW 150 Welding I

Units: 1.5
Hours: 18 hours LEC; 27 hours LAB
Prerequisite: None.
Enrollment Limitation: Registered Ironworkers Apprentice
Catalog Date: June 1, 2020

This course introduces the structure of ferrous metals and their reaction to heat. It covers the equipment and materials used for shielded metal-arc welding including safety hazards, charts, key terms, electrodes, and welding current controls.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe and demonstrate the oxy-fuel cutting process.
- identify and mitigate potential safety hazards.
- select proper electrodes for a job.
- set up primary variables for successful welding.
- describe carbon arc gouging (CAG).
- define key electrical terms.
- define terms related to voltage, including constant, variable, voltage drop, open-circuit, arc voltage, and polarity.
- demonstrate the proper use of welding equipment and machines.

IW 151 Welding II

Units: 1.5
Hours: 18 hours LEC; 27 hours LAB
Prerequisite: IW 150 with a grade of "C" or better
Enrollment Limitation: Registered Ironworkers Apprentice
Catalog Date: June 1, 2020

This course continues the study of ferrous metals and their reactions to heat. Equipment and materials employed in the use of shielded metal-arc and gas shielded-arc are included in this course.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate the arc welding process.
- describe the safety precautions for arc welding.
- identify weld symbols and special processes.
- differentiate between various flux core arc welding (FCAW) power source machines.
- set up the equipment for FCAW.
- troubleshoot FCAW problems.
• identify the characteristics of self-shielded flux core arc welding (FCAW-SS) electrodes.

IW 152 Welding III

Units: 1.5
Hours: 18 hours LEC; 27 hours LAB
Prerequisite: IW 151 with a grade of "C" or better
Enrollment Limitation: Registered Ironworkers Apprentice
Catalog Date: June 1, 2020

This course focuses on skill development in shielded metal arc and flux core arc welding on ferrous and non-ferrous metals. Vertical and overhead positions on all types of joints as they relate to structural stability are also covered.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• apply fusion-weld techniques to heavy gauge ferrous metals using low hydrogen electrodes and flux core wire electrodes.
• demonstrate the root and face bend welding test to American Welding Society standards.
• illustrate basic joint design and weld metallurgy.
• identify the uses and applications of ferrous and non-ferrous metals.
• select the proper procedure for the application of special metal techniques.

IW 160 Lead Hazard

Units: 1.5
Hours: 18 hours LEC; 27 hours LAB
Prerequisite: None
Enrollment Limitation: Registered Ironworkers apprentice.
Catalog Date: June 1, 2020

This course describes the health effects caused by lead exposure. Topics include the Occupational Safety and Health Administration (OSHA) regulations, sampling methods, legal rights of workers, and the use of proper protective equipment and work methods.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• discuss the history of the use of lead, the modern day uses of lead, and the exposure risks to lead.
• describe how lead enters the body, as well as the short and long term health effects associated with lead exposure.
• identify government agencies that regulate occupational exposure to lead as well as the regulations written to protect workers.
• show the methods which can be used to allow identification of lead coatings on the job.
• explain the requirements under the hazard communication program; how to read, interpret, and use a material data safety sheet as well as basic labeling systems.
• discuss the laws that protect workers.
• identify protective equipment that is commonly worn on steel structure jobs where lead is present.
• demonstrate typical work methods to avoid or prevent lead exposure associated with steel structures, bridges, and demolition activities.
• identify factors on the job site that directly affect safety.
• recognize legal responsibilities in working with products containing lead.
• describe required respiratory protection and the corresponding protection factors.

IW 170 Structural I

Units: 1.5
This course covers the theory and practice of blueprint reading, structural erection procedures, and proper steel structure construction.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- list various performance processes related to structural steel construction.
- discuss recommended building procedures related to structure steel construction.
- describe procedures for receiving and storing construction materials.
- explain blueprint and other drawings related to structural steel.
- identify open-web, long-span, and non-standard steel joists.
- perform job hazard analyses and describe procedures of safety meetings.

IW 171 Structural II

Units: 1.5
Hours: 18 hours LEC; 27 hours LAB
Prerequisite: IW 170 with a grade of "C" or better
Catalog Date: June 1, 2020

This course addresses the theory and practice of blueprint reading related to structure construction. Structural erection procedures including the operation of mobile and tower cranes and proper construction of various steel structures are presented.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the performance of various processes related to structural steel.
- demonstrate the recommended building procedures in structural steel construction.
- demonstrate the proper way to receive and store construction materials.
- describe the evolution and history of early cranes.
- define proper use and application of mobile and tower cranes in relation to structural steel construction.
- identify quadrants of crane operation.
- explain the requirements for working near power lines.
- demonstrate signaling procedures with tower, mobile, and telescoping cranes.

IW 180 Architectural/Ornamental I

Units: 1.5
Hours: 18 hours LEC; 27 hours LAB
Prerequisite: None.
Enrollment Limitation: Registered Ironworkers Apprentice
Catalog Date: June 1, 2020

This course covers the procedures and practices employed by the Ironworker in architectural and ornamental iron-working. Topics include tools, anchors, fasteners, and various layout instruments. Additionally, constructing curtain wall systems, applying sealants, and glazing systems are covered.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify different types of hand tools, powder actuated tools, anchors, and fasteners.
- recognize various types of sealants and glazings.
- name the various types of layout equipment.
- construct a curtain wall.
- construct a window wall.
- install anchors and fasteners.
- prepare joints and apply various types of sealants and glazings.
- identify types of fence and guard rails.
- identify detention systems and install detention frames, doors, and hardware.
- review procedures for storefronts and entryways.

IW 183 The History of Ironworkers

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This course covers the history of iron-working and the Ironworker Union movement from its birth in 1896 to the present.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- list the key events leading up to and including the inception of the Ironworker Union.
- explain key events in the life of the Ironworker Union from its birth to the present time.
- describe the Union's influence going into the 21st century.
- describe the impact of World War II on the Ironworker Union.

IW 186 Architectural/Ornamental II

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<td>Prerequisite:</td>
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This course is a continuation of IW 180 and provides detailed information on knowledge, procedures, and practices employed by the ironworker in architectural and ornamental iron working. Topics include tools, anchors, fasteners, and various layout instruments. Additionally, constructing curtain wall systems, applying sealants, and glazing systems are covered. This course is not open to students who have taken IW 181.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify different types of hand tools, powder actuated tools, anchors, and fasteners.
- recognize various types of sealants and glazings.
- name the various types of layout equipment.
- construct a curtain wall.
- build an on-site test chamber to measure air and water infiltration of window and curtain wall systems.
- install anchors and fasteners.
- prepare joints and apply various types of sealants and glazings.
IW 298 Work Experience in Ironworkers Apprenticeship

This course provides students the opportunity to work in the ironworkers apprenticeship program for the purpose of developing specific skills to meet the goals and objectives of the ironworkers Joint Apprenticeship and Training Committee (J.A.T.C.). Students complete work experience hours at approved training sites. Students may take up to 16 units total across all Work Experience course offerings. This course may be repeated when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate competencies for effective and competitive workforce performance in ironworkers apprenticeship program.
- demonstrate mastery of specific job skills as written in learning objectives under the supervision of the ironworkers Joint Apprenticeship and Training Committee (J.A.T.C.).

Operating Engineers Apprenticeship (OE3)

OE3 101 Introduction to Operators

This course introduces the skills and knowledge required to be a Construction Equipment Operator in the Operating Engineers Apprenticeship. Topics include an introduction to grade checking and the operation of a compactor, bulldozer, scraper, and backhoe.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate proper safety procedures when working with construction equipment.
- demonstrate basic grade-setting skills.
- describe the starting and stopping procedures for a loader, bulldozer, scraper, and backhoe per manufacturers’ recommendations.
- demonstrate the proper operation of equipment such as a loader, bulldozer, scraper, and backhoe per manufacturers’ recommendations.
- recognize the hazards of underground construction in a typical construction job site.
- demonstrate the proper hand signals used on job sites with heavy equipment.

OE3 102 Introduction to Heavy Duty Repair

This course is an introduction to the Heavy Equipment Operator in the Operating Engineers Apprenticeship. Topics include an introduction to electrical, pneumatic, hydraulic, and power train systems for heavy duty construction equipment. Additional topics include engines and safety.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- demonstrate proper safety procedures when working with construction equipment.
- solve electrical mathematical problems with Ohm’s Law and power formulas.
- demonstrate basic skills in problem-solving as they apply to electrical system repair.
- describe the principles of hydraulics and pneumatics in heavy equipment.
- identify components of diesel engines used in common heavy equipment.
- identify components of power trains used in common heavy equipment.
- describe safety procedures for the setup, starting and stopping of oxyacetylene equipment.
- describe safety procedures when using shielded metal arc welding (SMAW).

OE3 103 Introduction to Crane Operators

Units: 12
Hours: 164 hours LEC; 156 hours LAB
Prerequisite: None.
Enrollment Limitation: Registered Operating Engineer Apprentice.
Catalog Date: June 1, 2020

This course introduces the skills and knowledge to be a Crane Operator in the Operating Engineers Apprenticeship. Topics include rigging, crane operations, lubrication, booms, loading, and safety regulations.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate proper safety procedures when working with construction equipment.
- demonstrate proper use of load charts with crane operations.
- explain the initial proper configuration of a crane.
- explain the proper procedures for load control and tag lines.
- explain the regulations governing cranes.
- demonstrate various hand signals used on job sites with cranes.
- explain the pre-operational steps with inspections and maintenance.

OE3 104 Introduction to Grade Setter

Units: 8
Hours: 120 hours LEC; 72 hours LAB
Prerequisite: None.
Enrollment Limitation: Registered Operating Engineer Apprentice.
Catalog Date: June 1, 2020

This course introduces the skills and knowledge to be a Grade Setter in the Operating Engineers Apprenticeship. Topics include an introduction to grade checking and the operations of compactors, bulldozers, scrapers, and loaders.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate proper safety procedures when working with construction equipment.
- demonstrate basic grade-setting skills.
- describe the starting and stopping procedures for a loader, bulldozer, scraper, and backhoe per manufacturers’ recommendations.
- demonstrate the proper operation of equipment such as a loader, bulldozer, scraper, and backhoe per manufacturers’ recommendations.
OE3 110 Introduction to Dredge Operation

Units: 3  
Hours: 41 hours LEC; 39 hours LAB  
Prerequisite: None.  
Enrollment Limitation: Registered Operating Engineer Apprentice.  
Catalog Date: June 1, 2020

This course introduces dredge operations. Topics include principles of dredging, water safety, knot tying, hand signals, and crane operations for dredging operations.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- summarize the principles of dredging.
- demonstrate the safe operation of a dredge per manufacturers' recommendations.
- calculate the load requirements for a crane operating with a dredge platform using load charts.
- recognize proper water safety procedures for given dredge platform.
- apply different hand signals used in dredge operations.

OE3 112 Seamanship I

Units: 3  
Hours: 41 hours LEC; 39 hours LAB  
Prerequisite: None.  
Enrollment Limitation: Registered Operating Engineer Apprentice.  
Catalog Date: June 1, 2020

This course covers seamanship as it is required for dredge operations. Topics include boat handling, use of nautical charts, piloting, signaling, buoy safety, and general water safety requirements for dredge operations.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the hazards of weather, wind, waves, currents, tides and tidal currents, and how to deal with them.
- demonstrate the proper procedures to operate a vessel for dredging operations.
- use a nautical chart to locate a navigational course.
- identify buoy markers and their application for navigational purposes.
- demonstrate the different sound signals used in vessel operations.

OE3 115 Seamanship II

Units: 3  
Hours: 41 hours LEC; 39 hours LAB  
Prerequisite: OE3 112 with a grade of "C" or better  
Enrollment Limitation: Registered Operating Engineer Apprentice.  
Catalog Date: June 1, 2020

This course is a continuation of OE3 112. Advanced topics include marine rescue, lifeboat seamanship, dredging material handling, shipboard fire suppression, and shore operations.
Upon completion of this course, the student will be able to:

- describe the hazards of weather, wind, waves, currents, tides and tidal currents, and how to deal with them during rescue operations.
- explain the proper marine rescue methods during given scenarios.
- demonstrate the proper method to operate a lifeboat during rescue efforts.
- demonstrate the proper handling of shipboard fire suppression equipment.
- explain the proper management of dredge material in order to comply with federal and local code and regulations requirements.

OE3 120 Plant Operations

Units: 3
Hours: 41 hours LEC; 39 hours LAB
Prerequisite: None.
Enrollment Limitation: Registered Operating Engineer Apprentice.
Catalog Date: June 1, 2020

This course covers the operation, maintenance, and troubleshooting of batch, crushing, screening, and washing plants in the construction industry. Topics include maintenance procedures, erecting and dismantling, and types of materials.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain plant safety requirements.
- list different materials commonly processed in batch plants.
- describe the operation of batch plants.
- demonstrate the proper procedures for lubricating and maintaining a batch plant.
- demonstrate the proper troubleshooting techniques used in a crushing plant.

OE3 121 Welding and Cutting

Units: 3
Hours: 41 hours LEC; 39 hours LAB
Prerequisite: None.
Enrollment Limitation: Registered Operating Engineer Apprentice
Catalog Date: June 1, 2020

This course covers welding and oxy-acetylene used in batch, crushing, screening, and washing application plants. Topics include shop safety practices, proper selection of welding equipment, use of oxy-acetylene equipment, and proper welding techniques.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate proper safety procedures with each given welding and oxy-acetylene equipment.
- operate a cutting torch per manufacturer specifications.
- demonstrate the correct technique to operate an electric arc welding machine per manufacturer specifications.
- explain the techniques and methods used as a process for Shielded Metal Arc Welding (SMAW).
- explain the techniques and methods used as a process for Flux-Cored Arc Welding (FCAW).
- repair typical equipment used in plant operations by welding.
OE3 130 Backhoe & Excavator Operations

Units: 3
Hours: 41 hours LEC; 39 hours LAB
Prerequisite: None.
Enrollment Limitation: Registered Operating Engineer Apprentice
Catalog Date: June 1, 2020

This course covers the safe operation of a backhoe and/or excavator. Topics include trenching safety, hazards of underground construction, sloping, grade checking, and excavation for a manhole.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain the proper safety procedures to setup a backhoe and/or excavator.
- demonstrate the proper grade checking for elevation purposes.
- demonstrate the correct technique to operate a backhoe and/or excavator.
- slope a trench according to OSHA requirements.
- identify the controls for the operation of a backhoe and/or excavator.

OE3 131 Grade Checking

Units: 3
Hours: 41 hours LEC; 39 hours LAB
Prerequisite: None.
Enrollment Limitation: Registered Operating Engineer Apprentice
Catalog Date: June 1, 2020

This course covers grade checking for the construction equipment operator. Topics include grade setting terminology, stake marking, laser levelers, street section grading, Global Positioning System (GPS) devices, plan reading, metric conversions, and locating underground infrastructure.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain the terminology used in grade checking.
- demonstrate the proper grade checking for elevation purposes.
- setup a laser level to establish cut or fill.
- explain stake markings and terminology.
- prepare the layout of a pad with given grade stakes and blueprints.

OE3 132 Scrapers

Units: 3
Hours: 41 hours LEC; 39 hours LAB
Prerequisite: None.
Enrollment Limitation: Registered Operating Engineer Apprentice
Catalog Date: June 1, 2020

This course covers the operation of a scraper. Topics include equipment safety, grading, dumping and spreading, grade checking, and operation with a scraper.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate proper safety procedures to operate a scraper.
- demonstrate the proper grade checking for elevation purposes.
• demonstrate the correct technique to dumping and spreading with a scraper.
• demonstrate the ejector, apron, and cutting edge of a scraper.
• identify the controls for the operation of a scraper.

OE3 133 Loaders

Units: 3
Hours: 41 hours LEC; 39 hours LAB
Prerequisite: None.
Enrollment Limitation: Registered Operating Engineer Apprentice
Catalog Date: June 1, 2020

This course covers the safe operation of a loader. Topics include equipment safety, loading, transporting, stockpiling, and hand signals.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• explain the proper safety procedures to operate a loader.
• demonstrate the proper load balancing for a loader.
• demonstrate proper loading and hauling techniques of a loader.
• demonstrate the correct usage of hand signals for loaders.
• identify the controls for the operation of a loader.

OE3 134 Motor Grader

Units: 3
Hours: 41 hours LEC; 39 hours LAB
Prerequisite: None.
Enrollment Limitation: Registered Operating Engineer Apprentice
Catalog Date: June 1, 2020

This course covers the operation of a motor grader. Topics include equipment safety, grading, mixing, compaction density, grade checking, and v-ditching.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• explain the proper safety procedures to operate a motor grader.
• demonstrate the proper grade checking for elevation purposes.
• demonstrate the correct technique to mixing with required compaction density with a motor grader.
• demonstrate the operation of a global positioning system (GPS) with a motor grader.
• identify the controls for the operation of the motor grader.

OE3 135 Dozers

Units: 3
Hours: 41 hours LEC; 39 hours LAB
Prerequisite: None.
Enrollment Limitation: Registered Operating Engineer Apprentice
Catalog Date: June 1, 2020

This course covers the operation of dozers. Topics include equipment safety, cutting, spreading, and grade checking.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- explain the proper safety procedures to operate a dozer.
- demonstrate the proper grade checking for elevation purposes.
- demonstrate the correct technique to cutting and spreading with a dozer.
- demonstrate the operation of a global positioning system (GPS) with the dozer.
- identify the controls for the operation of a dozer.

OE3 136 Directional Drilling

Upon completion of this course, the student will be able to:

- explain directional drilling safety requirements.
- list different components of the tracker controller.
- describe the operation of the tracker control.
- demonstrate the procedures for lubricating and maintaining a directional drilling machine.
- demonstrate the calculations used with directional drilling machines such as hole volume, fluid-to-soil ratios, and other given methods.

OE3 140 Boom Pumps

Upon completion of this course, the student will be able to:

- list the various boom pumps with sizes and pumping capabilities.
- demonstrate the safe operation of a boom pump per manufacturers' recommendations.
- calculate the necessary mixes, additives, and slumps for the materials.
- explain potential hazards on a job site.
- apply different hand signals used in boom pumping operations.

OE3 141 Line Pumps
This course introduces line pumps, such as those for ground concrete pumping. Topics include safety, maintenance, components, controls, hand signals, and blockages.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- list the various line pumps with sizes and pumping capabilities.
- demonstrate the safe operation of a line pump per manufacturers’ recommendations.
- calculate the necessary mixes, additives, and slumps for the materials.
- explain potential hazards on a job site.
- apply different hand signals used in line pumping operations.

OE3 142 Advanced Boom Pumps

Units: 3
Hours: 41 hours LEC; 39 hours LAB
Prerequisite: OE3 140 with a grade of "C" or better
Enrollment Limitation: Registered Operating Engineer Apprentice.
Catalog Date: June 1, 2020

This course covers advanced boom pumps such as those used for overhead concrete pumping. Topics include advanced safety, preventative maintenance, components, controls, hand signals, blockages, and troubleshooting procedures.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- list the various boom pumps with sizes and pumping capabilities.
- demonstrate the safe operation of a boom pump per manufacturers’ recommendations.
- calculate the necessary mixes, additives, and slumps for the materials.
- explain potential hazards on a job site.
- apply different hand signals used in boom pumping operations.
- demonstrate the troubleshooting of a boom pump with given schematic drawings.

OE3 143 Advanced Line Pumps

Units: 3
Hours: 41 hours LEC; 39 hours LAB
Prerequisite: OE3 141 with a grade of "C" or better
Enrollment Limitation: Registered Operating Engineer Apprentice.
Catalog Date: June 1, 2020

This course covers advanced line pumps, such as those used for ground concrete pumping. Topics include advanced safety, preventative maintenance, components, controls, hand signals, blockages, and troubleshooting procedures.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- list the various line pumps with sizes and pumping capabilities.
- demonstrate the safe operation of a line pump per manufacturers’ recommendations.
- calculate the necessary mixes, additives, and slumps for the materials.
- explain potential hazards on a job site.
- apply different hand signals used in line pumping operations.
OE3 160 Grade Setting I

This course introduces the skills and knowledge required to be a grade setter in the Operating Engineer Apprenticeship. Topics include surveying principles, plan reading, global positioning systems (GPS), cut/fill slope staking, street section grading, and pad layout.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate the layout of a level pad according to the prints.
- demonstrate the proper grade checking for elevation purposes.
- demonstrate the layout for grading a street section.
- explain the markings on a grade stake for cut and fill markings.
- demonstrate the setup of a GPS file management for a Topcon system.

OE3 161 Grade Setting II

This course covers the advanced skills and knowledge required to be a grade setter in the Operating Engineer Apprenticeship. Topics include sloping pad layout, sidewalk, curb, and gutter grading, and catch point slope staking using global positioning systems (GPS) for Trimble systems.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate the layout of a sloping pad according to the prints.
- demonstrate the proper grade checking for elevation purposes.
- demonstrate the layout for grading a sidewalk, curb, and gutter section.
- explain the markings on a grade stake for catch point slope staking.
- demonstrate the setup of a GPS file management for a Trimble system.

OE3 182 Heavy Duty Equipment Hydraulics

This course covers hydraulic systems of heavy duty equipment. Topics include pumps, actuators, hoses, schematic drawings, and similar systems.

Student Learning Outcomes

Upon completion of this course, the student will be able to:
• describe the fundamentals of hydraulics.
• apply and list Pascal's Laws of Hydraulics.
• define viscosity of hydraulic fluids.
• identify the different components of hydraulic systems in heavy duty equipment.
• diagnose a basic hydraulic system.

OE3 183 Engines

Units: 3
Hours: 41 hours LEC; 39 hours LAB
Prerequisite: None.
Enrollment Limitation: Registered Operating Engineer Apprentice.
Catalog Date: June 1, 2020

This course covers the principles, operation, and diagnosis of heavy duty engines commonly used in construction equipment, such as earth moving equipment. Topics include fuel systems, specialty tool usage, and troubleshooting techniques.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• identify shop safety requirements.
• define and explain how compression ignition is used in diesel engines.
• explain the operating principles of the different components in heavy duty diesel engines.
• list the functions of the fuel injection system used in modern engines.
• demonstrate component analysis when troubleshooting a heavy duty diesel engine.

OE3 184 Power Trains

Units: 3
Hours: 41 hours LEC; 39 hours LAB
Prerequisite: None.
Enrollment Limitation: Registered Operating Engineer Apprentice.
Catalog Date: June 1, 2020

This covers the principles, operation, and diagnosis of heavy duty power trains commonly used in construction equipment such as earth moving equipment. Topics include shop safety, transmissions, drive-lines, differentials, and troubleshooting techniques.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• explain shop safety requirements.
• list the components in the power train and explain the basic operations.
• describe the operation of three basic types of clutches.
• define the purpose and operation of a manual transmissions used in heavy duty earth moving equipment.

OE3 185 Equipment Welding

Units: 3
Hours: 41 hours LEC; 39 hours LAB
Prerequisite: None.
Enrollment Limitation: Registered Operating Engineer Apprentice
Catalog Date: June 1, 2020
This course covers welding and oxyacetylene processes used in heavy construction equipment, such as bulldozers, backhoes, or earth moving equipment. Topics include shop safety practices, proper selection of welding equipment, use of oxyacetylene equipment, and proper welding techniques.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate proper safety procedures for welding and oxyacetylene equipment.
- demonstrate the correct technique to operate a cutting torch per manufacturer specifications.
- demonstrate the correct technique to operate an electric arc welding machine per manufacturer specifications.
- explain the techniques and methods used as a process for Shielded Metal Arc Welding (SMAW).
- explain the techniques and methods used as a process for Flux-Cored Arc Welding (FCAW).
- explain the basic concepts of metallurgy, inspection, testing, and distortion.

OE3 186 Lubrication Preventative Maintenance

Units: 3  
Hours: 41 hours LEC; 39 hours LAB  
Prerequisite: None.  
Enrollment Limitation: Registered Operating Engineer Apprentice.  
Catalog Date: June 1, 2020

This course covers lubrication preventative maintenance for the construction lube technician. Topics include lubricants, air filters, engine oils, and manufacturer services on heavy construction equipment.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the fundamentals of lubrication.
- perform manufacturer required preventative services.
- demonstrate specified engine oil replacement on earth moving equipment.
- demonstrate the inspection of equipment by manufacturer specifications.
- measure the different fluid levels in earth moving equipment.

OE3 187 Oils, Lubricants, and Coolants

Units: 3  
Hours: 41 hours LEC; 39 hours LAB  
Prerequisite: None.  
Enrollment Limitation: Registered Operating Engineer Apprentice.  
Catalog Date: June 1, 2020

This course covers oils, lubricants, and coolants for the construction lube technician. Topics include lubricants, engine oils, gear oils, transmission oils, grease, and coolants.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the fundamentals of lubrication.
- select hydraulic oils per manufacturer specifications for heavy construction equipment.
- record properly services being done on heavy construction equipment.
- determine the different viscosity requirements for heavy construction equipment depending on environmental conditions.
OE3 188 Servicing and Inspections

This course covers servicing and inspection skills for the construction lube technician. Topics include minor repairs, performing services, and inspecting for prevention.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- perform inspections on heavy construction equipment for preventative measures.
- select hydraulic oils per manufacturer specifications for heavy construction equipment.
- record properly services being done on heavy construction equipment.
- perform minor repairs on heavy construction equipment.
- select oil samples and determine potential problems with heavy construction equipment.

OE3 298 Work Experience in Operating Engineers Apprenticeship

This course provides students the opportunity to work in the operating engineers apprenticeship program for the purpose of developing specific skills to meet the goals and objectives of the operating engineers Joint Apprenticeship and Training Committee (J.A.T.C.). Students complete work experience hours at approved training sites. Students may take up to 16 units total across all Work Experience course offerings. This course may be repeated when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate competencies for effective and competitive workforce performance in operating engineers apprenticeship program.
- demonstrate mastery of specific job skills as written in learning objectives under the supervision of the operating engineers Joint Apprenticeship and Training Committee (J.A.T.C.).

Pre-Apprenticeship (PREAP)

PREAP 111 Infrastructure Pre-Apprenticeship

This course provides an introduction to infrastructure apprenticeships. It covers tools, equipment, materials, and techniques used for building roads, bridges, levees, and rail. Topics also include job safety, physical requirements for different job sites, employability skills for apprenticeship, and California apprenticeship laws. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:
• demonstrate job interview skills needed for the infrastructure apprenticeships.
• demonstrate the safe use and care of both hand and power tools.
• identify safety laws, regulations, and safe working conditions for apprenticeship training.
• demonstrate competency in basic infrastructure calculations.
• describe basic skills required for the construction of roads, bridges, levees, and rail.
• describe infrastructure construction materials and green building procedures.

PREAP 112 Infrastructure Pre-Apprenticeship I

Units: 3
Hours: 27 hours LEC; 81 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

This course provides an introduction to infrastructure construction trades apprenticeships. It covers tools, and equipment used for building and maintaining the facilities and systems that create America's infrastructure. Topics also include OSHA/jobsite safety, the safe use of hand and power tools, applied construction math, and employability skills for apprenticeship. This course is not open to students who have completed PREAP 111. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• demonstrate the safe use and care of both hand and power tools.
• identify safety laws, regulations, and safe working conditions for apprenticeship training.
• demonstrate competency in basic construction calculations.
• build a small wood project based on written and verbal instructions.

PREAP 113 Infrastructure Pre-Apprenticeship II

Units: 3
Hours: 27 hours LEC; 81 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

This course provides an overview of the commercial and industrial construction trades with an emphasis on America’s infrastructure. It covers materials and techniques that are used in the infrastructure trades to construct and maintain buildings and related facilities. Topics also include an introduction to construction drawings, material handling simulators, multi-craft skills, and California apprenticeship regulations. This course is not open to students who have completed PREAP 111. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• describe entry level skills required for the construction of roads, bridges, levees, and commercial buildings.
• identify construction tools, materials, and fasteners.
• identify the basic components within a set of construction drawings.
• demonstrate the ability to lay out a floor plan from a given drawing.
• measure the differences in elevation with a builder’s level and with construction laser levels.

PREAP 122 Pre-Apprenticeship for Utility Workers

Units: 8
Hours: 96 hours LEC; 144 hours LAB
Prerequisite: None.
Corequisite: FITNS 358
This course provides preparation for entry-level employment skills for the utility industry. Topics include safety, basic electrical fundamentals, gas principles, excavation, working at heights, industrial ergonomics, radio procedures, and knot tying. Field trips may be required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- explain the nature of electricity, resistance, basic circuit laws, and Ohms’ law including alternating current
- identify the industry specific requirements of excavation
- define power generation and distribution processes
- measure circuit values using fundamental electrical laws and rules
- define terms and vocabulary uses in the utility industry
- explain gas distribution for the utility industry
- demonstrate effective conflict resolution skills
- calculate values of circuits with the aid of a calculator
- identify safety laws, regulations, and safe working conditions for the utility industry

**PREAP 141 Green Technology Pre-Apprenticeship**

**Units:** 7  
**Hours:** 77 hours LEC; 147 hours LAB  
**Prerequisite:** None.  
**Corequisite:** Concurrent enrollment in FITNS 101.  
**Enrollment Limitation:** Students must have a high school diploma or GED.  
**Advisory:** Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.  
**Catalog Date:** June 1, 2020

This course provides an introduction to Green Technology Pre-Apprenticeship. It covers tools, equipment, materials, and techniques used in the green fields such as electrical, plumbing, heating ventilation and air conditioning (HVAC), and carpentry. Topics include commercial and industrial building energy efficiency, building codes, sustainability, renewable energy, green building, distributed generation systems, utilities, and smart grids. Additional topics include construction drawings, safety training, construction math, and basic communication and employability skills. Field trips may be required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- describe the major challenges to the green environment that are caused directly or indirectly by the built environment.
- identify decisions and actions in his/her personal and work life that impact the green environment.
- describe the life cycle phases of a building and the impacts on the green environment over its life cycle.
- identify green alternatives to conventional building practices and describe the positives and negatives of each alternative.
- describe the Leadership in Energy and Environmental Design (LEED) rating process.
- explain the role of Occupational Safety and Health Administration (OSHA) in job site safety.
- recognize and identify some of the basic hand tools and their proper uses in the construction trade.
- communicate effectively in on-the-job situations using verbal and written skills.
- identify renewable and non-renewable resources and energy.
- describe the importance of sustainable renewable energy sources.

**PREAP 142 Green Technology Pre-Apprenticeship I**

**Units:** 3
This course provides an introduction to Green Technology Pre-Apprenticeship. It covers tools, equipment, materials, and techniques used in the green fields such as electrical, plumbing, heating ventilation and air conditioning (HVAC), and carpentry. Topics include reducing consumer waste, water and other natural resources, recycling, renewable energy, and green building procedures and materials. Additional topics include construction drawings, safety training, construction math, and basic communication and employability skills. This course is not open to students who have completed PREAP 141. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the major challenges to the green environment that are caused directly or indirectly by the built environment.
- calculate individual carbon footprints and identify ways to lessen them.
- recognize and identify some of the basic hand tools and their proper uses in the construction trade.
- identify renewable and non-renewable resources of energy.
- describe the importance of sustainable renewable energy sources.

PREAP 143 Green Technology Pre-apprenticeship II

Upon completion of this course, the student will be able to:

- describe the life-cycle phases of a building and the impacts on the green environment over its life cycle.
- identify green alternatives to conventional building practices and describe the positives and negatives of each alternative.
- describe the Leadership in Energy and Environmental Design (LEED) rating process.
- list the benefits of the various sustainable construction systems.

Sheet Metal (SHME)

SHME 100 Sheet Metal Apprenticeship I

This course is an introduction to the sheet metal apprenticeship program. Topics include job-site safety practices, basic drafting, basic job-site drawings, and industry terminology.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Analyze and avoid unsafe conditions and unsafe acts, and observe safety laws and regulations.
Describe general Occupational Safety & Health Administration (OSHA) and Environmental Protection Agency (EPA) requirements on construction job sites.

Demonstrate cardiopulmonary resuscitation (CPR) and first aid on adults for use on construction job sites.

Identify commonly-used hand tools in the sheet metal industry.

Apply basic construction mathematics in calculating shapes, distances, formulas and various job site-related conditions.

Demonstrate basic drafting skills and use of drafting tools.

### SHME 101 Sheet Metal Apprenticeship II

**Units:** 3.30  
**Hours:** 40 hours LEC; 58 hours LAB  
**Prerequisite:** None.  
**Enrollment Limitation:** Registered Sheet Metal Apprentice  
**Catalog Date:** June 1, 2020

This course introduces an introduction to sheet metal field installation with an emphasis in basic sheet metal layout, parallel and radial line development and an introduction to triangulation. Topics include soft soldering and drafting of sheet metal prior to fabrication.

#### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Demonstrate drafting skills to specified drawings.
- Analyze drawing scales and convert to proper specified scale.
- Demonstrate proper soldering on sheet metal fabrication.
- Identify common symbols used on mechanical drawings.
- Identify and define plan view, elevation view and develop a profile in a sheet metal layout project.
- Demonstrate specified knowledge of triangulation to develop sheet metal fittings.
- Calculate area and volume of geometric shapes.

### SHME 110 Sheet Metal Apprenticeship III

**Units:** 3.30  
**Hours:** 40 hours LEC; 58 hours LAB  
**Prerequisite:** None.  
**Enrollment Limitation:** Registered Sheet Metal Apprentice  
**Catalog Date:** June 1, 2020

This course introduces basic layout skills for advanced pattern development. In addition topics include the basic bidding process, trigonometry for the sheet metal industry, fabrication of round fittings, and drafting of pictorial drawings.

#### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Identify hidden job costs and assemble a simple bid.
- Draft and fabricate a simple duct offset.
- Develop isometric and oblique drawings.
- Apply mathematics to fabricate complex sheet metal fittings.
- Draft isometric and oblique drawings of specified shapes.
- Draft and fabricate round duct fittings.

### SHME 111 Sheet Metal Apprenticeship IV
This course covers advanced pattern development, architectural sheet metal principles, flashing, and gutters. Topics include hoisting and rigging, as well as installation of fire and smoke dampers.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Demonstrate proper mitering of flashing and gutter products.
- Calculate proper water flow on architectural sheet metal products.
- Identify and demonstrate proper installation procedures for fire and smoke dampers.
- Demonstrate proper hand signals for cranes.
- Identify safe rigging practices.
- Demonstrate different knots commonly used for rigging.

SHME 120 Sheet Metal Apprenticeship V

Upon completion of this course, the student will be able to:

- Identify HVAC components.
- Measure the moisture content of air and relative humidity using a sling psychrometer and a psychometric chart.
- Calculate ventilation requirements for a given space.
- Identify three forms of heat transfer.
- List the components of a cooling systems.
- Demonstrate the use of an air duct calculator to design a duct system.
- Define a British thermal unit (BTU).

SHME 121 Sheet Metal Apprenticeship VI

Upon completion of this course, the student will be able to:
- Identify and avoid unsafe conditions and unsafe acts, and observe safety laws and regulations on construction job sites.
- Examine information in a job specification manual.
- Examine information in a heating, ventilating, and air conditioning (HVAC) unit instruction manual.
- Demonstrate proper layout of a roof curb and duct penetrations.
- Define the components in a central HVAC system.
- Construct a standing seam roof.

**SHME 130 Sheet Metal Apprenticeship VII**

**Units:** 3.30  
**Hours:** 40 hours LEC; 58 hours LAB  
**Prerequisite:** None.  
**Enrollment Limitation:** Registered Sheet Metal Apprentice  
**Catalog Date:** June 1, 2020

This course covers the design and construction of rooftop steel, advanced plans and specifications, and duct leakage detection. It includes basic electricity for sheet metal workers.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- Demonstrate advanced drafting skills to specified drawings.
- Calculate air system pressure, balancing and sizing to specified requirements.
- Assemble a shop fabrication order from given drawings, blueprints and specifications.
- Demonstrate troubleshooting methods for duct leakage testing.
- Demonstrate the drafting, layout and installation of roof top steel.

**SHME 131 Sheet Metal Apprenticeship VIII**

**Units:** 3.30  
**Hours:** 40 hours LEC; 58 hours LAB  
**Prerequisite:** None.  
**Enrollment Limitation:** Registered Sheet Metal Apprentice  
**Catalog Date:** June 1, 2020

This course covers testing, adjusting, and balancing of heating, ventilating, and air conditioning (HVAC) systems. Topics include advanced drafting elevation views of shaft duct systems and complete takeoff of a HVAC system with cost, quantity and weight.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- Calculate system pressures to specified tolerances in a HVAC system.
- Design a HVAC system to given specifications and blueprints.
- Demonstrate testing of a HVAC system to calculate specified air balance.
- Identify code violations in mechanical design based on the Uniform Mechanical Code (UMC).
- Calculate quantity, cost, and weight of a given HVAC system.

**SHME 140 Sheet Metal Apprenticeship IX**

**Units:** 3.30  
**Hours:** 40 hours LEC; 58 hours LAB  
**Prerequisite:** None.
This course covers the installation of architectural metal, food service equipment, and commercial exhaust systems. It includes control wiring of these systems.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- Demonstrate proper installation of skylight, trim, flashing and proper use of sealant.
- Select proper approved sealants for food service.
- Demonstrate proper installation of an exhaust system and control wiring.
- Identify food service codes required for installation.
- Demonstrate proper control wiring for a heating, ventilating, and air conditioning (HVAC) system.
- Demonstrate troubleshooting skills and repair a thermostat for a HVAC system.

**SHME 141 Sheet Metal Apprenticeship X**

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<td>Prerequisite:</td>
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<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
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</tbody>
</table>

This course covers shop foreman duties, procedures, and leadership training. In addition, the testing, adjusting, and balancing of blow pipe systems are addressed.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- Identify and select Sheet Metal Air Conditioning Contractors' National Association (SMACNA) standards for ducting and blow pipe systems.
- Identify code requirements for ducting and blow pipe systems.
- Demonstrate calculations for the proper balancing of a given blow pipe system.
- Identify and analyze shop foreman responsibilities and leadership qualities.
- Demonstrate proper use of an air velocity meter.
- Identify negative and positive blow pipe systems.

**SHME 150 Sheet Metal Welding I**

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<tr>
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<tr>
<td>Prerequisite:</td>
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This course covers oxyacetylene cutting, shielded metal arc (SMAW) and gas tungsten arc (GTAW) welding processes typically used in the sheet metal industry. Topics include welding safety procedures and maintenance techniques.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- describe safety procedures for the setup, starting, and stopping of oxyacetylene equipment.
- demonstrate proper cutting of a given material with oxyacetylene equipment.
- describe safety procedures when using shielded metal arc welding (SMAW) and gas tungsten arc welding (GTAW) equipment.
- demonstrate proper beads in the overhead, vertical, and horizontal positions.
• interpret common welding symbols represented on blueprints.

SHME 151 Sheet Metal Welding II

Units: 2.5
Hours: 27 hours LEC; 54 hours LAB
Prerequisite: None.
Enrollment Limitation: Registered Sheet Metal Apprentice
Catalog Date: June 1, 2020

This course covers advanced shielded metal arc (SMAW) and gas tungsten arc (GTAW) welding processes typically used in the sheet metal industry. Topics include welding safety procedures and maintenance techniques.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• describe safety procedures when using shielded metal arc welding (SMAW) and gas tungsten arc welding (GTAW) equipment.

• demonstrate proper beads in the overhead, vertical, and horizontal positions for advanced applications.

• demonstrate proper procedures in the welding inspection process.

SHME 298 Work Experience in Sheet Metal Apprenticeship

Units: 1 - 4
Hours: 75 - 300 hours LAB
Prerequisite: None.
Enrollment Limitation: Indentured in the sheet metal apprenticeship program.
Catalog Date: June 1, 2020

This course provides students the opportunity to work in the sheet metal apprenticeship program for the purpose of developing specific skills to meet the goals and objectives of the sheet metal Joint Apprenticeship and Training Committee (J.A.T.C.). Students complete work experience hours at approved training sites. Students may take up to 16 units total across all Work Experience course offerings. This course may be repeated when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• demonstrate competencies for effective and competitive workforce performance in sheet metal apprenticeship program.

• demonstrate mastery of specific job skills as written in learning objectives under the supervision of the sheet metal Joint Apprenticeship and Training Committee (J.A.T.C.).

Sheet Metal Technology (SMTEC)

SMTEC 100 Sheet Metal Service Technician Apprenticeship I

Units: 2.5
Hours: 27 hours LEC; 54 hours LAB
Prerequisite: None.
Enrollment Limitation: Registered Sheet Metal Apprentice
Catalog Date: June 1, 2020

This course is an introduction to the Sheet Metal Service Technician Apprenticeship. Topics include environmental systems, basic refrigeration theory, balancing refrigeration systems, and field safety. It includes the testing, adjusting, and balancing of refrigeration systems.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• Demonstrate use of tools and instruments used by sheet metal service technicians.
Recognize and practice safety precautions while working on refrigeration systems.

Identify and define the refrigeration cycle components.

Define and calculate the enthalpy necessary for refrigeration systems.

Identify different types of compression refrigeration systems.

Explain the basic refrigeration cycle.

SMTEC 101 Sheet Metal Service Technician Apprenticeship II

This course covers diagnosing refrigeration systems, charging and recovery of small hermetic systems, and servicing small heating, ventilating, and air conditioning (HVAC) package units.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Diagnose a refrigeration system on a small HVAC package unit.
- Demonstrate basic repair on a small HVAC package unit.
- Demonstrate charging a small hermetic system to specified levels.
- Demonstrate proper usage of piercing valves.
- Demonstrate proper recovery of refrigerant.

SMTEC 110 Sheet Metal Service Technician Apprenticeship III

This course covers basic electrical fundamentals and control circuits in package air conditioning units. Topics include basic motor principles, construction, and motor control circuits.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Define principles of basic alternating current (AC) and direct current (DC) motor theory.
- Identify parts of a AC and DC motor.
- Describe basic motor design, construction and theory of operation.
- Analyze control diagrams in a package air conditioning unit.
- Define different applications and types of air conditioning package units.
- Demonstrate measuring for electricity with a voltage meter in an air conditioning package unit.

SMTEC 111 Sheet Metal Service Technician Apprenticeship IV

Units: 2.5
Hours: 27 hours LEC; 54 hours LAB
Prerequisite: Registered Sheet Metal Apprentice
Enrollment Limitation: None.
Catalog Date: June 1, 2020

This course covers diagnosing refrigeration systems, charging and recovery of small hermetic systems, and servicing small heating, ventilating, and air conditioning (HVAC) package units.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Diagnose a refrigeration system on a small HVAC package unit.
- Demonstrate basic repair on a small HVAC package unit.
- Demonstrate charging a small hermetic system to specified levels.
- Demonstrate proper usage of piercing valves.
- Demonstrate proper recovery of refrigerant.

SMTEC 101 Sheet Metal Service Technician Apprenticeship II

This course covers diagnosing refrigeration systems, charging and recovery of small hermetic systems, and servicing small heating, ventilating, and air conditioning (HVAC) package units.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Diagnose a refrigeration system on a small HVAC package unit.
- Demonstrate basic repair on a small HVAC package unit.
- Demonstrate charging a small hermetic system to specified levels.
- Demonstrate proper usage of piercing valves.
- Demonstrate proper recovery of refrigerant.
This course covers hermetically sealed electric motors, motor control circuits and their protection. Topics include electrical schematics and diagrams relating to air conditioning equipment.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Demonstrate wiring a basic hermetically sealed motor.
- Identify components and functions of a basic hermetically sealed motor.
- Demonstrate the servicing of a hermetically sealed motor.
- Demonstrate the charging and recovery of a hermetic system.
- Explain the cycle of a compression system.
- Calculate the overload protection for a motor.

SMTEC 120 Sheet Metal Service Technician Apprenticeship V

Units: 2.5
Hours: 27 hours LEC; 54 hours LAB
Prerequisite: None.
Enrollment Limitation: Registered Sheet Metal Apprentice
Catalog Date: June 1, 2020

This course covers duct systems including design, selection, layout, and outlets. Topics include the properties of air, airflow, and heat in heating, ventilating, and air conditioning (HVAC) system design. Additionally, types of heating systems are covered.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Define air and the properties associated with air.
- Measure the moisture content of air and relative humidity using a sling psychrometer and psychrometric chart.
- Define the three forms of heat transfer: radiation, conduction, and convection.
- Demonstrate the use of an air duct calculator to analyze an air duct system design.
- Calculate ventilation requirements for a given building space.
- Identify different types of heating systems and their applications.

SMTEC 121 Sheet Metal Service Technician Apprenticeship VI

Units: 2.5
Hours: 27 hours LEC; 54 hours LAB
Prerequisite: None.
Enrollment Limitation: Registered Sheet Metal Apprentice
Catalog Date: June 1, 2020

This course covers chilled water systems, air cooled condensers, water cooled condensers, refrigerant lines and flow control devices. Topics include heat load calculations for cooling systems and heat pump operation, components, and controls.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Explain heat transfer in condenser and evaporator coils.
- Identify the components in a heat pump system.
- Calculate the heat load for a cooling system.
- Describe how the reversing valve operates.
- Describe the various operating cycles of a heat pump system.
- Calculate the capacity of a refrigerant line.
- Identify different refrigerant flow control devices.

SMTEC 130 Sheet Metal Service Technician Apprenticeship VII

Units: 2.5
Hours: 27 hours LEC; 54 hours LAB
Prerequisite: None.
Enrollment Limitation: Registered Sheet Metal Apprentice
Catalog Date: June 1, 2020

This course covers commercial systems such as walk-in freezers, ice makers, multi-zone systems and an introduction to computerized building management. Topics include constant volume air conditioning systems, and an introduction to pneumatic and electronic environmental system controls.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Describe the operation and function of a constant air volume air conditioning system.
- Demonstrate the proper installation of a pneumatic control system in order to actuate a given control device.
- Demonstrate the proper wiring of a electrical control system in order to actuate a given control device.
- Summarize the applications of a computerized building management system.
- Describe the requirements for commercial refrigeration systems.
- Describe the various methods used in charging commercial refrigeration systems.
- Describe the defrost systems used in commercial refrigeration systems.

SMTEC 131 Sheet Metal Service Technician Apprenticeship VIII

Units: 2.5
Hours: 27 hours LEC; 54 hours LAB
Prerequisite: None.
Enrollment Limitation: Registered Sheet Metal Apprentice
Catalog Date: June 1, 2020

This course covers variable air volume systems used in airflow regulation and their electronic control components. Topics include an introduction to the principles and components of direct digital controls (DDC) and energy management systems (EMS).

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- List and describe the most common DDC control devices for inputs and outputs.
- Identify and interpret commonly used DDC symbols used on drawings.
- Define logic and logic gates in DDC control systems.
- Measure a digital signal with the proper measurement instrument.
- Explain the basic logic and function of a analog to digital and digital to analog converter.
- Demonstrate the setup and balancing of a variable air volume system.

SMTEC 140 Sheet Metal Service Technician Apprenticeship IX

2.5
Units:
27 hours LEC; 54 hours LAB
Hours:
None.
Prerequisite:
Registered Sheet Metal Apprentice
Enrollment Limitation:
June 1, 2020
Catalog Date:

Student Learning Outcomes

2.5 Units:
27 hours LEC; 54 hours LAB
Hours:
None.
Prerequisite:
Registered Sheet Metal Apprentice
Enrollment Limitation:
June 1, 2020
Catalog Date:

This course covers commercial systems such as walk-in freezers, ice makers, multi-zone systems and an introduction to computerized building management. Topics include constant volume air conditioning systems, and an introduction to pneumatic and electronic environmental system controls.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Describe the operation and function of a constant air volume air conditioning system.
- Demonstrate the proper installation of a pneumatic control system in order to actuate a given control device.
- Demonstrate the proper wiring of a electrical control system in order to actuate a given control device.
- Summarize the applications of a computerized building management system.
- Describe the requirements for commercial refrigeration systems.
- Describe the various methods used in charging commercial refrigeration systems.
- Describe the defrost systems used in commercial refrigeration systems.

SMTEC 131 Sheet Metal Service Technician Apprenticeship VIII

Units: 2.5
Hours: 27 hours LEC; 54 hours LAB
Prerequisite: None.
Enrollment Limitation: Registered Sheet Metal Apprentice
Catalog Date: June 1, 2020

This course covers variable air volume systems used in airflow regulation and their electronic control components. Topics include an introduction to the principles and components of direct digital controls (DDC) and energy management systems (EMS).

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- List and describe the most common DDC control devices for inputs and outputs.
- Identify and interpret commonly used DDC symbols used on drawings.
- Define logic and logic gates in DDC control systems.
- Measure a digital signal with the proper measurement instrument.
- Explain the basic logic and function of a analog to digital and digital to analog converter.
- Demonstrate the setup and balancing of a variable air volume system.

SMTEC 140 Sheet Metal Service Technician Apprenticeship IX

2.5
Units:
27 hours LEC; 54 hours LAB
Hours:
None.
Prerequisite:
Registered Sheet Metal Apprentice
Enrollment Limitation:
June 1, 2020
Catalog Date:

Student Learning Outcomes

2.5 Units:
27 hours LEC; 54 hours LAB
Hours:
None.
Prerequisite:
Registered Sheet Metal Apprentice
Enrollment Limitation:
June 1, 2020
Catalog Date:

This course covers commercial systems such as walk-in freezers, ice makers, multi-zone systems and an introduction to computerized building management. Topics include constant volume air conditioning systems, and an introduction to pneumatic and electronic environmental system controls.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Describe the operation and function of a constant air volume air conditioning system.
- Demonstrate the proper installation of a pneumatic control system in order to actuate a given control device.
- Demonstrate the proper wiring of a electrical control system in order to actuate a given control device.
- Summarize the applications of a computerized building management system.
- Describe the requirements for commercial refrigeration systems.
- Describe the various methods used in charging commercial refrigeration systems.
- Describe the defrost systems used in commercial refrigeration systems.
This course covers the installation and application of direct digital control (DDC) systems in energy management systems (EMS). Topics include an introduction to blueprint reading for service technicians, and the testing and balancing of heating, ventilating, and air conditioning (HVAC) systems integrated with EMS.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Demonstrate the installation and programming of a direct digital system.
- Demonstrate the testing and balancing of an EMS integrated heating, ventilating, and air conditioning system.
- Analyze commercial blueprints, specifications, schedules and details.

SMTEC 141 Sheet Metal Service Technician Apprenticeship X

This course covers commissioning of direct digital control (DDC) systems in energy management systems (EMS). Topics include demand controlled ventilation systems and advanced blueprint reading for service technicians.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Program EMS software devices with given functions.
- Commission EMS devices and system.
- Explain the DDC integration requirements in order to have a properly operating system.
- Analyze industrial blueprints, specifications, schedules, and details to given requirements.
Art | American River College

This degree provides a foundation in art principles and practices and is designed for those interested in transferring to a four-year college or university, and for someone interested in furthering his/her visual arts skills. Course work includes study in art history and a wide range of 2-D and 3-D studio practice courses. 2-D refers to drawing, painting, design, and photography; 3-D refers to ceramics, jewelry, and sculpture.

Division Dean
Angela Milano
Department Chairs
Linda Gelfman

(916) 484-8433

Associate Degrees for Transfer

A.A.-T. in Art History

The Associate in Arts in Art History for Transfer provides a clearly articulated curricular track for students who wish to transfer to a CSU campus, while also serving the diverse needs of students interested in the breadth and depth of the field of Art History. Additionally, this degree exposes students to the core principles and practices of the field in order to build a foundation for their future personal, academic, or vocational paths.

The Associate in Arts degree in Art History for Transfer provides students with a major that fulfills the general requirements of the California State University for transfer. Students with this degree will receive priority admission with junior status to the California State University system. The Associate in Arts degree in Art History for Transfer (A.A.-T.) may be obtained by the completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program outlined below (earning a C or better in these courses) and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

Catalog Date: June 1, 2020

Degree Requirements

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<td>ART 300</td>
<td>Drawing and Composition I</td>
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<td>ARTH 302</td>
<td>Art: Stone Age Through the Middle Ages</td>
<td>3</td>
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<td>ARTH 308</td>
<td>Renaissance Tradition in Art</td>
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<td>Design: Color Theory (3)</td>
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<td>ART 327</td>
<td>Painting I (3)</td>
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<td>ART 328</td>
<td>Painting II (3)</td>
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<td>ART 336</td>
<td>Watercolor Painting (3)</td>
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<tr>
<td>ART 361</td>
<td>Printmaking: Survey (3)</td>
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<td>ART 375</td>
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<td>ART 390</td>
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^1Excluding any courses used to fulfill the degree requirements listed above.

*The Associate in Arts in Art History for Transfer (AA-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.*

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- assess and evaluate the contributions of artists throughout history.
- identify and evaluate works of art or architecture according to their appropriate style and time frame.
- analyze and critique art and architecture within the context of their functions and meanings.
- research and assess theoretical information concerning the meanings and purposes of art and architecture.
- explain the history of cultures and civilizations and how art and architecture is a reflection of that history.
Career Information

Art historians with undergraduate degrees are placed as registrars, preparators, and curatorial staff in art museums and galleries; they can also be employed as art critics in mass media publications, such as newspapers and magazines. An advanced degree allows an art historian a wider range of possible career applications, including museums directorships, curators, instructors, preservationists, researchers, and auction house personnel.

A.A.-T. in Studio Art

Completion of this degree provides a foundation in studio art methods. Program offerings include course work in art history, 2-D, and 3-D studio practices.

The Associate in Arts in Studio Art for Transfer provides students with a major that fulfills the general requirements of the California State University for transfer. Students with this degree will receive priority admission with junior status to the California State University system.

The Associate in Arts in Studio Art for Transfer (A.A.-T.) may be obtained by the completion of 60 transferable, semester units with a minimum of a 2.0 GPA, including (a) the major or area of emphasis described in the Required Program outlined below (earning a C or better in these courses), and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

Catalog Date: June 1, 2020

Degree Requirements

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<tbody>
<tr>
<td>ART 300</td>
<td>Drawing and Composition I</td>
<td>3</td>
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<tr>
<td>ART 320</td>
<td>Design: Fundamentals (3)</td>
<td>3</td>
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<tr>
<td>ART 370</td>
<td>Three Dimensional Design</td>
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<tr>
<td>ARTH 308</td>
<td>Renaissance Tradition in Art</td>
<td>3</td>
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<tr>
<td>ART 310</td>
<td>Modern Art</td>
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<tr>
<td></td>
<td>A minimum of 3 units from the following:</td>
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<tr>
<td>ARTH 322</td>
<td>Art History of the Non-Western World (3)</td>
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<tr>
<td>or ARTH 302</td>
<td>Art: Stone Age Through the Middle Ages (3)</td>
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<td>A minimum of 9 units from the following:</td>
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<td>Select three courses, each from a different category listed below:</td>
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<tr>
<td></td>
<td>Drawing</td>
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<tr>
<td>ART 302</td>
<td>Drawing and Composition II (3)</td>
<td></td>
</tr>
<tr>
<td>ART 304</td>
<td>Figure Drawing I (3)</td>
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<tr>
<td>ART 305</td>
<td>Figure Drawing II (3)</td>
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<tr>
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<td>Color Theory</td>
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<td>ART 323</td>
<td>Design: Color Theory (3)</td>
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<tr>
<td></td>
<td>Painting</td>
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<tr>
<td>ART 327</td>
<td>Painting I (3)</td>
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<tr>
<td>ART 336</td>
<td>Watercolor Painting (3)</td>
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<td>Printmaking</td>
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<tr>
<td>ART 361</td>
<td>Printmaking: Survey (3)</td>
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<tr>
<td></td>
<td>Sculpture</td>
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<tr>
<td>ART 372</td>
<td>Sculpture (3)</td>
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<tr>
<td></td>
<td>Ceramics</td>
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<tr>
<td>ART 390</td>
<td>Ceramics (3)</td>
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<td>Photography</td>
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<td>Basic Art Photography (3)</td>
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<tr>
<td>ARTPH 305</td>
<td>Digital Photography (3)</td>
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</table>
The Associate in Arts in Studio Art for Transfer (AA-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- differentiate major historical movements and developments in the visual arts.
- compose or design works of art that utilize a combination of technique, materials, visual ideas, and experiences.
- construct and document an initial portfolio of artworks for professional presentation.
- critique artworks using correct terminology related to concepts, materials, and techniques.
- evaluate form, image, and artistic creation of visual artworks from different traditions, cultures, and civilizations.

Career Information

Individuals with four-year degrees in art may be placed in the K-12 educational field as well as in museums and galleries as registrars, preparators, and curatorial staff. Individuals may also work as fine artists, graphic artists or designers, illustrators, computer artists, and other commercial work such as freelance photographers. Advanced degrees in art may lead to careers as educators at the college or university level, art directors, art editors, curators, conservators, and restorers for museums and galleries.

Associate Degrees

A.A. in Art

This degree provides a foundation in art principles and practices and is designed for those interested in transferring to a four-year college or university, and for someone interested in furthering his/her visual arts skills. Course work includes study in art history and a wide range of 2-D and 3-D studio practice courses. 2-D refers to drawing, painting, design, and photography; 3-D refers to ceramics, jewelry, and sculpture.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tr>
<td>ART 300</td>
<td>Drawing and Composition I</td>
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<td>ART 320</td>
<td>Design: Fundamentals (3)</td>
<td>3</td>
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<tr>
<td>ART 370</td>
<td>Three Dimensional Design</td>
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<td>ART 442</td>
<td>Introduction to Art Gallery Operations (2)</td>
<td>2 - 3</td>
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<tr>
<td>or ART 444</td>
<td>Art Gallery and Portfolio Preparation (3)</td>
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<tr>
<td>ARTH 302</td>
<td>Art: Stone Age Through the Middle Ages</td>
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<td>ARTH 308</td>
<td>Renaissance Tradition in Art (3)</td>
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<td>or ARTH 310</td>
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<td>ART 304</td>
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<tr>
<td>ART 305</td>
<td>Figure Drawing II (3)</td>
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<td>ART 306</td>
<td>Facial Expression and Anatomy (3)</td>
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<td>ART 312</td>
<td>Portrait Drawing (3)</td>
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<td>ART 323</td>
<td>Design: Color Theory (3)</td>
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<td>ART 324</td>
<td>Collage and Assemblage (3)</td>
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<td>ART 327</td>
<td>Painting I (3)</td>
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<td>ART 328</td>
<td>Painting II (3)</td>
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<td>ART 336</td>
<td>Watercolor Painting (3)</td>
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<td>Intermediate Watercolor Painting (3)</td>
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<td>ART 361</td>
<td>Printmaking: Survey (3)</td>
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<td>ART 371</td>
<td>Foundry Casting for Sculpture (3)</td>
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<td>Figure Sculpture (3)</td>
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<td>ART 376</td>
<td>Functional Sculpture (3)</td>
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<td>ART 390</td>
<td>Ceramics (3)</td>
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<td>ART 391</td>
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<td>Alternative Firing Processes in Ceramics (3)</td>
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<td>ART 430</td>
<td>Art and Children (3)</td>
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<td>Artists' Materials and Techniques (3)</td>
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<td>Introduction to Art (3)</td>
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<td>Art History of the Non-Western World (3)</td>
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<td>ARTH 333</td>
<td>Introduction to Islamic Art (3)</td>
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<td>ARTH 334</td>
<td>International Contemporary Art (3)</td>
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<td>ARTPH 300</td>
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<td>ARTPH 305</td>
<td>Digital Photography (3)</td>
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<td>ARTPH 322</td>
<td>Color Photography (3)</td>
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<td>ARTPH 340</td>
<td>Alternative Process Photography (3)</td>
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<td>ARTPH 350</td>
<td>Documentary Photography (3)</td>
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<td>ARTPH 360</td>
<td>Studio Lighting (3)</td>
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<td>ARTPH 370</td>
<td>Fashion, Wedding, and Portrait Photography (3)</td>
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<tr>
<td>ARTPH 376</td>
<td>Photography Lab: Portfolio Development (1)</td>
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</table>

Total Units: 32 - 33

The Art Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- differentiate major historical movements and developments in the visual arts.
- evaluate major trends and developments in contemporary works of art.
compose works of art that utilize a combination of techniques, materials, visual ideas, and experiences.

construct and document an initial portfolio of artworks for professional presentations.

critique and analyze subject matter in the visual arts based on theory and technique.

develop an aesthetic understanding and the ability to make value judgments within the context of images, form, and content of artistic creations.

conceive and develop conceptual structures of art imagery within a specific technical process.

assess aesthetic and visual traditions.

Career Information

An Associate Degree in art allows individuals to work in the educational field as well as in museums and galleries. Individuals may also work as graphic artists or designers, illustrators, computer artists, and other commercial work such as freelance photographers. Individuals could also work independently, producing works of art which are displayed in museums, galleries, and other exhibition spaces. Advanced degrees in art may lead to careers as educators, directors, curators, conservators, and restorers.

Certificates of Achievement

Freelance Photography Certificate

This certificate provides training for beginning careers in freelance photography. Topics include basic skills necessary for entry level photography positions or small studio businesses in photography.

Certificate Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
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<td>ART 320</td>
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<td>Introduction to Art (3)</td>
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<td>or ARTH 335</td>
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<td>ARTPH 350</td>
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<td>Fashion, Wedding, and Portrait Photography (3)</td>
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<td>ARTPH 376</td>
<td>Photography Lab: Portfolio Development (1)</td>
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<td>or ARTPH 498</td>
<td>Work Experience in Art Photography (1 -4)</td>
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<td>Total Units:</td>
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<td>30.5 - 33.5</td>
</tr>
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</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

select appropriate digital and film camera equipment and software for various client-based shooting assignments
• utilize a variety of studio lighting techniques for fine art photography or commercial photography
• organize a workflow for storing and editing photographs
• apply design knowledge and skill in the use of photo editing on the computer
• evaluate digital and film photographs for aesthetic quality
• design and create photographic compositions using the principles of visual organization: unity, balance, harmony-variety, rhythm, pattern, proportion/scale, movement, and economy
• compare and contrast historical works of art as they relate to an overall formal assessment of photography
• analyze the different photographic genres throughout history
• develop portfolios of photographs for specific clients
• develop a plan for launching a career in freelance photography
• make effective decisions, use workforce information, and manage his/her personal career plans

Career Information

Job opportunities include, but are not limited to, studio assistant, studio photographer, freelance photographer, editorial photographer, stock photographer, and photo lab manager.

Gallery Management Certificate

This certificate provides a foundation of knowledge, and experience in, the everyday working practices of art museums and galleries.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>ART 442</td>
<td>Introduction to Art Gallery Operations</td>
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<td>ARTH 300</td>
<td>Introduction to Art (3)</td>
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<tr>
<td>or ARTH 310</td>
<td>Modern Art (3)</td>
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<td>or ARTH 334</td>
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<td>ART 444</td>
<td>Art Gallery and Portfolio Preparation (3)</td>
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<td>ART 445</td>
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<td>ARTNM 322</td>
<td>Beginning Digital Art (3)</td>
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<td>ARTPH 305</td>
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<td>A minimum of 1 unit from the following:</td>
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<td>Total Units:</td>
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</tbody>
</table>

^1or any other studio course from the ART, ARTNM, or ARTPH designators.

Student Learning Outcomes

Upon completion of this program, the student will be able to:
recognize major historical developments in art and culture as they relate to museum and gallery practices.

- identify necessary skills for organizing art exhibits in a gallery setting.
- utilize advanced skills in gallery scheduling and exhibition procedures.
- apply terminology associated with the visual arts while relating to artists and the community.
- apply writing skills to create proposals for exhibitions and to generate community interest.

Certificate

Sculpture Certificate

This certificate provides training for beginning careers in metal fabrication and sculpture. Topics include the basic skills necessary for entry-level fabrication positions or small studio businesses in sculpture.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tbody>
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<td>Three Dimensional Design</td>
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<td>Sculpture</td>
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<td>ART 375</td>
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<td>Functional Sculpture (3)</td>
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<tr>
<td>ART 373</td>
<td>Intermediate Sculpture (3)</td>
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</table>

A minimum of 3 units from the following:

- ART 376 Functional Sculpture (3)
- ART 373 Intermediate Sculpture (3)

Total Units: 12

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- analyze compositional principles as they apply to three-dimensional form and space.
- create sculpture utilizing basic traditional and contemporary techniques.
- demonstrate the proper and safe use of a gas forge, the anvil, and other related metal working equipment.
- demonstrate blacksmith techniques such as punching, twisting, drawing out, and upsetting.
- utilize tools and technology such as forms, molds, crucible, melting furnace, and metal pouring equipment.
- describe the proper technique for applying patinas.
- evaluate blue print drawings as they relate to foundry casting.
- define the properties of sculptural form and space.
- demonstrate creative abilities.
- generate sculpture(s) based on a variety of source material.
- cite traditional and non-traditional metal working techniques as they apply to three-dimensional functional and non-functional art forms.
- express creativity through a process of conception, design, execution, finish, and presentation.
ART 101 Lightroom and Photoshop Basics

This course provides fundamental skills in Adobe Lightroom and Photoshop that artists, gallery personnel, photographers, and fashion industry workers need to manage image and video files for print and web purposes. Topics include file import from cameras and devices, file format, file size, and file management. It also covers Photoshop editing of image files, video files, and Photoshop processing workflows. Drawing in Adobe Photoshop using brushes and layers is introduced.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- use Lightroom catalogs to organize and archive files
- import files from various sources into Lightroom and Photoshop
- create digital slides of artwork for portfolio and competition purposes
- manage file formats and sizes for varied imaging purposes
- perform basic editing for image improvement in Lightroom and Photoshop
- use Photoshop brushes and other tools to draw for fashion and imaging purposes
- prepare files for print or web purposes

ART 300 Drawing and Composition I

This course introduces observational drawing and composition. It emphasizes the ability to perceive and define both positive and negative shapes, contour, volume, space and value using a variety of drawing media and subject matter. It focuses on the clarity of observational skills and the ability to translate three-dimensional form and space into two-dimensional drawings. Both linear and atmospheric perspective will be studied and applied to drawings. The development of dynamic compositions will be studied through the various arrangements of subject matter. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- create a portfolio of finished drawings in a variety of drawing media that demonstrates the ability to observe and record the characteristics of simple and complex objects using both line and value.
- apply principles of design and linear and/or atmospheric perspective to observational drawings.
- critique artworks using correct terminology related to drawing concepts, materials, and techniques.
- identify a personal style and begin an initial investigation of the issues of content.

ART 302 Drawing and Composition II

This course introduces observational drawing and composition. It emphasizes the ability to perceive and define both positive and negative shapes, contour, volume, space and value using a variety of drawing media and subject matter. It focuses on the clarity of observational skills and the ability to translate three-dimensional form and space into two-dimensional drawings. Both linear and atmospheric perspective will be studied and applied to drawings. The development of dynamic compositions will be studied through the various arrangements of subject matter. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- create a portfolio of finished drawings in a variety of drawing media that demonstrates the ability to observe and record the characteristics of simple and complex objects using both line and value.
- apply principles of design and linear and/or atmospheric perspective to observational drawings.
- critique artworks using correct terminology related to drawing concepts, materials, and techniques.
- identify a personal style and begin an initial investigation of the issues of content.
This course further develops the skills and concepts introduced in ART 300. It covers the relationships between formal elements such as line, shape, color, texture, value, perspective, and spatial relationships. It emphasizes the creative use of materials. It also includes critiques of student, historical, and contemporary works of art. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate intermediate level technical skills and concepts in drawing
- investigate methods toward the achievement of personal expression and self direction
- critically evaluate one's own artwork and the works of others
- design works utilizing principles of composition
- invent new methods for incorporating color theory within each artwork

ART 304 Figure Drawing I

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Course Family: Figure Studies (http://arc.losrios.edu/course-families#id_100008)
Prerequisite: ART 300 with a grade of "C" or better
Transferable: CSU; UC
C-ID: C-ID ARTS 200
Catalog Date: June 1, 2020

This course introduces and explores the human structure based on the history and traditions of the human figure in art. Skills are developed by critically analyzing, drawing, and composing the undraped figure in a representational manner from direct observation. A variety of media are introduced in the exploration of the human form. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze and discuss images of the human form found in art works throughout history.
- analyze, compose, and construct a variety of figure drawing skills with respect to using line, shape, value, and color.
- demonstrate and apply a variety of drawing techniques to describe anatomy, proportion, and planar structure of the human form.
- demonstrate control over various methods and media of drawing the figure.
- discuss, critically assess, and evaluate depictions of the human form.

ART 305 Figure Drawing II

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Course Family: Figure Studies (http://arc.losrios.edu/course-families#id_100008)
Prerequisite: ART 304 with a grade of "C" or better
Advisory: ART 312
Transferable: CSU; UC
Catalog Date: June 1, 2020

This course continues the study of the human figure in art as begun in ART 304. The pursuit of more complex strategies and skills are developed by critically analyzing, drawing, and composing the undraped figure. The use of color tools and the development of personal style are emphasized. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- assess, evaluate, and discuss depictions of the human figure found in art history.
- demonstrate through drawing a greater knowledge of human anatomy, proportion, and gesture.
- demonstrate the use of color in a variety of drawing applications and color medias.
• analyze and respond to one's own artwork and the work of others during individual and group critique(s).
• develop a subjective and personal style based on historical theory and concepts.
• create a portfolio of drawings where the figure is the focus and context.

ART 306 Facial Expression and Anatomy

Same As: ARTNM 320
Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: ART 300 with a grade of "C" or better
Advisory: ART 304
Transferable: CSU
Catalog Date: June 1, 2020

This course covers human facial expression and anatomy using live models, anatomical references, and imagination. Issues of expression as it relates to skeletal and muscular anatomy are addressed through a series of projects. This course is not open to students who have taken ARTNM 320.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• draw the human skull in order to understand the three-dimensional form.
• apply facial muscular structure to the skull.
• evaluate the muscular code for universal facial expressions.
• create the human head with varying expressions using 2D media.
• create meaningful exaggerations of expression using 2D media.
• evaluate the muscles and muscle dynamics responsible for facial expression.

ART 312 Portrait Drawing

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: ART 300 with a grade of "C" or better
Advisory: ART 304
Transferable: CSU; UC
General Education: AA/AS Area I
Catalog Date: June 1, 2020

This course introduces the study of the human image in portraiture. Emphasis is on developing the skills needed to portray specific individuals rather than a generalized image of people. Included are the history and traditions of portraiture, the use of color media, and the development of personal style. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• assess, evaluate, and discuss human portraiture found in art history.
• describe human facial anatomy and plane structure.
• create an accurate likeness of an individual using a variety of techniques and materials.
• develop a subjective and personal style based on historical theory and concepts.
• create a portfolio of artworks where the human portrait is the focus and context.

ART 314 Introduction to Illustration

Same As: ARTNM 370
Units: 3
Hours: 36 hours LEC; 54 hours LAB
This course is a survey of the history of illustration, defining areas of specialization and the illustrator's role in visual communication. The appropriate use of materials, tools and methods is evaluated. Illustration is analyzed as a method of visual problem solving through a series of projects with varied applications. This course is not open to students who have taken ARTNM 370.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the history of illustration.
- examine areas of specialization of illustration and analyze required skills for illustrators.
- apply illustration techniques with a variety of media.
- produce a range of visual styles.
- evaluate the appropriate style and media choice in terms of client, audience and print methods.

ART 317 Character Design

This course introduces the visual development of characters based on archetypal patterns. Students will consider backstory, personality, and physical attributes. Fundamental drawing skills such as shape, form, anatomical structure, and motion will be included. Both digital and traditional media are applied. It also covers the graphical development of characters for animation, games, comics, graphic novels, children's books, and illustrated novels. It is not open to students who have completed ARTNM 372.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- develop a comprehensive process for designing characters including character profile, reference, thumbnails, and refinements.
- quickly concept multiple variations for a character including body type, head structure, facial expression, motion studies, and costume.
- differentiate multiple characters based on clear, definable silhouettes.
- develop costumes for a character based on time period, environment, and social class.
- produce accurate turnarounds for a character.

ART 320 Design: Fundamentals

This course focuses on the fundamentals of design, establishing a foundation for intermediate and advanced art courses as well as developing a visual and verbal vocabulary essential to understanding and appreciating art and design esthetics. Design principles are applied through a series of studio projects that are derived from the study of both historical schools of art as well as contemporary theory. The elements of line, shape, form, spatial relationships, value, and color are analyzed in concert with their use by artists throughout history. Projects utilize a wide range of tools, media, and presentation techniques. This course is not open to students who have completed ARTNM 310.
Upon completion of this course, the student will be able to:

- design and create compositions using the principles of organization: unity, balance, harmony-variety, rhythm, pattern, proportion/scale, movement, and economy.
- build a body of work using visual gestalt theory and elements of design: line, shape, value, color, texture, and space.
- analyze works of fine art and design to critically assess components of subject, form, and content.
- compare and contrast historical works of art as they relate to an overall formal assessment of design.
- investigate modern and contemporary works of art to compare their formal similarities and differences from historical works.
- measure one's own work in terms of premise and concepts of design and their relationship to content.

**ART 323 Design: Color Theory**

**Units:** 3  
**Hours:** 36 hours LEC; 54 hours LAB  
**Prerequisite:** ART 320 with a grade of "C" or better  
**Transferable:** CSU; UC  
**C-ID:** C-ID ARTS 270  
**Catalog Date:** June 1, 2020

This course studies the principles, theories, and application of additive and subtractive color in two dimensions. Included is the use of color systems found in major historical and contemporary artistic styles. A portfolio of design projects in applied color systems is required. Field trips may be required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- compare and analyze historical and contemporary use of color in relation to color systems.
- distinguish the use of color models, including color relationships and color proportions.
- utilize stylistic technique that indicate an understanding of color application in art history.
- organize materials, vehicles, binders, opaque and transparent media, color mixing, and color interactions.
- create aesthetic designs or images, utilizing the various properties of color and color theories.
- analyze the function of color in design with regard to harmonies, contrast, emphasis, balance, form, space, light, rhythm and movement.
- integrate principles from additive and subtractive color systems to compose color compositions.
- explain how color is perceived physiologically, psychologically, symbolically and intuitively.

**ART 324 Collage and Assemblage**

**Units:** 3  
**Hours:** 36 hours LEC; 54 hours LAB  
**Prerequisite:** None.  
**Advisory:** Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.  
**Transferable:** CSU; UC  
**General Education:** AA/AS Area I; CSU Area C1  
**Catalog Date:** June 1, 2020

This course investigates the creation of artworks using the technique of collage and assemblage (the process of assembling and adhering diverse materials and found objects onto another surface). The history of collage and assemblage and basic design theories are introduced. Development of a personal visual style is encouraged. Field trips may be required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- create collage and assemblage artworks based on found and/or chosen materials.
- organize the use of basic design elements such as line, shape, value, color, texture, space, and composition to create collage and assemblage artworks.
• develop expressive content through the manipulation of collage and assemblage techniques.

• describe historical and contemporary developments, trends, materials, and approaches in collage and assemblage.

• assess and critique collage and assemblage artworks in group, individual, and written contexts using relevant critique formats, concepts, and terminology.

• create a diverse collection of visual elements, such as fragments, scraps, or found objects to build a personal clip-art file for collage and assemblage projects.

• construct a portfolio of collage and assemblage artworks for presentation.

ART 327 Painting I

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Course Family: Painting
Prerequisite: ART 300 or 320 with a grade of "C" or better
Transferable: CSU; UC
C-ID: C-ID ARTS 210
Catalog Date: June 1, 2020

This course introduces basic techniques and materials of painting. It includes the survey of historical and contemporary development of painting with emphasis on perceptual and technical skills, such as, color theory, paint mixing and technique, and creative responses to materials and subject matter. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• create paintings that demonstrate a working knowledge of the physical properties of painting materials.

• identify, discuss, and integrate elements and principles of design into the painting process.

• evaluate and apply the basic principles of color theory to painting projects.

• construct and prepare various supports and/or substrates for painting projects.

• develop expressive content through manipulation of mark, color, value, and composition.

• describe historical and contemporary developments, trends, materials, and approaches in painting.

• assess and critique paintings in group, individual, and written contexts using relevant critique formats, concepts, and terminology.

• safely handle and use studio painting materials and equipment.

ART 328 Painting II

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Course Family: Painting
Prerequisite: ART 327 with a grade of "C" or better
Transferable: CSU; UC
Catalog Date: June 1, 2020

This course expands on the basic painting techniques and materials introduced in ART 327. It encourages the development of artistic style and general and specific criticism found in the history of painting. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• develop a personal painting style.

• express more fully and in greater detail the techniques of painting.

• use principles of design and color theory in painting projects.

• apply historical, contemporary, and theoretical approaches in painting projects.

• assess and critique paintings in group, individual, and written contexts using relevant critique formats, concepts, and terminology.

• construct and document an initial portfolio of paintings for professional presentation.
ART 329 Painting III

This course further develops the skills and concepts introduced in ART 327. Included is the survey of historical and contemporary styles in painting as this pertains to the development of individual style and self expression. Topics may include; post-modern expression, such as image and text; mixed-media; and combining varied styles and techniques within a single artwork. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate advanced skills in painting techniques using a variety of materials and subjects.
- evaluate major historical and contemporary trends, using correct terminology related to concepts, materials and techniques in painting.
- analyze the relationship of using 2-dimensional and 3-dimensional sources as content and subject in painting.
- construct and document an initial portfolio of artworks for professional presentation.

ART 330 Mural Painting

This course provides a survey of mural painting as a public art form. It introduces the historical use of mural painting and examines the process of creating a mural painting by analyzing a site, researching, planning, and executing murals in public spaces, and working collaboratively with others. Field trips may be required to execute the work on location.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- distinguish the historical use of mural painting by different cultures throughout the world.
- work collaboratively with others to execute a mural as a public art form.
- evaluate and record the process of creating a mural painting from surveying the site to executing the work.
- apply and describe the planning stages in a large-scale mural project.
- adapt the appropriate media and techniques for each chosen mural site.

ART 336 Watercolor Painting

This course introduces painting with aqueous media and techniques, including watercolor, gouache, and acrylic. It emphasizes historical and contemporary development, technical skill, color relationship(s), and self-expression using aqueous media in painting. Different artists and topics are covered each semester. Field trips may be required.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe major historical and contemporary trends in painting focusing on aqueous media.
- demonstrate skills in basic painting materials and techniques focusing on aqueous media.
- evaluate and apply the basic principles of color theory in aqueous painting technique.
- integrate elements and principles of design into the painting process focusing on aqueous media.
- prepare supports and/or substrates for painting in the aqueous media.

ART 337 Intermediate Watercolor Painting

Units: 3  
Hours: 36 hours LEC; 54 hours LAB  
Course Family: Painting (http://arc.losrios.edu/course-families#id_100009)  
Prerequisite: ART 336 with a grade of "C" or better  
Transferable: CSU; UC  
Catalog Date: June 1, 2020

This course continues the study of the aqueous medium in painting begun in ART 336. More complex methods, concepts, varying approaches, and techniques using the aqueous medium are developed. Personal style is emphasized. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate advanced skills with a variety of materials and subjects, using aqueous painting techniques.
- evaluate major historical and contemporary trends, using correct terminology related to concepts, materials, and techniques in aqueous painting.
- develop a subjective and personal style based on the concepts, materials, and techniques of aqueous painting.
- analyze and respond to one's own artwork and the work of others during individual and group critique(s).
- construct and document a portfolio of aqueous paintings for professional presentation.

ART 339 Integrating Digital Media with Traditional Media I

Same As: ARTNM 331  
Units: 3  
Hours: 36 hours LEC; 54 hours LAB  
Prerequisite: None.  
Transferable: CSU  
General Education: AA/AS Area I  
Catalog Date: June 1, 2020

This course combines the materials and techniques used in both new media technology and traditional art practices. It explores a wide variety of ideas, tools, and resources. Topics include history, theory, and practice surrounding digital and traditional image generation, image manipulation, image transfer, and material exploration. The course emphasizes developing unique forms of portfolio quality projects demonstrating new approaches and methods of integrating digital media with traditional media forms.

This course is not available to students who have taken ARTNM 331.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- combine materials and techniques used in both new media technology and traditional art practices.
- create successful compositions using knowledge of history, theory, and practice surrounding digital and traditional image generation.
- create successful compositions using knowledge of history, theory, and practice surrounding digital and traditional image manipulation.
- create successful compositions using knowledge of history, theory, and practice surrounding digital and traditional image transfer.
- generate dynamic portfolio-quality projects, which demonstrate new approaches and methods of merging digital media with traditional media.
ART 361 Printmaking: Survey

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Course Family: Printmaking (http://arc.losrios.edu/course-families#id_100010)
Prerequisite: None.
Transferable: CSU; UC
C-ID: C-ID ARTS 220
Catalog Date: June 1, 2020

This course covers various printmaking techniques, including but not limited to: relief printing, (wood, linoleum, collagraph, and rubber), monotype, stencil and/or silkscreen printing, intaglio (drypoint etching), and basic pronto plate lithography. Different artists and/or visual examples are discussed each semester. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- design and compose works of art using the various printmaking techniques taught in class.
- safely handle and maintain print lab equipment.
- use correct techniques for specific printmaking process being employed.
- analyze historical printmaking styles and techniques from various cultures and time periods.
- critique artworks using correct terminology related to concepts, materials, and techniques of printmaking.
- describe and develop conceptual structures of art within a specific printmaking process.
- create a portfolio of multiples demonstrating a broad range of printmaking techniques.

ART 365 Printmaking II

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Course Family: Printmaking (http://arc.losrios.edu/course-families#id_100010)
Prerequisite: ART 361 with a grade of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This course covers practices in various printmaking techniques. It expands on the four basic techniques taught in ART 361: relief printing, intaglio, screen printing, and lithography. It also encourages the development of a personal style and the creation of a cohesive body of work using those techniques. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- design and create bodies of work using various printmaking techniques taught in class such as intaglio, relief and serigraph.
- develop and use advanced techniques for intaglio, relief, screen printing, or lithography.
- explore new techniques that can apply to contemporary practices.
- analyze developments of new processes in contemporary printmaking and apply to a variety of techniques.
- apply principles of design to printmaking images.
- develop a signature printmaking style.
- cite different historical influences and describe their impact on contemporary printmaking.
- analyze specific periods of historical printmaking and apply concepts to contemporary practice.
- create a completed body of work within sets of multiples demonstrating an understanding of the uses of specific printmaking techniques.

ART 370 Three Dimensional Design
This foundation course covers an analysis of historical and contemporary designs, primarily concerned with the visual dialogue between form and space, with focus on visual sensitivity for three-dimensional composition. Line, plane, and volume are utilized to construct 3-D forms using a variety of materials which may include but is not limited to clay, metal, wood, fibers, mixed media, plaster, and paper.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- identify and understand the formal elements and organizing principles of three-dimensional art.
- independently produce objects, forms, and problem-solving projects that successfully incorporate the basic elements and organizing principles of three-dimensional art.
- discuss, describe, analyze, and critique three-dimensional works of art through references to the formal elements and principles of design.
- make individual aesthetic decisions and judgments related to their own design work.
- translate ideas and visual experience into tactile forms objects using both formal and conceptual approaches.
- recognize the presence of specific design elements and principles in works of art as well as in the surrounding everyday physical world, throughout history and across cultures.
- compose in three dimensions and work with a variety of media which may include but is not limited to clay, wood, metal, paint, plaster, paper, fibers, mixed media, in an appropriate and safe manner.

**ART 371 Foundry Casting for Sculpture**

This course introduces the techniques, metallurgy, and practice of casting bronze and aluminum for sculpture using the sand molding method. Emphasis is placed on historical examples, design, techniques, vocabulary, and safety. Patterns are utilized directly with sand to create sculptures in metal. Different artists and topics are covered each semester.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- create individual art works through a process of conception, design, execution, finish and presentation.
- describe and utilize tools and technology (such as forms, molds, crucible, melting furnace, and metal pouring equipment) to create art works.
- analyze and apply safety related chemicals and metal working equipment.
- organize a foundry heat and process information/tasks both orally and in written formats.
- critique art work in both oral and written formats.
- discuss the historical and theoretical aspects of both design and techniques in art metal casting.
- describe experimental methods of metal casting, fabrication, and finish of cast art works.
- draw blueprint sketches of the artwork to be cast.
- demonstrate the proper technique for applying patinas.

**ART 372 Sculpture**

3 Units:

36 hours LEC; 54 hours LAB

**Course Family:** Sculpture (http://arc.losrios.edu/course-families#id_100011)

**Prerequisite:** Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

**Transferrable:** CSU; UC

**General Education:** CSU Area C1

**Catalog Date:** June 1, 2020
This is an introductory course in sculpture. It covers expressive use of form, color, and various sculptural methods, such as additive and subtractive media using clay and plaster, and constructive media like wood and steel; found objects and other materials may also be explored. This course utilizes a problem-solving format in order to develop knowledge of technical process, formal vocabulary, and individual expression. Both historical and contemporary approaches in developing form and content are included. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- create objects in various three-dimensional media.
- display basic skills and craftsmanship in creating sculptural works of art using the formal principles of design and visual elements.
- identify historical and contemporary sculpture as well as influences of non-Western sculpture.
- apply formal design and sculpture terminology to critique and evaluate artworks.

ART 373 Intermediate Sculpture

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Course Family: Sculpture
Prerequisite: ART 372 with a grade of "C" or better
Advisory: CSU; UC
Transferable: CSU Area C1
Catalog Date: June 1, 2020

This is an intermediate course in the practice of the expressive use of form in three-dimensional space. It utilizes traditional additive and subtractive media, as well as constructive media, and other contemporary materials. This course utilizes a problem-solving format in order to develop knowledge of technical process, formal vocabulary, and individual expression. It examines both historical and contemporary approaches in developing form and content.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- utilize compositional principles as they apply to three-dimensional form and space.
- discuss and demonstrate his/her knowledge of traditional and contemporary sculptural techniques.
- compare and contrast properties of sculpture form and space.
- develop his/her creative abilities and individual expression through problem-solving assignments.
- further develop the ability to generate related visual problems based on a variety of source material.

ART 374 Sculpture Lab

Units: 1 - 2
Hours: 54 - 108 hours LAB
Prerequisite: None.
Corequisite: ART 324, 370, 371, 372, 373, or 375
Transferable: CSU; UC (Credit granted only if concurrently enrolled in ART 372, 373 or 375)
Catalog Date: June 1, 2020

This course offers laboratory experience to assist in completing complex sculpture projects. It focuses on the development of a personal creative vision furthering technical skills and complex problem solving.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- analyze the relationship between content and mechanical skills in plaster fabrication to include composition, form, carving, constructing, molding, and finishing.
- exhibit skills in wax fabrication for bronze casting.
- exhibit safe and proper use of necessary mixed media equipment such as a band saw, drill press, grinder, and welders.
- exhibit skills in clay fabrication to include composition, form, molding, constructing, and finishing.
- analyze and select appropriate materials and techniques necessary to explore personal artistic vision.

ART 375 Figure Sculpture

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Course Family: Figure Studies (http://arc.losrios.edu/course-families#id_100008)
Prerequisite: None.
Advisory: ART 304
Transferable: CSU; UC
Catalog Date: June 1, 2020

This course introduces figure sculpture, using the live undraped model as reference. Concepts of human anatomy are emphasized through the use of quick gestural studies and sustained sculptural projects. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- construct sculptures of human gestures using ceramic clay.
- construct a free standing figure sculpture using an armature.
- analyze human anatomical structure through accurate representational form.
- analyze human anatomical structure using the figure to give form to personal thoughts and ideas.
- evaluate work by applying contemporary and traditional figurative sculpture concepts.

ART 376 Functional Sculpture

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Course Family: Sculpture (http://arc.losrios.edu/course-families#id_100011)
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340
Transferable: CSU
Catalog Date: June 1, 2020

This course covers the hands-on basics of metal forming, design principles and materials used for sculpture, and functional art forms with emphasis on the use of the anvil and the gas forge. Topics include hand forging metal techniques, furniture and sculpture design, finishing processes, and the use of patinas.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- design and execute sculptural concepts in the medium using the anvil and the gas forge.
- apply traditional and non-traditional metal working techniques to 3-dimensional functional and nonfunctional art forms.
- demonstrate the proper and safe use of a gas forge, the anvil and other related metal working equipment.
- demonstrate skill in the blacksmith techniques such as punching, twisting, drawing out, and upsetting.

ART 390 Ceramics

Units: 3
This course is a beginning ceramics class in hand building and throwing techniques. Elementary clay construction including pinch pot, coil, slab, and slump molds are covered as well as an introduction to the potter's wheel. Different methods of glazing and firing are studied. The history and theory of ceramics are examined.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify basic ceramic terminology
- distinguish between craft and fine art
- incorporate skills to build sculptural objects in clay
- create functional and non-functional ceramic work employing proficient technique
- differentiate and apply principles of design and theory to ceramic work
- research ceramic artwork and history

ART 391 Intermediate Ceramics

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<td>Hours:</td>
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<td>Course Family:</td>
<td>Ceramics-Hybrid (<a href="http://arc.losrios.edu/course-families#id_100013">http://arc.losrios.edu/course-families#id_100013</a>)</td>
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<tr>
<td>Prerequisite:</td>
<td>ART 390 with a grade of &quot;C&quot; or better</td>
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This is an intermediate course in wheel-throwing and sculpture techniques. It explores the technical and creative processes of ceramic pottery making and sculpture including surface treatment and various firing processes. Focus is placed on an in-depth examination of contemporary ceramics. Different artists, techniques, and projects are explored each semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate skills of wheel-throwing and hand-building ceramic techniques
- investigate the history and theory of ceramics
- create ceramic sculpture and pottery
- examine and integrate design, concept, and aesthetics in ceramic sculpture
- critique ceramic art work

ART 397 Alternative Firing Processes in Ceramics

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This course covers alternative firing processes in ceramics which include raku, wood, soda, saggar, sawdust, and pit firing. Ceramics is explored through hand-building and wheel-throwing techniques. Glaze formulation for the firing processes is included. Emphasis is placed on in-depth examinations of the history of kilns and firing techniques. Different firing processes are explored each semester. Field trips may be required.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- describe characteristics of alternative kilns and firing processes.
- create and produce artwork in clay specific to alternative firing techniques.
- select clay and glazes pertinent to alternative firing processes.
- critique ceramic art work.
- practice kiln maintenance.
- demonstrate safe kiln loading, unloading, and firing practices.

**ART 398 Ceramic Murals and Tiles**

*Units:* 3  
*Hours:* 36 hours LEC; 54 hours LAB  
*Course Family:* Ceramics-Hybrid  
*Prerequisite:* ART 390 with a grade of "C" or better  
*Transferable:* CSU  
*Catalog Date:* June 1, 2020  

This course introduces ceramic mural and tile methods and techniques. It explores the technical and creative process of site-specific mural and tile making including bas relief, press molds, various surface treatments, and installation methods. Focus is placed on an in-depth examination of the history of ceramic tiles and murals.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- design artworks that are site-specific.
- research art history as it applies to projects.
- draw and design murals/tiles before producing them in clay.
- create ceramic tiles and murals.
- experiment with different surface treatments for murals.
- apply various installation techniques.

**ART 420 Film Making**

*Units:* 2  
*Hours:* 18 hours LEC; 54 hours LAB  
*Prerequisite:* None.  
*Transferable:* CSU; UC (ART 420 & 422 combined: maximum credit - one course)  
*General Education:* CSU Area C1  
*Catalog Date:* June 1, 2020  

This course involves completing a series of short, individual and/or group projects, focusing on various methods and techniques that can be used to create films/videos which are visually sophisticated and conceptually interesting. Work by contemporary and historically-significant filmmakers is also covered.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- identify and discuss technical aspects of film making, comparing contemporary and historical perspectives
- identify and apply the formal elements of film making, comparing contemporary and historical perspectives
- differentiate between various types of lighting and demonstrate the relationships between lighting and form
- demonstrate distinction between subject movement, camera movement, and mechanical movement
- apply the scriptwriting principles of character uniqueness and development, subtext, conflict, content, and symbolism
- discuss and demonstrate major theories of film editing, comparing contemporary and historical perspectives
ART 430 Art and Children

This course introduces the use of artists' materials and techniques appropriate for teaching art to children. It includes the study of art history, including various movements (ism's) and concepts in creating artwork. This course covers the process of creating lesson plans, doing preparatory work for presenting art projects, and creation of drawings, paintings, and sculptures. It also covers how to identify and properly use, maintain, store, and clean commonly used art materials. Topics include proper identification, utilization, and presentation of basic art principles, and an understanding of age-specific capabilities in children. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify varying techniques for handling common art materials.
- develop skills and techniques to communicate basic art principles.
- organize an appropriate sequential plan for art education in the elementary schools.
- analyze age-specific capabilities of children in terms of the visual arts.
- propose appropriate art resources for use with specific groups of students.
- investigate a variety of cultural and age-specific methods of expression.
- assess the historical and social uses of art.

ART 440 Artists' Materials and Techniques

This course focuses on analyzing and developing artists' mediums and techniques. Historical information about various materials and their relationship to personal imagery and style are emphasized. The composition of pigments, their origins, and various binders are explored. The construction of various artists' substrates and supports as well as the techniques of matting and framing art work are also covered. A supply fee may be required for this course. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- categorize a broad sampling of artists' materials and techniques of historical, traditional, and modern practices.
- analyze the composition and use of artists' materials and techniques focusing on two-dimensional mediums.
- compare the technological advances of artists' materials and techniques throughout history.
- relate vocabulary and techniques to a variety of artists' mediums.
- explore the process of creating artists' materials and techniques based on historical, traditional, and modern practices.

ART 442 Introduction to Art Gallery Operations

This course introduces the use of artists' materials and techniques appropriate for teaching art to children. It includes the study of art history, including various movements (ism's) and concepts in creating artwork. This course covers the process of creating lesson plans, doing preparatory work for presenting art projects, and creation of drawings, paintings, and sculptures. It also covers how to identify and properly use, maintain, store, and clean commonly used art materials. Topics include proper identification, utilization, and presentation of basic art principles, and an understanding of age-specific capabilities in children. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify varying techniques for handling common art materials.
- develop skills and techniques to communicate basic art principles.
- organize an appropriate sequential plan for art education in the elementary schools.
- analyze age-specific capabilities of children in terms of the visual arts.
- propose appropriate art resources for use with specific groups of students.
- investigate a variety of cultural and age-specific methods of expression.
- assess the historical and social uses of art.
This course introduces gallery operations to art students. It involves hands-on experience in curating, planning, and installing exhibitions. A portion of this course is offered in a TBA component of 16-30 hours which may include work as a gallery attendant or gallery docent. Field trips may be required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- apply knowledge obtained in art history lectures in order to create exhibitions thematically to gallery exhibitions.
- identify problems and select solutions for displaying art work.
- demonstrate responsibility for gallery scheduling and exhibition procedures.
- discuss contemporary art and artists with gallery patrons.

### ART 443 Art Gallery Operations

| Units: | 3 |
| Hours: | 36 hours LEC; 54 hours LAB |
| Course Family: | Gallery Management (http://arc.losrios.edu/course-families#id_100015) |
| Prerequisite: | ART 442 with a grade of "C" or better |
| Transferable: | CSU |
| Catalog Date: | June 1, 2020 |

This course is a continuation in art gallery operations building on the concepts of proper handling of artwork; installing art exhibits; interacting with artists, patrons, and the public; planning and curating; inventory and maintenance of artwork; and gallery and student outreach. A portion of this course is offered in a TBA component of 16-30 hours which may include work experience as a gallery attendant or docent. Field trips are required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- apply developed knowledge to organize art exhibitions in a gallery setting.
- identify and solve problems related to displaying artworks in an evolved and creative manner.
- demonstrate a firmer grasp of responsibility for gallery scheduling and exhibition procedures.
- develop and utilize terminology associated with the visual arts while communicating with artists and gallery patrons.
- demonstrate improved knowledge of art and culture as it relates to the history of museums and gallery institutions.

### ART 444 Art Gallery and Portfolio Preparation

| Units: | 3 |
| Hours: | 36 hours LEC; 54 hours LAB |
| Course Family: | Studio Art and Practice (http://arc.losrios.edu/course-families#id_100014) |
| Prerequisite: | ART 442 with a grade of "C" or better |
| Advisory: | ENGWR 101 with a grade of "C" or better |
| Transferable: | CSU |
| Catalog Date: | June 1, 2020 |

This course offers study in both sides of the business world of art, including gaining entrance into galleries as an artist and finding, installing, and advertising professional gallery exhibitions. It emphasizes the creation of individual portfolios and portfolio management. Topics include selecting exhibitions, creating announcements, organizing receptions, and sending out press releases in addition to photographing art and preparing documents to accompany exhibitions. It also covers creating artist statements, digital portfolios properly formatted on a disk, business cards, cover letters, and resumes. Field trips to galleries and museums may be required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- analyze and demonstrate procedures for displaying artwork.
- develop, record, and maintain accountability for gallery schedules.
- create press releases and maintain public relations and proper advertising procedures for a gallery
- develop system for organization of gallery exhibitions
- assess artwork for installation purposes
- evaluate and produce a professional portfolio of art, including digital images, artist statement, resume, cover letter, and business cards

**ART 445 Art Gallery Operations**

**Units:** 3  
**Hours:** 36 hours LEC; 54 hours LAB  
**Course Family:** Gallery Management  
**Prerequisite:** ART 443 with a grade of "C" or better  
**Transferable:** CSU  
**Catalog Date:** June 1, 2020

This course continues students’ experiences in gallery operations. It provides additional exposure to gallery operations, including planning and installing exhibitions, lighting techniques, assistance in maintaining a permanent art collection, introduction to conservation techniques, participation in staffing and docent activities, gallery and student outreach programs, and assistance with additional on- and off-campus exhibitions. A portion of this course is offered in a TBA component of 16-30 hours which may include work experience as a gallery attendant or docent. Field trips are required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- apply practical knowledge obtained in previous gallery operation experiences.
- distinguish advanced gallery procedures and solve problems related to displaying and documenting works of art in an exhibition setting.
- prioritize responsibilities for gallery scheduling and exhibition procedures utilizing advanced skills based on previous experiences.
- integrate knowledge of contemporary and historical art and artists in the communication of art with the community.
- create proposals for exhibitions and press releases to generate community interest.

**ART 470 Art Lab**

**Units:** 1  
**Hours:** 54 hours LAB  
**Prerequisite:** None.  
**Transferable:** CSU  
**Catalog Date:** June 1, 2020

This course offers additional lab hours to more fully develop creative vision and technical skills. It provides additional assistance in assignments and portfolio development.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- analyze and select materials and techniques necessary to explore personal artistic vision.
- develop a portfolio of artwork for presentation.

**ART 494 Topics in Art**

**Units:** 0.5 - 4  
**Hours:** 6 - 48 hours LEC; 9 - 72 hours LAB  
**Prerequisite:** None.  
**Transferable:** CSU  
**Catalog Date:** June 1, 2020

This course is designed to offer unique, meaningful, or transient topics in art that are not included in current course offerings. Topics may include glass blowing; air brush, encaustic, fresco, or sumi painting technique; or bronze casting, for example.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- construct projects utilizing the techniques which are demonstrated in each topic of study.
- compare and contrast art historical influences pertaining to each topic of study.
- evaluate personal skill level pertaining to each topic of study.
- evaluate the job potential in the topic of study discussed.

ART 495 Independent Studies in Art

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

ART 498 Work Experience in Art

Units: 1 - 4
Hours: 60 - 300 hours LAB
Prerequisite: None.
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position, or job related to art with a cooperating site supervisor. Students are advised to consult with the Art Department faculty to review specific certificate and degree work experience requirements.
Transferable: CSU
General Education: AA/AS Area III(b)
Catalog Date: June 1, 2020

This course provides students with opportunities to develop marketable skills in preparation for employment or advancement within the field of art. It is designed for students interested in work experience and/or internships in transfer-level degree occupational programs. Course content includes understanding the application of education to the workforce, completion of Title 5 required forms which document the student’s progress and hours spent at the work site, and developing workplace skills and competencies.

During the semester, the student is required to complete 75 hours of related paid work experience, or 60 hours of related unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. All students are required to attend the first class meeting, a mid-semester meeting, and a final meeting. Additionally, students who have not already successfully completed a Work Experience course will be required to attend weekly orientations while returning participants may meet individually with the instructor as needed. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate application of industry knowledge and theoretical concepts in the field of art related to a transfer degree level career as written in the minimum three (3) learning objectives created by the student and his/her employer or work site supervisor at the start of the course.
- make effective decisions, use workforce information, and manage his/her personal career plans.
- behave professionally, ethically, and legally at work, consistent with applicable laws, regulations, and organizational norms.
- behave responsibly at work, exhibiting initiative and self-management in situations where it is needed.
- apply effective leadership styles at work, with consideration to group dynamics, team and individual decision making, and workforce diversity.
- communicate in oral, written, and other formats, as needed, in a variety of contexts at work.
- locate, organize, evaluate, and reference information at work.
- demonstrate originality and inventiveness at work by combining ideas or information in new ways, making connections between seemingly unrelated ideas, and reshaping goals in ways that reveal new possibilities using critical and creative thinking skills such as logical reasoning, analytical thinking, and problem-solving.
Art History (ARTH)

ARTH 300 Introduction to Art

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC (ARTH 300 & 480 combined; maximum credit - one course)
General Education: AA/AS Area I; CSU Area C1; IGETC Area 3A
C-ID: C-ID ARTH 100
Catalog Date: June 1, 2020

This course is a survey of the history and analysis of the visual arts, including drawing, painting, sculpture, architecture, and additional media. It offers a foundation for understanding art. Field trips to art galleries or museums may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- critically evaluate the basic elements of an artwork.
- categorize the varying processes of art-making.
- analyze different historical periods of art.
- identify different styles of art.
- describe a new way to look at art.
- compare and contrast different art styles.
- compare and contrast different historical periods of art.

ARTH 302 Art: Stone Age Through the Middle Ages

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340
Transferable: CSU; UC
General Education: AA/AS Area I; CSU Area C1; IGETC Area 3A
C-ID: C-ID ARTH 110
Catalog Date: June 1, 2020

This course is a study of the architecture, sculpture, and painting of the ancient Near East and Europe from the Stone Age through the Middle Ages. Art works of each period are discussed and related to respective cultures. Field trips and/or individual visitation to art galleries and museums are required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze major periods of art from the Stone Age through the Middle Ages.
- critique individual works of art from different periods.
- compare the quality and importance of different works of art from the same historical period.

ARTH 308 Renaissance Tradition in Art

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC
General Education: AA/AS Area I; CSU Area C1; IGETC Area 3A
This course is a study of painting, sculpture, and architecture of European and U.S. cultures from the 14th century early Renaissance to the mid-19th century. Outstanding art works of each major period are discussed, analyzed, and placed within historical context. A field trip to an art museum or art gallery may be required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- compare and contrast the visual artistic developments of Western cultures from the 14th century to the mid-19th century.
- analyze important works of art from each of the major periods presented.
- compare significant stylistic innovations from different artists and historical periods.
- compare the roles of art and artists within Renaissance and later societies.

**ARTH 310 Modern Art**

**Units:** 3  
**Hours:** 54 hours LEC  
**Prerequisite:** None.  
**Advisory:** Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.  
**Transferable:** CSU; UC  
**General Education:** AA/AS Area I; CSU Area C1; IGETC Area 3A  
**C-ID:** C-ID ARTH 150; Part of C-ID ARTH 120  
**Catalog Date:** June 1, 2020

This course covers 18th, 19th, 20th and 21st century art forms including painting, sculpture, and architecture in Europe and America. Styles discussed include Neoclassicism, Romanticism, Realism, Impressionism and Post-Impressionism, and the major movements of the 20th century. Post-Modern art is also discussed. A field trip to an art museum or art gallery may be required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- identify major works of art and architecture from the Neoclassical period to the contemporary period.
- discuss and distinguish styles and stylistic changes in art from the Neoclassical period to the contemporary period.
- interpret and evaluate art and architecture from the Neoclassical period to the contemporary period within their cultural and historical contexts.
- formulate and analyze meanings and functions of art and architecture from the Neoclassical period to the contemporary period.

**ARTH 318 History of American Art**

**Units:** 3  
**Hours:** 54 hours LEC  
**Prerequisite:** None.  
**Advisory:** Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; or ESLR 340 AND ESLW 340  
**Transferable:** CSU; UC  
**General Education:** AA/AS Area I; CSU Area C1; IGETC Area 3A  
**Catalog Date:** June 1, 2020

This course covers art in America from initial European contact to the present day. Topics include initial images of the New World made by Europeans; early art and architecture that reflects a synthesis of Native and European traditions; Colonial and early American art, architecture, and decorative arts; 19th-century portraits, landscapes, and history paintings; and regional and later modernist American art of the twentieth century. This course emphasizes the influence of European traditions as well as the history of a variety of cultures in the present day United States, the variety of styles and patrons in the country, and the way in which cultural values find expression in art, architecture, and decorative arts. An individual or group field trip to a museum or art gallery is required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- recall and identify major works of art and architecture created in America from the 15th century to the present day.
- compare and contrast art objects created in America from the 15th century to the present day.
- critique and analyze American art, architecture, and decorative arts based on aesthetic and functional qualities.
- identify and interpret sources of influence for American art, architecture, and decorative arts.
- synthesize American cultural values and their artistic expressions.
- describe how historical, social, or political contexts can be seen in the styles or types of art objects coming from specific American regions or eras.

**ARTH 322 Art History of the Non-Western World**

- **Units:** 3
- **Hours:** 54 hours LEC
- **Prerequisite:** None
- **Advisory:** Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESR 340 AND ESLW 340.
- **Transferable:** CSU; UC
- **General Education:** AA/AS Area I; CSU Area C1; IGETC Area 3A
- **Catalog Date:** June 1, 2020

This is a survey of art history throughout the Non-Western world. It covers the architecture, sculpture, and painting of the peoples of India, Africa, Asia, the Americas, the Arctic, Australia, and Oceania. The time period spans from the Stone Age to the 18th century. Field trips and/or individual visits to art galleries and museums are required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- analyze the different visual arts styles of Non-Western cultures.
- discuss and describe the diversity in art throughout the world.
- compare the aesthetic motivation and cultural purposes of various art forms.
- compare traditional multicultural and international art periods.

**ARTH 333 Introduction to Islamic Art**

- **Units:** 3
- **Hours:** 54 hours LEC
- **Prerequisite:** None
- **Transferable:** CSU; UC
- **General Education:** AA/AS Area I; CSU Area C1; IGETC Area 3A
- **Catalog Date:** June 1, 2020

This course surveys the art and culture of the Middle East. It focuses on Islamic art and architecture and provides fundamental information on the formation of Islamic art, its history, and philosophy. It includes visual examples from Arabic, Persian, and Indian cultures.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- evaluate the influential elements in the formation and production of Islamic art considering the social, political, and historical backdrop against which Islamic art flourished, including the role of the unorthodox interpretation of Islam relating to artistic endeavors.
- demonstrate an awareness of the critical issues within the field of "Islamic art" such as the use of the term "Islamic" in Islamic art and the application of methodology in the interpretation of the art.
- demonstrate knowledge of and comparatively analyze examples of the various branches of the art and architecture and the relating arts, for example the art of the book, calligraphy, and book illumination as part of the art of the object, religious and secular architecture, and the building decorative arts as seen in the realm of architecture.
- analyze the mutual impact of Islam and other cultures both in the East and the West and identify the elements of mutual appropriation in their visual art.

**ARTH 334 International Contemporary Art**

- **Units:** 3
- **Hours:** 54 hours LEC
- **Prerequisite:** None.
- **Transferable:** UC
This course is a worldwide survey of trends in art, including painting, sculpture, and architecture since 1980, with an emphasis on the diversity of contemporary global cultures. New art mediums, such as video, computer, street art, and performance art are highlighted. This course focuses on social and political commentary in art. A field trip to a local art exhibition may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- appraise representative artists and artworks from a number of different world cultures.
- analyze current trends in painting, sculpture, photography, film, architecture, and new visual art mediums.
- evaluate an artwork’s visual elements as well as its social or political content.
- critique the effectiveness of postmodern artworks.
- analyze current controversies and legal matters in art as well as artists' changing roles as participants in contemporary society.

ARTH 335 Survey of Photography

Same As: ARTPH 345
Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC
General Education: AA/AS Area I; CSU Area C1; IGETC Area 3A
Catalog Date: June 1, 2020

This course is a survey of photography. It explores the evolution of the photographic medium, its impact on art, culture, and history from the inception of photography to current trends. This survey covers various genres, including fine art, journalism, science, and social media. Field trips may be required. This course is not open to students who have completed ARTPH 345.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze the different photographic genres throughout history.
- compare the different visual art periods and styles of photography.
- describe and discuss the cultural impact of photography on society.
- evaluate the influence of photography on other artistic mediums.

Art Photography (ARTPH)

ARTPH 300 Basic Art Photography

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340
Transferable: CSU; UC
General Education: AA/AS Area I; CSU Area C1
C-ID: C-ID ARTS 260
Catalog Date: June 1, 2020

This course examines the formal and technical aspects of 35mm film photography. Topics include critiques of major movements in the history of photography and contemporary silver-gelatin process artists. A problem-solving approach is utilized to explore compositional ideas. Camera operation, black and white film developing, and silver-gelatin printmaking are covered. Digital photography file management and editing concepts are introduced through film scans. A 35mm single lens reflex (SLR) camera as well as darkroom and portfolio supplies are required. Processing chemicals are provided. Field trips may be required.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- evaluate principles of form as they apply to basic photography.
- manage camera, lens, and exposure techniques in various shooting situations.
- choose film processing and print enlarging techniques.
- recognize various photographic trends.
- critique photographs from the history of photography, current exhibits, and student work for technical print quality and composition.
- evaluate traditional prints and digital prints.
- choose file formats and resolution for film scans.
- apply basic digital editing techniques to film scans.

ARTPH 302 Black and White Silver Gelatin Photography Lab

Units: 1
Hours: 54 hours LAB
Course Family: Studio Art and Practice (http://arc.losrios.edu/course-families#id_100014)
Prerequisite: None.
Corequisite: ARTPH 300 or 340
Transferable: CSU
Catalog Date: June 1, 2020

This course offers additional lab hours to more fully develop creative vision and technical skills in black and white silver gelatin photography. It also allows alternative process photographers additional lab hours for development of film and digital negatives. It provides additional assistance in assignments and portfolio development for ARTPH 300 and ARTPH 340.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- process film and film scan exposures, wet-lab prints, and digital prints from film scans.
- evaluate wet-lab, archival inkjet and type c-prints for content, quality, and presentation.
- prepare bodies of photographic work for varied clients including galleries, customers, and publications.

ARTPH 305 Digital Photography

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: ENGWR 102 and ENGRD 116 with a grade of "C" or better; OR ESLR 320 and ESLW 320 with a grade of "C" or better. ARTNM 302 with a grade of "C" or better.
Transferable: CSU; UC
General Education: AAAS Area I
Catalog Date: June 1, 2020

This is a course in basic digital photography. Topics include digital camera functions, exposure systems using f-stop and shutter speed combinations, digital shooting practices, photographic composition and aesthetics, editing tools and software, and print portfolio development. It also includes issues in contemporary photography and the history of photography. Digital cameras with adjustable f-stops and shutter speeds, camera memory cards, and re-writable memory devices are required. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- choose f-stop and shutter speed combinations for various exposure systems and situations
- evaluate digital photographs for quality and aesthetics
- critique digital and traditional photographs
- assess digital photography editing needs
prioritize software tools and applications to edit digital photographs

systematize the digital editing work flow

assemble digital and print portfolios

identify major movements and artists from the history of photography

**ARTPH 306 Photography Lab: Digital Editing**

Units: 1

Hours: 54 hours LAB

Course Family: [Studio Art and Practice](http://arc.losrios.edu/course-families#id_100014)

Prerequisite: None.

Corequisite: ARTPH 305, 310, 322, or 360

Transferable: CSU

Catalog Date: June 1, 2020

This course offers additional lab hours to more fully develop creative vision and technical skills in digital image editing, processing, and printing. It provides additional assistance in assignments and portfolio development in ARTPH 305, ARTPH 310, ARTPH 322, and ARTPH 360.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- download and process images in LightRoom, Bridge, Camera Raw, and PhotoShop
- evaluate processing tools and software
- evaluate plug-ins and non-Adobe image processing

**ARTPH 310 Intermediate Photography**

Units: 3

Hours: 36 hours LEC; 54 hours LAB

Prerequisite: ARTPH 300 or 305 with a grade of "C" or better

Transferable: CSU

Catalog Date: June 1, 2020

This course covers the technical control of black and white photographic materials and equipment. Professional camera techniques and the creative aspects of photography are emphasized. A 35mm single lens reflex (SLR) or digital single lens reflex (DSLR) camera or digital camera with manual options is required. Darkroom and portfolio supplies are also required. Field trips may be required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- compare and contrast advanced photographic controls in the production of negatives, film enlargements, and digital prints
- evaluate a fine art photograph in terms of content and technique
- analyze digital and film prints for technical and aesthetic concerns
- critique advanced photographic and printing techniques from the history of photography and current trends in photography
- choose lighting techniques for portraiture and still life photography
- evaluate lighting conditions for contrast and quality
- apply color concepts to black and white images

**ARTPH 315 Trends in Software and Social Media for Photographers**

Units: 3

Hours: 36 hours LEC; 54 hours LAB

Prerequisite: ARTPH 305 with a grade of "C" or better

Advisory: Eligible for ENGRD 116 AND ENGWR 102; OR ESLR 320 AND ESLW 320.
This course covers basic trends in photographic editing and presentation software. Editing photographs in Photoshop and file management in Lightroom along with introductions to similar software are covered. Topics include uses of social media in presentation and dissemination of photographs for commercial purposes and clients, as well as photographic output to print, social media, and the internet.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- evaluate editing software for production of photographs for varied clients
- assess appropriateness of varied social media for client-based shooting assignments
- manage large volumes of image files for varied output and clients
- edit photographs for print portfolios, digital portfolios, and the internet

ARTPH 322 Color Photography

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: ARTPH 300 or 305 with a grade of "C" or better
Transferable: CSU; UC
Catalog Date: June 1, 2020

This course covers the aesthetic aspects of color photography involving camera and digital techniques emphasizing uniqueness of expression. It includes a continuing exploration of form and composition, lighting and exposure, film characteristics and scanning, and digital capture and editing, with emphasis on color photography as an art form. Color correction, color management, work flow, and other digital concepts are included. A 35mm single lens reflex (SLR) or digital camera with manual options as well as memory devices and portfolio supplies are required. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- appraise creative potential of color photographic processes
- distinguish between psychological impact of colors as compared to black and white photography
- choose appropriate processes, equipment, and related techniques for chosen photographic materials
- describe major works, past and present, in the field of color photography
- critique major works in the field of color photography
- choose color correction and editing options for digital photographs
- evaluate aesthetic differences in saturation and color quality in film and digital color prints
- create a color-managed work environment linking cameras, monitors, scanners, printers and projectors to consistent profiles
- assess image capture and editing work-flow techniques for varied commercial and fine art clients

ARTPH 340 Alternative Process Photography

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340
Transferable: CSU; UC
General Education: AA/AS Area I
Catalog Date: June 1, 2020

This course covers alternative photographic printing processes produced in sunlight. No camera is necessary. Image processes such as salt prints, cyanotypes, Van Dyke brown prints, gum prints, palladium prints, and wet-plate photography are covered. It includes the history of photographic processes from the daguerreotype to the digital age. Negatives are produced from digital transparencies, Xerox transparencies, transparency film, and natural objects. Varied printing substrates are covered. Papers and printing surfaces, brushes, memory storage devices, digital printing resources, safety glasses, and protective gloves are required. Chemistry is provided. Field trips may be required.
Upon completion of this course, the student will be able to:

- assess major technical developments in equipment and photographic processes
- produce photographs in major technical forms, such as salt print, brown print, cyanotype, gum print, and palladium print
- evaluate photographs by process and historical context
- develop a portfolio of photographs representing varied alternative photographic processes
- critique alternative process photographs for content and aesthetics
- evaluate the role of alternative process photographs in historical and contemporary photographic practice

**ARTPH 345 Survey of Photography**

**Same As:** ARTH 335  
**Units:** 3  
**Hours:** 54 hours LEC  
**Prerequisite:** None.  
**Advisory:** Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.  
**Transferable:** CSU; UC  
**General Education:** AA/AS Area I; CSU Area C1; IGETC Area 3A  
**Catalog Date:** June 1, 2020

This course is a survey of photography. It explores the evolution of the photographic medium, its impact on art, culture, and history from the inception of photography to current trends. This survey covers various genres, including fine art, journalism, science, and social media. Field trips may be required. This course is not open to students who have completed ARTH 335.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- analyze the different photographic genres throughout history.
- compare the different visual art periods and styles of photography.
- describe and discuss the cultural impact of photography on society.
- evaluate the influence of photography on other artistic mediums.

**ARTPH 350 Documentary Photography**

**Units:** 3  
**Hours:** 36 hours LEC; 54 hours LAB  
**Prerequisite:** ARTHPH 300 or 305 with a grade of "C" or better  
**Transferable:** CSU  
**Catalog Date:** June 1, 2020

This course provides instruction in documentary photography and photojournalism techniques and concepts. Image production and critical discussion are emphasized. A portfolio including an extensive photo essay or documentary project is required. A 35mm single lens reflex (SLR) camera or a digital camera (dSLR) with manual options as well as darkroom, digital, and portfolio supplies are required. Field trips may be required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- differentiate between news, feature, sport, fashion, documentary, and fine art photo essays
- evaluate morality and ethics of photographic choices on documentary content
- create and edit various photographic mediums for digital, press, and exhibit formats
- evaluate photographs for content and message
- investigate current and historical movements and trends in documentary media
- prepare a photographic essay or a photographic theme
ARTPH 360 Studio Lighting

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: ARTPH 300 or 305 with a grade of "C" or better
Transferable: CSU; UC
Catalog Date: June 1, 2020

This course is a study in studio lighting techniques used in photography. Topics include lighting ratios, correct exposure using an electronic flash and metering, basic portraiture, choice of lighting equipment and modifiers, white balance adjustments, and color temperature. It also includes study of the history of studio photography. Black and white, color, and digital processes are included. A 35mm single lens reflex (SLR) or digital camera (dSLR) with manual options, lighting sync port, as well as darkroom or digital and portfolio supplies are required. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- arrange portable continuous light units
- evaluate studio electronic flash units
- set up lighting combinations using pre-visualization
- selectively measure lighting and evaluate ratios
- evaluate white balance and color temperature
- compose and light studio still life, portrait, and product shots
- critique darkroom and digital prints for quality and aesthetics
- combine mixed lighting for artistic and commercial photography
- organize professional photographic materials and equipment
- prepare a portfolio to apply for work in the photographic industry

ARTPH 361 Photography Lab: Studio Lighting

Units: 1
Hours: 54 hours LAB
Course Family: Studio Art and Practice (http://arc.losrios.edu/course-families#id_100014)
Prerequisite: None.
Corequisite: ARTPH 360 or 370
Transferable: CSU
Catalog Date: June 1, 2020

This course offers additional lab hours to more fully develop creative vision and technical skills in studio lighting and large format photography. It provides additional assistance in assignments and portfolio development for ARTPH 360 and ARTPH 370.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- set up complex hot-light compositions
- set up complex strobe light compositions
- set up location lighting

ARTPH 370 Fashion, Wedding, and Portrait Photography

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: ARTPH 300 or 305 with a grade of "C" or better
Transferable: CSU
This course is an overview of basic fashion, wedding, and portrait photography concepts. Topics include major movements in fashion and portrait photography as well as the study of specific fashion photographers. This course also includes studio portrait lighting and styling techniques specific to fashion, wedding, and portrait photography. Wedding photojournalism is also covered. A 35mm digital camera (DSLR) with manual options is required. Fashion shoots are required. Field trips may be required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- identify major movements and trends in fashion, wedding, and portrait photography throughout history
- critique major fashion photographers for content and form
- assess still-photography lighting problems and identify solutions
- apply portable lighting techniques to runway, portrait, and wedding situations
- choose exposure techniques for model photography in black and white and color photography
- assess styling techniques for specific fashion, wedding, and portrait concepts
- employ wedding photojournalism techniques
- create portfolios of fashion, wedding, and portrait photographs
- assess current digital photography technology in software and hardware

**ARTPH 375 Freelance Photography Careers**

<table>
<thead>
<tr>
<th>Units</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours</td>
<td>36 hours LEC</td>
</tr>
<tr>
<td>Prerequisite</td>
<td>None.</td>
</tr>
<tr>
<td>Advisory</td>
<td>Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.</td>
</tr>
<tr>
<td>Transferable</td>
<td>CSU</td>
</tr>
<tr>
<td>Catalog Date</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course covers careers in freelance photography including commercial photography, journalism, and fine art photography. It introduces the basic elements of implementing photography project plans, including necessary permits, aesthetic style choices, marketing, photography pricing, and portfolio presentations. This course also covers preparing, presenting, and implementing freelance photography career plans.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- evaluate personal, business, and creative strengths and insights in photography.
- research potential career opportunities in photography.
- create a personal plan and outline expectations of a career in photography.
- explain photography presentation strategies including promotional campaign, print, motion, or web based.
- assess best bookkeeping and marketing practices for photography businesses.

**ARTPH 376 Photography Lab: Portfolio Development**

<table>
<thead>
<tr>
<th>Units</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours</td>
<td>54 hours LAB</td>
</tr>
<tr>
<td>Course Family</td>
<td>Studio Art and Practice <a href="http://arc.losrios.edu/course-families/id_100014">http://arc.losrios.edu/course-families/id_100014</a></td>
</tr>
<tr>
<td>Prerequisite</td>
<td>None.</td>
</tr>
<tr>
<td>Corequisite</td>
<td>Concurrent enrollment in ARTPH 300, ARTPH 305, ARTPH 310, ARTPH 320, ARTPH 340, ARTPH 350, ARTPH 360, ARTPH 370, ARTPH 375, or ARTPH 495</td>
</tr>
<tr>
<td>Transferable</td>
<td>CSU; UC (credit granted only if concurrently enrolled in ARTPH 300)</td>
</tr>
<tr>
<td>Catalog Date</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course offers additional lab hours to more fully develop creative vision and technical skills. It provides additional assistance in assignments and portfolio development.

**Student Learning Outcomes**

...
Upon completion of this course, the student will be able to:

- choose film developing or digital processing techniques
- control print finishing processes for portfolio development
- produce digital and print portfolios of original photographic work

**ARTPH 495 Independent Studies in Art Photography**

**Units:** 1 - 3  
**Hours:** 54 - 162 hours LAB  
**Prerequisite:** None.  
**Transferable:** CSU  
**Catalog Date:** June 1, 2020

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

**ARTPH 498 Work Experience in Art Photography**

**Units:** 1 - 4  
**Hours:** 60 - 300 hours LAB  
**Prerequisite:** None.  
**Enrollment Limitation:** Students must be in a paid or unpaid internship, volunteer position, or job related to art with a cooperating site supervisor. Students are advised to consult with the Art Photography Department faculty to review specific certificate and degree work experience requirements.  
**Advisory:** Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.  
**Transferable:** CSU  
**General Education:** AA/AS Area III(b)  
**Catalog Date:** June 1, 2020

This course provides students with opportunities to develop marketable skills in preparation for employment or advancement within the field of art photography. It is designed for students interested in work experience and/or internships in transfer-level degree occupational programs. Course content includes understanding the application of education to the workforce, completion of Title 5 required forms which document the student’s progress and hours spent at the work site, and developing workplace skills and competencies.

During the semester, the student is required to complete 75 hours of related paid work experience, or 60 hours of related unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. All students are required to attend the first class meeting, a mid-semester meeting, and a final meeting. Additionally, students who have not already successfully completed a Work Experience course will be required to attend weekly orientations while returning participants may meet individually with the instructor as needed. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- demonstrate application of industry knowledge and theoretical concepts in the field of art photography related to a transfer degree level career as written in the minimum three (3) learning objectives created by the student and his/her employer or work site supervisor at the start of the course.
- make effective decisions, use workforce information, and manage his/her personal career plans.
- behave professionally, ethically, and legally at work, consistent with applicable laws, regulations, and organizational norms.
- behave responsibly at work, exhibiting initiative and self-management in situations where it is needed.
- develop effective leadership skills at work, with consideration to group dynamics, team and individual decision making, and workforce diversity.
- communicate in oral, written, and other formats, as needed, in a variety of contexts at work.
- locate, organize, evaluate, and reference information at work.
- demonstrate originality and inventiveness at work by combining ideas or information in new ways, making connections between seemingly unrelated ideas, and reshaping goals in ways that reveal new possibilities using critical and creative thinking skills such as logical reasoning, analytical thinking, and problem-solving.
Art New Media | American River College

This degree emphasizes visual arts produced in a digital environment. Art New Media focuses on new technology and a strong foundation in the fundamentals of visual art. Coursework includes a wide spectrum of studies in traditional and new media fundamentals relevant to art and design.

Division Dean  
Angela Milano

Department Chairs  
Matthew Stoehr

Associate Degrees

A.A. in Art New Media

This degree emphasizes visual arts produced in a digital environment. Art New Media focuses on new technology and a strong foundation in the fundamentals of visual art. Coursework includes a wide spectrum of studies in traditional and new media fundamentals relevant to art and design.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>ART 300</td>
<td>Drawing and Composition I</td>
<td>3</td>
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<tr>
<td>ART 320</td>
<td>Design: Fundamentals (3)</td>
<td>3</td>
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<tr>
<td>ART 323</td>
<td>Design: Color Theory</td>
<td>3</td>
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<tr>
<td>ARTH 310</td>
<td>Modern Art</td>
<td>3</td>
</tr>
<tr>
<td>ARTNM 305</td>
<td>History of Graphic Design</td>
<td>3</td>
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<tr>
<td>ARTNM 450</td>
<td>Portfolio for Art New Media</td>
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A minimum of 15 units from the following:

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<thead>
<tr>
<th>COURSE CODE</th>
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<tbody>
<tr>
<td>ARTNM 302</td>
<td>Digital Basics for Art New Media (1.5)</td>
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<tr>
<td>ARTNM 303</td>
<td>Graphic Design: Typography (3)</td>
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<tr>
<td>ARTNM 320</td>
<td>Facial Expression and Anatomy (3)</td>
</tr>
<tr>
<td>or ART 306</td>
<td>Facial Expression and Anatomy (3)</td>
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<tr>
<td>ARTNM 322</td>
<td>Beginning Digital Art (3)</td>
</tr>
<tr>
<td>ARTNM 324</td>
<td>Digital Design (3)</td>
</tr>
<tr>
<td>ARTNM 325</td>
<td>Intermediate Digital Design (3)</td>
</tr>
<tr>
<td>ARTNM 326</td>
<td>Digital Painting (3)</td>
</tr>
<tr>
<td>ARTNM 328</td>
<td>Beginning Digital Photo Imagery (3)</td>
</tr>
<tr>
<td>ARTNM 330</td>
<td>Intermediate Digital Photo Imagery (3)</td>
</tr>
<tr>
<td>ARTNM 331</td>
<td>Integrating Digital Media with Traditional Media I (3)</td>
</tr>
<tr>
<td>or ART 339</td>
<td>Integrating Digital Media with Traditional Media I (3)</td>
</tr>
<tr>
<td>ARTNM 332</td>
<td>Digital Video (3)</td>
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<tr>
<td>ARTNM 352</td>
<td>Design for Publication (3)</td>
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<tr>
<td>ARTNM 354</td>
<td>Digital Prepress (3)</td>
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<tr>
<td>ARTNM 358</td>
<td>College Magazine: Art Selection and Editing (1 - 2)</td>
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<td>ARTNM 359</td>
<td>College Magazine: Design and Production (3)</td>
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<tr>
<td>ARTNM 370</td>
<td>Introduction to Illustration (3)</td>
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<td>or ART 314</td>
<td>Introduction to Illustration (3)</td>
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<tr>
<td>ARTNM 372</td>
<td>Character Design (3)</td>
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<td>or ART 317</td>
<td>Character Design (3)</td>
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<tr>
<td>ARTNM 373</td>
<td>Storyboarding (3)</td>
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<td>ARTNM 401</td>
<td>Introduction to Web Design (3)</td>
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<td>ARTNM 402</td>
<td>Intermediate Web Design (3)</td>
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<td>ARTNM 404</td>
<td>Interactive Basics (3)</td>
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<td>ARTNM 405</td>
<td>Digital 2D Animation (3)</td>
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<td>ARTNM 406</td>
<td>Design for Tablets (3)</td>
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<tr>
<td>ARTNM 420</td>
<td>Introduction to 3D Modeling (3)</td>
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<td>ARTNM 421</td>
<td>3D Character Modeling (3)</td>
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<tr>
<td>ARTNM 422</td>
<td>3D Animation (3)</td>
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<tr>
<td>ARTNM 423</td>
<td>3D Texturing (3)</td>
</tr>
<tr>
<td>ARTNM 429</td>
<td>3D Rigging and Rig Building (3)</td>
</tr>
<tr>
<td>ARTNM 431</td>
<td>3D Short Production (3)</td>
</tr>
<tr>
<td>CISW 300</td>
<td>Web Publishing (3)</td>
</tr>
<tr>
<td>WEXP 498</td>
<td>Work Experience in (Subject) (1 - 4)</td>
</tr>
<tr>
<td>Total Units:</td>
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</tr>
</tbody>
</table>

The Art New Media Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- analyze design principles relevant to new media technology
- combine various technical skills in the field of art new media
- create visual images utilizing traditional and/or digital media
- synthesize concepts of modern art history and apply them to illustration, animation, graphic design, and web design
- conceive visual solutions for successful visual communication
- critique new media works

Career Information

Career opportunities include Graphic Designer, Character Designer, 3D Animator, Web Designer, 3D Modeler and Texture Artist, 3D Artist, Commercial Illustrator, and Print Designer.

A.A. in Technical Communications

This is an interdisciplinary course of study designed to prepare students for employment as professional writers and communicators in a variety of media intended to
Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 100</td>
<td>English for the Professional</td>
<td>3</td>
</tr>
<tr>
<td>CISA 305</td>
<td>Beginning Word Processing</td>
<td>2</td>
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<tr>
<td>CISW 300</td>
<td>Web Publishing</td>
<td>3</td>
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<tr>
<td>JOUR 300</td>
<td>Newswriting and Reporting</td>
<td>3</td>
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<tr>
<td>TECCOM 300</td>
<td>Introduction to Technical/Professional Communication</td>
<td>3</td>
</tr>
<tr>
<td>TECCOM 310</td>
<td>Technical/Professional Communication: Writing Reports</td>
<td>3</td>
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<tr>
<td>TECCOM 320</td>
<td>Technical/Professional Communication: Proposal Writing</td>
<td>3</td>
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<tr>
<td>TECCOM 330</td>
<td>Technical/Professional Communication: Writing Technical Manuals</td>
<td>3</td>
</tr>
<tr>
<td>TECCOM 340</td>
<td>Technical/Professional Communication: Developing Help Systems</td>
<td>1.5</td>
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<td>A minimum of 12 units from the following:</td>
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<tr>
<td>ARTNM 328</td>
<td>Beginning Digital Photo Imagery (3)</td>
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<tr>
<td>ARTNM 330</td>
<td>Intermediate Digital Photo Imagery (3)</td>
<td></td>
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<tr>
<td>ARTNM 352</td>
<td>Design for Publication (3)</td>
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<tr>
<td>CISA 331</td>
<td>Intermediate Desktop Publishing (2)</td>
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<td>CISW 310</td>
<td>Advanced Web Publishing (4)</td>
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<tr>
<td>CISW 321</td>
<td>Web Site Development using Dreamweaver (3)</td>
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<tr>
<td>CISW 400</td>
<td>Client-side Web Scripting (4)</td>
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<tr>
<td>CISW 410</td>
<td>Middleware Web Scripting (4)</td>
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<td>ENGWR 301</td>
<td>College Composition and Literature (3)</td>
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<td><strong>Total Units:</strong></td>
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</tr>
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</table>

The Technical Communications Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- analyze audience information needs and propose solutions to aid the audience.
- design technical communication solutions for a variety of industry and government purposes.
- design and create web sites and help systems with effective visual design, navigation, and written content.
- design and publish printed pages with effective design, organization, content, and indexing.
- compose professional prose for a variety of audiences with a variety of purposes.
- compose and edit professional documents in grammatically correct, concise English.
- create and use style templates in a variety of industry standard software.

Career Information

Technical communicators may be employed in a variety of occupations in government, scientific firms, nonprofits, natural resources, finance, education, and high tech.

Certificates of Achievement
3D Rigging Technical Director Certificate

This certificate offers training on the articulation of movement for 3D objects, environments, and characters. Rigging is the process of giving a character controls for movement, therein "articulating" its range of motion, or bringing the character to life. Standard rigs for vehicles, bipedal, and quadrupedal characters are created, as well as rig variations, such as cartoon rigs to maximize flexibility. In addition, students are expected to increase efficiency of production by creating rig building tools. Also, interfacing tools are created to increase efficiency and usability of the rigs in production.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTNM 420</td>
<td>Introduction to 3D Modeling</td>
<td>3</td>
</tr>
<tr>
<td>ARTNM 429</td>
<td>3D Rigging and Rig Building</td>
<td>3</td>
</tr>
<tr>
<td>CISC 323</td>
<td>Linux Operating System</td>
<td>1</td>
</tr>
<tr>
<td>CISP 300</td>
<td>Algorithm Design/Problem Solving</td>
<td>3</td>
</tr>
<tr>
<td>MATH 372</td>
<td>College Algebra for Calculus</td>
<td>4</td>
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<tr>
<td>MATH 373</td>
<td>Trigonometry for Calculus</td>
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<td>A minimum of 3 units from the following:</td>
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<tr>
<td>WEXP 498</td>
<td>Work Experience in (Subject) (1 - 4)</td>
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<tr>
<td>or ARTNM 431</td>
<td>3D Short Production (3)</td>
<td></td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>21</td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- differentiate the types of deformers to achieve a specific deformation called for by animation.
- create a concise set of animation controls.
- analyze the animator's needs to provide and refine an articulation of the full range of expressions and body movement needed to support a character's acting range.
- create a portfolio quality demonstration reel of their rigs animated.
- proficiently use a programming language to solve rigging problems, create new tools, and create interfacing tools for the animator.
- proficiently use math to solve rigging problems.
- design and maintain master rigs that can be re-used as a basis for articulating similar characters, or applying existing rigs to newly created character sculpts.
- differentiate the deformation needs of realistic musculature and traditional cartoon movement.

Career Information

Students can apply their 3D rigging skills in film, game, and broadcast, as well as local industries, such as medical, legal, engineering, Web, and fine art. Students can continue their studies in 3D rigging at a four-year college or choose an entry-level position in any of the 3D animation industries.

3D Technical Director Certificate

This certificate offers a comprehensive understanding of the computer generated three-dimensional (CG 3D) production process. It is designed for self-learners, entrepreneurs, and developers of independent content or someone looking for a high level position in a 3D animation company. A broad range of topics are covered from traditional sculpting to digital rendering. In addition to technical direction, this certificate is ideal for any 3D Generalist position.

Catalog Date: June 1, 2020

Certificate Requirements
<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 300</td>
<td>Drawing and Composition I</td>
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</tr>
<tr>
<td>ART 304</td>
<td>Figure Drawing I</td>
<td>3</td>
</tr>
<tr>
<td>ARTNM 320</td>
<td>Facial Expression and Anatomy</td>
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<td>ARTNM 420</td>
<td>Introduction to 3D Modeling</td>
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<tr>
<td>ARTNM 429</td>
<td>3D Rigging and Rig Building</td>
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<tr>
<td>CISC 323</td>
<td>Linux Operating System</td>
<td>1</td>
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<td>CISP 300</td>
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<td>MATH 372</td>
<td>College Algebra for Calculus</td>
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<tr>
<td>MATH 373</td>
<td>Trigonometry for Calculus</td>
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<td>A minimum of 6 units from the following:</td>
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<td>ARTNM 421</td>
<td>3D Character Modeling (3)</td>
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<td>ARTNM 422</td>
<td>3D Animation (3)</td>
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<tr>
<td>ARTNM 423</td>
<td>3D Texturing (3)</td>
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<td>ARTNM 431</td>
<td>3D Short Production (3)</td>
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<td><strong>Total Units:</strong></td>
<td></td>
<td><strong>33</strong></td>
</tr>
</tbody>
</table>

^1ARTNM 422 has a prerequisite of ARTNM 405

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- plan a production pipeline and solve 3D production issues with a holistic understanding of 3D.
- create portfolio-quality demonstration reels with animation, modeling, texturing, and rigging.
- differentiate various 3D software strengths and weaknesses.
- apply for an entry-level 3D position calling for a 3D Technical Director or 3D Generalist.
- create digital textures and materials from observing and scanning real-world surfaces and materials.
- apply textures and materials to a computer-generated environment.

**Career Information**

Students can apply 3D skills in film, game, and broadcast, as well as local industries, such as medical, legal, engineering, Web, and fine art. Students can continue their studies in 3D at a four-year college or choose an entry-level position in any of the 3D animation industries.

**ARTNM: 3D Animation Certificate**

This certificate focuses on traditional animation principles to create believable animations. Animations created range from flying logos for broadcast television, to animated product placement, to characters used for the telling of fantastic stories. It focuses on skill sets in both the traditional arts and digital environments.

**Catalog Date:** June 1, 2020

**Certificate Requirements**

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>ART 300</td>
<td>Drawing and Composition I</td>
<td>3</td>
</tr>
<tr>
<td>ARTNM 373</td>
<td>Storyboarding</td>
<td>3</td>
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<td>ARTNM 405</td>
<td>Digital 2D Animation</td>
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</tr>
<tr>
<td>ARTNM 422</td>
<td>3D Animation</td>
<td>3</td>
</tr>
</tbody>
</table>
### Student Learning Outcomes

Upon completion of this program, the student will be able to:

- research and demonstrate application of the principles of animation to tell a story with meaning through movement.
- create the motions, gestures, and expressions of three-dimensional computer graphics characters and objects.
- critique animation and regularly improve upon demonstration reels.
- create high quality 3D models from live or image reference, and animate the models for use in demonstration reels.
- create a portfolio-quality 3D animation demonstration reel.
- create animation from live reference, video reference, and from hand-drawn imagery.
- create animation in various 2D and 3D software programs and apply the principles regardless of the software differences.
- block-in movements in rough animation and show for approval in a weekly review.
- finish work for approval in a timely manner.

### Career Information

Students can apply 3D animation skills in film, game, and broadcast, as well as local industries, such as medical, legal, engineering, Web, fine art, and entrepreneurial. Students can continue their studies in 3D animation at a four-year college or choose an entry level position in any of the 3D animation industries.

### ARTNM: 3D Modeling and Texturing Certificate

This certificate combines a foundation of traditional sculpture and painting with computer generated three dimensional digital modeling and painting. High polygon modeling techniques are used to create assets for any industry in need of 3D modeling and texturing. Texturing will focus primarily on the use of manipulated and painted imagery to create complex surfaces.

Catalog Date: June 1, 2020

### Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>ART 375</td>
<td>Figure Sculpture</td>
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<tr>
<td>ARTNM 420</td>
<td>Introduction to 3D Modeling</td>
<td>3</td>
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<td>ARTNM 421</td>
<td>3D Character Modeling</td>
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<td>ARTNM 423</td>
<td>3D Texturing</td>
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<tr>
<td>ART 306</td>
<td>Facial Expression and Anatomy (3)</td>
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<td>or ARTNM 320</td>
<td>Facial Expression and Anatomy (3)</td>
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<tr>
<td>ART 317</td>
<td>Character Design (3)</td>
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<td>or ARTNM 372</td>
<td>Character Design (3)</td>
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<td>ARTNM 431</td>
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</table>

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- create complex 3D environments, characters, and props to be used in the any production.
- create believable models of objects from life, photographs, or hand drawn reference.
- create accurate models of the human anatomy with a clear and clean polygon flow showing muscle, fat, skin, and bone topology.
- create believable textures from reference images.
- analyze and assess the needs of a project and determine the complexity of the models and textures to match the project.
- create clean, high polygon count, polygon meshes ready for production.
- create facial structures and shape targets preparing the character for facial animation.
- create a portfolio quality modeling and texturing demonstration reel.

**Career Information**

Students can continue their studies in 3D modeling and texturing at a four year college or choose to apply their 3D modeling and texturing skills in the film, game, and broadcast industries, as well as other local industries, such as medical, legal, engineering, Web, and fine art.

**ARTNM: Character Design Certificate**

This certificate focuses on the visual concept development of believable characters. Skills in traditional and digital illustration are applied to create characters for animation, games, comics, graphic novels, children’s books, and illustrated novels.

Catalog Date: June 1, 2020

**Certificate Requirements**

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>ART 300</td>
<td>Drawing and Composition I</td>
<td>3</td>
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<tr>
<td>ART 304</td>
<td>Figure Drawing I</td>
<td>3</td>
</tr>
<tr>
<td>ARTNM 320</td>
<td>Facial Expression and Anatomy (3)</td>
<td>3</td>
</tr>
<tr>
<td>or ART 306</td>
<td>Facial Expression and Anatomy (3)</td>
<td></td>
</tr>
<tr>
<td>ARTNM 326</td>
<td>Digital Painting</td>
<td>3</td>
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<td>ARTNM 372</td>
<td>Character Design</td>
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<td>A minimum of 3 units from the following:</td>
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<tr>
<td>ART 305</td>
<td>Figure Drawing II (3)</td>
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<tr>
<td>ART 375</td>
<td>Figure Sculpture (3)</td>
<td></td>
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<tr>
<td></td>
<td>Total Units:</td>
<td>18</td>
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</tbody>
</table>
Upon completion of this program, the student will be able to:

- create believable characters using traditional and digital media
- research the environment, social and cultural structure, anatomy, costume and motion as they relate to a particular narrative
- create characters with believable gesture and movement that are consistent with the character concept
- analyze and apply facial expressions for the character that effectively describe the character within a narrative
- utilize references from photographs, illustration, and animation to create characters that effectively interact within their environment
- compile a portfolio that presents the process of character creation from research through final presentation

Career Information
Career opportunities include film, game, broadcast, and illustration industries.

ARTNM: Commercial Illustration Certificate
This certificate focuses on traditional visual art principles to clearly communicate the needs of a client and their target audience. It includes skill sets from both the traditional arts and digital media. Illustration skills are applied in areas of editorial, advertising, technical and book illustration, as well as 3D modeling and texturing, animation, set design, and product design.

Catalog Date: June 1, 2020

Certificate Requirements

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<td>ARTNM 324</td>
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<td>ARTNM 326</td>
<td>Digital Painting</td>
<td>3</td>
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<tr>
<td>ARTNM 328</td>
<td>Beginning Digital Photo Imagery</td>
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<tr>
<td>ARTNM 370</td>
<td>Introduction to Illustration (3)</td>
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<tr>
<td>or ART 314</td>
<td>Introduction to Illustration (3)</td>
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<td>Total Units:</td>
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<td>18</td>
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</tbody>
</table>

Student Learning Outcomes
Upon completion of this program, the student will be able to:

- create drawn and painted images using traditional and digital media
- research and develop visual content with an understanding of the client's target audience
- develop and produce visual solutions that meet the needs of a client within a deadline
- analyze and apply color schemes to communicate a message that meets the client's needs
- research modern art and illustration history, applying concepts to illustrations to effectively communicate visually within contemporary culture
- compile a portfolio that demonstrates skill with both traditional and digital media and client based concept development

Career Information
Career opportunities include editorial, advertising, technical and book illustration, 3D modeling and texturing, animation, set design, and product design.
ARTNM: Web Design Certificate

The Web Design certificate incorporates the fundamentals of visual communication with industry-standard work flow and tools to prepare creatives and talents for the web design industry. The certificate focuses on the visual language necessary for a web designer to produce compelling graphics in the web authoring environment. Students are encouraged to further their studies in interactive design by obtaining other Art New Media Certificates such as the Interactive Design Certificate, the Digital Imagery Certificate and the Video Certificate within the Art New Media department, or similar programs at a four-year college, or encouraged to choose an entry-level position in the web design industry.

Catalog Date: June 1, 2020

Certificate Requirements

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<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>ARTNM 303</td>
<td>Graphic Design: Typography</td>
<td>3</td>
</tr>
<tr>
<td>ARTNM 324</td>
<td>Digital Design</td>
<td>3</td>
</tr>
<tr>
<td>ARTNM 328</td>
<td>Beginning Digital Photo Imagery</td>
<td>3</td>
</tr>
<tr>
<td>ARTNM 325</td>
<td>Intermediate Digital Design</td>
<td>3</td>
</tr>
<tr>
<td>ARTNM 330</td>
<td>Intermediate Digital Photo Imagery</td>
<td>3</td>
</tr>
<tr>
<td>ARTNM 401</td>
<td>Introduction to Web Design</td>
<td>3</td>
</tr>
<tr>
<td>ARTNM 331</td>
<td>Integrating Digital Media with Traditional Media I</td>
<td>3</td>
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<tr>
<td>ARTNM 332</td>
<td>Digital Video</td>
<td>3</td>
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<tr>
<td>ARTNM 402</td>
<td>Intermediate Web Design</td>
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<tr>
<td>Total Units:</td>
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</tbody>
</table>

Upon completion of this program, the student will be able to:

- produce compelling graphics incorporating industry-standard work flow and tools
- design visually successful web pages/web sites using visual design concepts
- evaluate content needs for target audience
- assess the most effective navigation flow
- conceive and deliver visual solutions for a client within a defined time frame

Career Information

Web design skills are used in business, government, educational institutions, and the entertainment industry.

Art New Media: Illustration Certificate

This certificate focuses on using traditional visual art principles to clearly communicate the needs of a client and/or target a specific audience. It includes skill sets from both the traditional arts and digital media. Illustration skills are applied in animation, character design, 3D modeling and texturing, set design, product design, as well as areas of editorial, advertising, technical, and book illustration.

Catalog Date: June 1, 2020

Certificate Requirements

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<thead>
<tr>
<th>COURSE CODE</th>
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<tbody>
<tr>
<td>ART 300</td>
<td>Drawing and Composition I</td>
<td>3</td>
</tr>
<tr>
<td>ART 304</td>
<td>Figure Drawing I</td>
<td>3</td>
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<tr>
<td>ART 323</td>
<td>Design: Color Theory</td>
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COURSE CODE | COURSE TITLE | UNITS
--- | --- | ---
ART 327 | Painting I (3) | 3
or ART 336 | Watercolor Painting (3) | 3
ARTH 310 | Modern Art | 3
ART 320 | Design: Fundamentals (3) | 3
ARTNM 320 | Facial Expression and Anatomy (3) | 3
or ART 306 | Facial Expression and Anatomy (3) | 3
ARTNM 324 | Digital Design | 3
ARTNM 328 | Digital Painting | 3
ARTNM 370 | Introduction to Illustration (3) | 3
or ART 314 | Introduction to Illustration (3) | 3
Total Units: | 30

**Student Learning Outcomes**
Upon completion of this program, the student will be able to:

- create drawn and painted images using traditional and digital media
- research and develop visual content with an understanding of the target audience
- develop and produce visual solutions that meet the needs of a client within a deadline
- analyze and apply effective color schemes to enhance the viewer’s emotional response to the content of an illustration
- research modern art and illustration history, applying concepts to illustrations to effectively communicate visually within contemporary culture
- create a portfolio that demonstrates skill with traditional and digital media and concept development

**Career Information**
Career opportunities include animation, character design, 3D modeling and texturing, set design, product design, as well as areas of editorial, advertising, technical, and book illustration.

**Graphic Design: Intern Artist Certificate**
This certificate introduces the software and theory used by graphic designers in the design studio. It covers page layout, vector drawing, and photo manipulation basics. It also focuses on current industry trends in the digital marketplace.

**Catalog Date:** June 1, 2020

**Certificate Requirements**

COURSE CODE | COURSE TITLE | UNITS
--- | --- | ---
ARTNM 303 | Graphic Design: Typography | 3
ARTNM 324 | Digital Design | 3
ARTNM 328 | Beginning Digital Photo Imagery | 3
ARTNM 352 | Design for Publication | 3
ARTNM 359 | College Magazine: Design and Production | 3
ARTNM 401 | Introduction to Web Design | 3
ARTNM 402 | Intermediate Web Design | 3
Total Units: | 21
Student Learning Outcomes

Upon completion of this program, the student will be able to:

- assess typographic hierarchy as it relates to message development.
- build digital files to specs required by the current industry.
- integrate different software files into one digital file.
- resolve digital production issues as they relate to industry standards.
- correlate deadline issues as they relate to production schedules.

Career Information

Students can apply their acquired skills for internship positions in graphic arts related jobs such as entry-level design positions, entry-level in-house design positions, and production artist positions. Or, with additional coursework, students can continue their studies at a qualified four-year college.

Graphic Design: Junior Artist Certificate

This certificate introduces software applications, industry-standard hardware, and the typographic/fundamental and technical skills necessary for today’s workplace. It focuses on visual communication through layout design, typography, and the dynamic relationship between image and type. It meets current marketplace demands by incorporating print/non-print media and the effect new technologies have on a changing communications field.

Catalog Date: June 1, 2020

Certificate Requirements

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<thead>
<tr>
<th>COURSE CODE</th>
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<tbody>
<tr>
<td>ARTNM 303</td>
<td>Graphic Design: Typography</td>
<td>3</td>
</tr>
<tr>
<td>ARTNM 305</td>
<td>History of Graphic Design</td>
<td>3</td>
</tr>
<tr>
<td>ARTNM 324</td>
<td>Digital Design</td>
<td>3</td>
</tr>
<tr>
<td>ARTNM 325</td>
<td>Intermediate Digital Design</td>
<td>3</td>
</tr>
<tr>
<td>ARTNM 328</td>
<td>Beginning Digital Photo Imagery</td>
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<tr>
<td>ARTNM 330</td>
<td>Intermediate Digital Photo Imagery</td>
<td>3</td>
</tr>
<tr>
<td>ARTNM 352</td>
<td>Design for Publication</td>
<td>3</td>
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<tr>
<td>ARTNM 354</td>
<td>Digital Prepress</td>
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<tr>
<td>ARTNM 359</td>
<td>College Magazine: Design and Production</td>
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<td>WEXP 498</td>
<td>Work Experience in (Subject) (1 - 4)</td>
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<td>30</td>
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</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- analyze and formulate visual communication concepts using graphic design principles and standards.
- evaluate the role of typography as a communication device and know how the graphic design field fits into today’s multimedia environment.
- design and produce two-dimensional media projects taking into account client needs, composition, color, and hierarchy of information.
- construct camera-ready art with industry standard graphic design software.
- evaluate problems generated by clients and execute visual concepts through research, thumbnails, roughs, design development and presentation.
- prioritize design and production deadlines for a deadline oriented industry.
Career Information
Students can apply their acquired skills in typography, software and concept development to apply for production artist or junior graphic designer positions.

Graphic Design: Production Artist Certificate
This certificate covers the process of digital production for printing and web. It focuses on the core software programs and current industry trends for digital media.
Catalog Date: June 1, 2020

Certificate Requirements

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<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>ARTNM 324</td>
<td>Digital Design</td>
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<td>ARTNM 328</td>
<td>Beginning Digital Photo Imagery</td>
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<td>ARTNM 359</td>
<td>College Magazine: Design and Production</td>
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<tr>
<td>ARTNM 401</td>
<td>Introduction to Web Design</td>
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<td><strong>Total Units:</strong></td>
<td><strong>18</strong></td>
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</table>

Student Learning Outcomes
Upon completion of this program, the student will be able to:

- investigate the basics of digital software for vector- and pixel- based media
- analyze specific conditions which influence digital production decisions
- categorize raster-based images and vector-based art as they relate to print and web
- calculate resolution, color modes and file size as they relate to print and web production
- construct a series of projects which build knowledge of simple and complex production issues

Career Information
This certificate prepares students for entry-level print or web production artist positions.

Technical Communications Certificate
This certificate offers an interdisciplinary program of courses in Technical Communications, Art/New Media, and Computer Information Systems to prepare students for a variety of technical writing and professional communication careers. The certificate includes the theory, writing skills, design background, and computer applications knowledge needed for jobs in technical communication.
Catalog Date: June 1, 2020

Certificate Requirements

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<th>COURSE CODE</th>
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<th>UNITS</th>
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<tbody>
<tr>
<td>ARTNM 352</td>
<td>Design for Publication (3)</td>
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<tr>
<td>or CISA 330</td>
<td>Desktop Publishing (2)</td>
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<td>CISA 305</td>
<td>Beginning Word Processing (2)</td>
<td>2 - 3</td>
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<tr>
<td>or BUSTEC 310</td>
<td>Introduction to Word/Information Processing (3)</td>
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</table>
Student Learning Outcomes

Upon completion of this program, the student will be able to:

- analyze audience information needs.
- compose concise, clearly written professional documents organized with the audiences' needs in mind.
- design print and online resources that communicate organizations' values, enhance readability, and are easy to use.
- demonstrate basic skills in the use of word processing, page design, and web design applications.
- evaluate organizations' communication goals and needs based on technical writing principles.

Career Information

Technical communicators find employment in medical, scientific, high tech, business, university, and government settings. They may write white papers, tutorials, reference and procedure manuals, help systems, user assistance video scripts, grants and proposals, and more.

Certificate

Art New Media: Foundation Certificate

This entry level certificate introduces the tools and context fundamental for the field of digital media.

Catalog Date: June 1, 2020

Certificate Requirements

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<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<td>ARTNM 302</td>
<td>Digital Basics for Art New Media</td>
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<tr>
<td>ARTNM 303</td>
<td>Graphic Design: Typography</td>
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<td>ARTNM 305</td>
<td>History of Graphic Design</td>
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<td>ARTNM 331</td>
<td>Integrating Digital Media with Traditional Media I</td>
<td>3</td>
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<td>Total Units:</td>
<td>10.5</td>
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</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- construct visual composition using design fundamentals.
- construct visual composition using typography principles.
- integrate traditional media and digital media.
• construct composition based on the history of graphic design.
• create basic digital composition using industry-standard tools.

Career Information
This program prepares students to apply their knowledge and experiences in many industries that require basic digital design skills. These positions include internship and entry-level visual communication opportunities within industries such as design, arts, entertainment, business, and education.

Art New Media (ARTNM)

ARTNM 302 Digital Basics for Art New Media

Units: 1.5
Hours: 18 hours LEC; 27 hours LAB
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

This course is an introduction to the digital environment for Art New Media. Topics include operating system(s), digital vocabulary, scanning, saving, and file formats. Distinctions between vector, bitmap, and page layout applications are made using Adobe Illustrator, Adobe Photoshop, and Adobe InDesign.

Student Learning Outcomes
Upon completion of this course, the student will be able to:
• manage navigation skills on the operating system.
• analyze distinctions between vector and bitmap imagery.
• integrate scanning techniques.
• choose appropriate file formats.
• define digital vocabulary appropriate for the Art New Media environment.
• create work using Adobe software.

ARTNM 303 Graphic Design: Typography

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

This course covers the art of visual communication and introduces the tools and concepts of visual thinking. It emphasizes the potential of typography as an effective communications tool. Additionally, it also covers historical overviews, portfolio development, and client presentations, paired with the terminology and visual language of design through the creation and evaluation of individual projects.

Student Learning Outcomes
Upon completion of this course, the student will be able to:
• apply the tools and materials of the graphic designer.
• apply the terminology of graphic design and typography.
• analyze the use of letterform and image in visual communication.
• create designs with the principles and problem solving process of graphic design.
• evaluate projects in terms of target audience.
ARTNM 305 History of Graphic Design

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: AA/AS Area I; CSU Area C1
Catalog Date: June 1, 2020

This course covers the history of visual communications as developed by ancient cultures through the present with an emphasis on commercial design, illustration, typographic development, and technological invention. It includes modern graphic design movements of the 20th century through the expansive media innovations of today. This course focuses primarily on analysis of design from a wide range of sources and cultures.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze the essential components of graphic design and their functions.
- differentiate between two-dimensional graphics, electronic graphics, and the graphic object.
- identify contributions of graphic design from many cultures and nations.
- compare the influence and historical importance of such contributions.

ARTNM 320 Facial Expression and Anatomy

Same As: ART 306
Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: ART 300 with a grade of "C" or better
Advisory: ART 304
Transferable: CSU
Catalog Date: June 1, 2020

This course covers human facial expression and anatomy using live models, anatomical references, and imagination. Issues of expression as it relates to skeletal and muscular anatomy are addressed through a series of projects. This course is not open to students who have taken ART 306.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- draw the human skull in order to understand the three-dimensional form.
- apply facial muscular structure to the skull.
- evaluate the muscular code for universal facial expressions.
- create the human head with varying expressions using 2D media.
- create meaningful exaggerations of expression using 2D media.
- evaluate the muscles and muscle dynamics responsible for facial expression.

ARTNM 322 Beginning Digital Art

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Transferable: CSU; UC
General Education: AA/AS Area I
C-ID: C-ID ARTS 250
Catalog Date: June 1, 2020

This introductory digital art course focuses on digital media processes, including software and hardware tools that facilitate creative visual and conceptual approaches to digital art making. A wide range of digital imaging techniques are explored, and time-based processes are introduced, leading to the creation of digital images, animations/videos, and mixed media objects. The course also explores artists' uses of new technologies in contemporary art-making practices. A vocabulary of new media terms and practices is developed through discussions and critiques.
Upon completion of this course, the student will be able to:

- integrate working knowledge of digital media processes including software and hardware tools for the purpose of digital art making.
- construct creative visual and conceptual approaches to digital art making.
- synthesize contextual understanding of contemporary artistic explorations using new technology.
- integrate vocabulary of new media terms and practices for discussions and critiques of digital art.
- solve problems actively and independently to achieve creative objectives.

**ARTNM 324 Digital Design**

**Units:** 3
**Hours:** 36 hours LEC; 54 hours LAB
**Prerequisite:** None.
**Advisory:** ARTNM 303; Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340; AND ART 300 OR ART 320 and ARTNM 302
**Transferable:** CSU
**Catalog Date:** June 1, 2020

This course is an introduction to fundamental design principles using the basic tools of Adobe Illustrator. It applies design skills and the tools of the software application to produce individual portfolio-quality projects.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- analyze and apply basic tools of Adobe Illustrator.
- create, manipulate, and edit images.
- create an effective project plan.
- evaluate completed design projects.
- create a professional portfolio presentation.

**ARTNM 325 Intermediate Digital Design**

**Units:** 3
**Hours:** 36 hours LEC; 54 hours LAB
**Prerequisite:** ARTNM 324 with a grade of "C" or better
**Transferable:** CSU
**Catalog Date:** June 1, 2020

This course is a continuation of ARTNM 324. It defines advanced elements of graphic design, composition, and gestalt visual principles as they relate to dominance, hierarchy, balance, and color. These topics are combined and applied to the tools and advanced imaging capabilities of Adobe Illustrator.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- demonstrate the use of basic tools in Adobe Illustrator.
- analyze color modes, including RGB, spot color, and CMYK.
- compare the use and purpose of vector-based art vs. raster-based images.
- identify the characteristics and importance of visual composition as they relate to gestalt visual principles.
- produce advanced effects and techniques by combining tools in Adobe Illustrator.
- assemble design elements and typography using advanced techniques and Adobe Illustrator tools.
ARTNM 326 Digital Painting

This course introduces the fundamental principles of color, drawing, and painting using the basic tools of Corel Painter. Visual communication skills of color, drawing, and painting are applied to produce individual portfolio-quality projects.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze and apply basic tools of Corel Painter
- apply tools to create, manipulate, and edit images
- develop an effective concept through research and drawn concepts, imagery, and refinement
- evaluate painting and drawing projects from initial concept through completion
- create a professional portfolio presentation

ARTNM 328 Beginning Digital Photo Imagery

This course is an introduction to computer-based photographic imaging with emphasis on utilizing cutting edge digital imaging tools to realize design objects. Basic operating principles of Adobe Photoshop are covered. Topics include scanning, basic photo correction, selections, layer basics, adjustment layers, basic masking and channels, typography, vector drawings, and compositing. Design fundamentals are discussed. Topics include positive and negative space relationship, unity, balance, and basic color theory. Concept development is also introduced.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- create photo manipulation using the basic tools of Adobe Photoshop.
- create digital composition with a successful positive and negative space relationship.
- create a unified digital composition.
- create a balanced digital composition.
- choose colors utilizing Color Theory.
- critique a visual composition using design fundamentals in unity, balance, and color theory.
- conceive a design concept using sketches and thumbnails.

ARTNM 330 Intermediate Digital Photo Imagery

This course is a continuation of ARTNM 328 Digital Photo Imagery, focusing on advanced application of digital image manipulation software and techniques. Students will explore complex compositing, advanced masking, and the use of specialized tools for creating visually striking images. Topics include advanced digital photography techniques, image layering, and the integration of multiple elements to create cohesive designs. The course emphasizes the development of critical thinking and problem-solving skills in the context of digital imagery creation.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- create sophisticated digital compositions with advanced techniques.
- apply principles of visual design to digital projects.
- utilize specialized digital tools for image manipulation.
- critique and analyze digital imagery effectively.
- present a comprehensive portfolio of digital projects.
This course introduces the intermediate techniques of digital photo imagery in Adobe Photoshop. Topics include the terminology of digital photo imaging, intermediate masking, channel and curve techniques, photomontage history and techniques, intermediate black and white techniques, issues surrounding dynamic range, color correction, features of the Action and History palettes, exploration of Layer Blending Modes, printing and/or transferring images onto various different media, working with large format images, and commercial printers.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- produce photomontages using intermediate skills associated with industry standard photo imaging software.
- analyze and apply intermediate compositing techniques such as masking.
- synthesize both the design concept and design process to produce sophisticated visual compositions.
- coordinate with service bureaus and commercial printers to produce quality output.
- analyze and critique photomontages in terms of design aesthetics and technical competence.

ARTNM 331 Integrating Digital Media with Traditional Media I

Same As: ART 339
Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Transferable: CSU
General Education: AA/AS Area I
Catalog Date: June 1, 2020

This course combines the materials and techniques used in both new media technology and traditional art practices. It explores a wide variety of ideas, tools, and resources. Topics include history, theory, and practice surrounding digital and traditional image generation, image manipulation, image transfer, and material exploration. The course emphasizes developing unique forms of portfolio quality projects demonstrating new approaches and methods of integrating digital media with traditional media forms.

This course is not available to students who have taken ART 339.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- combine materials and techniques used in both new media technology and traditional art practices.
- create successful compositions using knowledge of history, theory, and practice surrounding digital and traditional image generation.
- create successful compositions using knowledge of history, theory, and practice surrounding digital and traditional image manipulation.
- create successful compositions using knowledge of history, theory, and practice surrounding digital and traditional image transfer.
- generate dynamic portfolio-quality projects, which demonstrate new approaches and methods of merging digital media with traditional media.

ARTNM 332 Digital Video

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: ARTNM 302
Transferable: CSU
Catalog Date: June 1, 2020

This course applies the principles of cinematography and editing to the production of digital video. Industry standard software is employed to capture/import, edit, and produce high-end visual productions. The course includes transitions, multiple layers, alpha channels, and composite green screen segments. Evaluation of multimedia projects containing video segments in terms of design aesthetics and technical competence is included. This course examines the genres of documentary, short narrative film, title sequencing, and experimental film.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- critique and apply the basic principles and practices of digital video editing.
• apply the principles of cinematography to the creation of digital video.
• create digital video within the software production environment.
• create plans for digital video segments, using appropriate formats and compression options for output.
• evaluate multimedia projects containing video segments in terms of design aesthetics and technical competence.

ARTNM 352 Design for Publication

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: ART 320 or ARTNM 310 AND ARTNM 302.
Transferable: CSU
Catalog Date: June 1, 2020

This course introduces the basic operating principles of digital page layout software using Adobe InDesign. Principles of typography and the development of the printed page are applied to individual portfolio-quality projects. Areas of focus include book, magazine, and newspaper design, as well as publications such as newsletters, journals, and catalogs. An overview of promotions, such as fliers, posters, and brochures is also included.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• define the terminology of type.
• apply typography in various kinds of publications.
• analyze how type determines the messages communicated.
• relate the function of typography to other design elements.
• apply grid systems to page composition.
• evaluate layout design for a wide variety of publications.
• create a document that includes master pages and folios.
• create a document that includes typography, imported images, and text documents.
• determine color palette for a document.

ARTNM 354 Digital Prepress

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: ARTNM 352 with a grade of "C" or better
Advisory: ARTNM 302 AND ENGWR 102 and ENGRD 116 OR ESLR 320 and ESLW 320
Transferable: CSU
Catalog Date: June 1, 2020

This course introduces digital prepress for graphic design using industry standard software, like Adobe InDesign. Areas of focus include desktop production for commercial offset printing, preparation of print-ready digital files, paper selection, and the language necessary to properly communicate with commercial printers. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• apply prepress skills with page layout software
• define terms to properly communicate with commercial printers using industry language
• prepare camera-ready digital files for commercial offset printing, digital, and silk screen methods
• analyze different types of paper in relation to requirements for printing and identify the appropriate paper for the job
• identify printing presses and determine which press matches specific job requirements
ARTNM 358 College Magazine: Art Selection and Editing

Units: 1 - 2
Hours: 12 - 24 hours LEC; 18 - 36 hours LAB
Prerequisite: None.
Advisory: ARTH 300 and ARTNM 302
Transferable: CSU
Catalog Date: June 1, 2020

This course provides instruction in the editing of ARC's college magazine, the American River Review, for national competitions sponsored by organizations such as the Columbia Scholastic Press Association and the Associated Collegiate Press. The course focuses on the implementation of a submission process for art work including art handling, tracking of submissions, photography for print and evaluation of submissions. It may be taken four times for credit. A portion of this course may be offered in a TBA component of 6-20 hours which may include photographing 2D and 3D artwork, scanning or photographing photographic artwork, downloading or scanning digital submissions, and production organization such as reformatting and naming files, organizing files into media groups for evaluation.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- define and articulate criteria used for the critique of visual art in competitions
- critique art work submissions
- analyze art works based on defined criteria for competitive panels
- compare and contrast the merits of submitted artwork
- evaluate visual art based on defined criteria
- select visual art for publication for a magazine submitted for competition
- apply production techniques for magazine quality digital images
- compile submissions for entry in competition
- prepare for participation in competition in national competitions

ARTNM 359 College Magazine: Design and Production

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: ARTNM 302, 324, 328, 352, or 354
Transferable: CSU
Catalog Date: June 1, 2020

This course provides instruction in the design and production of ARC's college magazine, the American River Review, for national competitions sponsored by organizations such as the Columbia Scholastic Press Association and the Associated Collegiate Press. The course focuses on the graphic design, digital production, and printing of a literary and fine art magazine as well as the publicity, marketing, fund-raising, and distribution of the magazine. It provides the design staff a collaborative experience with the editorial staff taught by the English Department. It may be taken four times for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate leadership ability and group effectiveness in the production of a college magazine.
- develop and implement graphic design concepts into a literary and art magazine.
- develop and produce typographic solutions, visual grid systems, stylizing headings and paragraphs and special feature page layouts.
- explain the principals of visual communication as they relate to page layout and legibility.
- produce industry standard print ready PDF files.
- describe the basic departmental structure of a graphic design studio.
• apply basic work flow management systems used by graphic design studios to meet high pressure deadlines.
• describe core digital production issues as they relate to one color and four-color process printing.
• relate basic raster and vector art requirements as they relate to digital file preparation used for off-set printing.
• collaborate effectively with editorial and design teams to compete in national magazine competitions.

ARTNM 370 Introduction to Illustration

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• describe the history of illustration.
• examine areas of specialization of illustration and analyze required skills for illustrators.
• apply illustration techniques with a variety of media.
• produce a range of visual styles.
• evaluate the appropriate style and media choice in terms of client, audience and print methods.

ARTNM 372 Character Design

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• develop a comprehensive process for designing characters including character profile, reference, thumbnails, and refinements.
• quickly concept multiple variations for a character including body type, head structure, facial expression, motion studies, and costume.
• differentiate multiple characters based on clear, definable silhouettes.
• develop costumes for a character based on time period, environment, and social class.
• produce accurate turnarounds for a character.
This course introduces the storyboarding process for a range of industries, from film and game entertainment to the industrial and medical industries. It includes creating artwork for the visual interpretation of scripts and provided concepts, as well as developing original ideas. In addition, conceptual exercises, drawing practice, and the use of cinematic rules used in the industry are covered. Topics also include scale and camera angle, camera movement, character staging, composition, basic editing processes, creating animatics, and story reels.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- understand the visual language of cinematic storytelling.
- analyze the three act storytelling structure.
- apply the three act storytelling structure to film.
- demonstrate the ability to translate a script into a storyboard sequence.
- demonstrate the ability to create original story content and translate it into an animatic storyboard sequence.
- prioritize and budget time for storyboarding.

ARTNM 401 Introduction to Web Design

This course introduces technical and conceptual aspects of creating interactive visual media for screen-based delivery. It concentrates on designing standards-based web sites and applying standardized best practices to web design. This course introduces the basics of layout for visual communication by tightly integrating the design concepts with technical execution in a web environment. It also applies industry-standard authoring tools, and closely examines the meaning and validity of interactivity. Meaning and validity of interactivity are closely examined.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- design standards-based websites integrating basic design principles into the application of industry-standard authoring tools
- produce a design from idea to publishing applying industry-standard design workflow
- build information architecture for effective content flow
- create meaningful interactivity
- test and advertise published websites
- critique and analyze websites for their effectiveness in visual communication

ARTNM 402 Intermediate Web Design

This course covers production and intermediate design processes for the web with an emphasis on visual design. It employs various industry standard software applications to create original graphics, control layout and type, process images, and publish professional web pages and/or sites. Topics include an in-depth discussion on the processes and the strategies of combining text, images, animation, video, and audio elements to create compelling visual experiences for web users.
Upon completion of this course, the student will be able to:

- create web pages and sites using intermediate skills associated with standard web authoring tools.
- design sophisticated visual compositions and layouts for the web and mobile devices.
- synthesize both the design concepts and production process to build web projects.
- create interactions on web pages that use digital media and simple animations to increase usability.
- select and apply appropriate navigation patterns for a wide range of screen sizes.
- build and test prototypes for usability.
- analyze and critique a website in terms of design aesthetics and technical competence.

**ARTNM 404 Interactive Basics**

**Units:** 3  
**Hours:** 36 hours LEC; 54 hours LAB  
**Prerequisite:** None.  
**Advisory:** ARTNM 328, ARTNM 401, or CISW 300  
**Transferable:** CSU  
**Catalog Date:** June 1, 2020

This course introduces the design and delivery of rich interactive content suitable for graphical experiences across personal computers, mobile devices, and screens. Topics include generating interactivity between vector-based graphics, animation, integration of digital audio, raster graphics, and digital video. Industry standard workflow from image authoring to interactive authoring is discussed in detail. Visual design principles and interface design concepts are integrated into the making of portfolio-quality projects.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- create images and animation using the tools of a web authoring software.
- create and modify simple objects using design principles.
- create images using layers to form successful composition.
- design the interactivity of sound, video, and animation into a website and mobile device ready website.
- create interactive interface elements using scripting.
- create multimedia web projects to the published to the Web.

**ARTNM 405 Digital 2D Animation**

**Units:** 3  
**Hours:** 36 hours LEC; 54 hours LAB  
**Prerequisite:** None.  
**Advisory:** ART 300 and ARTNM 302  
**Transferable:** CSU  
**Catalog Date:** June 1, 2020

This course provides techniques for using the traditional principles of animation with industry-standard software. Topics include animating a bouncing ball, ball with a tail, ball with legs, full body bipedal, and a face synchronized to audio. Character animation topics involve locomotion, such as walking and jumping, using the traditional principles. Technical issues, such as frame-by-frame animation (cell animation), rotoscoping, interpolated or f-curve animation, are discussed and applied. Projects can be published on the Web, CD-Rom, DVD, and video.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- apply the twelve principles of animation to a bouncing ball.
- create humanoid locomotion using the twelve principles of animation.
analyze and apply walk mechanics to humanoid characters.
create basic facial animation synchronized to audio.
analyze and apply the visual component of a phoneme, known as viseme.
create animations with personality and mood.
critique animations on a daily basis.
incorporate criticisms into animations on a daily basis.

ARTNM 406 Design for Tablets

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: ARTNM 330, 352, and 402
Transferable: CSU
Catalog Date: June 1, 2020

This course introduces production and design processes of tablet-based media. Various industry standard software applications are employed to create compatible websites, digital documents, PDF presentations, and ePub creations. Topics include the processes and the strategies of combining text, images, animation, video, and audio elements to create compelling visual experiences for tablet-oriented mobile media.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explore trends in tablet-oriented design in regards to size, format, and layout
- determine which publication format works best to communicate design content
- analyze and compare the production capabilities of various design software
- create design layout, navigation system, and media content using mobile design principles
- identify computer languages used for mobile media design

ARTNM 420 Introduction to 3D Modeling

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: ART 320, ART 370, ARTNM 302, or ARTNM 370
Transferable: CSU
Catalog Date: June 1, 2020

This course introduces computer-generated three-dimensional, or CG 3D, modeling using industry standard software. The primary focus of this course is modeling using polygons, surfaces, and curves to produce quality demo reel renders of the models. Objects range from simplistic primitive shapes to sophisticated models of animals and plants. Software application tools, such as Autodesk Maya and Pixologic Zbrush, are applied to produce content for use in 3D printing, film, game, fine art, broadcast, medical and industrial animation, and more.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- create portfolio quality polygon meshes based on found objects.
- create portfolio quality polygon meshes by translating a 2D image to a 3D object.
- compare and contrast form and space to shape and line.
- research industry standard modeling techniques.
- critique the level of realism and believability of images, according to industry standards.
- create portfolio quality images of a still life from found objects.
ARTNM 421 3D Character Modeling

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: ARTNM 420 with a grade of "C" or better
Advisory: ART 375
Transferable: CSU
Catalog Date: June 1, 2020

This course is a continuation of ARTNM 420. Industry techniques and issues related to humanoid character modeling are analyzed and applied. Industry issues, such as the topology flow of human anatomy, facial blend targets, and joint correction, are developed. Clothing, hair, and accessories are added to the characters, strictly following concept designs.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze the human anatomical structure for static and dynamic characters.
- create accurate topology for face deformation.
- create accurate edge flow for deformation by assessing movement of human joints, muscles, bone, fats, and skin.
- create facial blend targets for lip synching and facial expression.
- create clothing and hair that naturally flow with the character.
- create a character based on concept designs, strictly following the original concept.
- create a template male and female face and body.
- create an image reference library for character modeling.

ARTNM 422 3D Animation

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: ARTNM 405 with a grade of "C" or better
Advisory: ART 375, DANCE 390, or TAP 300
Transferable: CSU
Catalog Date: June 1, 2020

This course provides 3D animation techniques using industry standard software. It covers the traditional principles from the golden years of Disney Studios as they are applied and translated to the computer-generated 3D (CG 3D) environment, and also to characters that walk, breathe, and act according to the twelve principles of animation. Topics also include weight, thought process, and the wave principle. Technical issues, such as walking along an uneven ground, importing and blending MoCap data, and locomotion around obstacles, are addressed.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply the twelve animation principles to objects and characters using industry standard software.
- differentiate keyframe and f-curve animation and use the strengths of both techniques.
- differentiate pose-to-pose animation and straight-ahead animation and use the strengths of both techniques.
- create a demonstration reel quality animation.
- create clear poses blocking the storytelling keys of a shot.
- critique animations and regularly improve upon animations.
- communicate thought process and weight in the animation of characters.
- create animations of bipedal characters.

ARTNM 423 3D Texturing
This course provides texturing techniques, or image mapping, using industry standard software, such as Adobe Photoshop, Pixologic Zbrush, and Autodesk Maya. Topics include photo-manipulation, unwrapping and painting hard-surface and sub-division surface models and creating a texture library. Environment and character-texture maps are created using image-mapping techniques.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- create textured surfaces for computer-generated 3D objects.
- prepare unwrapped objects for image mapping.
- create environments and atmospheres from image mapping and procedural textures.
- create textures using image mapping and procedural mapping.
- create textures for organic characters.
- differentiate texture solutions for varying final outputs.
- create a texture library from photographic and hand painted imagery.

ARTNM 429 3D Rigging and Rig Building

This course provides skills for the articulation of computer-generated three-dimensional, or CG 3D, objects. Projects include the creation of rigs for inanimate objects with the intent to animate, and the creation of a full body rig for bipedal and quadrupedal characters. Scripting languages and rig building tools are utilized to expedite the rigging process. 3D production issues, such as interfaces for animators, are addressed.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- create rigs that articulate the range of movements of an object.
- diagnose the needs of an object's movement.
- create a concise set of animation controls.
- create rigs that are true to the material of an object.
- create supporting rigs and rig elements that the rigging team can apply to a set of objects.
- research and proficiently apply math and programming skills to solve production problems.
- plan and communicate the needs of the object verbally and in written form to the rigging team.
- create portfolio-quality rigs.

ARTNM 431 3D Short Production

This course provides skills for the articulation of computer-generated three-dimensional, or CG 3D, objects. Projects include the creation of rigs for inanimate objects with the intent to animate, and the creation of a full body rig for bipedal and quadrupedal characters. Scripting languages and rig building tools are utilized to expedite the rigging process. 3D production issues, such as interfaces for animators, are addressed.
This course surveys and practices the pipeline of computer generated three dimensional (CG 3D) imagery based on real world short production scenarios; productions that are three minutes or less. The essential skills needed to survive in the Sacramento Valley CG 3D markets are covered. Areas of focus include a variety of real world short production scenarios, such as court room scene reenactment, work-at-home online markets, small business CG 3D logo, as well as visualization projects in the medical, invention, architectural, and landscaping fields.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- assess the CG 3D production pipeline and apply the pipeline as defined by the needs of the client.
- create a visualization based on a client's product plans.
- critique and revise work routinely to maintain a competitive edge in the CG 3D markets.
- creatively solve production problems in order to deliver content on time and on budget.
- create a demonstration reel designed with his/her specific strengths using the CG 3D production pipeline.
- create an online presence using free web resources and nominally priced resources to expose his/her demonstration reel to gain employment.
- choose techniques for projects confidently knowing how to solve the unique production problems.

ARTNM 450 Portfolio for Art New Media

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: Completion of 9 units from one Art New Media Certificate with a grade of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

The course provides essential skills, strategies and processes involved in organizing, selecting, writing and marketing one's creative work. Topics include file organization, file accessibility and backup, research techniques, target identification, resume building, letter of interest, portfolio construction, building resumes, interview techniques, interview body language, job research, and portfolio presentation. The portfolio can be tailored for application for jobs in the creative industry, transfer to 4-year art or graphics programs, graduate schools, gallery exhibitions, artist residencies, scholarships and artist grants.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- evaluate opportunities in the creative fields.
- create a resume tailored to art/design-related goals.
- research requirements for the job or school program desired.
- evaluate and compile a portfolio with examples of work to target a job or school program desired.
- professionally present the portfolio.
- examine interview techniques as they pertain to body language, mental preparation, standard interview questions and answers.

ARTNM 495 Independent Studies in Art New Media

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

ARTNM 498 Work Experience in Art New Media
This course provides students with opportunities to develop marketable skills in preparation for employment or advancement within the field of art new media. It is designed for students interested in work experience and/or internships in transfer-level degree occupational programs. Course content includes understanding the application of education to the workforce, completion of Title 5 required forms which document the student’s progress and hours spent at the work site, and developing workplace skills and competencies.

During the semester, the student is required to complete 75 hours of related paid work experience, or 60 hours of related unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. All students are required to attend the first class meeting, a mid-semester meeting, and a final meeting. Additionally, students who have not already successfully completed a Work Experience course will be required to attend weekly orientations while returning participants may meet individually with the instructor as needed. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate application of industry knowledge and theoretical concepts in the field of art new media related to a transfer degree level career as written in the minimum three (3) learning objectives created by the student and his/her employer or work site supervisor at the start of the course.
- make effective decisions, use workforce information, and manage his/her personal career plans.
- behave professionally, ethically, and legally at work, consistent with applicable laws, regulations, and organizational norms.
- behave responsibly at work, exhibiting initiative and self-management in situations where it is needed.
- apply effective leadership styles at work, with consideration to group dynamics, team and individual decision making, and workforce diversity.
- communicate in oral, written, and other formats, as needed, in a variety of contexts at work.
- locate, organize, evaluate, and reference information at work.
- demonstrate originality and inventiveness at work by combining ideas or information in new ways, making connections between seemingly unrelated ideas, and reshaping goals in ways that reveal new possibilities using critical and creative thinking skills such as logical reasoning, analytical thinking, and problem-solving.
ASL-English Interpreting | American River College

This program provides an integrated series of coursework in American Sign Language (ASL) and ASL-English interpretation to prepare students for entry-level positions. The series provides academic coursework based on a Deaf-centered framework that encourages students to embrace an empowered collaboration with Deaf people. A foundation in ASL discourse and interpretation is established through theoretical models. Emphasis is on the practical application of these models and knowledge in the areas of human relations, language skills, interpreting skills, cultural competence, service learning, and professionalism.

Division Dean       Diana Hicks
Department Chairs  Erica West Oyedele

(916) 484-8653

Associate Degree

A.A. in ASL-English Interpreter Preparation Program

This program provides an integrated series of coursework in American Sign Language (ASL) and ASL-English interpretation to prepare students for entry-level positions. The series provides academic coursework based on a Deaf-centered framework that encourages students to embrace an empowered collaboration with Deaf people. A foundation in ASL discourse and interpretation is established through theoretical models. Emphasis is on the practical application of these models and knowledge in the areas of human relations, language skills, interpreting skills, cultural competence, service learning, and professionalism.

Catalog Date: June 1, 2020

Degree Requirements

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<tr>
<td>INTRP 356</td>
<td>Fieldwork in Interpretation</td>
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<tr>
<td>INTRP 312</td>
<td>Introduction to Oral Transmission (0.5)</td>
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<tr>
<td>INTRP 330</td>
<td>Introduction to Educational Interpreting, K-12 (1)</td>
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<tr>
<td>INTRP 332</td>
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<td>INTRP 334</td>
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<tr>
<td>INTRP 336</td>
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<td>INTRP 338</td>
<td>Introduction to Social Services and Employment Interpreting (1)</td>
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<tr>
<td>INTRP 340</td>
<td>Introduction to Video Relay and Telephone Interpreting (0.5)</td>
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<td>INTRP 342</td>
<td>Introduction to Religious Interpreting (0.5)</td>
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<tr>
<td>INTRP 344</td>
<td>Introduction to Working with a Certified Deaf Interpreter (0.5)</td>
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<tr>
<td>INTRP 349</td>
<td>Signing for Dependency Situations (0.5)</td>
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The ASL-English Interpreter Preparation Program Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Enrollment Eligibility

To be eligible for enrollment in the program, the student must meet the following criteria:

- Successful completion of one of the following: a) Graduation from an accredited high school in the United States; b) General Educational Development (GED) Test; c) California High School Proficiency Examination (CHSPE) prior to time of application; d) An Associate of Arts/Associate of Science degree or higher from a regionally accredited college; e) A high school diploma from a school outside the United States with transcripts evaluated by a National Association of Credential Evaluation Services (NACES) approved independent agency. Such cases will be evaluated on an individual basis; f) College attended outside the United States with transcripts evaluated by a NACES approved independent agency, demonstrating A.A./A.S. degree or higher. Such cases will be evaluated on an individual basis.

- Completion of DEAF 316: American Sign Language IV or the equivalent, with a grade of “C” or better.

- A completed pre-enrollment application.

Enrollment Process

Eligible students are selected for the program according to the following steps:

- Pre-enrollment applications and deadlines for the ASL-English Interpreter Preparation Program (IPP) are available from the Humanities Division, the coordinator of the IPP or at the ARC IPP website. The Interpreter Preparation Program currently accepts students once per year for the Fall semester which begins in August. Applications for the Fall semester are available by February 15th and the deadline to submit the application is by the second Friday in April.

- Only qualified applicants who meet the educational requirements and follow the pre-enrollment procedures will be considered for the program. Meeting all these requirements does not guarantee acceptance into the program.

- Upon completion and acceptance of the pre-enrollment application, students will participate in an interview/screening process conducted by the Interpreter Preparation Program. Should the number of qualified applicants exceed available space in the program, selection will be based on the rankings from the interview/screening process.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- discuss and apply knowledge of linguistic, cross-cultural, and interpretation theories.

- demonstrate communicative competency in English and in ASL through effective communication in a variety of settings with Deaf and hearing participants of varying age, gender, and ethnicity.

- analyze, identify, and apply personal, professional, and ethical decisions in a manner consistent with theoretical models and standard professional practices that align in service with the goal of the setting and Deaf and hearing participants.

- demonstrate interpersonal competencies that foster effective communication and productive collaboration with colleagues, Deaf and hearing consumers, employers, and team members in an interpreting context.

- formulate effective interpretations both consecutively and simultaneously following a practice profession framework.

- develop an on-going professional action plan integrating interactions with Deaf related organizations, connections with interpreter employers, and the implications of
Career Information

American Sign Language-English interpreters are in demand locally, regionally, and nationally. A qualified American Sign Language-English interpreter enjoys a rewarding, highly flexible career. This field is expanding; growth in the job market is projected.

Certificate of Achievement

ASL-English Interpreter Preparation Program Certificate

This program provides an integrated series of coursework in American Sign Language (ASL) and ASL-English interpretation to prepare students for entry-level positions. The series provides academic coursework based on a Deaf-centered framework that encourages students to embrace an empowered collaboration with Deaf people. A foundation in ASL discourse and interpretation is established through theoretical models. Emphasis is on the practical application of these models and knowledge in the areas of human relations, language skills, interpreting skills, cultural competence, service learning, and professionalism.

Catalog Date: June 1, 2020

Certificate Requirements

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<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
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<td>DEAF 351</td>
<td>Introduction to American Deaf Culture</td>
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<td>DEAF 370</td>
<td>Linguistics of American Sign Language</td>
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<td>INTRP 300</td>
<td>Ethics and Professional Standards of Interpreting</td>
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<td>INTRP 301</td>
<td>Discourse Analysis &amp; Translation</td>
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<td>Orientation to the Interpreting Profession</td>
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<td>INTRP 305</td>
<td>ASL to English Interpreting</td>
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<td>INTRP 307</td>
<td>English to ASL Interpreting</td>
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<td>INTRP 310</td>
<td>Introduction to Deaf Blind Interpreting</td>
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<td>INTRP 314</td>
<td>Introduction to Multicultural Communication</td>
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<td>INTRP 325</td>
<td>Transliteration</td>
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<td>INTRP 350</td>
<td>Service Learning for Interpreters</td>
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<td>INTRP 354</td>
<td>Mock Interpreting II</td>
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- demonstrate communicative competency in English and in ASL through effective communication in a variety of settings with Deaf and hearing participants of varying age, gender, and ethnicity.

- analyze, identify, and apply personal, professional, and ethical decisions in a manner consistent with theoretical models and standard professional practices that align in service with the goal of the setting and Deaf and hearing participants.

- demonstrate interpersonal competencies that foster effective communication and productive collaboration with colleagues, Deaf and hearing participants, employers, and team members in an interpreting context.

- formulate effective interpretations both consecutively and simultaneously following a practice profession framework.

- develop an on-going professional action plan integrating interactions with Deaf related organizations, connections with interpreter employers, and the implications of certification on the provision of interpreting.

Career Information

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ASL-English Interpreting (INTRP)

INTRP 300 Ethics and Professional Standards of Interpreting

Units: 3
Hours: 54 hours LEC
Prerequisite: INTRP 303 and 305 with grades of "C" or better
This course provides an exploration of personal ethics and values, the Registry of Interpreters for the Deaf (RID) Code of Professional Conduct, and interpersonal relations as they relate to professional and ethical decision-making. Emphasis is on professional integrity, managing personal and professional behaviors, and conflict resolution for interpreters.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze personal ethics and mores as an American and as part of the D/deaf community.
- distinguish ethical standards within the RID Code of Professional Conduct.
- formulate ethical decisions regarding presented case studies.
- assess personal and professional behaviors appropriate to intercultural interpreted interactions.
- analyze ethical fitness regarding professional integrity, conflict resolution, and lifelong learning.
- assemble portfolio documentation related to a professional business plan.

INTRP 301 Discourse Analysis & Translation

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Enrollment Limitation: Acceptance into the Interpreter Preparation Program through a pre-enrollment application and interview/screening process.
Transferable: CSU
Catalog Date: June 1, 2020

This course provides a foundation in discourse analysis and an introduction to translation with a focus on understanding the context, intentions, and cultural norms used during various communication events. Topics include conversational signals, prosodic features, register variation, message analysis, and message transfer and translation. This course is formerly known as SILA 320.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the sociolinguistic aspects that impact communication and their influence on linguistic variation in various contexts.
- identify appropriate conversational signals and incorporate prosodic features in ASL and English.
- apply a 10-step discourse analysis process to examine the meaning and structure of ASL and English texts in various contexts.
- analyze and reformulate the meaning in main ideas, idea units, and word-level translations from the source text.
- appraise translation work based on various ASL and English source texts through ongoing self-assessment and peer review.

INTRP 303 Orientation to the Interpreting Profession

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Enrollment Limitation: Acceptance into the Interpreter Preparation Program through a pre-enrollment application and interview/screening process.
Transferable: CSU
Catalog Date: June 1, 2020

This course provides a working knowledge of the interpreting profession. Topics include the history of the interpreting field, personal and professional demands, laws and regulations, certification and evaluation standards, extra linguistic knowledge and the employment environment. Career-long learning, self-awareness, and intrapersonal and interpersonal skills are explored during this course.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- assess intrapersonal and interpersonal skills and aptitudes as they relate to the interpreter, colleagues, consumers, and employers.
• identify and discuss the major historical eras and professional organizations in the field of interpreting.
• research state regulations, state and national laws, and evaluation standards that affect the interpreting profession.
• describe current practices regarding business skills and the employment environment.
• plan a progression of courses to complete the American River College Interpretation Preparation Program.

INTRP 305 ASL to English Interpreting

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: INTRP 303 with a grade of "C" or better
Corequisite: INTRP 307
Transferable: CSU
Catalog Date: June 1, 2020

This course provides basic skills in translation and consecutive interpreting from American Sign Language (ASL) to English. Topics include a theoretical analysis of the interpreting process, application of academic and world knowledge, and an introduction to fundamental interpreting skills and techniques for professional interactions.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

• appraise cognitive processing and interpreting theory related to translation and consecutive interpreting.
• apply academic and world knowledge during ASL to English translation and consecutive interpreting.
• analyze and integrate register and discourse analysis.
• manage the flow of communication during the interpreting process.
• assess source language comprehension and incorporate feedback from the D/deaf consumer to modify interpretation.
• construct equivalent discourse in the target language, English, while monitoring message output.
• analyze the effectiveness of model, self, and peer interpreting performance by applying contemporary theories of performance assessment and peer review.
• choose appropriate personal, interpersonal, linguistic, cultural, and knowledge-based skills for professional interactions.

INTRP 307 English to ASL Interpreting

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: INTRP 303 with a grade of "C" or better
Corequisite: INTRP 305
Transferable: CSU
Catalog Date: June 1, 2020

This course provides basic skills in translation and consecutive interpreting from English to American Sign Language (ASL). Topics include a theoretical analysis of the interpreting process, application of academic and world knowledge, and an introduction to fundamental interpreting skills and techniques for professional interactions.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

• appraise cognitive processing and interpreting theory related to translation and consecutive interpreting.
• apply academic and world knowledge during English to ASL translation and consecutive interpreting.
• analyze and integrate register and discourse analysis.
• manage the flow of communication during the interpreting process.
• assess source language comprehension and incorporate feedback from the hearing consumer to modify interpretation.
• construct equivalent discourse in the target language, ASL, while monitoring message output.
• analyze the effectiveness of model, self, and peer interpreting performance by applying contemporary theories of performance assessment and peer review.
choose appropriate personal, interpersonal, linguistic, cultural, and knowledge-based skills for professional interactions.

INTRP 310 Introduction to Deaf Blind Interpreting

Units: 0.5
Hours: 9 hours LEC
Prerequisite: INTRP 303 with a grade of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This course provides an orientation to the Deaf-Blind community. Topics include sighted guide techniques, environmental and ergonomic considerations, modifications to the interpreting models, and additional responsibilities when interacting with Deaf-Blind individuals.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- outline an overview of the field of interpreting and working with Deaf-Blind persons.
- analyze the most common modes of communication used when interacting with Deaf-Blind people.
- choose the preferred type of communication and interpretation techniques.
- describe environmental and ergonomic considerations.
- identify modifications to the interpreting mode.

INTRP 312 Introduction to Oral Transmission

Units: 0.5
Hours: 9 hours LEC
Prerequisite: INTRP 303 with a grade of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This course provides exposure to, background in, and techniques for oral transmission and interaction with oral Deaf people. Topics include speechreading skills, articulation, and support techniques.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate heightened awareness, sensitivity, and the need for specialized communication with Deaf and hard-of-hearing people who prefer oral communication.
- outline environmental factors influencing the oral transmission process.
- apply factors influencing the process of speechreading.
- analyze and use verbal support techniques in oral interpreting.
- analyze and use support techniques in oral interpreting.
- transmit a message orally, using various techniques.

INTRP 314 Introduction to Multicultural Communication

Units: 0.5
Hours: 9 hours LEC
Prerequisite: None.
Advisory: INTRP 305 and 307
Transferable: CSU
Catalog Date: June 1, 2020

This course is a focus on the field of multicultural communication. Cultural and linguistic diversity, personal life experiences, and enhancing racial and ethnic diversity in the interpreting profession are emphasized.
Upon completion of this course, the student will be able to:

- analyze the depth and breadth of a multicultural and/or multilingual situation.
- appraise cultural implications of personal cultural norms, behaviors, and values.
- describe the cultural and linguistic diversity of the life of a specific cultural group.
- interact in a culturally sensitive manner with a specific cultural group.

**INTRP 320 Simultaneous Interpreting**

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<tr>
<td>Hours:</td>
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<tr>
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<tr>
<td>Transferable:</td>
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<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
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This course provides intermediate knowledge and skill development in the area of simultaneous interpreting. Both American Sign Language (ASL) to English and English to ASL interpreting skills are incorporated. Topics include an application of the interpreting process, a focus on analytical and composition skills, incorporation of cultural considerations, and team interpreting.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- assess interpreting situations to determine if qualified to accept the job.
- appraise cognitive processing, interpreting theory, and dual task strategies related to consecutive and simultaneous interpreting.
- evaluate academic and world knowledge during English to ASL and English to ASL simultaneous interpreting.
- assess source language comprehension and incorporate feedback from the consumer to modify interpretation.
- construct equivalent discourse in the target language while monitoring message output.
- choose appropriate personal, interpersonal, linguistic, cultural, and knowledge-based skills for professional interactions.
- examine the impact of cultural differences on interpreting situations.
- manage the flow of communication during the interpreting process.
- provide interpreting services that reflect awareness and sensitivity to culturally and ethnically diverse groups.
- analyze the effectiveness of model, self, and peer interpreting performance by applying contemporary theories of performance assessment and peer review.

**INTRP 325 Transliteration**

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<tr>
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<tr>
<td>Prerequisite:</td>
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<td>Transferable:</td>
<td>CSU</td>
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<td>June 1, 2020</td>
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This course provides basic skills in transliteration. It incorporates both ASL to English and English to ASL literal to idiomatic transliteration skills. Topics include language and consumer assessment, contact signing forms, semantic appropriateness, syntactic considerations, prosodic features, lipshadowing, lipreading, and fingerspelling reception and production.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- compare and contrast interpretation and transliteration.
- conduct linguistic assessments of various signed models.
- analyze context and content of source language in English, contact signing, and ASL.
- transliterate contact signing language samples demonstrating skills outlined in the contact signing assessment strategies.
- assess and demonstrate knowledge of the variety of cultural identifications by Deaf consumers.
- research vocabulary building related to ASL, English, and contact signing.
- produce ASL to English and English to ASL literal to idiomatic transliterations using information processing and assessment strategies.
- use appropriate ergonomics within the transliterated setting.

**INTRP 330 Introduction to Educational Interpreting, K-12**

**Units:** 1  
**Hours:** 18 hours LEC  
**Prerequisite:** INTRP 305 with a grade of "C" or better  
**Transferable:** CSU  
**Catalog Date:** June 1, 2020

This course introduces interpreting in the educational setting with a focus on the elementary and secondary levels of education. Emphasis is on vocabulary development and enrichment specific to educational interpreting, resource development, team building, roles and responsibilities, communicating with children, and ethics.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- identify mandated reporting situations and their impact in K-12 settings.
- analyze the roles and responsibilities of the student, instructor, and interpreter in a variety of K-12 settings.
- describe the various non-interpreting tasks which may be required of educational interpreters (tutor, aide, notetaker, lunchroom/playground/hall monitor, sign language teacher, resource, etc.).
- identify the characteristics of settings in which educational interpreting may be provided (classroom, field trips, parent-teacher conferences, Individual Education Plan meetings, assemblies, sporting events, theater, driver's education, etc.).
- assess, analyze, and interpret Deaf children's language samples.
- apply the RID Code of Professional Conduct and Educational Interpreter Performance Assessment Guidelines for Professional Conduct for educational interpreting.
- interpret effectively for mock classroom environments.

**INTRP 332 Introduction to Educational Interpreting, Post Secondary**

**Units:** 1  
**Hours:** 18 hours LEC  
**Prerequisite:** INTRP 305 and 307 with grades of "C" or better  
**Transferable:** CSU  
**Catalog Date:** June 1, 2020

This course is an introduction to interpreting in the educational setting with a focus on the postsecondary level of education. Emphasis is on vocabulary development and enrichment specific to educational interpreting, resource development, team building, roles and responsibilities, communicating with children, and ethics.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- choose translations that demonstrate lexical and syntactic flexibility for basic source texts in the educational setting.
- compile remedies for specific educational interpreting situations.
- identify unique characteristics of the variety of settings in which educational interpreting might be provided.
- research possible resources in the academic setting and community in preparation for a given educational interpreting assignment.
- assess, analyze, and interpret Deaf students' language samples.
- evaluate and document effective team interpreting strategies.
- interpret effectively in live and videotaped situations.
INTRP 334 Introduction to Medical Interpreting

Units: 1
Hours: 18 hours LEC
Prerequisite: INTRP 305 and 307 with grades of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

The course is an introduction to interpreting in the medical setting. Logistics, role and ethics, the impact of culture and language use are considered.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- compare and contrast medical environmental strategies, including positioning and sight lines.
- choose translations that demonstrate lexical and syntactic flexibility for basic source texts in the medical setting.
- generate appropriate ethical and cultural constructs in medical situations.
- detail the role and responsibilities of an interpreter in a medical setting.

INTRP 336 Introduction to Performing Arts Interpreting

Units: 1
Hours: 18 hours LEC
Prerequisite: INTRP 305 and 307 with grades of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This course is an introduction to interpreting in the performing arts setting. Character development, the function of space in American Sign Language (ASL), environmental considerations, team collaboration, and interpretation are considered.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze and construct characters related to a source text.
- determine and outline appropriate environmental strategies, including positioning and sight line techniques.
- choose appropriate morphological and syntactic linguistic features.
- compose an interpretation of a performing arts text.
- evaluate strategies in working as a member of an interpreting team.

INTRP 338 Introduction to Social Services and Employment Interpreting

Units: 1
Hours: 18 hours LEC
Prerequisite: INTRP 305 and 307 with grades of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This course is an introduction to interpreting in social services and employment settings. Environmental considerations, interpretation, resource building, teamwork, and ethics are considered.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- compare and contrast environmental strategies, including positioning and sight lines.
- interpret ASL/English in a variety of social service and employment mock environments.
compose strategies in working as a member of a team.

- research and incorporate interpretation strategies regarding specific settings including Deaf Safe, designated interpreter, corporate environment, and Department of Rehabilitation.
- apply ethical and cultural considerations in social services and employment-related situations.

**INTRP 340 Introduction to Video Relay and Telephone Interpreting**

**Units:** 0.5  
**Hours:** 9 hours LEC  
**Prerequisite:** INTRP 305 and 307 with grades of "C" or better  
**Transferable:** CSU  
**Catalog Date:** June 1, 2020

This course is an introduction to video relay and telephone interpreting. Environmental considerations, vocabulary development, resource building, video relay and telephone processes, etiquette, and ethics are considered.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- evaluate appropriate environmental strategies including positioning and lighting techniques.
- research methods to be used when telephone interpreting.
- analyze models in video interpreting.
- construct situation-specific strategies for interpreting on video and telephone.
- outline ethical and cultural considerations in specific settings.
- interpret effectively in live and videotaped situations.

**INTRP 342 Introduction to Religious Interpreting**

**Units:** 0.5  
**Hours:** 9 hours LEC  
**Prerequisite:** INTRP 305 and 307 with grades of "C" or better  
**Transferable:** CSU  
**Catalog Date:** June 1, 2020

This course is an introduction to interpreting in the religious setting. Environmental considerations, vocabulary development, resource building, introductory knowledge, and ethics are covered.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- compare and contrast environmental strategies, including positioning, lighting, and sight lines.
- plan a discourse analysis for representative texts in the religious setting.
- specify resources available for specific religious settings.
- research and outline strategies in working as a member of a team.
- formulate interpretations regarding specific prayers and hymns.
- describe appropriate ethical and cultural considerations in religious situations.

**INTRP 344 Introduction to Working with a Certified Deaf Interpreter**

**Units:** 0.5  
**Hours:** 9 hours LEC  
**Prerequisite:** INTRP 305 and 307 with grades of "C" or better  
**Transferable:** CSU
This course is an introduction to interpreting while working with a certified Deaf interpreter (CDI). Topics include: language and communication variation; specialized skills of the CDI; explanation of the role, function, and process of Deaf/hearing teams; and an introduction to the conjoint work involved in the collaborative interpreting process.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify language and communication variations within hearing culture both situational and temporary.
- outline the specialized skills and experience that the certified Deaf interpreter brings to the team.
- explain the role, function, and process of Deaf/hearing interpreting teams with an understanding of the possible power imbalances involved.
- examine aspects of the conjoint work involved in a collaborative interpreting process.

INTRP 349 Signing for Dependency Situations

Units: 0.5
Hours: 9 hours LEC
Prerequisite: INTRP 303 with a grade of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This course provides an introduction to the signs used by Deaf people related to sex, alcohol, and drug abuse. Resources available to Deaf people including Deaf Hope, Deaf Safe, and sobriety meetings are covered. Methods for interpreting these resources are covered.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify signs used in substance dependency and sexual situations.
- research resources regarding sobriety available to Deaf people.
- research resources regarding sexual assault, domestic violence, and keeping safe for Deaf people.
- analyze the ASL resources available in substance dependency and sexual situations.

INTRP 350 Service Learning for Interpreters

Units: 2
Hours: 27 hours LEC; 27 hours LAB
Prerequisite: INTRP 301 and 303 with grades of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This course provides an opportunity to collaborate to build relationships with the Deaf community. Topics include aligning goals and values of the Deaf community through a reciprocal, respectful, and mutually rewarding partnership, resulting in progress toward the Deaf community’s goals and enhanced learning of the responsibilities between future practitioners and the communities in which they work. A portion of this course may be offered in a TBA component of 27 hours which will include service learning provision.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze the relationship between Deaf community assets and capacity of the partnership to address identified needs.
- apply models of social change and experiential learning to personal experience.
- collaborate to construct service learning projects that are responsive to community needs.
- demonstrate cross-cultural and ASL discourse competencies during direct interaction and indirect conversations when Deaf community members are present.
INTRP 352 Mock Interpreting I

This course provides an opportunity to interpret for live or taped presenters in class. Focus is on application of text analysis, assignment preparation, team interpreting, and information processing.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate the ability to research and prepare for an in-class interpretation.
- analyze and document principles of Demand Control Schema related to team interpreting.
- produce a simultaneous interpretation that contains main points.
- assess interpreting performance and identify strategies for improvement.

INTRP 354 Mock Interpreting II

This course provides an opportunity to interpret for an ongoing college class. Focus is on application of text analysis, assignment preparation, information processing, the role of the educational interpreter, and giving and receiving feedback. A portion of this course may be offered in a TBA component of 40.5 hours which may include preparation for and interpreting in mock interpreting settings.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- research and prepare for an interpreting assignment.
- analyze and document principles of Demand-Control Schema in an interpreted assignment.
- integrate techniques for primary tasks inclusion, text analysis, and process management.
- formulate a simultaneous interpretation for a full class period while working with a team.
- assess interpreting performance and identify strategies for improvement.

INTRP 356 Fieldwork in Interpretation

This course provides an opportunity to apply classroom learning to real-world practice in interpreting in both on-campus and off-campus settings. It also provides an opportunity to take one of the national evaluation system examinations. A portion of this course may be offered in a TBA component of 108 hours which may include observation of interpreters and individual and team interpreting practice.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- formulate skills that enhance relationships with other employees, consumers, and the employer.
- choose specific professional skills applied to the delivery of interpreting services with Deaf and hearing consumers.
- analyze and document principles of interpreter observation and Demand-Control Schema for five different settings/days.
- research interpreting practices working with at least one interview with an interpreting services manager.
- complete employment application procedures such as a resume, cover letter, and interviewing techniques.
- prepare for and take a national skills-based assessment.
- document his/her work throughout the ARC Interpreter Preparation Program via a capstone portfolio.

**INTRP 495 Independent Studies in Sign Language Studies - Interpreting**

Units: 1 - 3  
Hours: 54 - 162 hours LAB  
Prerequisite: None  
Transferable: CSU  
Catalog Date: June 1, 2020

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.
Astronomy is part of the general education program at American River College. The astronomy course offerings include Introduction to Astronomy, The Solar System, Stars/Galaxies/Cosmology, Introduction to Astrobiology, Honors Introduction to Astronomy, Independent Studies in Astronomy, and an Astronomy Laboratory. All courses comply with general education transfer requirements.

Division Dean  Dr. Rina Roy
Department Chairs  Shih-Wen Young
(916) 484-8107

Associate Degree

A.S. in General Science

This program provides a broad study in the fields of biological and physical sciences in preparation for transfer to a four-year program and continuation of studies in upper division science courses.

Catalog Date: June 1, 2020

Degree Requirements

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**Biological Science Courses**

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### Astronomy (ASTR)

**ASTR 300 Introduction to Astronomy**

This course covers topics in modern planetary and stellar astronomy, such as dwarf, jovian, terrestrial, and extrasolar planets and the life cycle of stars, black holes, and supernovae. It also includes topics on cosmology and galactic astronomy, such as dark matter, dark energy, the Big Bang, and the expansion of the Universe.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- evaluate early models of the solar system using the scientific method and outline the historical events that led to our current model.

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### Student Learning Outcomes

- evaluate new and accepted ideas about the natural universe using scientific methods.
- analyze a wide variety of natural phenomena using basic definitions and fundamental theories of biological or physical sciences.
- apply appropriate quantitative and qualitative methods to interpret and analyze pertinent data.
- outline the basic concepts and fundamental theories of a natural science.
- articulate orally and/or in writing the importance of continuous examination and modification of accepted ideas as a fundamental element in the progress of science.
- discuss ethical components of scientific decision making and apply personal and social values within the process of decision making in scientific endeavors.
apply theories and models from classical physics and modern physics to explain astronomical observations, such as the motion of objects in the sky, the formation of planets, and the life cycle of stars.

classify the planets as terrestrial or jovian and list the characteristics of each category.

discuss the discovery of new Kuiper belt objects and how their existence changed our definition of what a planet is.

describe how extrasolar planets are detected and discuss their properties.

describe the structure of the Sun and its source of energy.

explain how astronomers collect light from distant stars and discuss what can be learned from analyzing that light.

classify different types of stars and galaxies, and discuss the stellar life cycle in the context of stellar evolution.

describe the astronomical evidence for dark matter and dark energy, and discuss their implications.

describe the scientific evidence and models regarding the nature and origin of the Universe, including its evolution from the Big Bang up to today.

ASTR 310 The Solar System

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: MATH 100, 104 or 132 with a grade of "C" or better, AND eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC (ASTR 300, 310 and 320 combined: maximum credit, two courses)
General Education: AA/AS Area IV; CSU Area B1; IGETC Area 5A
Catalog Date: June 1, 2020

This course explores the nature and evolution of the solar system. Topics include the night-time sky, the history of astronomy, the tools of astronomy, and the origins and characteristics of planets, their satellites, and other components of the solar system. Emphasis is placed on how astronomers gain and refine their knowledge of the Universe and interpret the latest results of planetary exploration.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe and explain the apparent motion of stars and planets in the night-time sky over the course of a day, a season, and a year.
- evaluate early models of the solar system using the scientific method, and outline the historical events that led to our current model.
- apply current scientific theories and models from classical and modern physics to explain astronomical observations, such as the motion of objects in the solar system and the formation and evolution of planets and the Sun.
- classify the planets as terrestrial or jovian and list the characteristics of each category.
- describe the role plate tectonics, volcanism, and magnetic fields play in shaping the surfaces, habitability, and other properties of different planetary bodies.
- identify the larger moons in the solar system and describe what makes them unique.
- identify other elements of the solar system, such as comets and asteroids; describe their characteristics and what can be learned from them.
- discuss the discovery of new Kuiper belt objects and how their existence changed our definition of what a planet is.
- describe how extrasolar planets are detected and discuss their properties.
- describe the structure of the Sun and its source of energy.

ASTR 320 Stars, Galaxies, and Cosmology

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: MATH 100, 104 or 132 with a grade of "C" or better, AND eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC (ASTR 300, 310, and 320 combined: maximum credit, two courses; ASTR 320 and 480 combined: maximum credit, one course; ASTR 320 and 481 combined: maximum credit, one course)
General Education: AA/AS Area IV; CSU Area B1; IGETC Area 5A
Catalog Date: June 1, 2020

This course explores the nature and evolution of stars, galaxies, and the Universe. Topics include the history of astronomy, the tools of astronomy, star classification, stellar...
evolution, neutron stars, black holes, and the Big Bang. Emphasis is placed on how astronomers gain and refine their knowledge of the Universe and interpret the latest results of space exploration.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- evaluate early models of the Universe using the scientific method and outline the historical events that led to our current model.
- explain how astronomers collect light from distant stars and discuss what can be learned from analyzing that light.
- apply theories and models from classical physics and modern physics to explain astronomical observations, such as the formation of black holes, the red-shift of light coming from distant galaxies, and the life cycle of the Sun.
- classify different star types and discuss their life cycles in the context of stellar evolution.
- classify galaxies and describe how they formed and evolved.
- describe the astronomical evidence for dark matter and dark energy, and discuss their implications.
- discuss the scientific evidence and models regarding the nature and origin of the Universe, including its evolution from the Big Bang up to today.

ASTR 330 Introduction to Astrobiology

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: MATH 100, 104 or 132 with a grade of "C" or better, AND eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC (ASTR 300, 310 and 320 combined: maximum credit, two courses)
General Education: AA/AS Area IV; CSU Area B1; IGETC Area 5A
Catalog Date: June 1, 2020

This course explores the possibilities of life beyond Earth and what we can learn from terrestrial life forms surviving in extreme conditions. Topics include the origin, biology, and evolution of life on Earth, habitability and interior energy sources of Earth and other planets in the solar system, the likelihood of life existing on other planets or moons within our solar system, attempts to locate life within our solar system, and attempts to communicate with intelligent life in other parts of the galaxy.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- discuss the origin of life on Earth and describe the evidence supporting the current models.
- describe how plate tectonics, volcanism, the atmosphere, and magnetic fields influenced the evolution of life on different planetary bodies.
- construct a set of criteria for determining the likelihood of finding life in a particular environment.
- evaluate the evidence for past microbial life on Mars.
- discuss the possibility of finding life on other planets or moons in the solar system.
- assess the chances of communicating successfully with technically advanced civilizations elsewhere in the galaxy.
- describe the nature of life on Earth: from cells to DNA, Darwinism, and the evolution of species.
- discuss topics related to astrobiology, such as the Cambrian explosion, mass extinctions, and genetic engineering of artificial life forms.
- identify different types of extremophiles and discuss how life can exist under such extreme conditions.

ASTR 400 Astronomy Laboratory

Units: 1
Hours: 54 hours LAB
Prerequisite: None.
Corequisite: ASTR 300, 310, 320, or 330
Transferable: CSU; UC
General Education: CSU Area B3; IGETC Area 5C
Catalog Date: June 1, 2020

This course covers the practical use of a telescope for visual observation of astronomical objects and the analysis of astronomical data. Topics may include constellation
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- set up and align a telescope.
- locate constellations and deep sky objects in the night sky with the aid of a telescope and star chart.
- explain the apparent motions of the planets, Sun, and stars.
- explain eclipses and the phases of the Moon.
- explain sunspots and the basic functioning of the Sun.
- analyze astronomical data.
- list different types of spectra used by astronomers and explain what they reveal about the composition and the temperature of stars.
- organize data on stellar properties to create a Hertzsprung-Russell (HR) diagram.
- estimate the age of the Universe based on Hubble’s Law and the Hubble time.

ASTR 481 Honors Astronomy: Stars, Galaxies, and Cosmology

| Units: | 4 |
| Hours: | 54 hours LEC; 54 hours LAB |
| Prerequisite: | Placement into ENGWG 480 through the assessment process. |
| Advisory: | MATH 100 or 132 with a grade of “C” or better |
| Transferable: | CSU; UC (UC Credit limitation: ASTR 320 and 481 combined: maximum credit, one course) |
| General Education: | AA/AS Area IV; CSU Area B1; CSU Area B3; IGETC Area 5A; IGETC Area 5C |
| Catalog Date: | June 1, 2020 |

This seminar-style course is an in-depth introduction to astronomy, focusing on stars, galaxies, and cosmology. It approaches current topics in astronomy through class discussion and laboratory activities, with an emphasis on critical thinking, problem-solving techniques, and conceptual reasoning.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- systematize astronomical conceptual knowledge while evaluating current astronomy theories and observations.
- discuss modern topics and problems pertaining to stellar evolution, galactic astronomy, cosmology, and related areas.
- estimate the age of the Universe based on Hubble’s Law and the Hubble time.
- explain how astronomers collect light from distant stars and discuss what can be learned from analyzing that light.
- classify different star types and discuss their life cycles in the context of stellar evolution.
- describe the astronomical evidence for dark matter and dark energy, and discuss their implications.
- discuss the scientific evidence and models regarding the nature and origin of the Universe, including its evolution from the Big Bang up to today.
- apply theories and models from classical physics and modern physics to explain astronomical observations, such as the formation of black holes, the red-shift of light coming from distant galaxies, and the life cycle of the Sun.
- conduct optical and radio telescope observations and data analysis.
- set up and align a telescope.
- explain the apparent motions of the planets, Sun, and stars.

ASTR 495 Independent Studies in Astronomy

| Units: | 1 - 3 |
| Hours: | 54 - 162 hours LAB |
| Prerequisite: | None. |
Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.
Automotive Collision Technology | American River College

This degree or certificate provides an extended combination of classroom and hands-on shop experience to prepare for careers in all phases of automotive collision technology. Topics include component repairs, structural and nonstructural repairs and refinishing. It also covers various automotive systems, such as heating and air-conditioning, suspension steering, and electrical.

Division Dean
Gary Aguilar

Department Chairs
Craig Weckman

(916) 484-8354

Associate Degree

A.S. in Automotive Collision Technology.

This degree provides an extended combination of classroom and hands-on shop experience to prepare for careers in all phases of automotive collision technology. Topics include component repairs, structural and non-structural repairs and refinishing. It also covers various automotive systems, such as heating and air-conditioning, suspension steering, and electrical.

Catalog Date: June 1, 2020

Degree Requirements

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<td>Automotive Refinishing</td>
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</tr>
<tr>
<td>ACT 161</td>
<td>Automotive Collision Software Systems, Estimating I</td>
<td>4</td>
</tr>
<tr>
<td>AT 100</td>
<td>Technical Basics for the Automotive Professional</td>
<td>3</td>
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<tr>
<td>AT 105</td>
<td>Mathematics for Automotive Technology</td>
<td>3</td>
</tr>
<tr>
<td>AT 180</td>
<td>Automotive Data Acquisition</td>
<td>3</td>
</tr>
<tr>
<td>AT 310</td>
<td>Heating and Air-Conditioning Systems</td>
<td>3</td>
</tr>
<tr>
<td>AT 311</td>
<td>Suspension and Steering Systems</td>
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</tr>
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<td>Automotive Electrical Systems</td>
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<tr>
<td></td>
<td>A minimum of 4 units from the following:</td>
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<tr>
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<td>53</td>
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</table>

The Automotive Collision Technology, Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.
Student Learning Outcomes

Upon completion of this program, the student will be able to:

- identify and estimate automotive collision damage.
- develop a repair plan.
- repair automotive collision mechanical damage.
- repair frame/unibody automotive collision structural damage.
- repair automotive collision body damage.
- refinish automotive collision damage.

Career Information

This program provides training and hands-on experience in high-demand skills that lead to promising careers with high wages. Students who have successfully completed this program are working as non-structural, structural, refinish and estimating technicians. The U.S. Labor Department reports that job opportunities for auto collision specialists are excellent because of the large number of older workers who are expected to retire in the next 5 to 10 years. In addition, it points out that experienced technicians are rarely laid off and that employers prefer to hire graduates of a formal training program for which provides a foundation in the latest collision technology, including the techniques and equipment used on the job.

Certificates of Achievement

Automotive Claims Estimator Certificate

This program provides the technical and practical skills necessary to properly diagnose collision-damaged vehicles and to document the cost and time necessary to repair collision-damaged vehicles. The use of state-of-the-art, computer-generated estimating programs and video imaging are used to prepare itemized estimates on collision-damaged vehicles. The procedures to prepare itemized estimates detailing the required procedures and parts necessary to correctly repair the vehicle are also covered.

Catalog Date: June 1, 2020

Certificate Requirements

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<td>BUS 212</td>
<td>Marketing for Small Businesses</td>
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<tr>
<td>BUS 218</td>
<td>Management Skills for the Small Business</td>
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<tr>
<td>BUS 224</td>
<td>Customer Service</td>
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<tr>
<td>BUSTEC 300.1</td>
<td>Keyboarding/Applications: Beginning</td>
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</table>

Total Units: 16

^Keyboard proficiency test. This program can be completed in 15 units if student passes keyboarding test.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- complete an accurate repair estimate
- apply technical skills necessary to remove, replace and align damaged cosmetic and mechanical related components
- recognize and identify direct, indirect and secondary damage on collision-damaged vehicles
- create a marketing plan for a small business utilizing appropriate data
- analyze the four functions of management: planning, organizing, directing, and evaluating
- demonstrate methods for building effective customer service teams
Career Information

This program provides training and hands-on experience in high-demand skills that lead to promising careers with high wages. The U.S. Labor Department reports that job opportunities for auto collision specialists are excellent because of the large number of older workers who are expected to retire in the next 5 to 10 years. In addition, it points out that experienced technicians are rarely laid off and that employers prefer to hire graduates of a formal training program because it provides a foundation in the latest collision technology, including the techniques and equipment used on the job.

Automotive Collision Technology. Certificate

This program provides a combination of classroom and hands-on shop experience to prepare for careers in all phases of automotive collision technology repair. Topics include component repairs, structural and non-structural repairs and refinish. It also covers various automotive systems, such as heating and air-conditioning, suspension steering, and electrical.

Catalog Date: June 1, 2020

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Student Learning Outcomes

Upon completion of this program, the student will be able to:

- identify and estimate automotive collision damage
- repair automotive collision mechanical damage
- repair frame/unibody automotive collision structural damage
- repair automotive collision body damage
- refinish automotive collision damage

Career Information

This program provides training and hands-on experience in high-demand skills that lead to promising careers with high wages. Students who have successfully completed this program are working as apprentice shop technicians. The U.S. Labor Department reports that job opportunities for auto collision specialists are excellent because of the
large number of older workers who are expected to retire in the next 5 to 10 years. In addition, it points out that experienced technicians are rarely laid off and that employers prefer to hire graduates of a formal training program because it provides a foundation in the latest collision technology, including the techniques and equipment used on the job.

Certificates

Automotive Collision Technology-Non-Structural Certificate

This certificate provides a combination of classroom and hands-on experience to prepare for careers in non-structural automotive collision technology. Topics include automotive collision basic, component and non-structural repairs. This certificate is intended for students who have completed the Automotive Collision Technology Certificate and need to obtain a higher skill level to obtain higher I-CAR pro levels.

Catalog Date: June 1, 2020

Certificate Requirements

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<td>Total Units:</td>
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<td>12</td>
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</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- identify collision damage
- repair vehicle sheet steel
- determine repair or replace based on I-CAR/ASE criteria
- repair hybrid vehicles to meet legal safely standards

Career Information

This program provides training and hands-on experience in high-demand skills that lead to promising career with high wages. Students who have successfully completed this program are working as body repair technicians. The U.S. Labor Department reports that job opportunity for auto collision specialists are excellent because of large number of older workers who are expected to retire in the next 4 to 10 years. In addition, it points out that experienced technicians are rarely laid off and employers prefer to hire graduates of a formal training program because it provides a foundation in the latest collision technology, including the techniques and equipment used on the job.

Automotive Collision Technology-Refinish Certificate

This program provides a combination of classroom and hands-on shop experience to prepare for a career in automotive collision technology refinishing. Topics include component repair, non-structural repairs and, refinishing. This certificate is intended for students who are interested in exploring the field of Automotive Collision Refinish.

Catalog Date: June 1, 2020

Certificate Requirements

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<td>ACT 140</td>
<td>Automotive Refinishing</td>
<td>4</td>
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<tr>
<td>Total Units:</td>
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</tr>
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Student Learning Outcomes
Upon completion of this program, the student will be able to:

- identify color matching and solutions
- apply color blending procedures including application
- apply paint material with proficiency
- polish repaired surface to factory finish
- prepare surface in all application phases
- remove and install adjacent parts for quality refinish preparation

Career Information

This program provides training and hands-on experience in high-demand skills that lead to promising careers with high wages. Students who have successfully completed this program are qualified candidates for refinish apprenticeships. The U.S. Labor Department reports that job opportunities for auto collision specialists are excellent because of the large number of older workers who are expected to retire in the next 5 to 10 years. In addition, it points out that experienced technicians are rarely laid off and that employers prefer to hire graduates or a formal training program because it provides a foundation in the latest collision technology, including the techniques and equipment used on the job.

Automotive Collision Technology-Structural Certificate

This program provides a combination of classroom and hands-on shop experience to prepare for a career in automotive collision structural repairs. This certificate is intended for students who have completed the Automotive Collision Technology Certificate and need to obtain a higher skill level in the field.

Catalog Date: June 1, 2020

Certificate Requirements

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<td>ACT 131</td>
<td>Automotive Collision Welding</td>
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</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>12</td>
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</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- identify structural damage
- mount and measure vehicles
- pull and square damaged structural areas
- perform collision related welding of sheet steel
- remove and install components

Career Information

This program provides training and hands-on experience in high-demand skills that lead to promising careers with high wages. Students who have successfully completed this program are working as frame/unibody technicians. The U.S. Labor Department reports that job opportunities for auto collision specialists are excellent because of the large number of older workers who are expected to retire in the next 5 to 10 years. In addition, it points out that experienced technicians are rarely laid off and that employers prefer to hire graduates of a formal training program because it provides a foundation in the latest collision technology, including the techniques and equipment used on the job.
ACT 100 Automotive Collision Basics

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

This course covers the basics of automotive collision repair of traditional, electric, and electric hybrid vehicles. Topics include use and disposal of hazardous materials; lighting, starting, and charging systems; and appropriate use and maintenance of tools and equipment.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze fundamental damage on a vehicle.
- use, handle and dispose of hazardous chemicals.
- recognize tools and use them safely.

ACT 110 Component Repairs

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: ACT 100 with a grade of "C" or better
Catalog Date: June 1, 2020

This course provides the technical principals and theories to perform limited and supervised repairs to collision-damaged vehicles. It covers how to safely remove, inspect, replace, and align bolt-on body components per vehicle manufacturers' specifications. It covers protection of mechanical and electrical systems, removal of damaged parts, removal and re-installation of movable glass, diagnosis of wind noise and water leaks, and techniques applicable to damaged vehicles. Students enrolled in the Collision Technology program at American River College (ARC) may be eligible to apply for Inter-Industry Conference on Automotive Collision Repairs (I-CAR) points and I-CAR certifications. This ARC-ACT/I-CAR alliance course also prepares students for Automotive Service Excellence (ASE) testing and National Automotive Technicians Education Foundation (NATEF) training standards.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply technical skills necessary to remove, replace, and align damaged mechanical and cosmetic sheet metal components per manufacturers' specifications.
- identify direct, indirect, and secondary damage on collision-damaged vehicles.
- demonstrate the correct and safe use, operation, and application of power and hand tools used in auto collision repair.
- examine, adjust, and replace movable door glass and associated electrical systems.
- assess and eliminate vehicle wind noise and water leaks.

ACT 120 Non-Structural Repair

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: ACT 100 with a grade of "C" or better
Catalog Date: June 1, 2020

This course provides the technical principles and theories to perform limited and supervised repairs to collision-damaged vehicles. It covers the fundamentals and theory of automotive collision repair procedures including composite repairs and replacements. Foam application techniques pertaining to noise reduction and structural strength are implemented. Additionally, metal straightening theory and techniques for steel and aluminum repairs, and the decision to make repairs vs. replacement are included. Students enrolled in the Collision Technology program at American River College (ARC) may be eligible to apply for Inter-Industry Conference on Automotive Collision Repair (I-CAR) points and I-CAR industry certifications. This ARC-ACT/I-CAR alliance course also prepares students for Automotive Service Excellence (ASE) testing, and National Automotive Technicians Educational Foundation (NATEF) training standards.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- repair and align damaged sheet metal and component parts on late model vehicles.
• evaluate the types of damage on collision damaged vehicles.
• determine procedures, techniques, and tools used to repair collision damaged vehicles.
• operate power and hand tools used in vehicle collision repair.
• evaluate repair vs. replacement decisions.
• implement composite repairs and replacement techniques.
• utilize structural and Noise Vibration Harshness (NVH) foams in the repair process.

ACT 130 Structural Repair

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: ACT 100 and 131 with grades of "C" or better
Catalog Date: June 1, 2020

This course covers principles and theories of automotive collision repair, including component alignment, component replacement, structural panel repair or replacement, corrosion protection, and chassis/frame alignment. Sectioning and full-panel replacement techniques and procedures are covered, including welding and self-piercing rivet adhesive bonding. Required corrosion protection techniques are applied. Students enrolled in the Collision Technology program at American River College (ARC) may be eligible to apply for Inter-Industry Conference on Automotive Collision Repair (I-CAR) points and I-CAR industry certifications. This ARC-ACT/I-CAR alliance course also prepares students for Automotive Service Excellence (ASE) testing, and National Automotive Technicians Education Foundation (NATEF) training standards.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• identify and analyze structural damage to collision damaged vehicles.
• inspect and measure damage using industry standard procedures and equipment.
• restore collision damaged aluminum and steel to pre-accident condition.
• evaluate composite paneled vehicles and body panels for repair versus replacement decisions.
• remove, repair, replace, and install panels on Unibody type systems.
• apply theory, techniques, and procedures for restoration of structural panels.
• determine type and application technique of corrosion protection materials.

ACT 131 Automotive Collision Welding

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

This course covers the various processes of welding in automotive collision repairs using metal inert gas (MIG) and tungsten inert gas (TIG). Topics include preparation, welding, and finishing.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• perform Sheet and .120 Steel welding with metal inert gas (MIG) and tungsten inert gas (TIG) on Standard, High Strength Steel (HSS), Advanced High Strength Steel (AHSS), Ultra High Strength steel (UHSS) and Boron Steel
• perform Sheet and .120 Aluminum welding with MIG and TIG
• perform Sheet and .120 Stainless Steel welding with MIG and TIG
• repair collision damage

ACT 140 Automotive Refinishing
This course covers the principles and theories of paint finish application, tinting, color evaluation, and color adjustments. Topics include paint application techniques, new and emerging paint technologies, color identification, and interpreting vehicle color codes. This course also addresses multiple compliances with regulations as determined by the Occupational Safety and Health Administration (OSHA), the Environmental Protection Agency (EPA), the Clean Air Act, and the Sacramento Municipal Air Quality Air Management District (SMAQMD) pertaining to Volatile Organic Compounds (VOC's). Students enrolled in the Automotive Collision Technology (ACT) program at American River College (ARC) may be eligible to apply for Inter-Industry Conference on Automotive Collision Repair (I-CAR) points and I-CAR industry certifications. This ARC-ACT/I-CAR alliance course also prepares students for Automotive Service Excellence (ASE) testing and National Automotive Technicians Education Foundation (NATEF) training standards.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- analyze the principles and theories of tinting technology.
- evaluate color and color adjustment for industry's current refinishing products.
- interpret and comply with regulations for OSHA, EPA, the Clean Air Act, and SMAQMD VOC.
- implement refinishing application techniques.

**ACT 150 Advanced Collision Frame & Unibody**

| Units: | 4 |
| Hours: | 54 hours LEC; 54 hours LAB |
| Prerequisite: | ACT 100 and 120 with grades of "C" or better |
| Catalog Date: | June 1, 2020 |

This course covers the principles and theories of advanced chassis design, development, and construction. Extensive bracket and frame fabrication and welding are emphasized.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- design automotive frames or modifications
- cut and form 18gage to 3/8" steel and aluminum
- weld similar and dissimilar metal thicknesses to specification
- mount, measure, and assemble frame components

**ACT 152 Advanced Collision Suspensions**

| Units: | 4 |
| Hours: | 54 hours LEC; 54 hours LAB |
| Prerequisite: | ACT 110, 120, 130, and 140 with grades of "C" or better |
| Catalog Date: | June 1, 2020 |

This course covers the principles and theories of advanced suspension design, development, and construction. Topics include big brakes and air suspensions.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- design and plan automotive suspension assemblies
- modify suspensions including big brakes
- design and plan steering assemblies
- install suspension and steering assemblies
ACT 154 Advanced Collision Drivetrain

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: ACT 110, 120, 130, and 140 with grades of "C" or better
Catalog Date: June 1, 2020

This course covers the principles and theories of advanced engines and transmissions. Topics include engine performance tuning and transmission selection.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify engine types
- modify and install engine and transmission components
- select, modify, and install transmissions
- interpret fuel injection fuel maps and adjust fuel injection systems

ACT 156 Advanced Collision Refinish

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: ACT 110, 120, 130, and 140 with grades of "C" or better
Catalog Date: June 1, 2020

This course covers the principles and theories of advanced custom show-quality automotive finishes. Topics include primers, color coats, special effects, clear coats, and polishing.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- plan and refinish a car from start to finish
- prepare surface for a custom hot rod finish to a high standard of excellence
- demonstrate proper usage of spray guns
- polish the refinished surface to a mirror-like appearance

ACT 161 Automotive Collision Software Systems, Estimating I

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

This course provides the technical and practical skills necessary to properly diagnose collision-damaged vehicles and to document the cost and time necessary to repair collision-damaged vehicles. The use of state-of-the-art computer generated estimating programs and video imaging are used to prepare itemized estimates on collision-damaged vehicles. The procedures to prepare itemized estimates detailing the required procedures and parts necessary to correctly repair the vehicle are also covered.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- complete an accurate handwritten repair estimate.
- identify a vehicle's codes and parts.
- use the procedure pages (P-pages) to determine appropriate steps for a given job estimate.
- demonstrate proficiency in establishing a step-by-step sequence for estimating and using this same technique for all estimates.
- explain the function of the California Bureau of Automotive Repair.
- use the Mitchell Ultra-Mate Estimating System to accurately produce computer assisted estimates.
- diagnose and analyze collision-damaged vehicles.

ACT 298 Work Experience in Collision Technology

This course provides students with opportunities to develop marketable skills in preparation for employment or advancement within the automotive collision field. It is designed for students interested in work experience and/or internships in associate degree level or certificate occupational programs. Course content includes understanding the application of education to the workforce, completion of Title 5 required forms which document the student's progress and hours spent at the work site, and developing workplace skills and competencies.

During the semester, the student is required to complete 75 hours of related paid work experience, or 60 hours of related unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. All students are required to attend the first class meeting, a mid-semester meeting, and a final meeting. Additionally, students who have not already successfully completed a Work Experience course will be required to attend weekly orientations while returning participants may meet individually with the instructor as needed. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate mastery of specific job skills in the automotive collision field related to an associate degree or certificate occupational program level career as written in the minimum three (3) learning objectives created by the student and his/her employer or work site supervisor at the start of the course.
- make effective decisions, use workforce information, and manage his/her personal career plans.
- behave professionally, ethically, and legally at work, consistent with applicable laws, regulations, and organizational norms.
- behave responsibly at work, exhibiting initiative and self-management in situations where it is needed.
- apply effective leadership styles at work, with consideration to group dynamics, team and individual decision making, and workforce diversity.
- communicate in oral, written, and other formats, as needed, in a variety of contexts at work.
- locate, organize, evaluate, and reference information at work.
- demonstrate originality and inventiveness at work by combining ideas or information in new ways, making connections between seemingly unrelated ideas, and reshaping goals in ways that reveal new possibilities using critical and creative thinking skills such as logical reasoning, analytical thinking, and problem-solving.
Automotive Technology | American River College

The automotive technology program is a combination of classroom and hands-on shop experiences that prepare students for careers in all phases of automotive service and repair on all types of cars. Students are trained on the use of workshop manuals in traditional and computerized formats, hand held meters and scanners, and special shop tools including power and hand tools.

Highlights include:

- ASE certified instructors and programs.
- Students may begin 5-week courses 3 times during the semester.
- 5-week courses allow completion of some certificate programs in one semester.
- Small class size ensures individual attention and access to specialized equipment.
- Preparation for ASE and State Smog Certification (Emissions Control) exams.

Division Dean: Gary Aguilar
Department Chairs: Ben French

Associate Degrees

A.S. in Automotive Analysis

This program prepares students for entry-level employment as smog and driveability service technicians. It also prepares students for Automotive Service Excellence (ASE) certification in Engine Repair A1, Automatic Transmissions/Transaxles A2, Electrical A6, Engine Performance A8, and Advanced Engine Performance L1. This program also fulfills the Bureau of Automotive Repair (BAR) requirements for California State Smog Check Inspector and California State Smog Check Repair Technician test candidates.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
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<th>UNITS</th>
</tr>
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<tbody>
<tr>
<td>AT 100</td>
<td>Technical Basics for the Automotive Professional</td>
<td>3</td>
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<td>AT 105</td>
<td>Mathematics for Automotive Technology</td>
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<td>AT 180</td>
<td>Automotive Data Acquisition</td>
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<td>AT 181</td>
<td>Snap-On Multimeter Basics</td>
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<td>AT 186</td>
<td>Snap-On MODIS – Automotive Diagnostic Use and Operation</td>
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<td>Snap-On SOLUS – Automotive Diagnostic Use and Operation</td>
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<td>AT 189</td>
<td>Snap-On VERUS – Automotive Diagnostic Use and Operation</td>
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<td>AT 330</td>
<td>Automotive Electrical Systems</td>
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</tr>
<tr>
<td>AT 333</td>
<td>California State Smog Check Inspector Training</td>
<td>6</td>
</tr>
</tbody>
</table>
**The Automotive Analysis Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.**

### Student Learning Outcomes

Upon completion of this program, the student will be able to:

- identify and implement safety procedures involved in the diagnosis, service, and repair of all major automobile and light truck systems.
- describe the function, operation, and characteristics of all major components in the following automotive systems: engines, automatic transmissions, electrical, air conditioning, emission control and computerized engine controls.
- identify and follow manufacturer's standards for proper automobile diagnosis and repair.
- operate hand and power tools necessary for automobile and light truck repair.
- operate diagnostic equipment and interpret test results.
- analyze, diagnose, and repair automotive engines, automatic transmissions, electrical systems, fuel delivery systems, ignition systems, emissions control systems, and computerized engine controls.
- operate a variety of aftermarket and factory scan tools.

### Career Information

Automotive Technician Smog Check Technician

### A.S. in Automotive Component Service Technician

This degree prepares the student for employment repairing of various automobile components including those requiring computer technology.

Catalog Date: June 1, 2020

### Degree Requirements

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<td>Suspension and Steering Systems</td>
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<td>Automatic Transmission and Transaxles</td>
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<tr>
<td>AT 298</td>
<td>Work Experience in Automotive Technology (1 - 4)</td>
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</tr>
</tbody>
</table>
The Automotive Component Service Technician Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- diagnose and repair major automotive components.
- describe the relationships between automotive components.
- complete service and repair work to industry time and quality standards.
- follow federal EPA guidelines for handling and use of hazardous material found in an automotive shop.
- demonstrate safe work practices in the auto shop.

Career Information

Employment as a technician, shop foreman, service manager for new car dealers, automotive repair shops, and fleet operators.

A.S. in Automotive Technology

This program prepares students for entry-level positions in the automotive industry with emphasis on engine management systems, emission controls, and complete automotive systems diagnosis and repair. It prepares students for all nine Automotive Service Excellence (ASE) certifications including Advanced Engine Performance (L-1). This program also fulfills the Bureau of Automotive Repair (BAR) requirements for California State Smog Check Inspector and California State Smog Check Repair Technician test candidates.

Catalog Date: June 1, 2020

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<td>AT 298</td>
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<td>or AT 140</td>
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</table>
The Automotive Technology Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- apply algebraic and mathematical concepts essential to advancement in the automotive industry.
- operate equipment and tools safely.
- evaluate, adjust, test, and diagnose components/system malfunctions.
- diagnose, assess, and repair manual and automatic transmissions and transaxles.
- locate, download, and analyze technical manuals from the Internet, digital, and text sources.
- diagnose, diagnose, and repair automotive electrical and electronic systems to ASE performance level.
- diagnose, troubleshoot, and repair basic air conditioning (AC) systems.
- diagnose, disassemble, inspect, clean, and reassemble components of the steering and suspension system.
- analyze, diagnose, and repair engines to ASE performance levels.
- analyze and repair fuel injection systems to ASE standards.
- diagnose engine emission control systems to ASE standards.
- prepare for the State Smog Check Inspector and California State Smog Check Repair Technician tests.

Certificates of Achievement

Air Conditioning Service Certificate

This certificate program prepares the student for an entry level position in the automotive industry. This program also prepares the student for Automotive Service Excellence (ASE) certification in Air Conditioning A-7.

Catalog Date: June 1, 2020

Certificate Requirements

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<td>AT 330</td>
<td>Automotive Electrical Systems</td>
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<td>Total Units:</td>
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</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Identify and implement safety procedures involved in the service and repair of Automotive Heating, Ventilation, Air Conditioning (HVAC) systems.
- Describe the function, operation and characteristics of each component in automotive HVAC systems.
- Operate diagnostic equipment and interpret results from the equipment.
- Diagnose automotive HVAC systems including manual, semi-automatic, and automatic.
- Repair automotive HVAC systems including manual, semi-automatic, and automatic.
- Diagnose engine cooling systems.
- Repair engine cooling systems.
- Follow Federal EPA guidelines for the handling and use of refrigerants.

### Alternative Fuels and Green Vehicle Technology Certificate

This certificate covers the various technologies used in the alternative fuels vehicles of today. Topics include biodiesel production, hybrid electric vehicles, and fuel cell technology.

Catalog Date: June 1, 2020

#### Certificate Requirements

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<tr>
<th>COURSE CODE</th>
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<tbody>
<tr>
<td>AT 100</td>
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<tr>
<td>AT 309</td>
<td>Introduction to Hybrid and Electric Vehicle Technology</td>
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<td>AT 330</td>
<td>Automotive Electrical Systems</td>
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<td>AT 331</td>
<td>Advanced Automotive Electrical Systems</td>
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<tr>
<td>AT 316</td>
<td>Alternative Fuels and Advanced Technology Vehicles</td>
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<td>Total Units:</td>
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</tbody>
</table>

#### Student Learning Outcomes

Upon completion of this program, the student will be able to:

- perform basic automotive services on alternative fuels vehicles.
- describe different alternative fuels vehicle designs.
- describe the process of making biodiesel.
- analyze electrical and electronic components and identify failures.
- use automotive test equipment such as digital multimeters and scan tools.
- perform high voltage system disable procedures on hybrid electric vehicles.

#### Career Information

Alternative fuels is an emerging career field that is rapidly growing. This certificate prepares automotive technology students for entrance into this field, from servicing alternative fuels vehicles to developing alternative fuels technology. Additional career opportunities are likely as the industry continues to grow.

### Automotive Analysis Certificate

This program prepares students for entry-level employment as smog and driveability service technicians. It also prepares students for Automotive Service Excellence (ASE) certification in Engine Repair A1, Automatic Transmissions/Transaxles A2, Electrical A6, Engine Performance A8, and Advanced Engine Performance L1. This program also fulfills the Bureau of Automotive Repair (BAR) requirements for California State Smog Check Inspector and California State Smog Check Repair Technician test candidates.

Catalog Date: June 1, 2020

#### Certificate Requirements

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<td>AT 180</td>
<td>Automotive Data Acquisition</td>
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<tr>
<td>COURSE CODE</td>
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<tr>
<td>AT 181</td>
<td>Snap-On Multimeter Basics</td>
<td>1</td>
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<td>AT 186</td>
<td>Snap-On MODIS – Automotive Diagnostic Use and Operation</td>
<td>2</td>
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<tr>
<td>AT 188</td>
<td>Snap-On SOLUS– Automotive Diagnostic Use and Operation</td>
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<td>Engine Performance &amp; Electronic Engine Controls</td>
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<tr>
<td>AT 298</td>
<td>Work Experience in Automotive Technology (1 - 4)</td>
<td></td>
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<td>or AT 140</td>
<td>Advanced Automotive Skill and Speed Development (3)</td>
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<tr>
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<td>Total Units:</td>
<td>40</td>
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</table>

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- identify and implement safety procedures involved in the diagnosis, service, and repair of all major automobile and light truck systems.
- describe the function, operation, and characteristics of all major components in the following automotive systems: engines, automatic transmissions, electrical, air conditioning, emission control, and computerized engine controls.
- identify and follow manufacturer's standards for proper automobile diagnosis and repair.
- operate hand and power tools necessary for automobile and light truck repair.
- operate diagnostic equipment and interpret test results.
- analyze, diagnose, and repair automotive engines, automatic transmissions, electrical systems, fuel delivery systems, ignition systems, emissions control systems, and computerized engine controls.
- operate a variety of aftermarket and factory scan tools.

**Career Information**

Automotive Technician Smog Check Technician

**Automotive Component Service Technician Certificate**

This certificate prepares the student for entry level employment in the repairing of various automobile components including those requiring computer technology.

**Certificate Requirements**

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<td>AT 130</td>
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<td>AT 310</td>
<td>Heating and Air-Conditioning Systems</td>
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</tr>
</tbody>
</table>
### Student Learning Outcomes

Upon completion of this program, the student will be able to:

- diagnose and repair automotive major automotive components.
- describe the relationship between automotive components.
- complete service and repair tasks to industry time and quality standards.
- follow federal EPA guidelines for handling and use of hazardous material found in an automotive shop.
- demonstrate safe work practices in the auto shop.

### Career Information

Employment as a technician for new car dealers, automotive repair shops, and fleet operators.

### Automotive Emissions Inspection and Repair Technician Certificate

This certificate prepares students for entry-level positions in the automotive industry as emissions inspectors or emissions repair technicians. It meets the state of California requirements for students seeking to apply for a California state smog inspector and/or repair license(s).

Catalog Date: June 1, 2020

### Certificate Requirements

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<td>California State Smog Check Inspector Training</td>
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<tr>
<td>AT 334</td>
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<tr>
<td>Total Units</td>
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<td>40</td>
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</table>

### Student Learning Outcomes

Upon completion of this program, the student will be able to:

- operate emission analyzers and tools safely.
• evaluate, adjust, test, and diagnose components/system malfunctions.
• research, download, and analyze technical manuals from the Internet, digital, and text sources.
• inspect, diagnose, and repair automotive electrical and electronic systems at Automotive Service Excellence (ASE) performance level.
• inspect, diagnose, and repair engines to ASE performance levels.
• inspect, diagnose, and repair fuel injection systems to ASE and BAR standards.
• diagnose engine emission systems to ASE and Bureau of Automotive Repair (BAR) standards.
• prepare for state smog inspector and repair technician certifications.

Career Information
California State Smog Inspector and California State Smog Repair Technician.

Automotive Technology Certificate
This program prepares students for entry-level positions in the automotive industry with emphasis on engine management systems, emission controls, and complete automotive systems diagnosis and repair. It prepares students for all nine Automotive Service Excellence (ASE) certifications including Advanced Engine Performance (L-1). This program also fulfills the Bureau of Automotive Repair (BAR) requirements for California State Smog Check Inspector and California State Smog Check Repair Technician test candidates.

Catalog Date: June 1, 2020

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</table>

A minimum of 1 unit from the following:

AT 298 Work Experience in Automotive Technology (1 - 4)
or AT 140 Advanced Automotive Skill and Speed Development (3)

Total Units: 52

Student Learning Outcomes
Upon completion of this program, the student will be able to:

• apply algebraic and mathematical concepts essential to advancement in the automotive industry.
• operate equipment and tools safely.
• evaluate, adjust, test, and diagnose components/system malfunctions.
• diagnose, assess, and repair manual transmissions and transaxles.
• locate, download, and analyze technical manuals from the Internet, digital, and text sources.
• analyze, diagnose, and repair automotive electrical and electronic systems at ASE performance level.
• diagnose and troubleshoot basic air conditioning (AC) systems.
• diagnose, disassemble, inspect, clean, and reassemble all components of the steering and suspension system.
• analyze, diagnose, and repair engines to ASE performance levels.
• analyze and repair fuel injection systems to ASE standards.
• diagnose engine emission systems to ASE standards.
• prepare for the state smog inspector and repair technician certifications.

Extreme Tuner Certificate

This program covers advanced applications of emissions related principles including fuel control and efficiency management of modern automobiles. Topics include brakes, repair of electrical systems, suspension, steering, and engine repairs.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT 100</td>
<td>Technical Basics for the Automotive Professional</td>
<td>3</td>
</tr>
<tr>
<td>AT 110</td>
<td>Automotive Brakes</td>
<td>3</td>
</tr>
<tr>
<td>AT 130</td>
<td>Manual Drive Trains and Axles</td>
<td>3</td>
</tr>
<tr>
<td>AT 311</td>
<td>Suspension and Steering Systems</td>
<td>3</td>
</tr>
<tr>
<td>AT 330</td>
<td>Automotive Electrical Systems</td>
<td>6</td>
</tr>
<tr>
<td>AT 314</td>
<td>Automotive Engine Repair</td>
<td>3</td>
</tr>
<tr>
<td>AT 316</td>
<td>Alternative Fuels and Advanced Technology Vehicles</td>
<td>4</td>
</tr>
<tr>
<td>AT 325</td>
<td>Engine Performance Testing &amp; Tuning</td>
<td>4</td>
</tr>
<tr>
<td>AT 327</td>
<td>Introduction to Motorsports</td>
<td>4</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>33</td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

• evaluate vehicle horsepower safely and effectively by use of diagnostic equipment.
• analyze and demonstrate safe operating practices both in the shop and track environment with stock and modified vehicles.
• validate and summarize outcomes of fuel, timing and power band modifications through hands-on exposure to live data derived before and after modifications.
• apply performance based principles to construct and operate a vehicle for competition, including classification divisions within a sanctioned racing organization.
• organize maintenance schedules and record keeping in order to keep vehicle competitive throughout a season.
• accurately interpret computer software data to make adjustments and modifications to improve performance and/or economy of a modern vehicle.

Career Information

The “Tuner” industry is a rapidly growing industry. Professional technicians today are modifying vehicles for both on and off road application. This certificate prepares the students for the following career opportunities: alternative fuels diagnostic technician, off-road performance tuner, and a racing team crew member.
Parts and Service Certificate

This certificate provides training for automotive parts and service advisors. Topics include parts knowledge, integrated computer management software, scheduling, inventory control, hazardous materials and warranty documentation requirements.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
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</tr>
<tr>
<td>AT 105</td>
<td>Mathematics for Automotive Technology</td>
<td>3</td>
</tr>
<tr>
<td>AT 107</td>
<td>Employability Skills for Technical Careers</td>
<td>2</td>
</tr>
<tr>
<td>AT 143</td>
<td>Automotive Parts</td>
<td>3</td>
</tr>
<tr>
<td>AT 146</td>
<td>Automotive Service Consultant</td>
<td>3</td>
</tr>
<tr>
<td>AT 180</td>
<td>Automotive Data Acquisition</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A minimum of 1 unit from the following:</td>
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</tr>
<tr>
<td>AT 298</td>
<td>Work Experience in Automotive Technology (1 - 4)</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Total Units:</td>
<td>18</td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Apply established procedures in the automotive industry.
- Ensure the satisfactory resolution of service-related customer issues.
- Create a service work including dispatching and invoicing.

Career Information

Various entry level positions in the automotive parts and service industry, such as service writers and parts specialists.

Small Engines Certificate

This certificate prepares students for employment in the automotive industry, specializing in small engines.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
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<tbody>
<tr>
<td>AT 100</td>
<td>Technical Basics for the Automotive Professional</td>
<td>3</td>
</tr>
<tr>
<td>AT 180</td>
<td>Automotive Data Acquisition</td>
<td>3</td>
</tr>
<tr>
<td>AT 181</td>
<td>Snap-On Multimeter Basics</td>
<td>1</td>
</tr>
<tr>
<td>AT 301</td>
<td>Small Gas Engines, Outdoor Power Equipment (4)</td>
<td>4</td>
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<tr>
<td>or HORT 330</td>
<td>Small Gas Engines, Outdoor Power Equipment (4)</td>
<td>4</td>
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<tr>
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<td>A minimum of 1 unit from the following:</td>
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<tr>
<td>AT 298</td>
<td>Work Experience in Automotive Technology (1 - 4)</td>
<td>1</td>
</tr>
<tr>
<td>or AT 140</td>
<td>Advanced Automotive Skill and Speed Development (3)</td>
<td></td>
</tr>
</tbody>
</table>
Upon completion of this program, the student will be able to:

- demonstrate accepted safety and work procedures, including Occupational Safety and Health Administration (OSHA) and proper hazardous materials disposal.
- service and repair the starter systems of 2-cycle and 4-cycle small engines.
- identify the external and internal parts of 2-cycle and 4-cycle small engines.
- determine the proper lubrication and fuel requirements for 2-cycle and 4-cycle small engines using factory maintenance data.
- service and repair the cooling and oil systems of 2-cycle and 4-cycle small engines.
- remove, rebuild, install, adjust, and tune 2-cycle and 4-cycle small engine fuel delivery and ignition system components.

The automotive small engines industry is growing and in need of technicians. This certificate prepares students for employment in many different areas, including horticulture, off road vehicles, marine applications, and many others.

**Snap-On™ Certification Certificate**

This certificate prepares students for entry-level positions in the automotive industry. It provides the knowledge and skills needed for certification using current Snap-On™ diagnostic tools.

Catalog Date: June 1, 2020

**Certificate Requirements**

<table>
<thead>
<tr>
<th>COURSE CODE</th>
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<tbody>
<tr>
<td>AT 100</td>
<td>Technical Basics for the Automotive Professional</td>
<td>3</td>
</tr>
<tr>
<td>AT 107</td>
<td>Employability Skills for Technical Careers</td>
<td>2</td>
</tr>
<tr>
<td>AT 180</td>
<td>Automotive Data Acquisition</td>
<td>3</td>
</tr>
<tr>
<td>AT 181</td>
<td>Snap-On Multimeter Basics</td>
<td>1</td>
</tr>
<tr>
<td>AT 188</td>
<td>Snap-On SOLUS– Automotive Diagnostic Use and Operation</td>
<td>1</td>
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<tr>
<td>AT 189</td>
<td>Snap-On VERUS – Automotive Diagnostic Use and Operation</td>
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<td>A minimum of 1 unit from the following:</td>
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<tr>
<td>AT 140</td>
<td>Advanced Automotive Skill and Speed Development (3)</td>
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<tr>
<td>or AT 298</td>
<td>Work Experience in Automotive Technology (1 - 4)</td>
<td></td>
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<tr>
<td>Total Units:</td>
<td></td>
<td>13</td>
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</tbody>
</table>

Upon completion of this program, the student will be able to:

- demonstrate safe, accurate use of tools and equipment.
- apply accurate measurement techniques.
- explain screen orientation and how to navigate through different functions of the VERUS scanner.
- perform the proper procedure to do an oil change on a vehicle.
- locate and analyze technical manuals from online computerized databases.
• apply retrieved data to specific vehicle conditions.

Career Information

The automotive industry is growing and in need of technicians. Snap-On™ certifications are in high demand.

Transmission Service Certificate

This certificate program prepares the student for an entry-level position in the automotive industry. This program includes Automotive Service Excellence (ASE) certification in A-2 automatic transmission and A-3 manual drive-train.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
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<tbody>
<tr>
<td>AT 100</td>
<td>Technical Basics for the Automotive Professional</td>
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</tr>
<tr>
<td>AT 105</td>
<td>Mathematics for Automotive Technology</td>
<td>3</td>
</tr>
<tr>
<td>AT 130</td>
<td>Manual Drive Trains and Axles</td>
<td>3</td>
</tr>
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<td>AT 140</td>
<td>Advanced Automotive Skill and Speed Development</td>
<td>3</td>
</tr>
<tr>
<td>AT 180</td>
<td>Automotive Data Acquisition</td>
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<tr>
<td>AT 317</td>
<td>Advanced Drivetrain</td>
<td>3</td>
</tr>
<tr>
<td>AT 330</td>
<td>Automotive Electrical Systems</td>
<td>6</td>
</tr>
<tr>
<td>AT 313</td>
<td>Automatic Transmission and Transaxles</td>
<td>3</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>27</td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

• analyze an automotive transmission, applying elements of drive-train theory.
• investigate an automotive electrical malfunction by locating, testing and identifying the failure in order to make the necessary repairs.
• research on-line and computer based automotive data sources in order to identify the correct repair procedure, and locate safety campaigns and bulletins.
• describe the operation of drive-train components in order to report and justify a recommended repair procedure.
• apply gear theory to drive-train malfunction.
• evaluate and recognize the drive-train malfunction.

Career Information

Entry-level positions in automatic transmission, clutch, and drive-train repair.

Undercar Service Certificate

The Undercar Service certificate provides entry-level training in performing repairs to automotive suspension, brake, and exhaust systems.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
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</table>
Student Learning Outcomes

Upon completion of this program, the student will be able to:

- develop a resume and cover letter to plan for future career opportunities.
- perform run-out and parallelism evaluations on brake rotors and machine to manufacturer’s specifications.
- measure and analyze suspension angles of a modern automobile and make adjustments necessary to bring the angle within manufacturer’s specifications.
- identify modern exhaust system components and demonstrate how they relate to California emission control laws.
- research and synthesize brake, suspension, and exhaust system information on electronic service manuals to provide information on repairs to meet industry standards.

Career Information

This certificate provides students with knowledge for entry-level careers in the automotive suspension, brake, and exhaust repair facilities.

Certificates

Automotive Brakes Certificate

This certificate prepares students for employment in the automotive industry, specializing in brakes.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
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<td>AT 100</td>
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<td>AT 110</td>
<td>Automotive Brakes</td>
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</tr>
<tr>
<td>AT 180</td>
<td>Automotive Data Acquisition</td>
<td>3</td>
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<tr>
<td>AT 181</td>
<td>Snap-On Multimeter Basics</td>
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<td></td>
<td>A minimum of 1 unit from the following:</td>
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<tr>
<td>AT 140</td>
<td>Advanced Automotive Skill and Speed Development (3)</td>
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</tr>
<tr>
<td>or AT 298</td>
<td>Work Experience in Automotive Technology (1 - 4)</td>
<td></td>
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<tr>
<td>Total Units:</td>
<td></td>
<td>11</td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:
describe shop orientation and safety issues.

- discuss the basics of vehicle service including oil, lubrication, inspection, and replacement of fluids.
- demonstrate proper handling, use, and disposal of hazardous materials in the automotive shop environment, combined with safety test.
- practice safety precautions and procedures when inspecting and repairing braking systems.
- analyze the various brake components used on automobiles and describe the functions of each.
- evaluate and diagnose brake components/system malfunctions.
- reassemble and adjust all components of the brake system following service manual procedures.
- arrange, clean, inspect, and measure all components of brake systems following established service manual procedures.

Career Information

The automotive brakes industry is growing and in need of technicians.

Automotive Suspension and Steering Certificate

This certificate prepares students for employment in the automotive industry, specializing in suspension and steering.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
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<tbody>
<tr>
<td>AT 100</td>
<td>Technical Basics for the Automotive Professional</td>
<td>3</td>
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<tr>
<td>AT 180</td>
<td>Automotive Data Acquisition</td>
<td>3</td>
</tr>
<tr>
<td>AT 181</td>
<td>Snap-On Multimeter Basics</td>
<td>1</td>
</tr>
<tr>
<td>AT 311</td>
<td>Suspension and Steering Systems</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A minimum of 1 unit from the following:</td>
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<tr>
<td>AT 298</td>
<td>Work Experience in Automotive Technology (1 - 4)</td>
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</tr>
<tr>
<td>or AT 140</td>
<td>Advanced Automotive Skill and Speed Development (3)</td>
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<tr>
<td></td>
<td>Total Units:</td>
<td>11</td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- analyze, describe, and avoid unsafe working conditions and unsafe acts, as well as observe safety regulations in an auto repair facility.
- identify the various components used on automotive steering and suspension systems and describe the function of each.
- perform geometric centerline and thrust line alignments.
- disassemble, inspect, clean, and reassemble all components of the steering and suspension systems in accordance to service manual procedures.
- determine the need for and perform four-wheel alignments.
- diagnose any malfunction of the steering suspension components used on automobiles.

Career Information

The automotive suspension and steering industry is growing and in need of technicians.
Automotive Technology (AT)

AT 100 Technical Basics for the Automotive Professional

Units: 3
Hours: 26 hours LEC; 84 hours LAB
Prerequisite: None
Catalog Date: June 1, 2020

This course presents theoretical and practical training for entry-level automotive technicians. It presents basic automotive diagnosis and service procedures used in automotive shops. Projects performed in an automotive shop environment provide hands-on experience with industry shop tools. Shop service operations which meet Automotive Service Excellence (ASE) standards including safety, electrical, and other general automotive procedures are covered.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate safe, accurate use of tools and equipment.
- incorporate the proper use of a tap and die to repair threads.
- apply accurate measurement techniques.
- perform the proper procedure to do an oil change on a vehicle.

AT 105 Mathematics for Automotive Technology

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Corequisite: AT 100
General Education: AA/AS Area II(b)
Catalog Date: June 1, 2020

This course covers mathematics relative to the automotive trades. Course topics include the metric system, fraction, decimal equivalents, basic equations, ratio and proportion, gear ratio calculations, power, efficiency, and torque. This course is designed for Automotive Technology majors and covers all automotive-related mathematical areas from basic technician calculations to shop money management.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- solve equations that contain addition, subtraction, multiplication, and division.
- use fractions, decimals, and percentages in automotive measurement and finance.
- identify metric and standard units of measurement.
- perform metric to standard unit conversion.
- calculate engine displacement, horsepower, and compression ratios.
- solve problems regarding gear ratios, hydraulics, or electrical systems.
- properly fill out an automotive repair order that includes parts, labor, and sales tax.

AT 106 Automotive Shop Operations

Units: 2
Hours: 36 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020

This course introduces operations of automotive dealerships, independent shops, and fleet shops. Emphasis is placed on the various influences that affect the technician's position within the operation. Topics include service, sales, parts, and financial operations. Customer Satisfaction Index (CSI) and the Bureau of Automotive Repair (BAR) are discussed. Field trips to local shops may be required.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify all of the dealership's departments and their functions
- critique dealership, independent, and fleet shop operation
- analyze how flat rate affects the technician
- analyze and evaluate the advantages and disadvantages of working in dealership, independent, and fleet shops
- evaluate the effectiveness of the Customer Satisfaction Index (CSI) in the service department
- evaluate the Bureau of Automotive Repair (BAR) rules and regulations regarding technician repair responsibilities

AT 107 Employability Skills for Technical Careers

Same As: ET 250 and WELD 150
Units: 2
Hours: 36 hours LEC
Prerequisite: None.
Advisory: ENGRD 116 with a grade of "C" or better; OR ESLR 320, ESLL 320, and ESLW 320 with a grade of "C" or better.
General Education: AA/AS Area III(b)
Catalog Date: June 1, 2020

This course provides the opportunity to explore technical careers while developing valuable work and life skills. It is an introduction to a variety of technically-related occupations, emphasizing technical careers in the Sacramento area. Activities are designed to enhance personal development, employability skills, and self esteem through leadership, citizenship, and character development. This course is not open to students who have completed ET 250 or WELD 150.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify personal interests.
- demonstrate effective communication skills.
- demonstrate personal qualities that are desirable in the workplace.
- create long-term and short-term goals.

AT 108 Successful Automobile Selling Skills

Units: 1.5
Hours: 27 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020

This course covers successful automobile sales techniques. Topics include the process of selling cars, from greeting the consumer to closing the sale. It also covers understanding today's information age consumer.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze a customer's automobile needs.
- list the steps for selling automobiles.
- create a sales draft.
- describe financing options.
- describe warranty options.
**AT 110 Automotive Brakes**

Units: 3  
Hours: 26 hours LEC; 84 hours LAB  
Prerequisite: None.  
Corequisite: AT 100 and 180  
Advisory: AT 181 and 188  
Catalog Date: June 1, 2020

This course covers the theory, design, adjustment, and repair or overhaul of brake systems and components. It covers the proper operation of power and hand devices used in the servicing of brake systems and components. This course meets Automotive Service Excellence (ASE) A5 standards.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- practice safety precautions and procedures when inspecting and repairing braking systems.
- analyze the various brake components used on automobiles and describe the functions of each.
- evaluate and diagnose brake components/system malfunctions.
- identify the special tools necessary to properly diagnose and repair brake component/system malfunctions.
- properly use special tools in diagnosing and repairing brake system malfunctions.
- arrange, clean, inspect, and measure all components of brake systems following established service manual procedures.
- refinish brake rotors and/or brake drums following established service manual procedures.
- reassemble and adjust all components of the brake system following service manual procedures.

**AT 130 Manual Drive Trains and Axles**

Units: 3  
Hours: 26 hours LEC; 84 hours LAB  
Prerequisite: None.  
Corequisite: AT 100 and 180  
Advisory: AT 181 and 188  
Catalog Date: June 1, 2020

This course covers the basic principles of manual transmissions and transaxles and service. Topics include clutches, manual transmissions and transaxles, drive line and shafts, differentials/limited slip differentials, and four-wheel drive/all-wheel drive. This course meets Automotive Service Excellence (ASE) standard A3.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- apply manual transmission theory to transmission operation.
- analyze and repair clutch problems.
- diagnose, assess, and repair manual transmissions and transaxles.
- diagnose, assess, and repair drive (half) shaft and universal joint/constant velocity joints.
- troubleshoot rear axle ring and pinion gears, differential case assembly, limited slip differential, and axle shafts.
- disassemble and assemble four-wheel drive components.
- determine and apply proper safety and repair procedures.
- diagnose, assess, and repair clutch hydraulic and cable release systems.

**AT 140 Advanced Automotive Skill and Speed Development**

Units: 3  
Hours: 22.5 hours LEC; 94.5 hours LAB  
Prerequisite: None.  
Corequisite: AT 100
This course covers automotive component diagnosis and repair, including brakes, suspension, heating and air conditioning, engine, transmissions, and other areas in preparation for competing in the regional, state, and national Skills USA competition. This course may be taken up to four times with different competitions.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- interpret customer's complaints, evaluate vehicle condition, and diagnose proper repair procedures in a competitive environment.
- analyze and replace engine cooling and heater system hoses in a competitive environment.
- perform cooling system tests and determine necessary action in a competitive environment.
- examine, replace, and adjust drive belts, tensioner, and pulleys in a competitive environment.
- solve a spongy brake pedal problem and correct condition in a competitive environment.
- explain the requirements for the Skills USA competition.

AT 143 Automotive Parts

Units: 3
Hours: 45 hours LEC; 27 hours LAB
Prerequisite: None.
Corequisite: AT 100
Catalog Date: June 1, 2020

This course introduces the key workings of automotive systems and their related parts. It also offers preparation for the Automotive Service Excellence (ASE) P-2 Parts Specialist test. Topics include suspension systems, hazardous waste regulations, and inventory management.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- look up parts using a paper catalog or computer-based system.
- explain the importance of inventory control and perform physical inventory.
- describe key automotive systems and parts application to assist customers in the repair of a vehicle.
- explain hazardous waste regulations as they apply to both transport and disposal, as well as the application of Material Safety Data Sheets (MSDS), in the automotive industry.
- apply the principles of recruiting and hiring, as well as writing of schedules, to ensure proper staffing.
- explain the different types and applications of common chemicals used in the automotive industry.
- utilize customer service skills when working with customers.
- utilize team building, coaching, and one-on-one interaction to facilitate the relationship between a supervisor and employee.

AT 145 Automotive Exhaust System

Units: 3
Hours: 26 hours LEC; 84 hours LAB
Prerequisite: AT 100 with a grade of "C" or better
Catalog Date: June 1, 2020

This course is an introduction to the principles and service of exhaust systems, including pipe bending, cutting, welding, installation, repair, and inspection. It offers preparation to students for the Automotive Service Excellence (ASE) X1 exhaust systems test, which is required for the ASE Under-Car Specialist Certificate. Various welding techniques are covered during the semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:
- perform standard welding operations.
- verify the integrity of a weld.
- determine center and depth of bends, and rotation of pipe.
- perform pipe bending operations.
- determine and perform appropriate exhaust repairs on catalytic converters, mufflers, resonators, pipes, manifolds, and hangers.
- explain state and federal standards for exhaust systems.

**AT 146 Automotive Service Consultant**

| Units: | 3 |
| Hours: | 45 hours LEC; 27 hours LAB |
| Prerequisite: | None. |
| Corequisite: | AT 180 |
| Advisory: | AT 100 |
| Catalog Date: | June 1, 2020 |

This course introduces the basic requirements needed to perform the duties of an automotive service consultant. It also offers preparation for the Automotive Service Excellence (ASE) C-1 Service Consultant exam. Topics include utilization of diagnostic flow charts, recruiting techniques, and small business operations.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- apply Bureau of Automotive Repair (BAR) regulations as an automotive service consultant.
- apply ethical practices to selling of automotive services and repairs.
- explain hazardous waste regulations as they apply to disposal and storage in the automotive repair facility.
- dispatch work in an orderly and efficient process to maximize technician productivity and profitability.
- document all services performed according to Motorist Assurance Program (MAP) standards and BAR regulations.
- utilize recruiting techniques that include print and electronic sources.
- apply proper interview techniques and hire qualified personnel to staff repair facility.
- use diagnostic flow charts to perform repairs on vehicle to reduce comeback repairs.
- describe how a small business operates.

**AT 156 Light Duty Diesel/Green Diesel Technology**

| Units: | 4 |
| Hours: | 54 hours LEC; 54 hours LAB |
| Prerequisite: | None. |
| Advisory: | AT 314 |
| Catalog Date: | June 1, 2020 |

This course introduces the diagnosis and repair of light duty diesel vehicles and covers the theory and operation of light duty diesel engines and their fuel delivery systems. Topics include diesel engine characteristics, early mechanical fuel delivery systems, early cylinder head design, and early engine construction. It also covers how to prepare these engines for conversion to green technology, such as low sulfur fuel, biodiesel, and alternative fuels. This course along with AT 157 is applicable for the field technician seeking training for ASE A9 certification and preparation for green technologies.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- describe the basic operation of diesel fueled vehicles.
- explain the differences between diesel and gasoline engine design.
- diagnose basic diesel engine driveability problems.
- perform basic diesel engine mechanical diagnostic procedures.
• evaluate the diesel fuel injection system's compatibility with low sulfur and biodiesel fuels.

AT 157 Advanced Light Duty Diesel/Green Diesel Technology

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: AT 156 and 330
Catalog Date: June 1, 2020

This course focuses on late model turbocharged light duty diesel vehicles operating on low sulfur, biodiesel, or alternative fuels. Topics include computer controlled injection, emission control systems, sensors, actuators, computer modules, exhaust gas recirculation (EGR) systems, particulate traps, selective catalytic reduction (SCR) systems, and lean oxides of nitrogen (NOx) traps. Diagnosis and repair of these systems are covered using computer diagnostic equipment to meet state emission compliance. This course along with AT 156 is applicable for the field technician seeking training for ASE A9 certification and preparation for green technologies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• explain the operation of common rail diesel fuel injection systems.
• explain the differences between late model diesel and older diesel engine design.
• diagnose basic driveability problems on late model diesel vehicles.
• perform basic diesel engine turbo charger diagnostic procedures.
• evaluate high pressure fuel system compatibility with biofuels and biofuel impact on diesel emissions.
• test diesel engine emissions and emission control systems.

AT 177 Bureau of Automotive Repair (BAR) Emissions Update UT032

Units: 1
Hours: 18 hours LEC
Prerequisite: None.
Advisory: AT 332 with a grade of "C" or better
Catalog Date: June 1, 2020

This course improves technicians’ abilities to diagnose and repair emissions failures on complex computer-controlled vehicles.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• identify the various network topologies used in On-Board Diagnostics (OBD) controlled vehicles.
• identify Controller Area Network (CAN) communication protocols used in OBD equipped vehicles.
• diagnose the cause of CAN communication failures on OBD equipped vehicles.
• use the Air Resources Board's Catalytic Converter database to identify California-legal catalytic converters.
• use an OBD scan tool to retrieve Mode 6 data.
• interpret the meaning of Mode 6 data retrieved from OBD equipped vehicles.

AT 178 BAR Repair Technician Update UT055

Units: 1
Hours: 18 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020

This course improves automotive repair technicians' abilities to diagnose and repair emissions failures on complex computer-controlled vehicles that use variable valve lift and valve timing technologies.
Upon completion of this course, the student will be able to:

- differentiate between fuel system and mechanical failures.
- discuss advanced diagnostic strategies to exclude possible causes of emission failure.
- identify the operation and strategies of variable valve timing and variable valve lift systems.
- explain the use of a diagnostic scan tool to diagnose variable valve timing and variable valve lift systems.

**AT 180 Automotive Data Acquisition**

<table>
<thead>
<tr>
<th>Units:</th>
<th>3</th>
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<tbody>
<tr>
<td>Hours:</td>
<td>54 hours LEC</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
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<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
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</tbody>
</table>

This course covers the skills needed to adequately retrieve and apply automotive data, including on-line technical manuals and computerized shop management programs. Computer-based automotive service repair order generation is covered as well as usage and application currently utilized in many automotive repair facilities.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- locate and analyze technical manuals from online computerized databases.
- apply retrieved data to specific vehicle conditions.
- use various computerized shop management programs.

**AT 181 Snap-On Multimeter Basics**

<table>
<thead>
<tr>
<th>Units:</th>
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</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>18 hours LEC; 9 hours LAB</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
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<td>Catalog Date:</td>
<td>June 1, 2020</td>
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</tbody>
</table>

This course explores the functionality and capability of the digital multimeter to improve technicians' diagnostic expertise when working with electrical related problems and prepares them for the Snap-on certification.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- choose the proper position on the rotary dial for testing.
- interpret the display readings and symbols.
- test for voltage.
- test for resistance.

**AT 182 General Motors Diagnostic Tools**

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<thead>
<tr>
<th>Units:</th>
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<tbody>
<tr>
<td>Hours:</td>
<td>27 hours LEC; 27 hours LAB</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
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<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
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</table>

This course explores the functionality and capability of General Motors diagnostic tools to improve technicians' expertise when working with On-Board computer-related problems.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- set up the Tech 2 for vehicle malfunction diagnosis.
- set up the MDI for vehicle malfunction diagnosis.
- explain screen orientation and how to navigate through different functions of the Tech 2 scanner.
- explain screen orientation and how to navigate through different functions of the MDI scanner.
- use the Tech 2 to program a control module.
- use the MDI to program a control module.

AT 184 Toyota Techstream - Automotive Diagnostic Use and Operation

Units: 2
Hours: 27 hours LEC; 27 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

This course explores the functionality and capability of Toyota’s Techstream to improve technicians’ diagnostic expertise when working with On-Board computer-related problems.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- set up the Techstream for vehicle malfunction diagnosis.
- explain screen orientation and how to navigate through different functions of the Techstream.

AT 186 Snap-On MODIS – Automotive Diagnostic Use and Operation

Units: 2
Hours: 27 hours LEC; 27 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

This course explores the functionality and capability of Snap-On’s MODIS (Modular Diagnostic Information System) to improve the technician’s diagnostic expertise when working on On-Board computer related problems.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- set up the MODIS for vehicle malfunction diagnosis.
- explain screen orientation and how to navigate through different functions of the MODIS scanner.

AT 188 Snap-On SOLUS – Automotive Diagnostic Use and Operation

Units: 1
Hours: 18 hours LEC; 9 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

This course explores the functionality and capability of Snap-On’s SOLUS to improve the technician’s diagnostic expertise when working on Board computer-related problems.

Student Learning Outcomes

Upon completion of this course, the student will be able to:
• set up the SOLUS for vehicle malfunction diagnosis.
• explain screen orientation.
• navigate through different functions of the SOLUS scanner.

AT 189 Snap-On VERUS – Automotive Diagnostic Use and Operation

Units: 2
Hours: 27 hours LEC; 27 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

This course explores the functionality and capability of Snap-On’s VERUS to improve technicians’ diagnostic expertise when working with on-board computer-related problems.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• set up the VERUS for vehicle malfunction diagnosis.
• explain screen orientation and how to navigate through different functions of the VERUS scanner.

AT 190 Advanced Student Projects

Units: 2
Hours: 108 hours LAB
Prerequisite: AT 100 with a grade of “C” or better
Catalog Date: June 1, 2020

This course provides opportunities to pursue advanced laboratory projects in all eight of the Automotive Service Excellence (ASE) educational areas. Projects are selected by the Automotive Department.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• apply automotive systems specifications and tolerances to modern systems.
• demonstrate skills in repair techniques.
• construct a complete automotive project.
• research automotive information and specifications from written and Internet sources.

AT 251 Automotive Electronic Accessories and Installation

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Corequisite: AT 330 or ET 302
Catalog Date: June 1, 2020

This course covers the principles and processes involved in the installation of mobile entertainment, security, positioning, and other electrical and electronic related systems and components. Safety, circuit diagrams, inspection, wiring, installation, and troubleshooting techniques are covered along with the operational characteristics of the various electrical circuits. This course offers preparation to become a qualified Mobile Electronics Certified Professional (MECP) installer. This course is not open to students who have taken ET 251. Field trips are required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• apply safety procedures pertaining to the installation and operation of vehicle entertainment/electronic components.
install, test, and operate the various types of mobile electronic equipment.

differentiate and analyze the operating characteristics of electronic circuits and installed components under normal and abnormal conditions.

interpret diagrams, solder and repair wiring, test and inspect installed components.

troubleshoot installed accessories using electronic test equipment and other measuring devices.

research mobile electronic circuits and device components using manufacturer's data, library resources, the Internet, and electronic shop manuals.

master the objectives of the MECP certification test and become a qualified mobile electronics certified installer.

AT 294 Topics in Automotive Technology

Units: 0.5 - 3
Hours: 9 - 54 hours LEC; 27 - 162 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

This course provides opportunity to study current topics in automotive technology that are not included in existing courses.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- develop analytical and critical thinking skills as they apply to automotive technology
- demonstrate an understanding and apply principles of automotive technology
- explain automotive technology as it applies to this topic

AT 295 Independent Studies in Automotive Technology

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

AT 298 Work Experience in Automotive Technology

Units: 1 - 4
Hours: 60 - 300 hours LAB
Prerequisite: None.
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position, or job related to the automotive industry with a cooperating site supervisor. Students are advised to consult with the Automotive Department faculty to review specific certificate and degree work experience requirements.
Advisory: AT 100; and eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
General Education: AA/AS Area III(b)
Catalog Date: June 1, 2020

This course provides students with opportunities to develop marketable skills in preparation for employment or advancement within the automotive field. It is designed for students interested in work experience and/or internships in associate degree level or certificate occupational programs. Course content includes understanding the application of education to the workforce, completion of Title 5 required forms which document the student's progress and hours spent at the work site, and developing workplace skills and competencies.

During the semester, the student is required to complete 75 hours of related paid work experience, or 60 hours of related unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. All students are required to attend the first class meeting, a mid-semester meeting, and a final meeting. Additionally, students who have not already successfully completed a Work Experience course will be required to attend weekly orientations while returning participants may meet individually with the instructor as needed. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:
demonstrate mastery of specific job skills in the automotive field related to an associate degree or certificate occupational program level career as written in the minimum three (3) learning objectives created by the student and his/her employer or work site supervisor at the start of the course.

- make effective decisions, use workforce information, and manage his/her personal career plans.
- behave professionally, ethically, and legally at work, consistent with applicable laws, regulations, and organizational norms.
- behave responsibly at work, exhibiting initiative and self-management in situations where it is needed.
- apply effective leadership styles at work, with consideration to group dynamics, team and individual decision making, and workforce diversity.
- communicate in oral, written, and other formats, as needed, in a variety of contexts at work.
- locate, organize, evaluate, and reference information at work.
- demonstrate originality and inventiveness at work by combining ideas or information in new ways, making connections between seemingly unrelated ideas, and reshaping goals in ways that reveal new possibilities using critical and creative thinking skills such as logical reasoning, analytical thinking, and problem-solving.

AT 301 Small Gas Engines, Outdoor Power Equipment

**Same As:** HORT 330  
**Units:** 4  
**Hours:** 54 hours LEC; 54 hours LAB  
**Prerequisite:** None.  
**Transferable:** CSU  
**Catalog Date:** June 1, 2020

This course covers the basic operational theory, servicing, adjusting, and maintenance of 2-cycle and 4-cycle small gas engines as they pertain to the automotive and horticulture industries. In addition, the small engine repair skill areas included in the regional, state, and national Skills USA competitions are covered. AT 301 and/or HORT 330 may be taken two times for credit for a maximum of 8 units, using different equipment.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- demonstrate accepted safety and work procedures, including Occupational Safety and Health Administration (OSHA) and proper hazardous materials disposal.
- identify the external and internal parts of 2-cycle and 4-cycle small engines.
- determine the proper lubrication and fuel requirements for 2-cycle and 4-cycle small engines using factory maintenance data.
- service and repair the cooling and oil systems of 2-cycle and 4-cycle small engines.
- service and repair the starter systems of 2-cycle and 4-cycle small engines.
- remove, rebuild, install, adjust, and tune 2-cycle and 4-cycle small engine fuel delivery and ignition system components.
- disassemble, inspect, repair, and assemble a single cylinder 2-cycle and 4-cycle engine.
- list the Skills USA competition requirements.
- list the Skills USA competition judging criteria.
- prepare to compete in Skills USA competition.

AT 309 Introduction to Hybrid and Electric Vehicle Technology

**Units:** 4  
**Hours:** 54 hours LEC; 54 hours LAB  
**Prerequisite:** AT 315 with a grade of "C" or better  
**Advisory:** AT 110, 310, 313, 314, and 322  
**Transferable:** CSU  
**Catalog Date:** June 1, 2020

This course covers the theory and operation of hybrid and electric vehicle operation. Each of the major manufacturers' vehicles is discussed along with the safety and service procedures that apply to these vehicles. Hands-on activities include major service procedures and basic diagnostics on the most common hybrid and electric vehicles in the market today. It is recommended that a student take the electrical, brakes, and air conditioning courses or a have previous field experience before taking this course.

**Student Learning Outcomes**
Upon completion of this course, the student will be able to:

- analyze and avoid unsafe conditions and unsafe acts in compliance with safety laws and regulations in the auto work place.
- explain basic electric and hybrid vehicle operation.
- identify the different types of hybrid vehicles in use today.
- perform routine services on full electric and hybrid electric vehicles following manufacturer's procedures.
- perform high voltage system disable and enable procedures.
- pull generic and manufacturer specific data trouble codes from hybrid vehicle computer systems.
- interpret basic hybrid electric vehicle scan data to determine battery state of charge and temperature.

AT 310 Heating and Air-Conditioning Systems

Units: 3
Hours: 26 hours LEC; 84 hours LAB
Prerequisite: None.
Corequisite: AT 100
Advisory: AT 181 and 188
Transferable: CSU
Catalog Date: June 1, 2020

This course is an introduction to automotive heating and air conditioning theory. It meets Automotive Service Excellence (ASE) standard A7 and combines performance testing and repair practices as utilized in the industry.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply safety precautions in handling of refrigerant R-12 and R134-a.
- describe the basic operation of each component in the typical automotive air conditioning (A/C) system.
- identify the different types of compressors and controls.
- use the manifold gauge set in discharging, evacuating, and charging automotive A/C systems.
- diagnose and troubleshoot basic A/C systems.
- list basic components of automatic temperature control (ATC) systems.
- identify basic five parts of an A/C system.
- detect and repair leaks using electronic and dye leak detection systems.

AT 311 Suspension and Steering Systems

Units: 3
Hours: 26 hours LEC; 84 hours LAB
Prerequisite: None.
Corequisite: AT 100
Advisory: AT 181 and 188
Transferable: CSU
Catalog Date: June 1, 2020

This course is an introduction to advanced principles and service of suspension and steering systems, including alignment of equipment, alignment procedures, and the diagnosis and repair of suspension components. It meets Automotive Service Excellence (ASE) A4 certification standards.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze, describe, and avoid unsafe working conditions and unsafe acts, as well as observe safety regulations in an auto repair facility.
- use measuring instruments and procedures proficiently.
- identify automotive service tools and equipment.
- identify the various components used on automotive steering and suspension systems and describe the function of each.
- diagnose any malfunction of the steering suspension components used on automobiles.
- analyze tire wear problems and/or vibrations and perform the necessary repairs.
- disassemble, inspect, clean, and reassemble all components of the steering and suspension systems in accordance to service manual procedures.
- analyze alignment angles to determine need for two- or four-wheel alignment.
- determine the need for and perform four-wheel alignments.
- perform geometric center-line and thrust-line alignments.
- perform tire balancing procedures.

**AT 313 Automatic Transmission and Transaxles**

Units: 3
Hours: 26 hours LEC; 84 hours LAB
Prerequisite: None.
Corequisite: AT 100
Advisory: AT 181 and 188
Transferable: CSU
Catalog Date: June 1, 2020

This course covers the basics of automatic transmission and transaxle principles and service. Topics include hydraulic principles, diagnosis and service, power conversion, and automatic transmission operation. AT 313 and AT 317 together meet Automotive Service Excellence (ASE) standard A2.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- apply automatic transmission theory to transmission operation.
- remove, disassemble, and assemble gear train, shafts, bushings, oil pump, and case.
- remove, inspect, and replace friction and reaction units.
- diagnose and assess transmission and transaxle mechanical and hydraulic systems.
- troubleshoot and analyze transmission and transaxle electronic systems.
- assess condition of fluids, filters, and gaskets.
- determine and apply proper safety and repair procedures.
- assess and adjust bands as necessary.

**AT 314 Automotive Engine Repair**

Units: 3
Hours: 26 hours LEC; 84 hours LAB
Prerequisite: None.
Corequisite: AT 100 and 105
Transferable: CSU
Catalog Date: June 1, 2020

This course covers the principles, operation, and diagnosis of automotive engines, including basic engine operation and construction, parts identification and location, engine dis-assembly procedures, engine diagnosis, engine repair and rebuilding procedures, and engine reassembly procedures. Completion of AT 314 and AT 332 meet Automotive Service Excellence (ASE) A1 standards.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- troubleshoot internal engine malfunctions.
• analyze engine components for wear and/or tear.
• evaluate repairs by checking them with measurement and test equipment.
• diagnose and repair engines at ASE performance standard levels.

AT 316 Alternative Fuels and Advanced Technology Vehicles

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: None.
Corequisite: AT 100
Transferable: CSU
Catalog Date: June 1, 2020

This hands-on course provides an overview of both conventional and alternative fuels with their impact on vehicle emissions in both gasoline and diesel engines. In addition, advanced vehicle technologies such as hybrid electric, direct injection, and fuel cells are explored. Topics include gasoline, E85, M85, diesel, biodiesel, CNG, LPG, LNG, RNG, EVs, HEVs, fuel cells, and dynamometer testing. Completion of this course helps students prepare for the Automotive Service Excellence (ASE) F1 Alternative Fuels Certification in addition to the ASE L3 Hybrid/Electric Vehicle Specialist Certification. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• describe the basic chemical composition of various fuels.
• analyze the benefits and challenges of various fuels.
• identify the major components on a variety of alternative fuel vehicles (AFVs).
• perform before and after repair emission tests and analyze the results.
• conduct vehicle efficiency tests and describe the test results.

AT 317 Advanced Drivetrain

Units: 3
Hours: 26 hours LEC; 84 hours LAB
Prerequisite: AT 313 with a grade of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This course covers advanced aspects of automatic transmissions, automatic transaxles, manual drivetrains, diagnosis, service, and repair. Topics include mechanical, electrical, and electronic diagnosis, diagnosis and repair of vibration problems, advanced scan tool operation, and dynamometer testing. AT 317 and AT 313 together meet Automotive Service Excellence (ASE) standard A2.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• diagnose electronic failures using electronic test equipment.
• analyze data received from vehicle scan tests.
• test electronic and electrical components and identify failures.
• identify vibration problems using electronic test equipment.
• assess electronic, mechanical, or hydraulic failures.
• increase repair speed and skill.
• diagnose and perform in-vehicle repairs.
• identify hybrid powertrain components.

AT 325 Engine Performance Testing & Tuning
This course explores the performance and efficiency of modern vehicle engine systems through the use of engine dynamometers and flowbench test equipment. Course topics include dynamometer performance testing, high performance engine assembly, engine computer reprogramming, fuel injector flow testing, forced induction systems and how to achieve maximum performance by choosing components that complement each other. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate safe practices as related to the automotive performance industry.
- evaluate engine efficiency and/or performance through the use of test equipment.
- repair serviceable parts to improve vehicle performance and/or efficiency.
- modify engine systems to improve vehicle performance and/or efficiency.
- analyze engine performance enhancements for effectiveness and feasibility.

AT 327 Introduction to Motorsports

This course is an introduction to motorsports through lecture, hands-on activities, and raceway experience. It discusses the operation of a race team, racing events, and race track operation. Course topics include the setup and modification of vehicle safety equipment, suspension, braking, and data acquisition systems. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate safe practices related to performance vehicles and racing events.
- perform most vehicle safety and performance modifications required to complete sanctioned racing events.
- describe the components of a technical inspection within a sanctioned racing event.
- participate in team activities at race track promotional events.
- identify career opportunities in motorsports.

AT 330 Automotive Electrical Systems

This course covers the principles, operation, and diagnosis of automotive electrical systems including fundamentals of electricity (DC), electrical circuits, battery operation, fundamentals of magnetism, charging systems, starting systems, and electrical schematics. Along with completion of AT 331, this course meets Automotive Service Excellence (ASE) certification standards for the A6 Electrical Systems certification.

Student Learning Outcomes

Upon completion of this course, the student will be able to:
- identify and avoid unsafe conditions and unsafe acts in compliance with safety laws and regulations in the auto work place.
- calculate electrical mathematical problems with Ohm’s Law, fractions, square roots, and power formulas.
- solve basic problems as they apply to electrical system repair.
- analyze electrical components for malfunction.
- read and interpret basic electrical schematics for system diagnosis and repair.
- evaluate repairs by utilizing test equipment such as a Digital Volt Ohm Meter (DVOM) and a Voltage Amperage Tester (VAT-40).
- diagnose and repair simple electrical systems at industry ASE performance standard levels.

**AT 331 Advanced Automotive Electrical Systems**

**Units:** 6  
**Hours:** 81 hours LEC; 81 hours LAB  
**Prerequisite:** AT 180 and 330 with grades of “C” or better  
**Advisory:** AT 110 and 310  
**Transferable:** CSU  
**Catalog Date:** June 1, 2020

This course covers the principles of advanced electrical diagnostics. Topics include automotive computers, vehicle networks, driver information systems and accessories, supplemental restraint systems, antilock brakes, tire pressure monitoring systems, and climate control. Along with completion of AT 330, this course meets Automotive Service Excellence (ASE) certification standards for the A6 Electrical Systems certification.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- identify and avoid unsafe conditions and unsafe acts in compliance with safety laws and regulations in the auto work place.
- solve advanced problems as they apply to electrical system repair.
- analyze electrical and electronic components for malfunction.
- research and interpret advanced electrical schematics for system diagnostics and repair.
- evaluate repairs using test equipment, such as digital volt-ohm meters (DVOM), digital storage oscilloscopes (DSO), and scan-tools.
- diagnose and repair automotive electronic systems at industry ASE performance standard levels.

**AT 332 Engine Performance & Electronic Engine Controls**

**Units:** 6  
**Hours:** 81 hours LEC; 81 hours LAB  
**Prerequisite:** AT 331 and AT 333 with grades of “C” or better  
**Transferable:** CSU  
**Catalog Date:** June 1, 2020

This course covers the principles, operation, and diagnosis of automotive engine performance systems including engine mechanics, ignition, fuel delivery, and electronic engine controls. It includes extensive troubleshooting, use of diagnostic test equipment, lab oscilloscopes, scantools, and emission analyzers. Along with completion of AT 333, this course meets Automotive Service Excellence (ASE) certification standards for the A8 Engine Performance certification. This course is formerly known as AT 326.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- identify and avoid unsafe conditions and unsafe acts and observe safety laws and regulations.
- determine logical diagnostic tests to run based upon vehicle symptoms.
- evaluate service and repair methods according to industry and ASE approved standards.
- analyze and diagnose engine mechanical, electrical and fuel control problems.
- evaluate information obtained from diagnostic equipment.
- diagnose and correct emission problems effectively.
evaluate the setup and operation of a digital storage oscilloscope (DSO).

evaluate information obtained from diagnostic equipment.

AT 333 California State Smog Check Inspector Training

Units: 6
Hours: 81 hours LEC; 81 hours LAB
Prerequisite: AT 314 with a grade of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This course covers the Bureau of Automotive Repair (BAR) certified Level 1 and Level 2 smog inspector training. Topics include smog check laws, rules and regulations; standards of practice; engine theory, design, and operation; emission control theory, design, identification, operation, and testing; smog inspection visual and functional testing procedures; and loaded mode emission testing. It is required for first-time licensed inspection technicians. Along with completion of AT 332, this course meets Automotive Service Excellence (ASE) certification standards for the A8 Engine Performance certification. This course is formerly known as AT 323.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify and avoid unsafe conditions and unsafe acts and observe safety laws and regulations.
- identify a vehicle by year, make, model, and certification status.
- verify emission control equipment needed.
- evaluate the condition of emission control equipment, and correctly report the condition.
- describe the laws, regulations, and procedures associated with the smog check program.
- test vehicles using appropriate emission testing procedures while observing visual, functional, and tailpipe emission testing procedures.
- explain why inspections are necessary, as well as why vehicles are equipped with emission controls.
- evaluate information obtained from diagnostic equipment.

AT 334 BAR Specified Diagnostic and Repair Training

Units: 4
Hours: 72 hours LEC
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

State law currently requires that applicants for a Smog Check Repair license possesses Automotive Service Excellence (ASE) certifications in the following areas: A6 – Automotive Electrical/Electronic systems; A8 – Automotive Engine Performance; L1 – Advanced Engine Performance.

This course is an intensive review of automotive electrical/electronic systems, engine mechanical systems, emission control systems, and computer control systems as they relate to automotive emissions controls. It satisfies the ASE certification requirement when applying for a Smog Check technician license and may be used by the applicant in lieu of the ASE certifications.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- define and test electrical circuits and locate electrical faults.
- explain the proper use of electrical test equipment.
- interpret electrical wiring diagrams and their role in troubleshooting electrical systems.
- solve problems related to circuit resistance.
- apply organized troubleshooting techniques.
- define electrical terms of watts, voltage, current, and resistance.
- test ignition systems and computer components systems with an oscilloscope.
• explain the theory of the four stroke engine.
• diagnose engine mechanical faults.
• explain the use and operation of five-gas exhaust analyzers as required for emissions diagnosis.
• explain diagnostic principles of advanced engine performance.
• analyze and diagnose computerized engine control systems.
• analyze engine control failures.
• analyze and troubleshoot internal engine failures and their effect on exhaust emissions.

AT 495 Independent Studies in Automotive Technology

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.
Biologists are fully engaged in meeting the challenges of the future, helping to improve the quality of human life and preserve our world’s biodiversity. The Biology courses at ARC provide students with the breadth and depth of knowledge necessary to more fully understand the living world. The Biology Department offers a wide range of lecture, laboratory, and field courses for majors and non-majors alike, whether for transfer, vocational training, or general interest.

Division Dean
Dr. Rina Roy

Department Chairs
Justin Moore

Associate Degrees for Transfer

A.S.-T. in Biology

The Associate in Science in Biology for Transfer degree provides students with a major that fulfills the general requirements of the California State University for transfer. Students with this degree will receive priority admission with junior status to the California State University system. The Associate in Science in Biology for Transfer (AS-T) degree may be obtained by the completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program outlined below (earning a C or better in these courses) and (b) the Intersegmental General Education Transfer Curriculum for Science, Technology, Engineering, and Mathematics (IGETC-STEM).

Catalog Date: June 1, 2020

Degree Requirements

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Total Units: 32 - 39

The Associate in Science in Biology for Transfer (AS-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) the Intersegmental General Education Transfer Curriculum for Science, Technology, Engineering, and Mathematics (IGETC for STEM).

Student Learning Outcomes

Upon completion of this program, the student will be able to:
• apply the scientific method: define problems clearly, construct testable hypotheses, design and execute appropriate experiments, analyze data, and justify appropriate conclusions.

• demonstrate knowledge of scientific terminology and interpret principle concepts of biology.

• demonstrate content knowledge, laboratory skills, and study skills to be successful at a four-year institution.

• record and analyze data using appropriate laboratory skills and instrumentation.

• assemble and critically evaluate technical information from the scientific literature.

• apply safe laboratory practices.

• work effectively in groups, as leaders or team members, to solve problems and interact productively with a diverse group of peers.

• demonstrate awareness of the role of biology in contemporary societal and global issues.

Associate Degrees

A.S. in Biotechnology

This degree provides the theory and skills necessary for entry into the biotechnology field, which uses cellular and molecular processes for industry or research. Course work includes practical laboratory skills with emphasis on good laboratory practice, quality control, and regulatory issues in the biotechnology workplace. Completion of the degree also prepares the student for transfer at the upper division level to academic programs involving biotechnology.

Catalog Date: June 1, 2020

Degree Requirements

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The Biotechnology Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.
Student Learning Outcomes

Upon completion of this program, the student will be able to:

- apply biological and chemical concepts to biotechnology research and its practical applications.
- demonstrate biotechnology laboratory procedures involving protein and DNA techniques, cell culture methods, and solution preparation.
- design and interpret experiments involving biotechnology laboratory procedures.
- evaluate biotechnology laboratory practices in the context of good laboratory practice, quality control, and regulatory issues.
- analyze biotechnology data using mathematical and statistical methods.
- integrate laboratory skills and theory into job-related tasks in the biotechnology workplace.
- appraise social and ethical issues related to advances in biotechnology research and its practical applications.

Career Information

This degree prepares the student for entry-level work in the bioscience industry in the areas of research and development, production, clinical testing, and diagnostic work. Potential employers include biotechnology and pharmaceutical companies, as well as laboratories in hospitals, government, and universities.

A.S. in General Science

This program provides a broad study in the fields of biological and physical sciences in preparation for transfer to a four-year program and continuation of studies in upper division science courses.

Catalog Date: June 1, 2020

Degree Requirements

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**Biological Science Courses**

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Total Units: 18

\[^{1}\text{must be transfer-level and must include one laboratory course in a physical science and one laboratory course in a biological science.}\]

\[^{2}\text{The General Science Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.}\]

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- evaluate new and accepted ideas about the natural universe using scientific methods.
- analyze a wide variety of natural phenomena using basic definitions and fundamental theories of biological or physical sciences.
- apply appropriate quantitative and qualitative methods to interpret and analyze pertinent data.
- outline the basic concepts and fundamental theories of a natural science.
- articulate orally and/or in writing the importance of continuous examination and modification of accepted ideas as a fundamental element in the progress of science.
- discuss ethical components of scientific decision making and apply personal and social values within the process of decision making in scientific endeavors.

**Certificate of Achievement**

**Biotechnology Certificate**

This certificate provides the theory and skills necessary for entry into the biotechnology field, which uses cellular and molecular biology processes for industry or research. Course work includes practical laboratory skills with emphasis on good laboratory practice, quality control, and regulatory issues in the biotechnology workplace. This certificate is suitable for preparing the student for the biotechnology workplace at the support personnel level.

**Certificate Requirements**

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<td>or BIOL 440</td>
<td>General Microbiology (4)</td>
<td></td>
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<tr>
<td>or BIOL 442</td>
<td>General Microbiology and Public Health (5)</td>
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<tr>
<td>BIOT 301</td>
<td>Biotechnology and Human Health</td>
<td>3</td>
</tr>
<tr>
<td>BIOT 311</td>
<td>Biotechnology Laboratory Methods - Molecular Techniques</td>
<td>2</td>
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Catalog Date: June 1, 2020
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<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tr>
<td>BIOT 312</td>
<td>Biotechnology Laboratory Methods - Microbial and Cell Culture Techniques</td>
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<td>CHEM 305</td>
<td>Introduction to Chemistry (5)</td>
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<td>or CHEM 309</td>
<td>Integrated General, Organic, and Biological Chemistry (5)</td>
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<td>or CHEM 400</td>
<td>General Chemistry I (5)</td>
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<td>MATH 120</td>
<td>Intermediate Algebra (5)</td>
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<td>or STAT 300</td>
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<tr>
<td>BIOT 305</td>
<td>Introduction to Bioinformatics (1)</td>
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<tr>
<td>or BIOT 307</td>
<td>Biotechnology and Society (2)</td>
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<tr>
<td>or BIOT 498</td>
<td>Work Experience in Biotechnology (1 - 4)</td>
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<td>Total Units:</td>
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<td>24 - 26</td>
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**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- apply biological and chemical concepts to biotechnology research and its practical applications.
- demonstrate biotechnology laboratory procedures involving protein and DNA techniques, cell culture methods, and solution preparation.
- design and interpret experiments involving biotechnology laboratory procedures.
- evaluate biotechnology laboratory practices in the context of good laboratory practice, quality control, and regulatory issues.
- assess the impact of biotechnology on social and ethical issues.

**Career Information**

This certificate prepares the student for entry-level work in the bioscience industry in the areas of research and development, production, clinical testing, and diagnostic work. Potential employers include biotechnology and pharmaceutical companies, as well as laboratories in hospitals, government, and universities.

**Biology (BIOL)**

**BIOL 102 Essentials of Human Anatomy and Physiology**

- **Units:** 4
- **Hours:** 54 hours LEC; 54 hours LAB
- **Prerequisite:** None.
- **General Education:** AA/AS Area IV
- **Catalog Date:** June 1, 2020

This course examines body systems from an anatomical and physiological point of view. The basic anatomy and physiology of all the body systems are covered with an emphasis on developing vocabulary in each area. This course meets the minimum science requirements for Paramedic, Healthcare Interpreting, Gerontology, Health Care, and Funeral Service programs.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- identify major organs, cavities, bones and bone markings, muscles, and blood vessels on models or drawings.
- explain how different organ systems contribute to the maintenance of the living cells of our bodies.
- explain how different organ systems work together to maintain homeostasis.
- correlate course knowledge of organ systems to disease, aging, and healing processes.
- integrate the body's structural design with its functioning to explain how life is maintained.
- differentiate between credible sources of scientific information and anecdotes or stories.

**BIOL 103 Human Anatomy for Funeral Services**

**Units:** 4  
**Hours:** 54 hours LEC; 54 hours LAB  
**Prerequisite:** None  
**Corequisite:** FSE 300  
**Enrollment Limitation:** An off-site clinical laboratory component of the course may require a background check, drug screening, and testing for hepatitis B.  
**General Education:** AA/AS Area IV  
**Catalog Date:** June 1, 2020

This course is an intensive study of the structure of the human body. It covers the basic terminology of anatomy, microscopic anatomy, the four major tissue types, and all the organ systems of the human body. Topics include the following systems: integumentary, skeletal, muscular, nervous, cardiovascular, respiratory, digestive, urinary, and reproductive. Laboratory assignments develop skills of observation, investigation, and identification of selected structures. It emphasizes the regions and structures relevant to embalming techniques through the dissection of a human cadaver. This course is designed for students preparing for a career in funeral service.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- identify all body parts, body structures, organs, and tissues of the human body at a detailed level on models.  
- assess and identify structures on a previously dissected human cadaver.  
- demonstrate proper dissection technique on an undissected human cadaver.  
- dissect and identify specific anatomical structures in human cadavers that are relevant to embalming procedures.  
- analyze the relationships between anatomical systems by applying principles of the scientific method and inquiry.  
- identify specific anatomical guides, linear guides, and anatomical limits of structures relevant to embalming procedures.  
- demonstrate appropriate behavior in the presence of a human cadaver.  
- enumerate ethical issues regarding working with human cadavers.

**BIOL 130 Microbiology for Funeral Service**

**Units:** 3  
**Hours:** 54 hours LEC  
**Prerequisite:** CHEM 130 with a grade of "C" or better  
**Corequisite:** FSE 312 and 330  
**Advisory:** BIOL 300 with a grade of "C" or better  
**Catalog Date:** June 1, 2020

This course covers a survey of the basic principles of microbiology. It relates these principles to Funeral Service Education especially as they pertain to sanitation, disinfection, public health, infectious disease, and embalming practice.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- identify basic microbial morphology and describe basic microbial physiology.  
- interpret the relationships and interactions between a host and a parasite.  
- assess the effect of environmental disinfection and decontamination procedures.  
- describe the fundamentals of the infectious disease process.  
- categorize specific and nonspecific defense mechanisms against disease.  
- distinguish between the various methods of transmission of infectious disease.  
- differentiate between normal flora, true pathogens, and opportunistic pathogens.  
- identify examples of human disease and corresponding infectious agents with special emphasis on control and prevention of disease.
BIOL 295 Independent Studies in Biology

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

BIOL 300 The Foundations of Biology

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC (BIOL 300, 303 & 310 combined: maximum credit - two courses; no credit for BIOL 300 if taken after BIOL 400)
General Education: AA/AS Area IV; CSU Area B2; IGETC Area 5B
Catalog Date: June 1, 2020

This course for non-science majors covers basic biological principles and how they relate to humans. Topics include an introduction to the philosophy of science and basic cell chemistry, structure, and physiology. An introduction to basic genetics (transmission and molecular) as well as some biotechnology principles are discussed. Additionally, human body systems, evolution, reproduction and development, as well as ecology and human impacts on the environment are addressed.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain basic cellular, anatomical, and physiological mechanisms by which organisms, including humans, maintain homeostasis.
- describe the basic processes of cellular reproduction and genetics.
- describe implications of modern biotechnologies.
- apply evolutionary theory to various organisms.
- evaluate new situations using the scientific method, including evaluating the validity of data and forming appropriate conclusions.
- propose solutions to biological problems.
- analyze data using quantitative reasoning and basic mathematical concepts.
- analyze changes in biodiversity over time.

BIOL 301 Evolution

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC
General Education: AA/AS Area IV; CSU Area B2; IGETC Area 5B
Catalog Date: June 1, 2020

This non-science majors course is an introduction to evolutionary biology. It explores the history of life and the mechanisms that give rise to the diversity of life on earth. Topics include the scientific method, the history of evolutionary thought, the origins of life, population genetics, speciation, evolutionary developmental biology and systematics.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze new situations using the scientific method, evaluate the validity of data, and form appropriate conclusions.
- describe the contribution of key individuals to the development of the theory of evolution.
explain the forces that act to change the genetics of populations over time.

explain the concept of species and how new species form.

explain recent discoveries in the field of evolutionary developmental biology.

describe major events in the evolution of life on earth.

BIOL 303 Survey of Biology

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: MATH 100 or 132 with a grade of "C" or better
Transferable: CSU; UC (BIOL 300, 303 & 310 combined: maximum credit - two courses; no credit for BIOL 303 if taken after BIOL 310 or 400)
General Education: AA/AS Area IV; CSU Area B2; CSU Area B3; IGETC Area 5B; IGETC Area 5C
Catalog Date: June 1, 2020

This course covers the basic principles of cell biology, genetics (transmission and molecular), ecology, and evolution. It also emphasizes the process of science, interrelationships among living organisms, and the relationship of biological structures and functions. Laboratory activities include plant and animal dissection. This course provides science preparation for those entering a Multiple Subject Teacher Credential Program. Field trips are required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify properties that are common to all living things, and identify representatives of the major groups of organisms
- compare and contrast the structures and functions of cells, tissues, and organ systems of major groups of organisms
- apply the scientific method: use inquiry, data collection, quantitative reasoning, and basic mathematical concepts to analyze the results of a simple experiment
- assess the scientific quality of information based on scientific processes
- explain how the mechanisms of evolution and the evidence supporting the theory of evolution account for both the unity and diversity of life
- interpret results of ecological studies, including graphs, diagrams, and charts
- correlate the basic concepts of DNA synthesis, cell division, sexual reproduction, and transmission genetics
- understand the importance of gene expression in creating the organism

BIOL 305 Natural History

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGW 300; OR ESLR 340 AND ESLW 340
Transferable: CSU; UC
General Education: AA/AS Area IV; CSU Area B2; CSU Area B3; IGETC Area 5B; IGETC Area 5C
Catalog Date: June 1, 2020

This course covers basic biological and ecological principles to explain the origin and diversity of living organisms. Topics range from landscape formation and habitats to the adaptations organisms have evolved to live in their environment. Although this is a broad survey course, it emphasizes California environments. Dissection is not part of this curriculum. This course is designed as an introductory course and for non-majors who enjoy the outdoors. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze the biological differences in structure and function of several California ecosystems.
- examine the different relationships between species.
- apply general biological and ecological concepts to explain origins of life hypotheses, extant biological diversity, and individual traits that promote survival, growth, and reproduction.
- incorporate the principles of natural selection to explain relationships between species’ adaptations and the environment.
• explain the mechanisms of evolution and their impact on adaptations over geologic time.
• recognize common species of plants and animals in the field, and the biomes of California.
• assess the importance of climate and geology to plant and animal adaptations.
• evaluate the importance of biodiversity to ecosystem health.
• record observations on adaptations and ecology in natural environments.
• evaluate biological data and form logical conclusions suggested by the data.
• assess the scientific quality of information based on the process of science and the scientific method.

BIOL 310 General Biology

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: MATH 32, MATH 42, or STAT 105 with a grade of "C" or better; and eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC (BIOL 300, 303 & 310 combined: maximum credit - two courses)
General Education: AA/AS Area IV; CSU Area B2; CSU Area B3; IGETC Area 5B; IGETC Area 5C
Catalog Date: June 1, 2020

This laboratory course for non-science majors covers basic biological principles and how they relate to humans. Concepts include cell chemistry, structure, and physiology; genetics (transmission and molecular); biotechnology; human body systems; evolution; reproduction and development; ecology; and human impacts on the environment.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• explain major molecular, cellular, physiological, ecological, and evolutionary principles.
• apply major molecular, cellular, physiological, ecological, and evolutionary principles to basic biological problems.
• apply the scientific method to a biological problem.
• assess information from a variety of sources for scientific validity and meaning.
• analyze a particular biological structure and explain its function.
• evaluate a hypothesis in the laboratory using inquiry, data collection and analysis, quantitative reasoning, and basic mathematical skills.

BIOL 322 Ethnobotany

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Transferable: CSU; UC
General Education: AA/AS Area VI
Catalog Date: June 1, 2020

This course focuses on the multicultural use of plants. Emphasis is on the identification and use of plants from several cultures including the American Indians, Europeans, South Americans, and Chinese. Topics include the use of plants for food, medicine, basketry, technology, shelter, and music. Sight recognition of plants is emphasized. An analysis of ethnicity and ethnocentrism is also included. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• identify herbs, shrubs, and trees using plant keys
• compare and contrast uses of plants from many cultures
• prepare American Indian foods
• gather and prepare plants according to appropriate seasons and methods
• compare and contrast ethnobotanical issues facing American Indians, South Americans, Europeans, and Chinese
BIOL 332 Introduction to Ornithology

Unit: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC
General Education: AA/AS Area IV; CSU Area B2; CSU Area B3; IGETC Area 5B; IGETC Area 5C
Catalog Date: June 1, 2020

This introductory course covers the biology and natural history of birds. Topics include evolutionary origins of birds and of flight, avian anatomy and physiology, and bird behavior, such as migration, song, feeding ecology, and mating systems. Conservation strategies are also investigated. Laboratory work explores bird structure and function, taxonomic classification, and species identification, particularly of those found in California and the western United States. Field trips are required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- examine the nature of scientific thought and methodology as it applies to the analysis of avian biology
- compare and contrast the current scientific hypotheses regarding the evolution of birds and flight and evaluate the evidence supporting these views
- analyze the evolutionary forces that have led to specific avian adaptations to flight, including morphological, physiological, and behavioral traits
- explain the genetic mechanisms that generate bird biodiversity
- assess the scientific quality of information based on the process of science and the scientific method in the field of ornithology
- identify the major conservation concerns in the field of ornithology and the scientific efforts that may mitigate these threats
- evaluate the effectiveness of citizen science, digital data, and metadata systems to obtain quality ornithological data
- demonstrate the proper use of binoculars and field guides in order to identify birds in the field

BIOL 342 The New Plagues: New and Ancient Infectious Diseases Threatening World Health

Unit: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340
Transferable: CSU; UC
General Education: CSU Area B2; IGETC Area 5B
Catalog Date: June 1, 2020

This course explores the biology, epidemiology, and pathology of selected pathogens such as prions, viruses, bacteria, protozoa, fungi, and helminths that threaten public health on a global scale. It explores the interaction between human behavior and disease agents on the emergence of new infectious agents and the re-emergence of ancient plagues.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- compare and contrast the anatomical and functional characteristics of infectious agents.
- describe the etiology, transmission, epidemiology, treatment, and prevention of major infectious diseases.
- explain how host defenses respond to infectious agents.
- assess the effects of selected infectious agents on human populations throughout history.
- evaluate factors that lead to the emergence or re-emergence of infectious diseases worldwide.
- apply microbiology concepts to current issues in human health and infectious disease.
- list examples of infectious agents used as biological weapons.
demonstrate expertise for a specific infectious disease by preparing an oral research presentation including visual illustrations.

explore how infectious diseases can be controlled by vaccines, antimicrobial agents, and behavioral and social changes.

BIOL 352 Conservation Biology

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: AA/AS Area IV; CSU Area B2; IGETC Area 5B
Catalog Date: June 1, 2020

This course introduces biological and ecological principles involved in understanding and analyzing environmental problems and exploring scientifically sound conservation approaches. Major topics include forms and patterns of biodiversity, values of biodiversity, threats to biodiversity, conservation at the population and species levels, applied conservation biology, and conservation and sustainable development at the local, regional, national, and international levels. This course places emphasis on scientific processes and methodology, while also examining the economic, social, political, and ethical aspects of conservation issues. Course themes are explored through extensive use of interactive case studies, discussion, and activities surrounding relevant current events. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply fundamental biological and ecological terms, concepts, and principles to the critical analysis of conservation issues
- examine biodiversity in terms of biological structure, composition, and function at the genetic, species, ecosystem, and landscape levels
- analyze the interrelationships between biological, physical, and social systems
- assess the scientific integrity of information
- evaluate the effectiveness of conservation strategies
- apply the scientific process to conservation problem solving and personal decision making

BIOL 370 Marine Biology

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC (BIOL 370 & 482 combined: maximum credit - one course)
General Education: AA/AS Area IV; CSU Area B2; CSU Area B3; IGETC Area 5B; IGETC Area 5C
Catalog Date: June 1, 2020

This course is an introduction to marine biology. It includes the study of cell biology, evolution, physical oceanography, marine algae, marine vertebrate and invertebrate animals, and the ecology of various marine zones. Field trips focusing on the Central and Northern California coast are required and serve as the laboratory component of this course. Field experiences may include but are not limited to natural history of the rocky intertidal, invertebrate identification, salt marsh ecology, sandy beach ecology, or estuary ecology. This course is not open to students who have completed BIOL 482.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify and analyze the interrelationships between chemistry, geology, biology, and ecology in the ocean.
- explain oceanographic phenomena, such as waves, currents, and tides.
- identify and classify the various life forms in the ocean.
- evaluate major adaptations of various organisms and their evolutionary origins.
- compare and contrast various marine zones.
- apply the scientific method to a biological problem by formulating hypotheses and analyzing data.

BIOL 375 Marine Ecology
This course for non-science majors is an introduction to the marine physical environment, the diversity of marine life, and the complex interactions between the two. It uses the marine environment as a model for introducing the key concepts of the scientific method, ecology, evolution, biodiversity, and sustainability.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the interconnectedness between the physical environment and living organisms.
- describe the interconnectedness among different living organisms in marine ecosystems.
- describe the interconnectedness between humans and the marine environment.
- explain how evolutionary processes have influenced marine organism adaptations and the biodiversity of marine communities.
- apply basic ecological principles (e.g., biodiversity, community dynamics, primary production, the niche, energy flow, or nutrient cycles) to marine organisms and/or marine ecosystems.
- apply the concept of sustainability to the human use of marine resources.
- paraphrase and evaluate the scientific credibility of websites and/or magazine articles related to current marine ecology issues.

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**BIOL 390 Natural History Field Study**

| Units: | 3 |
| Hours: | 54 hours LEC |
| Prerequisite: | None |
| Advisory: | MATH 32, MATH 42, or STAT 105 with a grade of "C" or better; and eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340 |
| Transferable: | CSU; UC |
| General Education: | AA/AS Area IV; CSU Area B2; IGETC Area 5B |
| Catalog Date: | June 1, 2020 |

This course focuses on the ecology and natural history of specific habitats of biological interest. Course content varies according to field destination but may include topics in botany, zoology, marine, conservation, and geography. Field study methodology and tools are also covered. Field trips are required and field trip expense fees may be required.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- relate biological and ecological concepts and processes to specific locations in California
- describe site-specific biological and ecological phenomena
- analyze the interrelationships between biological, physical, and social systems at a particular site
- hypothesize about the causal mechanisms, both evolutionary and environmental, that make the natural history of specific field sites unique
- compose field notes
- collect and analyze field data
- demonstrate the use of field equipment

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**BIOL 400 Principles of Biology**

| Units: | 5 |
| Hours: | 54 hours LEC; 108 hours LAB |
| Prerequisite: | CHEM 400 with a grade of "C" or better |
| Advisory: | Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340 |
| Transferable: | CSU; UC |
| General Education: | AAAS Area IV; CSU Area B2; CSU Area B3; IGETC Area 5B; IGETC Area 5C |
| Catalog Date: | June 1, 2020 |
This course introduces biological concepts important for a general understanding and background for biology majors and pre-professional programs. Emphasis is on the scientific method and basic processes common to all forms of life. Topics include cell structure and function, cell physiology, cell reproduction, Mendelian and molecular genetics, evolution, and ecology.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- describe the scientific method.
- demonstrate skills in laboratory procedures and apply critical thinking in laboratory experiments.
- evaluate data generated in the laboratory for validity and scientific meaning.
- analyze interactions between biological systems.
- assess a problem and formulate a solution in the laboratory by using inquiry, data collection and analysis, quantitative reasoning, and basic mathematical concepts.

**BIOL 410 Principles of Botany**

Units: 5
Hours: 54 hours LEC; 108 hours LAB
Prerequisite: BIOL 400 with a grade of "C" or better
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC

This course covers the general principles of botany for science majors. It builds upon and applies concepts developed in cell and molecular biology to the study of plants. It covers the anatomy and physiology, morphology, ecology, diversity, and evolution of higher plants. Thorough cladistic analysis is used to study phylogenetic relationships among the cyanobacteria, protists, fungi, and all major plant phyla. It also covers general ecological principles. Field trips may be required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- identify plant cells, tissues, and organs
- describe the development of the primary and secondary plant body from the seed to the mature plant
- evaluate the environmental adaptations of plants as these adaptations relate to the plants’ anatomy, morphology, and physiology
- demonstrate the use of plant keys to identify botanical organisms in the field
- identify examples of how plants utilize hormones to interact with and respond to the external environment
- describe the physiological pathways that plants utilize to create and store sugars and to uptake minerals
- classify organisms into their respective domain, kingdom, and phyla based on their identifying characteristics
- analyze evolutionary trends among fungi, cyanobacteria, protists, and plants
- describe the major advances and evolutionary trends of the plant phyla as they adapted further onto land (charting nonvascular plants through anthophyta)
- generate hypotheses relating to ecology
- state basic ecological principles
- apply the scientific method

**BIOL 415 Introduction to Biology: Biodiversity, Evolution, and Ecology**

Units: 5
Hours: 54 hours LEC; 108 hours LAB
Prerequisite: BIOL 400 with a grade of "C" or better
This course, intended for science majors, introduces the ecological and evolutionary processes that shape biodiversity, relating the patterns of biodiversity to small and large scale environmental effects. The diversity of life on Earth (including animals, plants, fungi, protists, and additional unicellular organisms) is covered. Overarching themes include evolutionary mechanisms, phylogenetic analysis, interactions of organisms with the environment, and global processes and patterns. Not open for credit to students who have completed BIOL 410 and BIOL 420 with a grade of C or better. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- define and give examples of the levels of organization seen in living things from cells, organs, tissues, and tissue systems to ecosystems.
- explain evolutionary mechanisms for both macroevolution and microevolution and how they relate to the diversity of life. Apply them to specific examples.
- investigate various mechanisms used by organisms to produce, store, and use energy.
- describe processes involved in embryologic development of major taxa stressing the patterns observed and relating them to evolutionary principles.
- use evolutionary mechanisms to critique the major body plans of organisms showing they are a result of environmental adaptations and shared ancestry.
- compare and contrast anatomical and physiological characteristics of major taxa. Focus on evolutionary relationships and adaptations to the environment.
- systematize various phyla by creating phylogenetic trees using anatomical and physiological data. Use trees to extrapolate the relationship of organisms. Evaluate hypothetical trees.
- identify basic ecological principles.
- identify, compare, and contrast life cycles observed in the major taxa with the focus on how these life cycles relate to evolutionary mechanisms and ecological principles.
- identify, compare, and contrast representative reproductive strategies seen in major phyla; detail how these relate to evolutionary mechanisms and ecological principles.
- analyze the relationship of organisms to their biotic and abiotic environment.
- integrate ecological principles with issues that affect the human condition.

BIOL 420 Principles of Zoology

Upon completion of this course, the student will be able to:

- describe reproductive and developmental processes used by animals.
- demonstrate anatomical characteristics of animals using dissection methods.
- list the characteristics of the major animal phyla.
- construct phylogenetic trees based on anatomic, physiologic, and embryologic data.
- interpret phylogenetic trees.
- compare and contrast anatomy and physiology of the animal phyla.
- analyze the environmental adaptations of animals based on anatomic and physiologic characteristics.
- evaluate the microevolutionary processes that produce patterns in nature.
• evaluate phylogenetic hypotheses with anatomic and physiologic data.
• integrate developmental, anatomical, and environmental data to hypothesize evolutionary relationships between animals.

BIOL 430 Anatomy and Physiology

Units: 5
Hours: 54 hours LEC; 108 hours LAB
Prerequisite: CHEM 305, 309, or 400 with a grade of "C" or better
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340
Transferable: CSU; UC
General Education: AAAS Area IV; CSU Area B2; CSU Area B3; IGETC Area 5B; IGETC Area 5C
C-ID: Part of C-ID BIOL 115S
Catalog Date: June 1, 2020

This course emphasizes the integration of structure and function of the human body. It is built on the study of anatomical terminology, cells, and tissues, followed by expansion into the integumentary, skeletal, muscular, and nervous systems. Laboratory study is enhanced by the microscopic investigation of tissues, examination of anatomical models, cadavers, and the dissection of preserved material. Laboratory activities may also include both wet-lab experiments and computer simulations. BIOL 431 must be subsequently taken to complete the study of all major body systems.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• assemble general anatomical structures within the hierarchy of levels of organization
• incorporate appropriate anatomical terms to demonstrate the position and relationship of anatomical structures
• predict negative and positive feedback responses to changes in homeostasis
• correlate the chemical structure of atoms and molecules with their physiological functions
• predict the function of a particular cell based on its organelles
• examine how tissues establish the framework of organs and systems
• integrate the type of tissue present with the function of the organ
• identify specific anatomical components of the integumentary, skeletal, muscle, and nervous systems using appropriate tools (microscope, models, preserved organs, and cadaver prostheses)
• describe the mechanisms of neural communication and control
• describe the mechanisms of muscle contraction
• evaluate data collected during experimental challenges to homeostasis
• apply knowledge of physiological changes to cellular and organ pathology

BIOL 431 Anatomy and Physiology

Units: 5
Hours: 54 hours LEC; 108 hours LAB
Prerequisite: BIOL 430 with a grade of "C" or better
Advisory: Eligible for ENGRD 310 or ENGRD 312; OR ESLR 340
Transferable: CSU; UC
General Education: AAAS Area IV
C-ID: Part of C-ID BIOL 115S
Catalog Date: June 1, 2020

This lecture and laboratory course in human anatomy and physiology emphasizes the integration of structure and function. It provides students with an understanding of the structure, function, and regulation of the human body through the physiological integration of the following systems: cardiovascular, lymphatic, respiratory, digestive, urinary, endocrine, and reproductive. Laboratory study is enhanced by the microscopic study of tissues, examination of anatomical models, and the dissection of preserved material. Laboratory activity is also enhanced by the examination of whole cadavers as well as prosected head, torso, upper and lower extremities, and individual organs. Laboratory activities also include both wet-lab experiments and computer simulations. Both BIOL 430 and BIOL 431 must be taken to complete the study of all major body systems.

Student Learning Outcomes

Upon completion of this course, the student will be able to:
• identify specific anatomic components of the endocrine, cardiovascular, immune, respiratory, urinary, digestive, and reproductive systems using appropriate tools (microscope, models, preserved organs, and cadaver material)

• diagram the functional relationship between each organ and the system to which it belongs

• illustrate the relationship between basic embryonic development and mature functional structures

• correlate the mechanisms by which the functional cells of each of the major systems respond to maintain homeostasis

• evaluate the neuronal and hormonal responses to changes in cardiovascular and respiratory dynamics

• evaluate the neuronal and hormonal responses to changes in digestive dynamics

• measure physiologic data during challenges to cardiovascular, respiratory, urinary, and digestive systems

• collect data through experimental challenges to cardiovascular, respiratory, urinary, and digestive challenges to homeostasis

• predict the outcome of pathophysiological changes to various body systems

**BIOL 440 General Microbiology**

**Units:** 4  
**Hours:** 54 hours LEC; 72 hours LAB  
**Prerequisite:** CHEM 305, 309, or 400 with a grade of "C" or better  
**Advisory:** Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340; AND BIOL 300 or CHEM 306 with a grade of "C" or better.  
**Transferable:** CSU; UC  
**General Education:** CSU Area B2; CSU Area B3; IGETC Area 5B; IGETC Area 5C  
**Catalog Date:** June 1, 2020

This course introduces microorganisms and their effects on human health. It examines the structure, physiology, metabolism, and genetics of microorganisms. Laboratory work includes aseptic technique, morphological and biochemical properties of microorganisms, and medically relevant issues regarding microorganisms.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

• analyze the properties of microorganisms in terms of cellular anatomy and physiology.

• summarize the properties of microorganisms in terms of biochemistry and genetics and correlate these properties to applications in biotechnology.

• apply microbiology concepts to current issues in human health and infectious diseases.

• demonstrate proper microbiology laboratory techniques involving microscopy, biochemical tests and diagnostic media to characterize microorganisms of significance to human health.

• describe how physical and chemical methods can be used to control microbial growth.

• explain how the human body interacts with various microorganisms through symbiotic relationships and host defenses.

**BIOL 442 General Microbiology and Public Health**

**Units:** 5  
**Hours:** 54 hours LEC; 108 hours LAB  
**Prerequisite:** CHEM 306, CHEM 309, or CHEM 400 with a grade of "C" or better; OR CHEM 305 with a grade of "C" or better and one of the following: BIOL 300, BIOL 303, or BIOL 310 with a grade of "C" or better.  
**Advisory:** Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340 with a grade of "C" or better.  
**Transferable:** CSU; UC  
**General Education:** CSU Area B2; CSU Area B3; IGETC Area 5B; IGETC Area 5C  
**Catalog Date:** June 1, 2020

This course provides a survey of bacteria, viruses, fungi, protozoa, and helminths that are associated with human infectious diseases and public health. It examines their cellular and molecular structure, physiology, metabolism, and genetics. Laboratory work introduces methods for cultivating and characterizing microorganisms.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

• evaluate the anatomical, physiological, biochemical, and molecular properties of microorganisms.
• apply microbiology concepts to advances in biotechnology.
• evaluate how physical and chemical methods can be used to control microbial growth.
• apply microbiology concepts to current issues in public health and infectious disease.
• explain how host defenses interact with pathogenic microorganisms.
• design and evaluate experiments involving microscopy, biochemical tests, DNA techniques, and diagnostic media.
• describe various infectious diseases, including the causative agent(s), signs and symptoms, pathogenesis, virulence factors, epidemiology, diagnosis, treatment, and prevention.

BIOL 482 Honors Marine Biology

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: Placement into ENGWR 480 through the assessment process.
Transferable: CSU; UC (BIOL 370 & 482 combined: maximum credit - one course)
General Education: AA/AS Area IV; CSU Area B2; CSU Area B3; IGETC Area 5B; IGETC Area 5C
Catalog Date: June 1, 2020

This course is an honors level introduction to marine biology. Using a seminar style, it explores physical oceanography, marine algae, marine vertebrate and invertebrate animals, and the ecology of various marine zones. Field trips focusing on inter-tidal organisms of the Central and Northern California Coast are required. A portion of this course may be offered in a TBA component of 54 hours which may include but is not limited to designing and conducting experiments in the rocky intertidal, invertebrate identification, salt marsh ecology, sandy beach ecology, estuary ecology, or comparative anatomy of fishes. The course is not open to students who have completed BIOL 370.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• analyze the interrelationships between chemistry, biology and ecology in the marine environment (including oceanographic phenomena such as waves, currents, and tides).
• examine and support with experimental data the mechanisms of cell biology which allow marine organisms to survive in their environment.
• categorize and contrast the various life forms found in the marine environment.
• analyze and interpret data from current scientific journals and evaluate the broader implications of each study.
• formulate hypotheses in marine biology, design experiments to test them, and interpret and present the data.
• critique plans of action for marine conservation.

BIOL 491 Science Skills and Applications II

Units: 0.5
Hours: 27 hours LAB
Prerequisite: None.
Corequisite: Current enrollment in a science, nutrition, or nursing course.
Transferable: CSU
Catalog Date: June 1, 2020

This course offers individualized instructional modules designed to acquire or improve study strategies for science, nursing, or nutrition courses. Strategies include goal setting, the intensive study cycle, graphic organizers, constructing and interpreting graphs, mastering science vocabulary, self monitoring while reading, coding method of reading, and advanced problem solving. This course is offered in a flexible TBA format of 27 laboratory hours to accommodate the student's schedule. Registration is open through the ninth week of the semester. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• develop short- and long-term goals and assess progress in reaching these goals.
• refine time management techniques and apply new techniques for avoiding procrastination.
• analyze vocabulary development strategies and apply pertinent ones to science courses.
• choose and apply the appropriate problem-solving strategies for science courses.
• construct and interpret various graphs of scientific data.
• apply active reading strategies in science texts.
• create content-based graphic organizers to facilitate understanding of complex topics.
• utilize the strategies of intensive study cycles.
• assess performance on science course exams in order to modify study strategies.

BIOL 495 Independent Studies in Biology

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

Biology - Field Studies (BIOLFS)

Biotechnology (BIOT)

BIOT 301 Biotechnology and Human Health

Units: 3
Hours: 54 hours LEC
Prerequisite: BIOL 303, BIOL 310, BIOL 400, BIOL 440, BIOL 442, or BIOT 307 with a grade of “C” or better
Transferable: CSU
Catalog Date: June 1, 2020

This course introduces biotechnology as it pertains to human health and disease. Topics include an introduction to molecular biology and genetics, recombinant DNA technology, biopharmaceutical products, forensics and genetic testing, stem cells and regenerative medicine, genomics and bioinformatics, and ethical issues arising from biotechnology disease diagnosis and treatment.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• relate biological macromolecules, such as nucleic acids and proteins, to their physical properties and cellular function.
• integrate the roles of DNA, RNA, and proteins with the expression of genetic traits of cells and organisms.
• analyze the scientific concepts underlying biotechnology techniques.
• evaluate new developments in biotechnology research on current human health and disease issues.
• explain how information-based biotechnology approaches, such as genomics and bioinformatics, are used to address biomedical issues.
• examine current ethical and social issues in the use of biotechnology for human health.

BIOT 305 Introduction to Bioinformatics

Units: 1
Hours: 14 hours LEC; 14 hours LAB
Prerequisite: BIOL 303, BIOL 310, BIOL 400, BIOL 440, BIOL 442, BIOT 301, or BIOT 307 with a grade of “C” or better
Transferable: CSU
Catalog Date: June 1, 2020

This course examines the basic concepts and techniques in bioinformatics, the computer analysis of nucleic acids and proteins. Topics include biotechnology databases, database searching, structure and function analysis of biological molecules, sequence alignment and analysis, and biological applications of bioinformatics.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain biological applications of bioinformatics concepts.
- design data retrieval strategies from bioinformatics databases.
- set up a data analysis using bioinformatics computational tools.
- analyze structure and function bioinformatics data.

BIOT 307 Biotechnology and Society

Units: 2
Hours: 36 hours LEC
Prerequisite: None.
Transferable: CSU; UC
Catalog Date: June 1, 2020

This course examines the scientific and social impact of biotechnology by introducing basic technical concepts to examine recent advances. Topics include biotechnology applications in medicine, agriculture, industry, and the environment, and their ethical implications and public perception.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain biotechnology applications in medicine, agriculture, and industry.
- correlate recent advances in biotechnology research with new products and processes.
- evaluate social and ethical issues involving biotechnology.

BIOT 311 Biotechnology Laboratory Methods - Molecular Techniques

Units: 2
Hours: 18 hours LEC; 54 hours LAB
Prerequisite: BIOL 300, BIOL 303, BIOL 310, BIOL 400, BIOL 440, BIOL 442, or BIOT 307 with a grade of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This course covers basic concepts and techniques to work effectively in a bioscience laboratory. Topics include laboratory solution preparation, recombinant DNA methods and nucleic acid analysis techniques, protein separation and analytical techniques, good laboratory practice, and product quality issues.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- organize and prepare materials needed for nucleic acid and protein laboratory techniques.
- design and perform laboratory procedures involving manipulation of nucleic acid and protein samples.
- interpret and evaluate the results of nucleic acid and protein analysis experiments.
- assess biotechnology laboratory procedures on the basis of good laboratory practice, quality control, and regulatory issues.

BIOT 312 Biotechnology Laboratory Methods - Microbial and Cell Culture Techniques

Units: 2
Hours: 18 hours LEC; 54 hours LAB
Prerequisite: BIOL 300, BIOL 303, BIOL 310, BIOL 400, BIOL 440, BIOL 442, or BIOT 307 with a grade of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This course covers basic concepts and techniques to work effectively in a bioscience laboratory. Topics include media preparation, microbial and plant cell culture
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- organize and prepare materials needed for culture media preparation, aseptic cell cultures, and DNA and enzyme diagnostic tests.
- design and perform laboratory procedures involving microbial and cell culture techniques, DNA analysis of microbiological samples, and microbial enzyme diagnostic tests.
- interpret and evaluate the experimental results of cell culture experiments, microbial DNA analysis, and enzyme diagnostic tests.
- assess the quality of laboratory data using descriptive statistical measures.

BIOT 498 Work Experience in Biotechnology

Units: 1 - 4
Hours: 60 - 300 hours LAB
Prerequisite: None.
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position, or job related to biotechnology with a cooperating site supervisor. Students are advised to consult with the Biotechnology Department faculty to review specific certificate and degree work experience requirements.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU
General Education: AA/AS Area III(b)
Catalog Date: June 1, 2020

This course provides students with opportunities to develop marketable skills in preparation for employment or advancement within the field of biotechnology. It is designed for students interested in work experience and/or internships in transfer-level degree occupational programs. Course content includes understanding the application of education to the workforce, completion of Title 5 required forms which document the student’s progress and hours spent at the work site, and developing workplace skills and competencies.

During the semester, the student is required to complete 75 hours of related paid work experience, or 60 hours of related unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. All students are required to attend the first class meeting, a mid-semester meeting, and a final meeting. Additionally, students who have not already successfully completed a Work Experience course will be required to attend weekly orientations while returning participants may meet individually with the instructor as needed. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate application of industry knowledge and theoretical concepts in biotechnology related to a transfer degree level career as written in the minimum three (3) learning objectives created by the student and his/her employer or work site supervisor at the start of the course.
- make effective decisions, use workforce information, and manage his/her personal career plans.
- behave professionally, ethically, and legally at work, consistent with applicable laws, regulations, and organizational norms.
- behave responsibly at work, exhibiting initiative and self-management in situations where it is needed.
- apply effective leadership styles at work, with consideration to group dynamics, team and individual decision making, and workforce diversity.
- communicate in oral, written, and other formats, as needed, in a variety of contexts at work.
- locate, organize, evaluate, and reference information at work.
- demonstrate originality and inventiveness at work by combining ideas or information in new ways, making connections between seemingly unrelated ideas, and reshaping goals in ways that reveal new possibilities using critical and creative thinking skills such as logical reasoning, analytical thinking, and problem-solving.
Associate Degrees for Transfer

A.S.-T. in Business Administration

The Associate in Science in Business for Transfer (AS-T) degree provides students with a major that fulfills the general requirements for transfer to the California State University. Students with this degree will receive priority admission with junior status to the California State University system. The Associate in Science in Business for Transfer (AS-T) degree may be obtained by the completion of 60 transferable, semester units with a minimum of a 2.0 GPA, including the major or area of emphasis described in the Required Program outlined below (earning a C or better in these courses), and the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

Students should work closely with their ARC counselor to ensure that they are taking the appropriate coursework to prepare for majoring in Business at the four-year college they wish to transfer to.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 301</td>
<td>Financial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>ACCT 311</td>
<td>Managerial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>BUS 340</td>
<td>Business Law (3)</td>
<td>3</td>
</tr>
<tr>
<td>ECON 302</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 304</td>
<td>Principles of Microeconomics</td>
<td>3</td>
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<tr>
<td>MATH 340</td>
<td>Calculus for Business and Economics (3)</td>
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</tr>
<tr>
<td>STAT 300</td>
<td>Introduction to Probability and Statistics (4)</td>
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<td></td>
<td>A minimum of 3 units from the following:</td>
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<tr>
<td>BUS 300</td>
<td>Introduction to Business (3)</td>
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<tr>
<td>CISA 305</td>
<td>Beginning Word Processing (2)</td>
<td></td>
</tr>
<tr>
<td>CISA 308</td>
<td>Exploring Word Processing and Presentation Software (1)</td>
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</tr>
<tr>
<td>CISA 315</td>
<td>Introduction to Electronic Spreadsheets (2)</td>
<td></td>
</tr>
<tr>
<td>CISA 316</td>
<td>Intermediate Electronic Spreadsheets (2)</td>
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<tr>
<td>CISA 318</td>
<td>Exploring Spreadsheet Software (1)</td>
<td></td>
</tr>
<tr>
<td>CISA 340</td>
<td>Presentation Graphics (2)</td>
<td></td>
</tr>
<tr>
<td>CISC 305</td>
<td>Introduction to the Internet (1)</td>
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</tr>
<tr>
<td>CISC 308</td>
<td>Exploring Computer Environments and the Internet (1)</td>
<td></td>
</tr>
<tr>
<td>CISC 310</td>
<td>Introduction to Computer Information Science (3)</td>
<td></td>
</tr>
</tbody>
</table>

1. A minimum of 5 units from the following:
COURSE CODE  | COURSE TITLE                  | UNITS
-------------|------------------------------|------
CISC 320     | Operating Systems (1)        |      

Total Units: 25

1Students can also select one of the following courses if not already used: MATH 340, STAT 300.

The Associate in Science in Business Administration for Transfer (AS-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- identify and explain the major functional areas of the business organizations including management, marketing, finance, and accounting.
- apply commonly used computer application programs to create relevant business documents.
- apply accounting and mathematical concepts and principles in making decisions about business operations.
- assess the relationships and interdependencies of economic, social, legal, and global environments in which businesses operate.

Career Information

Account executive, analyst, bank employee, buyer, manager, entrepreneur, financial planner, government service, insurance representative, investment counselor, public administration, purchasing agent, retail/industrial sales, stockbroker. Some options may require more than 2 years of study and additional licensing.

Associate Degrees

A.A. in General Business

This degree is designed to provide a strong foundation for those entering into a variety of business fields in the private and public sector. It includes coursework that is essential for entry-level positions and enhances the knowledge base of those who are seeking career progression.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 101</td>
<td>Fundamentals of College Accounting (3)</td>
<td>3 - 4</td>
</tr>
<tr>
<td>or ACCT 301</td>
<td>Financial Accounting (4)</td>
<td></td>
</tr>
<tr>
<td>BUS 105</td>
<td>Business Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>BUS 110</td>
<td>Business Economics (3)</td>
<td>3</td>
</tr>
<tr>
<td>or ECON 302</td>
<td>Principles of Macroeconomics (3)</td>
<td></td>
</tr>
<tr>
<td>BUS 300</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS 310</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>BUS 320</td>
<td>Concepts in Personal Finance</td>
<td>3</td>
</tr>
<tr>
<td>BUS 340</td>
<td>Business Law (3)</td>
<td>3</td>
</tr>
<tr>
<td>CISA 305</td>
<td>Beginning Word Processing (2)</td>
<td>2</td>
</tr>
<tr>
<td>CISA 315</td>
<td>Introduction to Electronic Spreadsheets (2)</td>
<td>2</td>
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<tr>
<td>MKT 300</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A minimum of 6 units from the following:</td>
<td>6¹</td>
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<tr>
<td>BUS, MGT, MKT, RE courses not used to fulfill other requirements for this major.</td>
<td></td>
<td></td>
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</tbody>
</table>

Total Units: 34 - 35
Work Experience (498) courses are limited to 3 units maximum towards degree requirements.

The General Business Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- identify and explain the major functional areas of business organizations including management, marketing, finance, and accounting.
- develop leadership skills and abilities that are effective in managing a multicultural workforce.
- analyze practical business problems and utilize critical thinking and research skills in the evaluation of alternative solutions.
- apply accounting concepts and principles in making decisions about business operations.
- integrate management principles in relationship to finance, personnel, products, services, and information.
- communicate effectively verbally and in writing in various business settings.
- apply commonly used computer application programs to compose relevant business documents.

Career Information

Account executive, analyst, bank employee, buyer, clerk, data-entry clerk, data-entry specialist, entrepreneur, financial planner, government service, insurance representative, investment counselor, manager, marketing, market research, office assistant, public administration, purchasing agent, retail/industrial sales.

A.A. in Small Business Management

The Small Business Management degree provides training and education for those wishing to own or manage a small entrepreneurial venture. The various elements involved in starting and operating a small business are covered.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 101</td>
<td>Fundamentals of College Accounting (3)</td>
<td>3 - 4</td>
</tr>
<tr>
<td>or ACCT 301</td>
<td>Financial Accounting (4)</td>
<td>3</td>
</tr>
<tr>
<td>BUS 105</td>
<td>Business Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>BUS 110</td>
<td>Business Economics (3)</td>
<td>3</td>
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<tr>
<td>or ECON 302</td>
<td>Principles of Macroeconomics (3)</td>
<td>3</td>
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<tr>
<td>BUS 300</td>
<td>Introduction to Business</td>
<td>3</td>
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<tr>
<td>BUS 340</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>BUS 350</td>
<td>Small Business Management/Entrepreneurship</td>
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<tr>
<td>MGMT 304</td>
<td>Principles of Management (3)</td>
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<tr>
<td>or MGMT 362</td>
<td>Techniques of Management (3)</td>
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<tr>
<td>MKT 300</td>
<td>Principles of Marketing</td>
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<tr>
<td>MKT 312</td>
<td>Retailing</td>
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<tr>
<td>A minimum of 3 units from the following:</td>
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<tr>
<td>ACCT 341</td>
<td>Computerized Accounting (3)</td>
<td>3</td>
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<tr>
<td>ACCT 343</td>
<td>Computer Spreadsheet Applications for Accounting (2)</td>
<td>3</td>
</tr>
<tr>
<td>BUSTEC 305</td>
<td>Business Technology Essentials (1)</td>
<td>3</td>
</tr>
<tr>
<td>BUSTEC 310</td>
<td>Introduction to Word/Information Processing (3)</td>
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</tr>
</tbody>
</table>

One or more Computer Information Science course.
A minimum of 3 units from the following:

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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</thead>
<tbody>
<tr>
<td>BUS 210</td>
<td>The Business Plan (1)</td>
<td>3</td>
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<tr>
<td>BUS 212</td>
<td>Marketing for Small Businesses (1)</td>
<td></td>
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<tr>
<td>BUS 214</td>
<td>Financing a Small Business (1)</td>
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<tr>
<td>BUS 216</td>
<td>Essential Records for the Small Business (1)</td>
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<tr>
<td>BUS 218</td>
<td>Management Skills for the Small Business (1)</td>
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<tr>
<td>BUS 220</td>
<td>Retailing and Merchandising for the Small Business (1)</td>
<td></td>
</tr>
<tr>
<td>BUS 224</td>
<td>Customer Service (1)</td>
<td></td>
</tr>
<tr>
<td>BUS 228</td>
<td>Selling Techniques for the Small Business (1)</td>
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</tbody>
</table>

Total Units: 33 - 34

The Small Business Management Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Evaluate the feasibility of success when starting a new business venture.
- Research and compose a business plan that can be used for planning as well as financing.
- Employ appropriate management, finance, accounting, and marketing techniques required in operating a business.

Certificates of Achievement

Business Information Worker Certificate

This certificate prepares students for entry-level office, computer, and administrative support positions in a variety of industries.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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</thead>
<tbody>
<tr>
<td>BUS 100</td>
<td>English for the Professional</td>
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<tr>
<td>BUS 224</td>
<td>Customer Service</td>
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<tr>
<td>BUS 310</td>
<td>Business Communications</td>
<td>3</td>
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<tr>
<td>BUSTEC 101</td>
<td>Computer Keyboarding: 10-Key</td>
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<tr>
<td>BUSTEC 126</td>
<td>Outlook: Basics (1)</td>
<td>1</td>
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<tr>
<td>or CISA 126</td>
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<tr>
<td>BUSTEC 300.1</td>
<td>Keyboarding/Applications: Beginning</td>
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<tr>
<td>BUSTEC 305</td>
<td>Business Technology Essentials</td>
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<tr>
<td>BUSTEC 310</td>
<td>Introduction to Word/Information Processing</td>
<td>3</td>
</tr>
<tr>
<td>BUSTEC 332</td>
<td>Integrated Business Projects (3)</td>
<td>3</td>
</tr>
<tr>
<td>or BUS 312</td>
<td>Workplace Behavior and Ethics (3)</td>
<td></td>
</tr>
<tr>
<td>CISA 315</td>
<td>Introduction to Electronic Spreadsheets</td>
<td>2</td>
</tr>
</tbody>
</table>

Total Units: 19
Upon completion of this program, the student will be able to:

- demonstrate proficiency in business technology applications.
- demonstrate proficiency in business administration skills.
- demonstrate proficiency in business communication skills.
- apply customer service skills in a business environment and provide a positive customer service experience.

Career Information

Students who successfully complete this certificate are prepared for entry-level positions in office, computer, and administrative support positions in a variety of industries.

Computer Applications for Small Business Certificate

This certificate provides an overview of the specific computer related skills needed to run a small business. The focus is on word processing, electronic spreadsheets, desktop publishing, web page creation, computerized accounting, and an overview of small business/entrepreneurship.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>ACCT 101</td>
<td>Fundamentals of College Accounting (3)</td>
<td>3-4</td>
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<tr>
<td>or ACCT 301</td>
<td>Financial Accounting (4)</td>
<td></td>
</tr>
<tr>
<td>ACCT 341</td>
<td>Computerized Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BUS 350</td>
<td>Small Business Management/Entrepreneurship</td>
<td>3</td>
</tr>
<tr>
<td>CISA 305</td>
<td>Beginning Word Processing</td>
<td>2</td>
</tr>
<tr>
<td>CISA 315</td>
<td>Introduction to Electronic Spreadsheets</td>
<td>2</td>
</tr>
<tr>
<td>CISA 330</td>
<td>Desktop Publishing</td>
<td>2</td>
</tr>
<tr>
<td>CISC 306</td>
<td>Introduction to Web Page Creation</td>
<td>1</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>16-17</td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- assess the ways to start a business and which form of business organization should be used
- explain the importance of a business plan, a financial plan, and a marketing plan
- apply principles of management and marketing relevant to the small business
- plan and execute strategies for working with multiple documents, templates, and macros, and apply techniques for using and editing pre-designed styles
- plan, construct, test, and evaluate worksheets that are efficient, accurate, and professional using a spreadsheet application
- create commonly used printed marketing documents using desktop publishing software
- evaluate web page content needs and design a web page
- generate and interpret various reports and financial statements in appropriate bookkeeping software

Cross-Cultural Conflict Resolution Certificate

This certificate provides the knowledge and skills needed to resolve cross-cultural conflict with both internal and external customers. It combines a theoretical understanding
of conflict with the practical application of handling conflict within the context of a diverse environment.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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</thead>
<tbody>
<tr>
<td>BUS 317</td>
<td>Managing Workplace Conflict</td>
<td>3</td>
</tr>
<tr>
<td>BUS 330</td>
<td>Managing Diversity in the Workplace</td>
<td>3</td>
</tr>
<tr>
<td>BUS 332</td>
<td>Cross-Cultural Customer Service</td>
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<tr>
<td>SPEECH 325</td>
<td>Intercultural Communication</td>
<td>3</td>
</tr>
<tr>
<td>Total Units:</td>
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<td>12</td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- adapt communication behaviors based on cultural values and communication styles.
- analyze negotiation processes, strategies, and techniques.
- develop tactics for effective conflict management and resolution.

Entrepreneurship Certificate

This certificate is designed for existing and potential entrepreneurs. It provides an introductory and organized course of study that enables students to develop their entrepreneurial skills, recognize opportunities, and learn the basics of starting and managing a small business.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>ACCT 101</td>
<td>Fundamentals of College Accounting (3)</td>
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<tr>
<td>or ACCT 301</td>
<td>Financial Accounting (4)</td>
<td>3 - 4</td>
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<tr>
<td>BUS 340</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>BUS 350</td>
<td>Small Business Management/Entrepreneurship</td>
<td>3</td>
</tr>
<tr>
<td>MKT 300</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>12 - 13</td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- create a business plan that covers all facets of operating a business
- organize, and manage the different business functions necessary for ongoing operations
- appraise, and evaluate business opportunities

General Business - Introduction Certificate

This certificate provides an introductory overview of the various disciplines in business, such as management, marketing, accounting, and finance. It is intended to meet the needs of students who wish to develop, retrain, or upgrade skills.
Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
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<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 101</td>
<td>Fundamentals of College Accounting (3)</td>
<td>3-4</td>
</tr>
<tr>
<td>or ACCT 301</td>
<td>Financial Accounting (4)</td>
<td></td>
</tr>
<tr>
<td>BUS 300</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS 340</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>MKT 300</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>Total Units</td>
<td></td>
<td>12-13</td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- identify the functions of management and apply them in business situations
- analyze written communication
- evaluate and apply the basic concepts of marketing in both for-profit and non-profit
- explain small business practices such as record-keeping, financing, marketing, and creating a business plan

General Business Certificate

The General Business certificate provides an overview of the various disciplines in business such as management, marketing, accounting and finance. It is intended to meet the needs of students who wish to develop, retrain or upgrade skills.

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 101</td>
<td>Fundamentals of College Accounting (3)</td>
<td>3-4</td>
</tr>
<tr>
<td>or ACCT 301</td>
<td>Financial Accounting (4)</td>
<td></td>
</tr>
<tr>
<td>BUS 300</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS 310</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>BUS 340</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>CISC 300</td>
<td>Computer Familiarization</td>
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<tr>
<td>MGMT 304</td>
<td>Principles of Management</td>
<td>3</td>
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<tr>
<td>MKT 300</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>BUS 330</td>
<td>Managing Diversity in the Workplace (3)</td>
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<tr>
<td>MGMT 362</td>
<td>Techniques of Management</td>
<td>3</td>
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<tr>
<td>BUS 224</td>
<td>Customer Service (1)</td>
<td></td>
</tr>
<tr>
<td>BUS 210</td>
<td>The Business Plan (1)</td>
<td></td>
</tr>
<tr>
<td>BUS 212</td>
<td>Marketing for Small Businesses (1)</td>
<td></td>
</tr>
<tr>
<td>BUS 214</td>
<td>Financing a Small Business (1)</td>
<td></td>
</tr>
<tr>
<td>BUS 350</td>
<td>Small Business Management/Entrepreneurship (3)</td>
<td></td>
</tr>
</tbody>
</table>
### Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Identify the functions of management and apply them in business situations.
- Analyze written communication.
- Evaluate and apply the basic concepts of marketing in both for-profit and non-profit organization.
- Develop leadership skills and abilities that are effective in managing a multicultural workforce.
- Apply commonly used computer application programs to create relevant business documents.
- Apply business mathematics in order to analyze data and solve business problems.
- Explain small business practices such as record-keeping, financing, marketing, and creating a business plan.
- Compose effective business documents.

### Internet Marketing Certificate

This certificate offers a program of study for students seeking jobs that require skills in technical marketing applications. It provides opportunities to combine traditional marketing theory with the technical skills needed in today's business environment. Courses address current technology-based business communications, marketing, Internet strategies, applications, and trends.

**Catalog Date:** June 1, 2020

### Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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</thead>
<tbody>
<tr>
<td>BUS 310</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>CISA 330</td>
<td>Desktop Publishing</td>
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</tr>
<tr>
<td>CISA 340</td>
<td>Presentation Graphics</td>
<td>2</td>
</tr>
<tr>
<td>CISA 345</td>
<td>Technical Marketing Applications</td>
<td>2</td>
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<tr>
<td>CISA 346</td>
<td>Social Media Applications</td>
<td>1</td>
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<tr>
<td>CISW 350</td>
<td>Imaging for the Web</td>
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<tr>
<td>MKT 330</td>
<td>Internet Marketing</td>
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<tr>
<td>Total Units:</td>
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<td>14</td>
</tr>
</tbody>
</table>

### Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Identify and create effective Internet marketing strategies that enhance business relationships with present and future customers.
- Apply communication theory, effective writing techniques, and presentation skills to business situations.
• utilize software applications designed to present and promote business in print and visual media.
• devise a marketing plan using social media applications and content platforms for marketing both small and large businesses.
• analyze various software applications for Search Engine Optimization (SEO), analytic tools, web-building and blog applications, email marketing, and other technical marketing tools.

Career Information
Career opportunities include titles such as social media administrator, digital marketing director, campaign specialist, marketing/events coordinator, media marketing, social media squad, Internet marketing communications, and communications and social media coordinator.

Marketing Essentials Certificate
This certificate provides an introductory overview of the various aspects of marketing, such as target marketing, marketing strategy, advertising, professional selling, retailing, public relations, social media, and customer service. It is intended to meet the needs of employed students who wish to upgrade their marketing skills, as well as those students who are seeking entry-level marketing positions.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MKT 300</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>MKT 310</td>
<td>Selling Professionally</td>
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</tr>
<tr>
<td>MKT 312</td>
<td>Retailing</td>
<td>3</td>
</tr>
<tr>
<td>MKT 314</td>
<td>Advertising</td>
<td>3</td>
</tr>
<tr>
<td>MKT 330</td>
<td>Internet Marketing</td>
<td>3</td>
</tr>
<tr>
<td>Total Units:</td>
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<td>15</td>
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</table>

Student Learning Outcomes
Upon completion of this program, the student will be able to:

• analyze the philosophy of the marketing concept, and the importance of customer satisfaction.
• discover the function and elements of the marketing mix.
• incorporate strategies for planning, producing, and selecting the appropriate advertising media, and creating an advertising campaign.
• demonstrate professional selling skills, including sales presentations.
• evaluate principles of retailing, such as store location, store layout and design, pricing, human resource management, and promotional methods.
• compare and contrast various e-marketing tools, such as websites and social media.

Career Information
Marketing, selling, advertising, public relations, and marketing management positions, for profit and non-profit organizations. Also, enhancing marketing skills for the entrepreneur and small business owner.

Small Business Management Certificate
This certificate is designed for existing and potential entrepreneurs. It provides an organized course of study that enables students to develop entrepreneurial skills, recognize opportunities, and learn the basics of starting and managing a small business.

Catalog Date: June 1, 2020

Certificate Requirements
<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 210</td>
<td>The Business Plan</td>
<td>1</td>
</tr>
<tr>
<td>BUS 212</td>
<td>Marketing for Small Businesses</td>
<td>1</td>
</tr>
<tr>
<td>BUS 214</td>
<td>Financing a Small Business</td>
<td>1</td>
</tr>
<tr>
<td>BUS 216</td>
<td>Essential Records for the Small Business</td>
<td>1</td>
</tr>
<tr>
<td>BUS 350</td>
<td>Small Business Management/Entrepreneurship</td>
<td>3</td>
</tr>
<tr>
<td>CISC 300</td>
<td>Computer Familiarization</td>
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A minimum of 8 units from the following:

<table>
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<th>COURSE TITLE</th>
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<tbody>
<tr>
<td>ACCT 121</td>
<td>Payroll Accounting (3)</td>
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<tr>
<td>ACCT 341</td>
<td>Computerized Accounting (3)</td>
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<tr>
<td>BUS 218</td>
<td>Management Skills for the Small Business (1)</td>
<td></td>
</tr>
<tr>
<td>BUS 220</td>
<td>Retailing and Merchandising for the Small Business (1)</td>
<td></td>
</tr>
<tr>
<td>BUS 224</td>
<td>Customer Service (1)</td>
<td></td>
</tr>
<tr>
<td>BUS 228</td>
<td>Selling Techniques for the Small Business (1)</td>
<td></td>
</tr>
<tr>
<td>BUS 340</td>
<td>Business Law (3)</td>
<td></td>
</tr>
<tr>
<td>CISA 305</td>
<td>Beginning Word Processing (2)</td>
<td></td>
</tr>
<tr>
<td>CISA 315</td>
<td>Introduction to Electronic Spreadsheets (2)</td>
<td></td>
</tr>
<tr>
<td>MKT 300</td>
<td>Principles of Marketing (3)</td>
<td></td>
</tr>
<tr>
<td>MKT 312</td>
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</tr>
<tr>
<td>MKT 314</td>
<td>Advertising (3)</td>
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</table>

Total Units: 16

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- create a business plan that covers all facets of operating a business.
- organize and manage the different business functions necessary for ongoing operations.
- appraise and evaluate business opportunities.

**Technical Communications Certificate**

This certificate offers an interdisciplinary program of courses in Technical Communications, Art/New Media, and Computer Information Systems to prepare students for a variety of technical writing and professional communication careers. The certificate includes the theory, writing skills, design background, and computer applications knowledge needed for jobs in technical communication.

Catalog Date: June 1, 2020

**Certificate Requirements**

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTNM 352</td>
<td>Design for Publication (3)</td>
<td>2 - 3</td>
</tr>
<tr>
<td>or CISA 330</td>
<td>Desktop Publishing (2)</td>
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<td>CISA 305</td>
<td>Beginning Word Processing (2)</td>
<td>2 - 3</td>
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<tr>
<td>or BUSTEC 310</td>
<td>Introduction to Word/Information Processing (3)</td>
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</tr>
<tr>
<td>CISW 300</td>
<td>Web Publishing</td>
<td>3</td>
</tr>
</tbody>
</table>
### Business (BUS)

#### BUS 100 English for the Professional

**Units:** 3  
**Hours:** 54 hours LEC  
**Prerequisite:** None  
**Advisory:** BUSTEC 300.1, ESLR 310, and ESLW 310 with grades of "C" or better  
**Catalog Date:** June 1, 2020

This course prepares students for professional business communication and BUS 310: Business Communications. It presents principles of correct and effective English usage as applied in business. Included are skills and techniques of written communication, sentence structure, word usage, punctuation, spelling, business vocabulary, and business and employment document formatting. It emphasizes critical thinking and effective writing techniques by analyzing written communication and composing and organizing paragraphs into effective business documents. Proofreading skills are stressed throughout the course.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- identify, select, and use appropriate writing aids, references, and Internet resources used in business writing.
- prepare documents that exhibit a clear understanding of the structure of English grammar, word usage, punctuation, spelling, and business vocabulary.
- produce documents that demonstrate the essentials of sentence structure, critical thinking, and effective business writing.
- compose coherent, well-developed, unified paragraphs within documents.
- proofread, edit, and evaluate written sentences, paragraphs, and basic business documents.
- research, create, proofread, edit, and evaluate employment documents.
BUS 105 Business Mathematics

This course reviews basic mathematical skills and introduces equations and formulas in solving for unknowns. Calculations for banking, commercial discounts, retail and wholesale markup-markdown, payroll computations, simple and compound interest, bank discount, present value, taxes, insurance, depreciation, and financial statements are explored. This course is recommended for business majors.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- add, subtract, multiply, and divide whole numbers, fractions, and decimals.
- use fractions, decimals, graphs, and statistics to calculate values.
- analyze application problems.
- solve for unknowns by using formulas, variables, and equations.
- evaluate financial alternatives based on mathematical formulas.
- demonstrate accuracy, neatness, thoroughness, promptness, and speed as they pertain to business mathematics.

BUS 110 Business Economics

This course is designed for two-year Accounting, Business, Computer Information, Marketing, and Real Estate majors. Both microeconomic and macroeconomic theory are covered with the emphasis towards applications. This course does not meet ECON 302 or 304 requirements for transfer students.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- summarize and analyze the interaction between macro and micro economics.
- summarize the history of economic thought and its relevance to modern business practices.
- evaluate the effect of government economic actions on business and industry.
- analyze current economic events and their effect on the business community.
- apply various economic principles to business disciplines such as marketing, finance, law, accounting, and ethics.

BUS 210 The Business Plan

This course offers an organized, step-by-step approach to preparing a business plan. All sections of the business plan are covered.
Upon completion of this course, the student will be able to:

- describe the essential elements of a business plan.
- identify resources needed to create a business plan.
- analyze target markets.
- develop a business plan.
- evaluate business plans based on quality and thoroughness of content.
- project start-up, monthly, and yearly costs.

**BUS 212 Marketing for Small Businesses**

| Units: | 1 |
| Hours: | 18 hours LEC |
| Prerequisite: | None. |
| Advisory: | BUS 350; and eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340. |
| Catalog Date: | June 1, 2020 |

This course covers how small businesses market products and services to consumers through the creation of a marketing plan. Topics include identifying target markets and utilizing the marketing mix to most effectively reach customers.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- explain the marketing mix: product or service, price, place, and promotion.
- describe competitive advantages for a small business and how to utilize this within the marketing mix.
- analyze potential markets.
- create a marketing plan for a small business utilizing appropriate data.

**BUS 214 Financing a Small Business**

| Units: | 1 |
| Hours: | 18 hours LEC |
| Prerequisite: | None. |
| Catalog Date: | June 1, 2020 |

This course covers the sources and methods of raising capital for small businesses. It explores how much money is needed and where it can be obtained, start-up costs, and projecting monthly and yearly costs. Financial ratios and key financial statements are also covered.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- evaluate available sources of money for entrepreneurs.
- evaluate typical requirements and qualifications for obtaining various types of financing.
- interpret financial statements and apply key financial ratios.
- arrange and present financial needs and financial statements.
- predict financial needs of the business, one time and ongoing.

**BUS 216 Essential Records for the Small Business**

| Units: | 1 |
| Hours: | 18 hours LEC |
| Prerequisite: | None. |
| Advisory: | ENGWR 51 and ENGRD 15, OR ESLR 310 and ESLW 310; BUS 105 and 350 with a grade of "C" or better. |
This course emphasizes the various types of records that small businesses must keep. The focus is on financial, employment, and tax records. Simple, easy-to-use record-keeping systems are covered.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- describe how adequate recordkeeping systems help increase the chance of a small business’s survival.
- identify specific tax treatment of the various types of business organizations.
- research and list how to report business income and expenses, employment taxes, and business use of the home.
- explain and perform the process of completing and filing employment tax and income tax.
- state the factors used in determining the need for professional tax and/or accounting assistance.
- construct a filing system with specific document categories for your own business to organize all your pertinent records.
- define the various types of business records that a small business will encounter during startup and operations.

**BUS 218 Management Skills for the Small Business**

**Units:** 1  
**Hours:** 18 hours LEC  
**Prerequisite:** None  
**Advisory:** ENGWR 51 and ENGRD 15, OR ESLR 310 and ESLW 310; BUS 105 and 350 with a grade of "C" or better.  
**Catalog Date:** June 1, 2020

A small business owner must understand and motivate others to help the business reach its objectives. This course covers planning and organizing work flow, delegating responsibilities, leadership styles, decision making, stress management, and working with employee organizations, all of which help the business reach its objectives.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- explain the four functions of management: planning, organizing, directing, and evaluating.
- list the traits and characteristics of effective leaders.
- analyze the skills used in training and motivating employees.
- describe the steps used in making decisions and the importance of decision-making skills.
- define the different types of leadership styles.
- formulate a leadership plan and style conducive to a specific small business.

**BUS 220 Retailing and Merchandising for the Small Business**

**Units:** 1  
**Hours:** 18 hours LEC  
**Prerequisite:** None  
**Advisory:** ENGWR 51 and ENGRD 15, OR ESLR 310 and ESLW 310; BUS 105 and 350 with a "C" grade or better.  
**Catalog Date:** June 1, 2020

This course emphasizes retailing concepts, such as inventory control and turnover rates, selecting merchandise sources, using trade and cash discounts, pricing, markup and markdown, and shrinkage control. It also includes how to develop a merchandising plan, inventory control system, and assessing consumer behavior and demographics.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- develop, evaluate, and implement a merchandise plan.
- analyze pricing theories, including markup and markdown.
• describe various inventory control systems.
• analyze how to meet customers' needs.
• interpret and compare data from various financial records.
• design and construct an inventory control system for a small business.

BUS 224 Customer Service

This course introduces a study of the principles involved in building and delivering effective customer service. It focuses on providing value-added service through improved attitude, improved listening, conflict management, problem solving, and successful customer service interactions.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• evaluate the importance of customer service and its relationship to the success of any business.
• describe effective strategies to improve communication
• analyze the role of customer services in the marketing of a good and/or service.
• explain how to develop customer relationships.

BUS 228 Selling Techniques for the Small Business

The class focuses on those skills needed to successfully engage in the sales process of products/services. Special emphasis is given to small business owners and their needs.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• define the steps in the sales process.
• differentiate among different types of selling.
• identify and demonstrate effective elements of communication style.
• relate the various skills of professional selling techniques to the small business.

BUS 250 Survey of International Business

This course is a comprehensive overview of international business, designed to provide both beginners and experienced business people with a global perspective on international trade, including foreign investments, impact of financial markets, international marketing, and the operation of multi-national corporations.
Upon completion of this course, the student will be able to:

- compare and contrast domestic business practices and foreign business operations
- interpret and discuss the impact on international trade of economic, cultural, financial, political, and geographic differences.
- explain the differences in development outcomes between market and non-market economies
- construct a strategic plan for opening up global markets for a small business.
- research and assess demographic information for foreign countries or markets to identify which would be most suitable to export goods and services.

BUS 294 Topics in Business

Units: 0.5 - 4
Hours: 9 - 72 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Catalog Date: June 1, 2020

This course provides opportunities to study topics in business that are not included in current course offerings. Individualized topics may be developed in cooperation with business and industry to meet specialized training needs.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe current subject matter as identified in cooperation with business and industry.
- apply skills to the level identified by the instructor in development of each semester's offering.
- analyze and interpret data to complete written reports as designed prior to each semester's offering for the topic.

BUS 295 Independent Studies in Business

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

BUS 300 Introduction to Business

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC
General Education: AA/AS Area V(b)
C-ID: C-ID BUS 110
Catalog Date: June 1, 2020

This course provides a multidisciplinary examination of how culture, society, economic systems, legal, international, political, financial institutions, and human behavior interact to affect a business organization's policy and practices within the U.S. and a global society. It covers specific areas such as management, marketing, finance, accounting, economics, and computer information systems. It is a core requirement for business majors. This course provides an overview that is helpful for selecting a specific career and/or major in the field of business.

Student Learning Outcomes

Upon completion of this course, the student will be able to:
• describe the economic, social, legal, and governmental environments in which business organizations operate.

• define and describe the key management functions of planning, organizing, leading, and controlling.

• identify the marketing mix and the key tools, terms, and strategies related to each element.

• define business ethics and explain the role of social responsibility in an organization.

• identify how business operates in an international/global environment including interdependence, integrated financial markets, and legal, social, cultural, factors.

• compare and contrast the advantages/disadvantages in each form of business ownership.

• explain the importance of finance to the operations of business.

BUS 310 Business Communications

Units: 3
Hours: 54 hours LEC
Prerequisite: BUS 100 or ENGRWR 300 with a grade of "C" or better
Advisory: BUSTEC 300.1
Transferable: CSU
General Education: AA/AS Area II(a)
Catalog Date: June 1, 2020

This course provides the basic concepts for understanding communication in a changing business environment and focuses on practicing the strategies and principles of effective communication in business situations. Tools to communicate effectively in a fast-paced technological, global marketplace are emphasized. This experience provides opportunities to create, edit, evaluate, and critique business documents and reports. A formal research paper using research and analytical skills, and drawing conclusions and making recommendations is required. A business presentation is prepared and delivered.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• apply communication theory, effective writing techniques, and interpersonal communication skills to business situations.

• analyze case studies, evaluate communication problems, and develop appropriate solutions to problems presented.

• compose written communications and business presentations that reflect analytical and decision-making skills.

• organize documents in proper business formats.

• formulate research problem, plan and conduct research, analyze data, develop logical conclusions and recommendations, organize material into a proper report format.

• use effective presentation techniques to deliver a business or client-focused presentation.

• evaluate ways that technology is changing business communication, including positive and negative effects.

BUS 312 Workplace Behavior and Ethics

Units: 3
Hours: 54 hours LEC
Prerequisite: None
Advisory: BUSTEC 300.1 and CISC 300 with a grade of "C" or better; and eligible for ENGRD 310 or ENGRD 312 AND ENGRWR 300, OR ESLR 340 AND ESLW 340.
Transferable: CSU
General Education: AA/AS Area III(b)
Catalog Date: June 1, 2020

This course introduces basic procedures that promote effective workplace practices. Specific topics include communicating effectively, working on teams, problem-solving, preparing and processing information, understanding business ethics, researching ethical business standards, and implementing ethical principles. Activities and techniques help to develop competencies needed in the workplace to communicate with coworkers and customers effectively.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• analyze personal communication skills in the workplace to respond appropriately to the communication styles of others.

• work effectively on a team.
• identify barriers to good communication and choose effective techniques to overcome them.
• explain active listening techniques—simple signals, mirroring and paraphrasing—to identify facts and feelings.
• specify appropriate guidelines when giving or following instructions.
• demonstrate skills in conflict resolution situations by keeping calm and calming others.
• collect and interpret information and data that can be organized to formulate and implement a solution.
• use various forms of technology to communicate in the workplace.
• assess some personal values and be able to relate how they fit within the ethical standards of an assigned organization.
• define ethical issues and develop ethical plans of action that are appropriate for use in a business setting.
• compare different ethical policies or codes of conduct from at least three organizations.
• prepare a professional portfolio or e-portfolio of acquired workplace skills.

BUS 317 Managing Workplace Conflict

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

This course focuses on identifying and understanding the underlying causes of workplace conflict and strategies for managing conflict effectively. It explores the impact of conflict on workplace communication, decision making, and leadership. It includes practical and strategic skills to prevent escalation of conflict and defuse disruptive behaviors.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• explain and assess the role personality and negotiating temperament plays in workplace conflict management.
• analyze the negotiation process, strategies, and techniques for effective conflict resolution in the workplace.
• apply a situational approach to workplace conflict resolution.
• evaluate benefits and drawbacks of various conflict management strategies in the context of the workplace.

BUS 320 Concepts in Personal Finance

Same As: ECON 320
Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU
General Education: AA/AS Area V(b); AA/AS Area III(b); CSU Area D2
Catalog Date: June 1, 2020

This course covers how to analyze financial affairs for lifelong decision making. It examines the basics of financial planning, analysis, and decision making in areas of budgeting, taxes, credit, money management, insurance, investments, and retirement with an emphasis on principles to develop economic decision-making skills. This course is not open to students who have completed ECON 320.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• examine economic needs, establish financial goals, and design a personal financial plan to achieve them
• apply economic principles and concepts to develop a financial plan
• assess the changing economic environment and develop alternative plans or contingency plans so the personal financial plan remains viable
• analyze the various investment options to aid in successful financial planning
- apply the concept of the time value of money
- explain types of risk and risk management methods to develop a risk management plan
- analyze advantages and disadvantages of credit, determine the cost of credit, and assess the types and sources of credit
- construct, implement, review, and revise a financial plan

BUS 330 Managing Diversity in the Workplace

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU
General Education: AA/AS Area V(b); AA/AS Area VI; CSU Area D3
Catalog Date: June 1, 2020

The course examines the leadership skills and abilities needed to manage a multicultural workplace. It focuses on the workplace impact of various historical, social, and cultural experience/perspectives related to gender, age, ethnicity, and disability. Workplace issues related to the diversity of the American consumer and global consumer impact on the United States are analyzed.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- define culture within the context of the United States workplace.
- evaluate demographic trends in order to determine the effects upon the United States society and workplace.
- analyze how language, gender, race, ethnicity, and organizational culture interact to produce a motivating organizational climate.
- apply leadership skills and abilities that are effective in managing a multicultural workforce.
- analyze the impact of cultural, historical, and stereotypical perspectives on the workplace.

BUS 332 Cross-Cultural Customer Service

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

This course focuses on defining and developing skills to ensure customer service satisfaction and success. Emphasis is placed on dealing with difficult situations and people from a cross-cultural perspective, and on bringing out the best in others. It provides practical, hands-on techniques for those engaged in customer contact.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- adapt to different customer behavior styles.
- describe techniques to handle angry customers.
- evaluate verbal and non-verbal cues in appraising a conflict situation.
- apply positive communication and listening techniques.
- apply strategies for service recovery.
- communicate effectively with a diverse customer population.

BUS 340 Business Law

Units: 3
Hours: 54 hours LEC
This course focuses on the law in its relationship to the environment of business. Topics covered include the American legal system as an instrument of economic, social, and political control, sources and processes of law, contracts and sales, agency, business organizations, ethics, and the regulatory process.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- define and explain important legal principles and analyze how they affect business and personal issues.
- describe the federal and state court system's structure and organization and how court procedures are applied during the litigation process including trial.
- assess the need for law and its importance to our society.
- analyze legal situations, think logically, distinguish fact from opinion, and formulate strategies based on legal precedents.
- interpret regulatory laws, legislation and statutes and discuss how they promote fair competition in a private enterprise economic system.
- assess and apply legal principles by analysis of case problems.

**BUS 350 Small Business Management/Entrepreneurship**

**Units:** 3  
**Hours:** 54 hours LEC  
**Prerequisite:** None.  
**Transferable:** CSU  
**Catalog Date:** June 1, 2020

This course provides an overview of the various elements involved in starting and operating a small business. It covers developing a business plan, finding financial resources, developing personal and business goals, managing employees, meeting legal requirements, understanding marketing concepts, and other topics of interest to the entrepreneur.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- assess how to start a business and which form of business organization should be used.
- explain the importance of a business plan, a financial plan, and a marketing plan.
- apply principles of management and marketing relevant to the small business.
- evaluate financial reports.
- analyze the impact of legal requirements and government regulations as related to the operation of the small business.
- describe the financing process and how to access capital.

**BUS 495 Independent Studies in Business**

**Units:** 0.5 - 4  
**Hours:** 27 - 216 hours LAB  
**Prerequisite:** None.  
**Transferable:** CSU  
**Catalog Date:** June 1, 2020

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

**BUS 498 Work Experience in Business**
This course provides students with opportunities to develop marketable skills in preparation for employment or advancement within the field of business. It is designed for students interested in work experience and/or internships in transfer-level degree occupational programs. Course content includes understanding the application of education to the workforce, completion of Title 5 required forms which document the student’s progress and hours spent at the work site, and developing workplace skills and competencies.

During the semester, the student is required to complete 75 hours of related paid work experience, or 60 hours of related unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. All students are required to attend the first class meeting, a mid-semester meeting, and a final meeting. Additionally, students who have not already successfully completed a Work Experience course will be required to attend weekly orientations while returning participants may meet individually with the instructor as needed. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate application of industry knowledge and theoretical concepts in business related to a transfer degree level career as written in the minimum three (3) learning objectives created by the student and his/her employer or work site supervisor at the start of the course.

- make effective decisions, use workforce information, and manage his/her personal career plans.

- behave professionally, ethically, and legally at work, consistent with applicable laws, regulations, and organizational norms.

- behave responsibly at work, exhibiting initiative and self-management in situations where it is needed.

- apply effective leadership styles at work, with consideration to group dynamics, team and individual decision making, and workforce diversity.

- communicate in oral, written, and other formats, as needed, in a variety of contexts at work.

- locate, organize, evaluate, and reference information at work.

- demonstrate originality and inventiveness at work by combining ideas or information in new ways, making connections between seemingly unrelated ideas, and reshaping goals in ways that reveal new possibilities using critical and creative thinking skills such as logical reasoning, analytical thinking, and problem-solving.
The degree is designed to develop advanced skills needed for upper-level administrative support and office management careers. The course work includes communication skills, organizational management, business documents and projects, teamwork, financial data, ethics, and a variety of computer and office technologies.

Division Dean
Kirsten Corbin

Department Chairs
Heidi Bennett

(916) 484-8361

Associate Degrees

A.A. in Administrative Professional

This degree is designed to develop advanced skills needed for upper-level administrative support and office management careers. The course work includes communication skills, organizational management, business documents and projects, teamwork, financial data, ethics, and a variety of computer and office technologies.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 101</td>
<td>Fundamentals of College Accounting (3)</td>
<td>3 - 4</td>
</tr>
<tr>
<td>or ACCT 301</td>
<td>Financial Accounting (4)</td>
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<tr>
<td>BUS 300</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS 310</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>BUSTEC 101</td>
<td>Computer Keyboarding: 10-Key</td>
<td>1</td>
</tr>
<tr>
<td>BUSTEC 110</td>
<td>Business Procedures for Professional Success</td>
<td>3</td>
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<tr>
<td>BUSTEC 126</td>
<td>Outlook: Basics (1)</td>
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<tr>
<td>or CISA 126</td>
<td>Outlook: Basics (1)</td>
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</tr>
<tr>
<td>BUSTEC 127</td>
<td>Outlook: Tools (1)</td>
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</tr>
<tr>
<td>or CISA 127</td>
<td>Outlook: Tools (1)</td>
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</tr>
<tr>
<td>BUSTEC 300.1</td>
<td>Keyboarding/Applications: Beginning</td>
<td>1</td>
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<tr>
<td>BUSTEC 305</td>
<td>Business Technology Essentials</td>
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</tr>
<tr>
<td>BUSTEC 310</td>
<td>Introduction to Word/Information Processing</td>
<td>3</td>
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<tr>
<td>BUSTEC 313</td>
<td>Web-based Conferencing and Presentations for the Business Professional</td>
<td>2</td>
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<tr>
<td>BUSTEC 332</td>
<td>Integrated Business Projects</td>
<td>3</td>
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<tr>
<td>CISA 315</td>
<td>Introduction to Electronic Spreadsheets</td>
<td>2</td>
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<td>CISA 320</td>
<td>Introduction to Database Management</td>
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<tr>
<td>MGMT 300</td>
<td>Introduction to Leadership in Action (3)</td>
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<td>or MGMT 304</td>
<td>Principles of Management (3)</td>
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<td>Total Units:</td>
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<td>31 - 32</td>
</tr>
</tbody>
</table>
The Administrative Professional Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- manage office operations including employee supervision, records management, supplies and equipment, administrative support, financial statements, and customer service.
- evaluate business projects, generate task lists, and prioritize completion of work.
- integrate word processing, spreadsheet, database, presentation, and electronic information management systems to complete business projects.
- create, revise, and evaluate verbal and written business messages demonstrating business communication techniques.
- utilize critical thinking, problem solving, and organizational management skills to complete work independently or in a group.
- analyze ethical dilemmas, utilize ethical decision-making processes, and determine appropriate ethical behavior.

Career Information

Typical career opportunities include clerical, administrative support, and executive assistant positions with private industry, non-profit organizations, and government entities.

A.A. in Virtual Administrative Professional

This degree offers enterprising individuals an opportunity to develop their own business ventures to perform administrative tasks using new technology and the Internet. The current trend toward "outsourcing" work supports the growing need for virtual professionals. Confidence in being customer focused and creative are essential activities of this program. The goal of the virtual administrative professional degree is to assist students in developing a niche that meets the needs of today's employers.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tr>
<td>BUS 105</td>
<td>Business Mathematics</td>
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<tr>
<td>BUS 216</td>
<td>Essential Records for the Small Business (1)</td>
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<td>BUS 224</td>
<td>Customer Service</td>
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<td>BUS 310</td>
<td>Business Communications</td>
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<td>BUS 350</td>
<td>Small Business Management/Entrepreneurship</td>
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<td>BUSTEC 110</td>
<td>Business Procedures for Professional Success</td>
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<tr>
<td>BUSTEC 300.1</td>
<td>Keyboarding/Applications: Beginning</td>
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<td>BUSTEC 300.2</td>
<td>Keyboarding/Applications: Document Formatting</td>
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<td>BUSTEC 300.3</td>
<td>Keyboarding/Applications: Advanced Document Formatting</td>
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<td>BUSTEC 332</td>
<td>Integrated Business Projects</td>
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<tr>
<td>BUSTEC 350</td>
<td>Virtual Careers and Technologies</td>
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<td>CISA 315</td>
<td>Introduction to Electronic Spreadsheets</td>
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<td>CISA 320</td>
<td>Introduction to Database Management (1)</td>
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<td>CISC 305</td>
<td>Introduction to the Internet</td>
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<td>A minimum of 2 units from the following:</td>
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<tr>
<td>BUS 498</td>
<td>Work Experience in Business (1 - 4)</td>
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<td></td>
<td>Total Units:</td>
<td>32</td>
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</table>
The Virtual Administrative Professional Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- categorize essential records into an adequate record keeping system.
- compose written communications and deliver oral presentations for business proposals and projects that focus on the audience.
- explain the importance of a business plan, financial plan, and marketing plan for a business.
- create, arrange, and edit business documents using word processing features.
- select different technologies and software to complete business projects.
- design a virtual office atmosphere which includes marketing oneself, satisfying clients, and managing resources and capital.
- manipulate and format data into a worksheet and database.
- choose appropriate search strategies when using the Internet.

Career Information

Typical career opportunities include administrative professional, executive and/or personal assistant, real estate virtual assistant, online assistant, meeting planner, travel planner, desktop publisher, graphic designer, clerical recruiter, newsletter editor, virtual meetings organizer, and virtual assistant. Industries that virtual professionals support are sales, law, finance, church, Internet enterprises, marketing firms, public relations, direct mail, concierge, authors, contractors, and therapists.

Certificates of Achievement

Business Information Worker Certificate

This certificate prepares students for entry-level office, computer, and administrative support positions in a variety of industries.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
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<tr>
<td>BUS 100</td>
<td>English for the Professional</td>
<td>3</td>
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<td>BUS 224</td>
<td>Customer Service</td>
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<td>BUSTEC 332</td>
<td>Integrated Business Projects (3)</td>
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<tr>
<td>or BUS 312</td>
<td>Workplace Behavior and Ethics (3)</td>
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<td>CISA 315</td>
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<td>Total Units:</td>
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</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- demonstrate proficiency in business technology applications.
demonstrate proficiency in business administration skills.

demonstrate proficiency in business communication skills.

apply customer service skills in a business environment and provide a positive customer service experience.

Career Information

Students who successfully complete this certificate are prepared for entry-level positions in office, computer, and administrative support positions in a variety of industries.

Law Office Clerical Assistant Certificate

This certificate provides the skills needed for entry-level clerical positions in law offices. The course work emphasizes workforce skills including an introduction to the use of terms particular to the legal field.

This Law Office Clerical Assistant certificate is not approved by the American Bar Association and does not prepare students to work as paralegals or legal assistants under California state law.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>BUS 312</td>
<td>Workplace Behavior and Ethics</td>
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<td>BUSTEC 100.1</td>
<td>Keyboarding Skills: Beginning (1)</td>
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<td>or BUSTEC</td>
<td>Keyboarding/Applications: Beginning (1)</td>
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<td>300.1</td>
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<tr>
<td>BUSTEC 100.2</td>
<td>Keyboarding Skills: Intermediate (1)</td>
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<td>or BUSTEC</td>
<td>Keyboarding/Applications: Document Formatting (1)</td>
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<td>300.2</td>
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<td>BUSTEC 305</td>
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<td>BUSTEC 310</td>
<td>Introduction to Word/Information Processing</td>
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<tr>
<td>LA 300</td>
<td>Introduction to Law and the American Legal System</td>
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<td>LA 350</td>
<td>Law Office Management</td>
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<td>15</td>
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</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

• demonstrate keyboarding competence in the legal workplace.

• solve common office problems using current business technology and software applications.

• practice effective communication with law office personnel and clients.

• apply appropriate ethical standards to the special situations encountered in a law office.

• produce written documents in appropriate formats using typical legal office technology.

Career Information

Typical career opportunities are entry-level clerical positions in a law office. In order to earn an A.A. or a Certificate to become a Legal Assistant/Paralegal, see the Legal Studies Program requirements in the Behavior and Social Sciences Division.

Office Technology Certificate
This certificate offers technological skills in preparation for first-time employment, re-entry, or career advancement in a variety of office careers. Program topics include keyboarding/word processing, integrated office applications, organization and supervision of office activities, office procedures, business communications, critical thinking, and report writing.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
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<tbody>
<tr>
<td>BUS 310</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>BUS 312</td>
<td>Workplace Behavior and Ethics</td>
<td>3</td>
</tr>
<tr>
<td>BUSTEC 101</td>
<td>Computer Keyboarding: 10-Key</td>
<td>1</td>
</tr>
<tr>
<td>BUSTEC 126</td>
<td>Outlook: Basics (1)</td>
<td>1</td>
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<tr>
<td>or CISA 126</td>
<td>Outlook: Basics (1)</td>
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</tr>
<tr>
<td>BUSTEC 127</td>
<td>Outlook: Tools (1)</td>
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</tr>
<tr>
<td>or CISA 127</td>
<td>Outlook: Tools (1)</td>
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</tr>
<tr>
<td>BUSTEC 300.1</td>
<td>Keyboarding/Applications: Beginning</td>
<td>1</td>
</tr>
<tr>
<td>BUSTEC 300.2</td>
<td>Keyboarding/Applications: Document Formatting</td>
<td>1</td>
</tr>
<tr>
<td>BUSTEC 305</td>
<td>Business Technology Essentials</td>
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<tr>
<td>BUSTEC 332</td>
<td>Integrated Business Projects</td>
<td>3</td>
</tr>
<tr>
<td>CISA 315</td>
<td>Introduction to Electronic Spreadsheets</td>
<td>2</td>
</tr>
<tr>
<td>CISA 320</td>
<td>Introduction to Database Management</td>
<td>1</td>
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<td>A minimum of 3 units from the following:</td>
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<tr>
<td>BUSTEC 310</td>
<td>Introduction to Word/Information Processing (3)</td>
<td></td>
</tr>
<tr>
<td>BUSTEC 313</td>
<td>Web-based Conferencing and Presentations for the Business Professional (2)</td>
<td></td>
</tr>
<tr>
<td>CISC 300</td>
<td>Computer Familiarization (1)</td>
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</tr>
<tr>
<td>CISC 306</td>
<td>Introduction to Web Page Creation (1)</td>
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</tr>
<tr>
<td>Total Units:</td>
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<td>21</td>
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</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- compose and format business documents.
- demonstrate effective writing techniques for business documents.
- integrate the use of word processing, spreadsheet, database, presentation, and electronic communication software to business tasks.
- incorporate technological, communication, and problem-solving skills in the business setting.

Virtual Office Professional Certificate

This certificate offers preparation as an independent entrepreneur providing administrative, creative, and technical services to clients in virtual environments. This emerging profession encourages working from home.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>BUS 100</td>
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<td>BUS 312</td>
<td>Workplace Behavior and Ethics (3)</td>
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</tr>
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<td>BUSTEC 110</td>
<td>Business Procedures for Professional Success</td>
<td>3</td>
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<td>BUSTEC 127</td>
<td>Outlook: Tools (1)</td>
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<td>BUSTEC 300.1</td>
<td>Keyboarding/Applications: Beginning</td>
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<td>BUSTEC 300.2</td>
<td>Keyboarding/Applications: Document Formatting</td>
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<td>BUSTEC 350</td>
<td>Virtual Careers and Technologies</td>
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<tr>
<td>CISA 320</td>
<td>Introduction to Database Management (1)</td>
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<td>or CISA 315</td>
<td>Introduction to Electronic Spreadsheets (2)</td>
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</tr>
<tr>
<td>or CISC 305</td>
<td>Introduction to the Internet (1)</td>
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<td>16 - 17</td>
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1 Individuals who hold a certificate as a Certified Administrative Professional (CAP) may receive credit for this option with evidence of completion of the CAP certification.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- compose and format business documents demonstrating effective writing techniques and utilizing electronic technologies.
- follow procedures and guidelines for dealing with people—over the telephone, through email, and with other technologies.
- analyze the purpose of a business project, select software, and follow procedures to complete the project.
- describe the different types of virtual environments.
- use the principles of effective time management to prioritize and meet deadlines.
- list the skills and work habits necessary for success in a virtual office career.
- identify and select job and career opportunities in virtual environments.
- determine requirements for setting up a virtual office.

Career Information

Typical career opportunities include administrative professional, executive and/or personal assistant, real estate virtual assistant, online assistant, meeting planner, travel planner, desktop publisher, graphic designer, clerical recruiter, newsletter editor, virtual meetings organizer, and virtual office assistant.

Certificate

Office Assistant Certificate

This certificate provides training in clerical procedures for entry-level office positions.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tr>
<td>BUSTEC 125</td>
<td>Clerical Assistant</td>
<td>6</td>
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<tr>
<td>Total Units:</td>
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<td>6</td>
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</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Perform keyboarding tasks successfully and competently in the workplace.
Business Technology (BUSTEC)

BUSTEC 100.1 Keyboarding Skills: Beginning

This course helps students improve their keyboarding speed and accuracy. Individualized skill improvement plans are based on a computerized assessment of computer keyboarding speed and accuracy. This course is not open to students who have previously completed the first module of BUSTEC 100. This course is for students who know how to correctly touch type and want to improve their keyboarding speed and accuracy. Students who want to learn to correctly touch type should take BUSTEC 300.1. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- touch type using proper technique.
- touch type with increasing speed and accuracy.

BUSTEC 100.2 Keyboarding Skills: Intermediate

This course helps students improve their keyboarding speed and accuracy and builds upon the skills learned in BUSTEC 100.1. Individualized skill improvement plans are based on a computerized assessment of computer keyboarding speed and accuracy. This course is not open to students who have previously completed the second module of BUSTEC 100. This course is for students who know how to correctly touch type and want to improve their keyboarding speed and accuracy. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate speed and accuracy improvement as defined in the skill improvement plan.
- incorporate touch typing and proper keyboarding techniques to complete skill-building exercises and improve keyboarding speed.
- incorporate proofreading techniques and business vocabulary to complete skill-building exercises and timed writings.

BUSTEC 100.3 Keyboarding Skills: Advanced

Solve business problems using current business technology and software applications.

Apply appropriate rules and procedures for the business environment while demonstrating critical-thinking techniques.

Produce job search documents and demonstrate job search skills.

Career Information

Typical career opportunities are entry-level clerical positions.
This course helps students improve their keyboarding speed and accuracy and builds upon the skills learned in BUSTEC 100. Individualized skill improvement plans are based on a computerized assessment of computer keyboarding speed and accuracy. This course is not open to students who have previously completed the third module of BUSTEC 100. This course is for students who know how to correctly touch type and want to improve their keyboarding speed and accuracy. Pass/No Pass only.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- demonstrate speed and accuracy improvement as defined in the skill improvement plan.
- demonstrate improved productivity by applying appropriate business keyboarding vocabulary and proofreading techniques.
- identify and correct spelling errors quickly and accurately.

BUSTEC 101 Computer Keyboarding: 10-Key

Units: 1
Hours: 12 hours LEC; 18 hours LAB
Prerequisite: None
Advisory: BUSTEC 300.1 with a grade of "C" or better
Catalog Date: June 1, 2020

This course introduces the numeric keypad and alphanumeric data entry. Course content focuses on developing proper 10-key technique, speed, and accuracy. Simulated employment tests based on industry standards are included. Ten-key certification testing is completed at the end of the course.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- operate a numeric keypad by touch at a rate of 8,000+ keystrokes/hour with 98 percent accuracy.
- demonstrate proper ergonomic techniques for 10-key operation when completing a variety of job-related tasks.
- critique 10-key techniques and select appropriate skill-improvement activities.
- examine business documents and select the correct information for alpha/numeric input.
- complete 10-key certification testing.

BUSTEC 110 Business Procedures for Professional Success

Units: 3
Hours: 54 hours LEC
Prerequisite: BUSTEC 300.3 with a grade of "C" or better
Advisory: BUSTEC 310
Catalog Date: June 1, 2020

This course provides preparation for the business professional in electronic workplaces. Topics include business communication, records management, and preparation of business documents. Critical thinking, problem solving, teamwork, supervision skills, administrative procedures, and information processing technologies are used to complete assignments and activities as a business professional. These skills provide the background for advancement to supervisory and management positions. Primary emphasis is on processing documents using skills in word processing, spreadsheets, presentation graphics, database, and email. Career planning and development are addressed.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- solve business problems involving decision making and critical thinking.
- communicate effectively both orally and in writing as a member of a business team.
- use operating systems and application software to perform business tasks.
- apply business procedures for the use and operation of business technologies.
- demonstrate supervision and management skills to facilitate workflow and productivity.
- identify strategies that address and improve ethical business behavior.
demonstrate independent initiative and carry out oral and written instructions.

BUSTEC 125 Clerical Assistant

Units: 6
Hours: 90 hours LEC; 54 hours LAB
Prerequisite: BUSTEC 300.1 with a grade of "C" or better; or ability to touch type at 25 wpm.
Corequisite: BUSTEC 101
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; or ESLR 340 AND ESLW 340.
Catalog Date: June 1, 2020

This course covers the skills needed for entry-level clerical positions. Topics include word processing and spreadsheet applications; American Records Management Association (ARMA) filing procedures; office procedures and communications, including telephone, mail, email, and Internet; soft-skills; and employability skills.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify appropriate resources and/or procedures for completing office tasks.
- classify and file documents according to the American Records Management Association (ARMA) rules.
- incorporate effective communication techniques to oral and written communications.
- prioritize tasks, prepare schedules, and use organization techniques to manage workflow.
- integrate appropriate word processing functions for maintaining productivity, including creating and editing business documents while selecting appropriate functions.
- utilize appropriate spreadsheet functions to plan, build, test, format, and print; enter formulas; sort data; and create charts or graphs.
- identify employment resources and job search techniques.
- demonstrate appropriate soft-skills required to be successful in the professional office environment.

BUSTEC 126 Outlook: Basics

Same As: CISA 126
Units: 1
Hours: 18 hours LEC
Prerequisite: None.
Advisory: BUSTEC 300.1
Catalog Date: June 1, 2020

This course introduces Microsoft Outlook, the industry-leading personal information management software. Topics include understanding and navigating the Outlook environment, creating and sending email, using email special features, managing Outlook contacts, using an electronic calendar, and creating tasks and to-do items. BUSTEC 126/CISA 126 and BUSTEC 127/CISA 127 taken together are considered sufficient preparation to pass the Microsoft Office Specialist certification for the Microsoft Outlook application and the communications portion of the International Computer Driver's License (ICDL) Module 7: Information and Communication. This course is not open to students who have completed CISA 126.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- send and receive email utilizing the special features of Outlook.
- create and modify contacts in an address book.
- create and organize Outlook calendar items.
- incorporate tasks and to-do items into the personal information management software.
- distinguish between Outlook in an Exchange environment and a stand-alone environment.
- identify the potential risks associated with the use of email.
BUSTEC 127 Outlook: Tools

This course presents the advanced personal information management tools in Outlook. Topics include working with multiple email accounts, using rules and folders, incorporating advanced calendar and contact features, collaborating using sharing and delegate features, and customizing the Outlook user interface. In addition, the course covers the integration of Outlook with other applications in the Microsoft Office suite. Additionally, BUSTEC 126/CISA 126 and BUSTEC 127/CISA 127 taken together are considered sufficient preparation to pass the Microsoft Office Specialist certification for the Microsoft Outlook application and the communications portion of the International Computer Driver's License (ICDL) Module 7: Information and Communication. This course is not open to students who have completed CISA 127.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- incorporate multiple email accounts into Outlook.
- integrate rules and folders into communication management.
- apply Outlook features to find, manage, and archive information.
- collaborate with other Outlook users by using sharing and delegates.
- customize contacts and calendars using advanced Outlook features.
- revise the Outlook user environment.

BUSTEC 300.1 Keyboarding/Applications: Beginning

This course introduces touch typing of alphabetic, numeric, and symbol keys. It covers keyboarding techniques, speed-and-accuracy development, and essential computer-keyboarding information. This course is specifically designed for the beginning typist as well as those who have been typing for a long time using improper technique. This course is not open to students who have previously completed the first module of BUSTEC 300.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply the proper use of keyboarding techniques.
- demonstrate the ability to key using the touch method.
- demonstrate the ability to touch-type 25+ WPM for two minutes with a maximum of five errors.
- revise documents using proper grammar and punctuation.
- use proofreader marks to revise documents.

BUSTEC 300.2 Keyboarding/Applications: Document Formatting

This course provides beginning to intermediate document formatting and skill development for academic, employment, personal, and businesses purposes. This course builds upon skills learned in BUSTEC 300.1 to provide students with additional computer keyboarding skills in the creation and modification of word processing documents.
It covers use of an office-level word processing program to create and format business correspondence, academic reports, business reports, and tables. English grammar, spelling, punctuation, and proofreading are reinforced throughout. Timed writing tests are used to increase keyboarding speed and accuracy. This course is not open to students who have previously completed the second module of BUSTEC 300.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate the ability to touch-type 35+ WPM for three minutes with a maximum of five errors.
- use proofreader marks to revise documents.
- revise documents using proper grammar and punctuation.
- create and edit properly formatted business letters and memos using appropriate word processing features.
- create and edit properly formatted business and academic reports using appropriate word processing features.
- create and edit properly formatted boxed, open, and ruled tables using appropriate word processing features.

BUSTEC 300.3 Keyboarding/Applications: Advanced Document Formatting

Units: 1
Hours: 12 hours LEC; 18 hours LAB
Prerequisite: BUSTEC 300.2 with a grade of “C” or better
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300 or BUS 310; OR ESLR 340 AND ESLW 340.
Transferable: CSU
Catalog Date: June 1, 2020

This course provides advanced skill development of documents for business, academic, employment, or personal use. This course builds on skills learned in BUSTEC 300.2. This course includes enhancing proofreading proficiency, reinforcing communication skills, increasing speed and accuracy, and using features of a current office-level word processing program to create a variety of business documents with advanced formatting. This course is not open to students who have previously completed the third module of BUSTEC 300.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate the ability to touch-type 40+ WPM for five minutes with a maximum of five errors.
- use proofreader marks to revise documents.
- revise documents using proper grammar and punctuation.
- create and edit properly formatted business letters, personal business letters, and memos using advanced word processing features.
- create and edit properly formatted business and academic reports including report front and end matter using advanced word processing features.
- create and edit properly formatted employment documents using word processing features.

BUSTEC 305 Business Technology Essentials

Units: 1
Hours: 18 hours LEC
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

This course focuses on the integration of technology and administrative skills in a business environment. Topics include hardware and software; electronic, voice, and fax communications; electronic calendars; internet resources; digital copiers and scanners; and the virtual office. This is an introductory course recommended for all business students.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- define the terms associated with business information systems and technologies.
- compare hardware and software options available for creating, storing, and distributing business information.
- choose an appropriate technology for completing work assignments.
- manage business tasks by integrating available technologies and organizational procedures.
- use the basic features of business machines including copiers, scanners, faxes, phones, and computers.
- locate sources of information on current business technology trends.

**BUSTEC 310 Introduction to Word/Information Processing**

**Units:** 3  
**Hours:** 36 hours LEC; 54 hours LAB  
**Prerequisite:** BUSTEC 300.1 with a grade of "C" or better  
**Transferable:** CSU  
**Catalog Date:** June 1, 2020

This course reviews basic word/information processing and introduces intermediate and advanced formatting for correspondence, tables, reports, newsletters, presentations, and other business-related documents. It emphasizes formatting and document production techniques to produce professional business documents used in today's workplace. Intermediate and advanced word processing topics include tables, columns, themes and styles, merge, graphics, macros, collaboration, and templates.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- utilize word processing features to create, edit, preview, save, and print documents.
- manage files and folders.
- create business letters, personal business letters, memorandum, and reports.
- analyze document content and make accurate decisions regarding layout, production, and distribution.
- use formatting tools such as columns, tables, borders and shading, color, symbols, charts, graphics, and text boxes to enhance the appearance of business documents.
- assemble documents using appropriate word processing functions, including headers/footers, styles, templates, comments, table of contents, and index generators.
- verify document accuracy using proofreading and editing tools.

**BUSTEC 313 Web-based Conferencing and Presentations for the Business Professional**

**Units:** 2  
**Hours:** 36 hours LEC  
**Prerequisite:** None.  
**Advisory:** BUS 310 and CISA 340  
**Transferable:** CSU  
**Catalog Date:** June 1, 2020

This course develops business presentation skills indispensable in today's job market. Topics include data evaluation, content planning and organizing, visual aid development, and methods of presentation including web (video) conferencing and podcasting. Strategies for interviews, meetings, training, and group presentations typically found in a business environment are explored.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- describe the different types of business presentations and mediums available
- analyze the purpose of a business presentation
- select the correct presentation style and medium to deliver content
- prepare presentation content, handouts, online polls and notes for delivery
- create supportive visual aids such as slidedecks, flipcharts, and white boards
- develop charts, graphs, and other illustrations to support ideas
evaluate presentation styles and provide feedback for improvement
create, edit, and deliver business presentations as part of a team
create, edit, and deliver web-based business presentations

BUSTEC 332 Integrated Business Projects

Units: 3
Hours: 54 hours LEC
Prerequisite: BUSTEC 110 with a grade of "C" or better
Advisory: BUSTEC 310, CISA 315, and CISA 320
Transferable: CSU
Catalog Date: June 1, 2020

This course applies office administration skills and procedures using a suite of software. Course content integrates word processing, spreadsheet, database, presentation, and communication software to create, format, revise, share, and maintain business documents and data. Hands-on business projects require use of current office systems and incorporate problem-solving skills and real world business simulations.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the concepts and features of integrating software functions.
- integrate the use of word processing, spreadsheet, database, presentation, and electronic communication software to create, format, revise, share, and maintain business documents and data.
- analyze the purpose of a business project and select software to complete the project.
- utilize electronic communication to send and receive business correspondence and attachments beyond the simple use of e-mail.
- organize and manage electronic files on local and cloud storage devices.
- operate in a team to create, edit, and maintain business projects.

BUSTEC 350 Virtual Careers and Technologies

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

This course explores careers in a virtual environment and identifies techniques and technologies needed by virtual workers. Specific topics include types of virtual environments, technologies and skills needed in a virtual office, ways to establish and manage a virtual career, effective communication, and job opportunities. This course also examines issues for career preparation in a virtual environment.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the different types of virtual environments
- define terms that relate to virtual environments
- assess the skills and work habits necessary for virtual careers
- analyze ways to establish and manage a virtual career
- evaluate technologies utilized in virtual careers
- apply communication tools and techniques for a virtual environment
- locate and identify job opportunities
American River College’s chemistry program offers you a high quality education whether you are seeking to transfer to a 4-year college, obtain an Associate’s Degree, or seeking to obtain career technical education. The highly trained faculty in the Chemistry Department is committed to rigorous academic standards, large selection of classes, student-friendly atmosphere, and interactive classes. Our diverse faculty is dedicated to teaching and learning. They have backgrounds that cover all aspects of chemistry. The department provides hands-on experiential learning as well as access to a nationally award-winning peer assisted tutorial program (Beacon).

Division Dean
Dr. Rina Roy

Department Chairs
Michael Payne
Kristin Casale

(916) 484-8107

Associate Degree

A.S. in General Science

This program provides a broad study in the fields of biological and physical sciences in preparation for transfer to a four-year program and continuation of studies in upper division science courses.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>ASTR 300</td>
<td>Introduction to Astronomy (3)</td>
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<tr>
<td>ASTR 310</td>
<td>The Solar System (3)</td>
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<tr>
<td>ASTR 320</td>
<td>Stars, Galaxies, and Cosmology (3)</td>
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<td>ASTR 330</td>
<td>Introduction to Astrobiology (3)</td>
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<td>ASTR 400</td>
<td>Astronomy Laboratory (1)</td>
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<tr>
<td>ASTR 481</td>
<td>Honors Astronomy: Stars, Galaxies, and Cosmology (4)</td>
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<td>ASTR 495</td>
<td>Independent Studies in Astronomy (1 - 3)</td>
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<td>ASTR 499</td>
<td>Experimental Offering in Astronomy (0.5 - 4)</td>
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<td>CHEM 305</td>
<td>Introduction to Chemistry (5)</td>
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<td>CHEM 306</td>
<td>Introduction to Organic and Biological Chemistry (5)</td>
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<td>CHEM 420</td>
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<td>CHEM 421</td>
<td>Organic Chemistry II (5)</td>
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<td>Independent Studies in Chemistry (1 - 3)</td>
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<td>GEOG 300</td>
<td>Physical Geography: Exploring Earth’s Environmental Systems (3)</td>
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<td>Global Climate Change (3)</td>
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<td>GEOG 306</td>
<td>Weather and Climate (3)</td>
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<td>GEOG 307</td>
<td>Environmental Hazards and Natural Disasters (3)</td>
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<td>Introduction to Oceanography (3)</td>
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<td>Introduction to Oceanography Lab (1)</td>
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<td>GEOG 391</td>
<td>Field Studies in Geography: Mountain Landscapes (1 - 4)</td>
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<td>GEOG 392</td>
<td>Field Studies in Geography: Coastal Landscapes (1 - 4)</td>
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<td>GEOG 393</td>
<td>Field Studies in Geography: Arid Landscapes (1 - 4)</td>
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<td>GEOL 300</td>
<td>Physical Geology (3)</td>
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<td>GEOL 301</td>
<td>Physical Geology Laboratory (1)</td>
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<td>GEOL 305</td>
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<td>Electricity and Magnetism (4)</td>
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<td>Heat, Waves, Light and Modern Physics (4)</td>
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**Biological Science Courses**

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<td>The New Plagues: New and Ancient Infectious Diseases Threatening World Health (3)</td>
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<td>BIOT 305</td>
<td>Introduction to Bioinformatics (1)</td>
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### Chemistry (CHEM)

#### CHEM 83 Strategies for Problem Solving in General, Organic and Biological Chemistry

**Units:** 0.75  
**Hours:** 40.5 hours LAB  
**Prerequisite:** None.  
**Corequisite:** CHEM 309  
**Catalog Date:** June 1, 2020

This course develops analytical reasoning strategies, critical thinking skills, and problem-solving abilities for both quantitative and qualitative problems in chemistry. It is designed to support students enrolled in CHEM 309 at American River College. Pass/No Pass only.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- apply analytical reasoning and critical thinking skills as they relate to the study of chemistry.
- demonstrate quantitative, qualitative, and descriptive problem solving skills as they relate to the study of chemistry.
apply study habits that enable mastery of chemistry.
build expertise and increased competence in problem solving strategies through practice.

CHEM 84 Strategies for Problem Solving in General Chemistry I

Units: 0.75
Hours: 40.5 hours LAB
Prerequisite: None.
Corequisite: CHEM 400
Catalog Date: June 1, 2020

This course develops analytical reasoning strategies, critical thinking skills, and problem-solving abilities for both quantitative and qualitative problems in chemistry. It is designed to support students enrolled in CHEM 400 at American River College, with content that will be specific to CHEM 400. Pass/No Pass only.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

• apply analytical reasoning and critical thinking skills as they relate to the study of chemistry.
• demonstrate quantitative, qualitative, and descriptive problem-solving skills as they relate to the study of chemistry.
• apply study habits that enable mastery of chemistry.
• build expertise and increased competence in problem-solving strategies through practice.

CHEM 86 Strategies for Problem Solving in Organic Chemistry I

Units: 0.75
Hours: 40.5 hours LAB
Prerequisite: None.
Corequisite: CHEM 420
Catalog Date: June 1, 2020

This course develops analytical reasoning strategies, critical thinking skills, and problem-solving abilities for both quantitative and qualitative problems in chemistry. It is designed to support students enrolled in CHEM 420 at American River College. Pass/No Pass Only.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

• apply analytical reasoning and critical thinking skills as they relate to the study of chemistry.
• demonstrate quantitative, qualitative, and descriptive problem-solving skills as they relate to the study of chemistry.
• apply study habits that enable mastery of chemistry.
• build expertise and increased competence in problem-solving strategies through practice.

CHEM 87 Strategies for Problem Solving in Organic Chemistry II

Units: 0.75
Hours: 40.5 hours LAB
Prerequisite: None.
Corequisite: CHEM 421
Catalog Date: June 1, 2020

This course develops analytical reasoning strategies, critical thinking skills, and problem-solving abilities for both quantitative and qualitative problems in chemistry. It is designed to support students enrolled in CHEM 421 at American River College.

Student Learning Outcomes
Upon completion of this course, the student will be able to:
- apply analytical reasoning and critical thinking skills as they relate to the study of chemistry.
- demonstrate quantitative, qualitative, and descriptive problem-solving skills as they relate to the study of chemistry.
- apply study habits that enable mastery of chemistry.
- build expertise and increased competence in problem-solving strategies through practice.

### CHEM 130 Chemistry for Funeral Service

**Units:** 4  
**Hours:** 72 hours LEC  
**Prerequisite:** None  
**Corequisite:** BUS 340, FSE 310, and FSE 320  
**Enrollment Limitation:** Acceptance into the Funeral Service Education program.  
**Catalog Date:** June 1, 2020

This course is a survey of the basic principles of chemistry as they relate to funeral service. Topics include chemical principles involved in sanitation, disinfection, public health, and embalming practices. It also covers the development and use of personal, professional, and community sanitation practices, as well as use of and precautions related to potentially harmful chemicals that are currently used in the field of funeral service.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe selected facts of general chemistry as a basis for studying organic and biochemistry.
- explain the essential characteristics of autolysis, hydrolysis, fermentation, and putrefaction in the area of chemistry of decomposition.
- identify the characteristic features of solutions, suspensions, emulsions, and the processes of diffusion as they relate to the embalming process.
- describe the characteristic features of organic compounds.
- compare the characteristics of carbohydrates, lipids, and proteins in the area of basic biochemistry.
- describe representative chemicals in embalming fluids (arterial, cavity, and accessory) and give their respective functions.
- list the potentially harmful chemicals used in the preparation room and the precautions to be taken with each.

### CHEM 305 Introduction to Chemistry

**Units:** 5  
**Hours:** 72 hours LEC; 54 hours LAB  
**Prerequisite:** MATH 100 or 132 with a grade of "C" or better  
**Advisory:** Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ELSW 340.  
**Transferable:** CSU; UC (Credit Limitation: No credit if taken after CHEM 400)  
**General Education:** AA/AS Area IV; CSU Area B1; CSU Area B3; IGETC Area 5A; IGETC Area 5C  
**C-ID:** C-ID CHEM 101; Part of C-ID PHYS 140  
**Catalog Date:** June 1, 2020

This course covers general principles of chemistry, such as unit analysis, atomic structure, nomenclature, mole concept, stoichiometry, and gases. It also introduces organic chemistry and biochemistry. This course is primarily designed for allied health majors.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze and set up measurements of physical quantities and convert units of physical quantities via the use of dimensional analysis.
- name and write formulas of elements, ions, acids, and ionic and molecular compounds.
- describe atomic theory and interpret the periodic table.
- apply the mole concept toward stoichiometry-related problems and chemical reactions.
- identify the variables used to describe properties of a gas.
- formulate qualitatively and quantitatively the effect of change of one or more variables on one another.
- describe chemical bonds, intermolecular forces in the liquid state, solubility of substances, and the concept of osmosis, and their applications.
demonstrate the properties of acids and bases and convert acid concentration to pH and vice-versa

classify, distinguish, and contrast the classes and structural features of organic and biological compounds

CHEM 306 Introduction to Organic and Biological Chemistry

Units: 5
Hours: 72 hours LEC; 54 hours LAB
Prerequisite: CHEM 305 with a grade of "C" or better
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGRW 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC (Credit Limitation: No credit if taken after CHEM 400)
General Education: CSU Area B1; CSU Area B3; IGETC Area 5A; IGETC Area 5C
C-ID: C-ID CHEM 102
Catalog Date: June 1, 2020

This course is a continuation of CHEM 305. It covers the organic functional groups and reactions involved in the chemistry of life (biochemistry) as applied to the health sciences.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify, name, and draw structures of organic compounds including hydrocarbons, alcohols, organic acids, esters, amines, and amides
- defend predicted physical properties of hydrocarbons, alcohols, organic acids, esters, amines, and amides based on their chemical structure
- classify reactions involving hydrocarbons, alcohols, organic acids, esters, amines, and amides
- predict products from reactions involving hydrocarbons, alcohols, organic acids, esters, amines, and amides
- compare the physical and chemical properties of carbohydrates, lipids, proteins, enzymes, and nucleic acids
- compare and contrast the structures and functions of carbohydrates, lipids, proteins, enzymes, and nucleic acids in the body
- compare and contrast the processes of DNA replication and transcription, RNA translation, and common types of mutations
- predict the chemical reactions used in carbohydrate and lipid metabolism
- evaluate the energy yield from carbohydrate and lipid metabolism in the body

CHEM 309 Integrated General, Organic, and Biological Chemistry

Units: 5
Hours: 72 hours LEC; 54 hours LAB
Prerequisite: MATH 100, 129, or 132 with a grade of "C" or better, or placement through the assessment process.
Advisory: One year of high school chemistry with a grade of "C" or better; AND MATH 120 or MATH 133; AND eligible for ENGRD 310 or ENGRD 312 AND ENGRW 300, OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC
General Education: AA/AS Area IV; CSU Area B1; CSU Area B3; IGETC Area 5A; IGETC Area 5C
Catalog Date: June 1, 2020

This course is an intensive survey of general, organic, and biological chemistry specifically designed for students majoring in nursing and other health-related fields. Topics include general chemistry, organic chemistry, and biological chemistry as they apply to the chemistry of the human body. This course satisfies the requirements of those health-care programs which require one semester of chemistry. Students enrolled in this course are strongly encouraged to co-enroll in CHEM 83.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze the fundamental features of chemistry including measurement of physical properties such as mass, volume, density, pressure, temperature, solutions, concentrations, and dilutions.
- apply the concept of unit analysis towards medical dosage calculations.
- differentiate between physical and chemical properties of matter.
- name and write chemical formulae of cations, anions and inorganic and organic compounds.
- evaluate various types of chemical reactions, both organic and inorganic.
• qualitatively compare spontaneous and nonspontaneous processes.
• analyze the phenomena of diffusion, osmosis, dialysis, and transport mechanisms of particles through cell membranes based on their physical properties.
• describe intermolecular forces and apply them in the understanding of basic principles of biochemistry and physical characteristics of organic compounds.
• differentiate between functional groups when they appear in an organic structure.
• relate the physical and chemical properties of compounds containing functional groups.
• differentiate typical acid and base formulae and compare the behavior associated with acids and bases.
• apply Le Chatlier's equilibrium principles in the understanding of blood buffers.
• distinguish various functions of four major classes of biomolecules in living cells.
• distinguish key structural features and properties of these classes of biomolecules.
• compare the processes of DNA replication, transcription, and translation.
• compare major biochemical components in common catabolic pathways for carbohydrates and fatty acids and compare the output from those processes.

CHEM 310 Chemical Calculations

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: MATH 100, 129, or 132 with a grade of "C" or better
Corequisite: MATH 120 or 133
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU
General Education: AA/AS Area IV
Catalog Date: June 1, 2020

This course introduces calculations, terminology, chemical techniques, and laboratory techniques. It provides intensive problem solving skills necessary for CHEM 400.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• solve chemical calculation problems, for example, unit conversion and theoretical yield calculations, in a clear and logical fashion.
• describe and explain organizational trends of the periodic table, for example, atomic mass, periods and groups, metals, nonmetals, metalloids, and atom size.
• describe the structure of an atom and predict common ions formed.
• formulate the name of inorganic compounds (molecular and ionic) and acids.
• identify the type of chemical reaction given reactant(s) and product(s) and balance the chemical reaction using coefficients.
• predict the products of inorganic chemical reactions using solubility rules.
• use the ideal gas law and the gas laws to predict temperature, pressure, volume, mass, or molar quantity of a gas.
• perform calculations involving mass percents, molarity, solution stoichiometry, and pH.
• complete lab experiments in a safe and timely manner, after receiving written and/or verbal instructions.
• demonstrate the proper use of laboratory glassware and equipment by collecting and recording scientific measurements in data tables with the correct number of units and significant figures (i.e. graduated cylinder, balances, thermometer, buret, pipet, and metric ruler), and the recording of observations (physical and chemical changes and properties).

CHEM 400 General Chemistry I

Units: 5
Hours: 54 hours LEC; 108 hours LAB
Prerequisite: MATH 120, 125, 129, or 133 with a grade of "C" or better AND one of the following: 1) CHEM 310 with a grade of "C" or better; or, 2) Previous chemistry course with a grade of "C" or better AND a passing score on the Chemistry Assessment Test from the Assessment Center at American River College.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC
General Education: AA/AS Area IV; CSU Area B1; CSU Area B3; IGETC Area 5A; IGETC Area 5C
C-ID: C-ID CHEM 110; Part of C-ID CHEM 120S
This course covers the basic principles of chemistry with an emphasis on chemical calculations, chemical reactions including balancing of complicated reduction-oxidation (REDOX) reactions, stoichiometry, gas laws, thermochemistry, atomic structure and bonding theories, ionic equations, solutions, intermolecular forces and phases of matter, and acid/base chemistry including titrations and pH. Laboratory work is devoted to investigations of the theoretical work discussed in lecture.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- successfully complete laboratory experiments (involving evaluation of experimental data and confirmation of physical constants) in a safe and timely manner, after receiving written and/or verbal instructions.
- demonstrate the proper collection and recording of scientific measurements in tables with the correct units and number of significant figures (i.e. measuring mass, volume, temperature, length, and pressure), and the recording and evaluation of observations (physical and chemical changes and properties).
- analyze and then solve chemical calculation problems that involve solids, solutions, or gases, in a clear and logical fashion; for example, stoichiometry, acid-base, and colligative property problems.
- analyze and then solve chemical calculation problems that involve heat energy transfers in calorimeters or chemical reactions; for example, determining the heat of fusion, heat of solution, heat of reaction, and heat capacity.
- construct balanced chemical equations from written descriptions of chemical reactions.
- synthesize data into computer-generated graphical outputs and make predictions by interpolation using linear and non-linear regression analyses.
- evaluate errors related to experimental procedures and assess their effects on experimental results.
- predict the products of inorganic chemical reactions using solubility rules and the activity series, by assessing electrolyte strength, and by employing the fundamental rules of acid/base chemistry.
- apply chemical naming rules to inorganic molecular and ionic compounds, acids, and simple straight-chain hydrocarbons.
- predict changes in solution properties based on colligative property calculations; for example, changes in boiling point, freezing point, vapor pressure, and osmotic pressure.
- explain how and why substances dissolve in other substances and perform calculations to evaluate solution concentration in various units (molar, molal, % mass, mole fraction).
- use the ideal gas law and the empirical or combined gas laws to predict temperature, pressure, volume, mass, or molar quantity of a gas.
- explain and predict observable properties of gases (pressure, temperature, volume) from an understanding of the behavior of the individual particles in a gas.
- produce Lewis structures of simple molecules and polyatomic ions and predict their shape and relative polarity.
- label the parts of a phase diagram, use it to predict the temperature and pressure at which phase changes will occur, and construct heating curves that include phase changes.
- analyze the structure of an atom and explain the origin of atomic emission spectra.

CHEM 401 General Chemistry II

Units: 5
Hours: 54 hours LEC; 108 hours LAB
Prerequisite: CHEM 400 with a grade of "C" or better
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC
General Education: CSU Area B1; CSU Area B3; IGETC Area 5A; IGETC Area 5C
C-ID: Part of C-ID CHEM 120S
Catalog Date: June 1, 2020

This course is a continuation of the principles of chemistry with emphasis on equilibria, bonding, thermodynamics, kinetics, and electrochemistry. A brief introduction to organic chemistry is included. Laboratory work is devoted to qualitative analysis and experiments dealing with the theoretical work discussed in lecture.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain the basic concepts and theories of kinetics, equilibrium, thermodynamics, electrochemistry, coordination chemistry, and nuclear chemistry.
- cite examples of the importance and relevancy of chemical concepts.
- solve quantitative problems in kinetics, equilibrium, thermodynamics, electrochemistry, coordination chemistry, and nuclear chemistry through the mathematical application of basic principles.
evaluate and solve qualitative problems using the basic principles of kinetics, equilibrium, thermodynamics, electrochemistry, coordination chemistry, and nuclear chemistry.

conduct a variety of qualitative and quantitative inorganic laboratory experiments utilizing a variety of chemistry instrumentation such as spectrophotometry and pH meters.

analyze experimental data to compare and contrast theoretical value versus experimental values.

design appropriate laboratory procedures for open-ended inquiry experiments.

prepare written laboratory reports describing and interpreting hands-on laboratory experiments.

demonstrate safe laboratory practices and proper materials handling.

CHEM 420 Organic Chemistry I

Units: 5
Hours: 54 hours LEC; 108 hours LAB
Prerequisite: CHEM 401 with a grade of "C" or better
Transferable: CSU; UC (CHEM 420 & 423 combined: maximum credit - one course)
C-ID: C-ID CHEM 150; Part of C-ID CHEM 160S
Catalog Date: June 1, 2020

This course is designed to prepare students who are majoring in chemistry or chemical engineering, for transfer to a four-year institution, or to prepare students for entrance into professional schools in the fields of medicine, pharmacy, or dentistry. Emphasis is on the application of modern principles regarding structure, reactivity, methods of synthesis and physical properties of carbon compounds.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- name saturated and unsaturated hydrocarbons, alkyl halides, and alcohols
- analyze the relationship between the molecular structure of an organic molecule and its physical properties and chemical reactivity
- analyze reaction mechanisms to predict products of organic chemistry reactions
- propose reaction mechanisms for common organic chemistry reactions
- identify a compound given its molecular formula, infrared spectrum, and nuclear magnetic resonance (NMR) spectrum
- design multi-step organic syntheses
- analyze organic compounds through the operation of instruments such as the refractometer, Fourier transform infrared spectroscopy (FTIR), nuclear magnetic resonance spectroscopy (NMR), gas chromatography (GC), and polarimeter
- perform laboratory techniques such as separation, synthesis, purification, identification, and characterization of organic compounds utilizing both macro- and micro-scale procedures
- evaluate experimental data

CHEM 421 Organic Chemistry II

Units: 5
Hours: 54 hours LEC; 108 hours LAB
Prerequisite: CHEM 420 with a grade of "C" or better
Transferable: CSU; UC
C-ID: Part of C-ID CHEM 160S
Catalog Date: June 1, 2020

This course covers general physical and chemical properties of aromatic compounds, ethers, carbonyl compounds, amines, carbonyl derivatives, and biological compounds of interest. It also includes mass spectrometry, ultraviolet-visible (UV-VIS) spectroscopy, and carbon-13 nuclear magnetic resonance (NMR). Special attention is given to development of reaction mechanisms, methods of organic synthesis, and instrumental analysis as they apply to organic chemistry.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- relate principles of chemical reactions and mechanisms to organic functional groups
• propose reaction mechanisms for common organic chemistry reactions
• plan the synthesis of organic compounds utilizing the specific reactions of functional groups
• describe biochemical processes using organic reactions
• determine the structure of organic compounds by evaluating mass spectra, NMR spectra, UV-VIS, and infrared (IR) spectra
• perform laboratory experiments using both macro- and micro-scale procedures
• evaluate experimental data

CHEM 423 Organic Chemistry - Short Survey

Units: 5  
Hours: 72 hours LEC; 54 hours LAB  
Prerequisite: CHEM 401 with a grade of "C" or better  
Transferable: CSU; UC ((CHEM 420 & 423 combined: maximum credit - one course))  
General Education: CSU Area B1; CSU Area B3; IGETC Area 5A; IGETC Area 5C  
Catalog Date: June 1, 2020

This course is a survey of carbon containing compounds with emphasis on organic compounds of biological interest. Topics include the chemistry of organic functional groups, Infra Red spectroscopy, and mechanisms of reactions. This course is designed primarily for students majoring in the life sciences, nutrition/dietetics, and related fields. This course is not recommended for students majoring in chemistry, chemical engineering, medicine, dentistry, pharmacy, or chiropractics.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• validate structural and bonding theories towards the reactivity of the functional groups of organic chemistry.

• name alkanes, alkenes, alkynes, alcohols, ethers, acids, esters, aldehydes, ketones, amides, amines, and aromatic molecules using the International Union of Pure and Applied Chemistry (IUPAC) system.

• predict mechanisms and intermediates in the understanding of organic reactions.

• identify organic compounds through the interpretation of Infra Red spectral data and degree of unsaturation.

• differentiate between structural isomers, stereoisomers, and resonance forms.

• analyze the effect of reagents, solvents, catalysts, temperature, and pressure in reactions.

• develop the conversion of one organic functional group to another.

• propose route synthesis of simple organic molecules.

• evaluate concepts of organic chemistry towards understanding of biochemistry topics such as carbohydrates, proteins, and lipids.

CHEM 495 Independent Studies in Chemistry

Units: 1 - 3  
Hours: 54 - 162 hours LAB  
Prerequisite: None.  
Transferable: CSU  
Catalog Date: June 1, 2020

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.
Community Services offerings enable you to improve the quality of your life through lifelong learning. This program of fee-based classes is designed to serve individuals with educational goals that do not require college credit.

Department Chairs Raymelle (Rae) Revel
☎ (916) 485-6000
✉ revelr@arc.losrios.edu

Community Services Education (CSERV)

CSERV 2010 Emergency Medical Technician Renewal

Units: 0
Prerequisite: None.
Catalog Date: June 1, 2020

Course is designed to review basic prehospital topics and skills required for National Registry of Emergency Medical Technician recertification.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Understanding National Registry recertification guidelines and course requirements.
- Justify prehospital treatment plans aligned to a variety of common chief complaints.
- Demonstrate minimum performance competency of required Emergency Medical Technician skills as required by Title 22 of the California State Code of Regulations.
- Discuss signs and symptoms, treatment standards and communication requirements associated with common prehospital medical and trauma responses.
- Justify patient management performance as it compares to local, state and national Emergency Medical Services standards.

CSERV 2011 Emergency Medical Technician Skills Competency Verification

Units: 0
Prerequisite: None.
Catalog Date: June 1, 2020

This course is designed to provide Emergency Medical Technicians (EMT) the opportunity to verify EMT-Skills Competency as required by the California Emergency Medical Services Authority.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Demonstrate minimum performance competency on all Title 22 EMT required skills. Skills include: Trauma assessment, Medical assessment, airway emergencies, breathing emergencies, AED & CPR, circulation emergencies, neurological emergencies, soft tissue injuries, musculoskeletal injury, and obstetrical emergencies.
CSERV 2013 Pediatric Advanced Life Support

The PALS course gives healthcare professionals the knowledge and skills to better recognize and treat critically ill infants and children.
The course uses a scenario-based, team approach to teach pediatric emergency management of pediatric patients approaching or already in respiratory or cardiac arrest.
The course covers treatment beyond the first few emergency minutes and goes through stabilizing patients or transport phases of a pediatric emergency, in or out of the hospital.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Diagram and perform the emergency treatment of infants and children at risk for cardio-pulmonary arrest.
- Summarize systematic approach to pediatric assessment.
- Demonstrate effective respiratory management in a infant or child in respiratory failure.
- Validate skills for 1- and 2-person CPR and AED skills for infants and children.
- Demonstrate defibrillation and synchronized cardioversion for pediatric patients.
- Demonstrate intraosseous access and fluid bolus administration.
- Put into action effective resuscitation team dynamics

CSERV 2014 Pediatric Advanced Life Support Renewal

The PALS course gives healthcare professionals the knowledge and skills to better recognize and treat critically ill infants and children.
The course uses a scenario-based, team approach to teach pediatric emergency management of pediatric patients approaching or already in respiratory or cardiac arrest.
The course covers treatment beyond the first few emergency minutes and goes through stabilizing patients or transport phases of a pediatric emergency, in or out of the hospital.
Recertification/renewal is provided to professional with a current provider level PALS certification.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Recall the systematic approach to pediatric assessment.
- Adapt treatment plans to accurately reflect changes in patient acuity.
- Summarize the effective dynamics utilized during pediatric resuscitation events.
- Demonstrate minimum competency of the PALS Core Cases.

CSERV 2015 Advanced Cardiac Life Support

Emergency Health Care Providers frequently manage patients with life-threatening cardiac events. This course will enhance their skills in treating adult victims of cardiac arrest or other cardiopulmonary emergencies . This course emphasizes will include:

- importance of basic life support CPR to patient survival
- integration of effective basic life support with ACLS interventions
- importance of effective team interaction and communication during resuscitation

The course includes simulated clinical scenarios that encourage active, hands-on participation through learning stations where students practice essential skills individually, as part of a team, and as team leader.
Upon completion of this course, the student will be able to:

- Diagram and perform the emergency treatment of adults at risk for cardio-pulmonary arrest.
- Summarize systematic approach to adult cardiac assessment.
- Demonstrate effective respiratory management in an adult in respiratory failure.
- Validate skills for 1- and 2-person CPR and AED skills for adult cardiac arrest patients.
- Demonstrate defibrillation and synchronized cardioversion and transcutaneous pacing for the adult patient.
- Demonstrate intraosseous access and fluid bolus administration.
- Put into action effective resuscitation team dynamics

CSERV 2016 Advanced Cardiac Life Support Renewal

Units: 0  
Prerequisite: None.  
Catalog Date: June 1, 2020

Emergency Health Care Providers frequently manage patients with life-threatening cardiac events. This course will enhance their skills in treating adult victims of cardiac arrest or other cardiopulmonary emergencies. This course emphasizes will include: • importance of basic life support CPR to patient survival • integration of effective basic life support with ACLS interventions • importance of effective team interaction and communication during resuscitation The course includes simulated clinical scenarios that encourage active, hands-on participation through learning stations where students practice essential skills individually, as part of a team, and as team leader. Recertification assumes experience as a provider of ACLS.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Demonstrate minimum treatment competency of the required ACLS Core Cases.

CSERV 2018 National Registry Paramedic Licensure Preparation

Units: 0  
Prerequisite: None.  
Catalog Date: June 1, 2020

This course is designed to prepare paramedic students for the National Registry of Emergency Medical Technicians-Paramedic Licensure Examination.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Discuss pathophysiology, signs and symptoms, and emergency care of patients with medical-based complaints.
- Discuss pathophysiology, signs and symptoms, and emergency care of patients with trauma-based complaints.
- Demonstrate minimum competency for all required NREMT Advanced Skills.

CSERV 2019 National Registry Paramedic Licensure Testing

Units: 0  
Prerequisite: None.  
Catalog Date: June 1, 2020

This course is designed to test paramedic students for minimum skills competency for the National Registry of Emergency Medical Technicians-Paramedic.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- Demonstrate minimum standards of skills competency as set by the National Registry of Emergency Medical Technicians. Advanced skills tested follow NREMT policies and procedures.

CSERV 2020 12 Lead EKG Interpretation and Advanced Cardiac Care

Units: 0  
Prerequisite: None.
Catalog Date: June 1, 2020

This course is designed for practicing health care professionals who manage and treat emergency cardiac patients. The course presents current concepts involving 12 lead EKG application, interpretation and associated advanced emergency cardiac care.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Explain Acute Coronary Syndromes.
- Analyze various reperfusion therapies.
- Identify and interpret EKG complexes and wave forms.
- Diagnose cardiac abnormalities using a variety of 12-Lead EKGs.
- Demonstrate standard application of the 12-Lead EKG monitor.
- Examine a variety of emergency cardiac care standards as they relate to various EKG interpretations.

CSERV 2021 MCI & Incident Command System Basics

Units: 0  
Prerequisite: None.
Catalog Date: June 1, 2020

This course is designed for Public Safety professionals interested in understanding the basic concepts of both the Incident Command System (ICS) and Mass Casualty Incidents (MCI). The course provides students with simulated opportunities to implement the ICS when presented with MCI events.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Examine the basic elements of the Incident Command System.
- Compare command procedures used at small-, medium-, and large-scale medical incidents.
- Describe the functional components of the incident command system in terms of command, finance, logistics, operations, and planning.
- Employ the incident command system given a variety of mass casualty incidents.

CSERV 2022 Trauma Life Support

Units: 0  
Prerequisite: None.
Catalog Date: June 1, 2020

This course is designed to provide students with the knowledge and skills to better manage trauma patients in the prehospital environment. The courses involves international standards that enable the student to master the latest techniques in rapid trauma assessment, identification of immediate life-threatening injuries and the appropriate medical interventions.

Student Learning Outcomes

Upon completion of this course, the student will be able to:
• Perform an effective scene size up and determination of the mechanisms of injury.
• Using the Priority Plan, determine patient acuity levels during a rapid trauma assessment.
• Analyze trauma treatment implementation and adapt to align with changing patient conditions.
• Recognize signs and symptoms associated with Shock Syndromes.
• Demonstrate airway management, fluid resuscitation skills, spinal management skills, and extremity trauma skills.
• Given a variety of trauma-based scenarios, utilize appropriate trauma assessment and management skills for adults, children, the elderly, pregnant patients and those under the influence of alcohol or drugs.
• Perform trauma management skills during traumatic cardiopulmonary arrest.

CSERV 2030 Russian for Business and Travel I

Units: 0
Prerequisite: None.
Catalog Date: June 1, 2020

This is an introductory course in Russian that emphasizes basic business and travel-related vocabulary as well as cultural/nonverbal aspects of Russian business communication. This low-stress course introduces only the grammar and structures absolutely necessary for speaking and is oriented to the development of travel and business speech habits. It covers such topics as formal and informal greetings and farewells, getting acquainted, talking about self and family, asking for directions and transportation, describing weather, feelings and emotions. The course also enhances participants' general understanding of Russian-speaking cultures and introduces some significant aspects of Russian geography and modern history. No prior knowledge of Russian is required.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

• use basic Russian conversational skills in travel and business meetings as well as for personal enjoyment.
• initiate simple statements and answer basic questions related to greetings and farewells, directions, self-introduction, giving a tour, talking about time, days of the weeks and weather, discussing some feelings and emotions.
• demonstrate basic knowledge of Russian geography and an understanding of some of the more significant aspects of contemporary Russian business culture.
• integrate basic Russian language and cultural knowledge in a variety of situations.
• cope with and understand basic speech situations related to business and travel.

CSERV 2031 Russian for Business and Travel II

Units: 0
Prerequisite: None.
Catalog Date: June 1, 2020

This is an introductory course in Russian that emphasizes basic business and travel-related vocabulary as well as cultural/nonverbal aspects of Russian business communication. This low-stress course introduces only the grammar and structures absolutely necessary for speaking and is oriented to the development of travel and business speech habits. It covers such topics as airport procedures, baggage claim information, daily routine, hotel-related phrases, money, and vocabulary and ethics of phone conversations. The course also enhances participants' general understanding of Russian-speaking cultures and introduces some significant aspects of Russian geography and modern history. Intended for community members with minimal previous knowledge of Russian.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

• use basic Russian conversational skills in travel and phone conversations.
• initiate simple statements and answer basic questions related to airport procedures, transportation, accommodation, and personal belongings.
• express some feelings, emotions, likes and dislikes.
• demonstrate basic knowledge of Russian geography and an understanding of some of the more significant aspects of contemporary Russian business culture.
• integrate basic Russian language and cultural knowledge in a variety of situations.
• cope with and understand typical speech situations related to business and travel.
CSERV 2040 Medical Spanish: Part 1

Units: 0
Prerequisite: None.
Catalog Date: June 1, 2020

This course is designed to help community members and people who are interested in helping the sick by providing the following: Medical Spanish Terminology and phrases for non-native speakers of Spanish wishing to enhance their ability to communicate with their Spanish-speaking patients, as well as for native speakers of Spanish wishing to broaden their use of medical terminology in order to be able to communicate more effectively with their family members in a variety of health settings. Emphasizes oral communication in a variety of medical settings by focusing on basic language exchange between doctor/nurse and patient. No prior knowledge of Spanish required.

*Provider Approved by the Board of Registered Nursing for 32 Contact Hours per 8-week course. Provider #CEP15540.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- use Spanish conversational skills in a variety of medical settings.
- listen to and pronounce words in Spanish that focus primarily on medical terminology.
- communicate information, ask questions and discuss physical symptoms with some grammar provided.
- gain sensitivity and understanding of the Spanish-speaking cultures as well as how to best approach Spanish-speaking patients.

CSERV 2041 Medical Spanish: Part 2

Units: 0
Prerequisite: None.
Catalog Date: June 1, 2020

This course is designed to help community members and people who are interested in helping the sick by providing the following: Medical Spanish Terminology and phrases for non-native speakers of Spanish wishing to enhance their ability to communicate with their Spanish-speaking patients, as well as for native speakers of Spanish wishing to broaden their use of medical terminology in order to be able to communicate more effectively with their family members in a variety of health settings. Emphasizes oral communication in a variety of medical settings by focusing on vocabulary and phrases used by specialists and their patients. Basic prior knowledge of Spanish recommended.

*Provider Approved by the Board of Registered Nursing for 32 Contact Hours per 8-week course. Provider #CEP15540.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- use Spanish conversational skills in a variety of medical settings.
- listen to and pronounce words in Spanish that focus primarily on medical terminology.
- communicate information, ask questions and discuss physical symptoms with some grammar provided.
- gain sensitivity and understanding of the Spanish-speaking cultures as well as how to best approach Spanish-speaking patients.

CSERV 2042 Medical Spanish: Part 3

Units: 0
Prerequisite: None.
Catalog Date: June 1, 2020

This course is designed to help community members and people who are interested in helping the sick by providing the following: Medical Spanish Terminology and phrases for non-native speakers of Spanish wishing to enhance their ability to communicate with their Spanish-speaking patients, as well as for native speakers of Spanish wishing to broaden their use of medical terminology in order to be able to communicate more effectively with their family members in a variety of health settings. Emphasizes oral communication in a variety of medical settings by focusing on vocabulary and phrases used at medical centers and hospitals. Some prior knowledge of Spanish, along with the ability to converse in both the present and the past, recommended.

*Provider Approved by the Board of Registered Nursing for 32 Contact Hours per 8-week course. Provider #CEP15540.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- use Spanish conversational skills in a variety of medical settings.
• listen to and pronounce words in Spanish that focus primarily on medical terminology.
• communicate information, ask questions and discuss physical symptoms with some grammar provided.
• gain sensitivity and understanding of the Spanish-speaking cultures as well as how to best approach Spanish-speaking patients.

CSERV 2043 Medical Spanish: Part 4

Units: 0
Prerequisite: None.
Catalog Date: June 1, 2020

This course is designed to help community members and people who are interested in helping the sick by providing the following: Medical Spanish Terminology and phrases for non-native speakers of Spanish wishing to enhance their ability to communicate with their Spanish-speaking patients, as well as for native speakers of Spanish wishing to broaden their use of medical terminology in order to be able to communicate more effectively with their family members in a variety of health settings. Emphasizes oral communication in a variety of medical settings by focusing on different health problems current to society. Some prior knowledge of Spanish with the ability to converse in the present, past and future recommended. *Provider Approved by the Board of Registered Nursing for 32 Contact Hours per 8-week course. Provider #CEP15540.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• use Spanish conversational skills in a variety of medical settings.
• listen to and pronounce words in Spanish that focus primarily on medical terminology.
• communicate information, ask questions and discuss physical symptoms with some grammar provided.
• gain sensitivity and understanding of the Spanish-speaking cultures as well as how to best approach Spanish-speaking patients.

CSERV 2080 BAR A-6 Alternative - Electrical and Electronic Systems Training

Units: 0
Prerequisite: None.
Catalog Date: June 1, 2020

This course is an intensive Bureau of Automotive Repair-approved review of automotive electrical/electronic systems. It partially satisfies the ASE certification requirement when applying for a Smog Check technician license.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• test electrical circuits and faults.
• diagnose electrical problems using analog and digital meters and logic probes.
• define faults using test equipment.
• interpret electrical wiring diagrams and their role in troubleshooting.
• solve problems related to circuit resistance.
• evaluate effect of circuit resistance on temperature and driveability.

CSERV 2081 BAR A-8 Alternative - Engine Performance Systems

Units: 0
Prerequisite: None.
Catalog Date: June 1, 2020

This course is an intensive Bureau of Automotive Repair-approved review of automotive engine performance systems. It partially satisfies ASE certification requirement when applying for a Smog Check technician license.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- apply organized troubleshooting techniques
- test ignition systems with oscilloscopes
- diagnose fuel metering systems
- diagnose engine mechanical problems
- use four-gas analyzers for emissions diagnostics

CSERV 2082 BAR Approved L-1 Alternative

Units: 0
Prerequisite: None.
Catalog Date: June 1, 2020

This course is preparation for the Bureau of Automotive Repair (BAR) – approved Advanced Engine Performance Exam. Topics covered include Power Train Diagnosis, Computer Control Diagnostics, Ignition System Diagnostics, Fuel and Air Induction Diagnostics, Emission Control Diagnostics, and I/M Failure Diagnosis. The BAR L-1 Alternative test is administered at the end of the class.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain diagnostic principles of Advanced Engine Performance
- diagnose engine control systems
- analyze engine control failures
- analyze and troubleshoot internal engine failures and their effect on engine exhaust systems

CSERV 2083 Bureau of Automotive Repair Emissions Update

Units: 0
Prerequisite: None.
Catalog Date: June 1, 2020

This course is required for all licensed smog technicians who need to meet California emissions control smog license renewal standards.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- perform pre-inspection and final inspection procedures.
- identify vehicles requiring special testing procedures
- apply the current rules and regulations in performing a Smog Check inspection
- use current state-of-the-art diagnostic equipment.
- evaluate catalytic converter test results.
- analyze the Smog Check vehicle inspection report and apply appropriate diagnostic techniques.

CSERV 2087 California Council on Diesel Education and Technology 1 (CCDET 1)

Units: 0
Prerequisite: None.
Catalog Date: June 1, 2020

This course is offered to individuals who have received emissions code violations. It covers the California Council on Diesel Education and Technology, or CCDET requirements for Heavy Duty Vehicle Inspection and Periodic Smoke Detection Programs. Topics include common causes of high diesel smoke levels and smoke
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Address causes of excess smoke.
- Demonstrate test procedures as they relate to smoke emissions.
- Demonstrate test procedures as they relate to opacity testing.

CSERV 2089 California Council on Diesel Education and Technology 2 (CCDET 2)

Units: 0
Prerequisite: None.
Catalog Date: June 1, 2020

This course is offered to individuals who have received emissions code violations. It covers the California Council on Diesel Education and Technology, or CCDET requirements for After-treatment and Maintenance as it applies to Diesel exhaust. Topics include strategies to reduce diesel particulate matter and Heavy Duty Diesel Engine certification standards.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Describe new heavy-duty diesel engine certification standards.
- Demonstrate diesel particulate reduction strategies.
- Demonstrate proper application of sensor technology as it applies to emissions standards.
Associate Degrees

A.S. in CIS: Computer Networking Management

This degree covers network administration technologies, techniques, and the hardware and software used in today's business/enterprise networking environment. Major topics covered include installation, configuration, and troubleshooting of network operating systems. The degree stresses the knowledge and skills required for the day-to-day operation, business aspects, security and management of computer networks. This degree has three distinct concentrations with specific courses for each concentration track:

1. Microsoft Windows networking concentration, focusing on preparing for the Microsoft Certified Systems Engineer (MCSE) and/or the Microsoft Certified Systems Administrator (MCSA) certification.
2. Linux/Unix networking concentration, focusing on preparing for the administration of commercial Linux/Unix servers and network environments.
3. Cisco router and network administration concentration, which covers all the objectives of the Cisco Certified Network Associate (CCNA) certification exam.

Catalog Date: June 1, 2020

Degree Requirements

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<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
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<tbody>
<tr>
<td>BUS 310</td>
<td>Business Communications (3)</td>
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<td>College Composition (3)</td>
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<td>or ESLW 340</td>
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<td>CISC 320</td>
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<td>CISC 323</td>
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<td>Microcomputer Support Essentials - Preparation for A+ Certification</td>
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<td>CISS 310</td>
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Subtotal Units: 14 - 15

CISCO Concentration

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<td>Networking Technologies - Preparation for N+ Certification (2)</td>
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<td>or CISN 119</td>
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<td>CISN 111</td>
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<td>CISN 119</td>
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<td>CISN 120</td>
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<td>CISN 121</td>
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<td>CISN 122</td>
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The CIS: Computer Networking Management Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- **WINDOWS CONCENTRATION:**
  - install, configure, monitor, manage, backup, and customize a Microsoft server.
  - design, construct and apply group policies and NTFS file system permissions to secure files and network resources.
  - design, construct and troubleshoot a Microsoft Active Directory network using Microsoft workstation and server operating systems.

- ** CISCO CONCENTRATION:**
  - design, evaluate, construct and implement a routed IP network using industry standard routing protocols and routing equipment, in a wired or wireless configuration.
  - design, evaluate, construct and implement a multilayer switching network using switching protocols, such as Ethernet, in a wired or wireless configuration.
  - design, install and test Wide Area Network (WAN) connectivity solutions.
  - design and evaluate basic security and access solutions in a switched or routed LAN or WAN.
  - design, evaluate, specify, and install various types of network media.

- **LINUX/UNIX CONCENTRATION:**
  - install, configure, monitor, manage, backup, and customize a Linux server.
  - design, evaluate and implement and troubleshoot typical Linux server services in the areas of user accounts and security, printing, web server, telnet server, firewall, email server, domain name service, dynamic host configuration protocol, network file system, and Microsoft Windows compatibility.

Career Information

This degree is designed for career/technical students who plan to enter the work force as well as working IT professionals that wish to upgrade their skills. Typical careers a student could expect to pursue include network technical support staff, network administrators, network designers, network systems engineer, network troubleshooters, and information systems security specialists.

A.S. in CIS: Computer Programming

This degree includes general topics in the field of computer programming as well as focused topics related to one commonly used programming language. General topics include the use of an operating system, and the translation of a problem statement into a generic program solution. Programming language-specific topics include syntax, program structuring, language constructs and proper programming methods.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>CISC 310</td>
<td>Introduction to Computer Information Science</td>
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<tr>
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C++ concentration

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<tbody>
<tr>
<td>[ CISP 300</td>
<td>Algorithm Design/Problem Solving (3)</td>
<td>5 - 7</td>
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<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
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<td>-------------</td>
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<tr>
<td>CISP 360</td>
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Java concentration

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<tr>
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<td>Algorithm Design/Problem Solving (3)</td>
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<tr>
<td>and CISP 360</td>
<td>Introduction to Structured Programming (4)</td>
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<td>or CISP 480</td>
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<tr>
<td>CISC 320</td>
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<td>CISC 323</td>
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<td>CISC 324</td>
<td>Intermediate Linux Operating System (1)</td>
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<tr>
<td>CISP 310</td>
<td>Assembly Language Programming for Microcomputers (4)</td>
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<td>CISP 362</td>
<td>Programming for Mobile Devices I (4)</td>
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Visual Basic concentration

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<th>UNITS</th>
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<tbody>
<tr>
<td>CISA 322</td>
<td>Design and Development of Desktop Database Applications</td>
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<tr>
<td>CISP 300</td>
<td>Algorithm Design/Problem Solving</td>
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<tr>
<td>CISP 370</td>
<td>Beginning Visual Basic</td>
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<td>CISP 371</td>
<td>Intermediate Visual Basic</td>
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</table>

The CIS: Computer Programming Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- describe how programming relates to the development of an information system.
• develop programs using the top-down method.
• apply structured programming techniques.
• translate a detailed design document into a computer programming language solution.
• verify the syntactic correctness of a program.
• verify the logical correctness of a program.
• analyze the behavior of a program and locate defects.

Career Information

Upon completion of the computer programming degree, a student meets the minimum qualifications as an entry-level programmer/developer.

A.S. in CIS: Database Management

The CIS: Database Management degree focuses on relational database technology used in the business environment. The emphasis is on selecting the appropriate system platform for database deployment. Course work includes database system design and programming for desktop, enterprise and Internet platforms, structure query language (SQL) programming, introductory principles of modular programming, system design and problem solving, desktop operating systems, electronic spreadsheets and a variety of introductory business courses.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>ACCT 101</td>
<td>Fundamentals of College Accounting (3)</td>
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<td>or ACCT 301</td>
<td>Financial Accounting (4)</td>
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<tr>
<td>BUS 110</td>
<td>Business Economics (3)</td>
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<tr>
<td>or ECON 302</td>
<td>Principles of Macroeconomics (3)</td>
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<tr>
<td>BUS 300</td>
<td>Introduction to Business</td>
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<td>BUS 310</td>
<td>Business Communications (3)</td>
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<tr>
<td>or ENGWR 300</td>
<td>College Composition (3)</td>
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<td>CISA 315</td>
<td>Introduction to Electronic Spreadsheets</td>
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<td>CISA 320</td>
<td>Introduction to Database Management</td>
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<td>CISA 322</td>
<td>Design and Development of Desktop Database Applications</td>
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<td>CISC 310</td>
<td>Introduction to Computer Information Science</td>
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<tr>
<td>CISC 320</td>
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<td>CISP 350</td>
<td>Database Programming</td>
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<td>CISP 370</td>
<td>Beginning Visual Basic</td>
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<tr>
<td>CISW 300</td>
<td>Web Publishing</td>
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<td>CISW 410</td>
<td>Middleware Web Scripting</td>
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</table>

The CIS: Database Management Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

• describe relational database technologies for desktop, enterprise and Internet platforms.
• explain and discuss database theory and principles.
• employ relational database technologies for either desktop, enterprise and Internet platforms to solve common business problems using standard database principles and practices.
• assess and document information system requirements.
• employ modular programming concepts in program development.
• design and code elementary programs encountered in business and government.
• identify interactive web publishing situations requiring database solutions.
• create interactive web database.
• analyze practical business problems and utilize critical thinking in the determination of alternative solutions.
• apply communication theory, effective writing techniques, and interpersonal communication skills to business situations.
• analyze and explain the nature and purpose of accounting and its function in business.

A.A. in CIS: Microcomputer Applications

This degree focuses on the use of the microcomputer and current, commonly used software to solve problems in a business environment. Course work includes microcomputer applications in database management, desktop publishing, electronic spreadsheets, presentation graphics, operating systems, word processing, and at least one programming language.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>BUSTEC 300.1</td>
<td>Keyboarding/Applications: Beginning</td>
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<td>CISA 126</td>
<td>Outlook: Basics (1)</td>
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<td>Outlook: Basics (1)</td>
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<td>CISA 127</td>
<td>Outlook: Tools (1)</td>
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<td>or BUSTEC 127</td>
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<td>CISA 305</td>
<td>Beginning Word Processing</td>
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<td>CISA 306</td>
<td>Intermediate Word Processing</td>
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<tr>
<td>CISA 315</td>
<td>Introduction to Electronic Spreadsheets</td>
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<td>CISA 316</td>
<td>Intermediate Electronic Spreadsheets</td>
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<tr>
<td>CISA 320</td>
<td>Introduction to Database Management</td>
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<td>CISA 322</td>
<td>Design and Development of Desktop Database Applications</td>
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</tr>
<tr>
<td>CISA 330</td>
<td>Desktop Publishing</td>
<td>2</td>
</tr>
<tr>
<td>CISA 340</td>
<td>Presentation Graphics</td>
<td>2</td>
</tr>
<tr>
<td>CISC 306</td>
<td>Introduction to Web Page Creation</td>
<td>1</td>
</tr>
<tr>
<td>CISC 310</td>
<td>Introduction to Computer Information Science</td>
<td>3</td>
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<tr>
<td>CISC 320</td>
<td>Operating Systems</td>
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<td>CISC 323</td>
<td>Linux Operating System</td>
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<td>BUSTEC 313</td>
<td>Web-based Conferencing and Presentations for the Business Professional (2)</td>
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<tr>
<td>CISA 160</td>
<td>Project Management Techniques and Software (3)</td>
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<tr>
<td>CISA 171</td>
<td>Introduction to Adobe Acrobat (1)</td>
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</table>
COURSE CODE | COURSE TITLE | UNITS
--- | --- | ---
CISC 350 | Introduction to Data Communications (1) | 
CISC 351 | Introduction to Local Area Networks (1) | 
CISS 315 | Ethical Hacking (3) | 
CISW 300 | Web Publishing (3) | 

A minimum of 3 units from the following: 3

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<th>UNITS</th>
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<tbody>
<tr>
<td>ACCT 343</td>
<td>Computer Spreadsheet Applications for Accounting (2)</td>
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<td>CISA 331</td>
<td>Intermediate Desktop Publishing (2)</td>
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<td>CISC 305</td>
<td>Introduction to the Internet (1)</td>
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<td>CISP 350</td>
<td>Database Programming (3)</td>
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<td>CISP 360</td>
<td>Introduction to Structured Programming (4)</td>
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<td>CISP 371</td>
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<td>CISP 480</td>
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<td>CISS 300</td>
<td>Introduction to Information Systems Security (1)</td>
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<tr>
<td>CISW 370</td>
<td>Designing Accessible Websites (1)</td>
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Total Units: 37

The CIS: Microcomputer Applications Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- design and manage database tables, queries and forms.
- produce reports for use in a typical business environment.
- evaluate the basic computing needs of a business by developing associated documentation and presentations.
- create spreadsheet formulas and manipulate business data.
- compose and format typical business communications documents according to industry standards.
- combine data from different software applications into one document.
- compose simple computer programs using basic logic.
- apply file management techniques in organizing computer data.

A.S. in CIS: PC Support Management

The CIS: PC Support Management degree covers the use and maintenance of a microcomputer’s hardware, software and network connections in today’s business environment. Course work includes learning basic computer skills in configuration, use, and troubleshooting major hardware components, different operating systems, and applications in a standalone and network environment. Additionally, the degree introduces basic business and project management skills. This program covers all the objectives of the Computing Technology Industry Association (CompTIA) A+ certification exam.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
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<th>COURSE TITLE</th>
<th>UNITS</th>
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<tr>
<td>BUS 300</td>
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<td>Business Communications</td>
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<td>CISA 160</td>
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<td>UNITS</td>
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<td>Introduction to Data Communications</td>
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<td>CISC 351</td>
<td>Introduction to Local Area Networks</td>
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<td>CISC 361</td>
<td>Microcomputer Support Essentials - Preparation for A+ Certification</td>
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<td>Microcomputer and Applications Support</td>
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<td>Microcomputer Support Technical - Preparation for A+ Certification</td>
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<td>CISS 315</td>
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<td>Beginning Word Processing (2)</td>
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<td>CISA 320</td>
<td>Introduction to Database Management (1)</td>
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<tr>
<td>CISA 340</td>
<td>Presentation Graphics (2)</td>
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<tr>
<td>CISC 306</td>
<td>Introduction to Web Page Creation (1)</td>
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<tr>
<td>CISC 323</td>
<td>Linux Operating System (1)</td>
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<tr>
<td>Total Units:</td>
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</tbody>
</table>

1Taken on the Windows operating system.

The CIS: PC Support Management Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- Identify the names, purpose, and characteristics of system components.
- Evaluate and demonstrate basic procedures for adding and removing field replaceable components for desktop computers.
- Analyze and demonstrate the installation and troubleshooting of current operating systems, applications and basic networking technology used in industry.
- Formulate back-up, recovery, and system protection plans for the operating system in a network environment.
- Develop proficiency in customer service skills to effectively diagnose and communicate microcomputer software and hardware-related problems and solutions at the user level.
- Demonstrate the techniques to manage a project, control costs, and schedule resources employing management software.
- Recognize within the information technology (IT) field the diverse business environment associated with support issues.
- Configure and implement data security methods for protecting computers and networks from unauthorized access.

**A.S. in Computer Science**

This degree provides a comprehensive exposure to programming languages, algorithms and problem solving in preparation for upper division computer science courses. The Computer Science degree includes substantial course work in mathematics required by most university computer science programs.

Catalog Date: June 1, 2020
Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tbody>
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<td>CISP 300</td>
<td>Algorithm Design/Problem Solving (3)</td>
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</tr>
<tr>
<td>and CISP 360</td>
<td>Introduction to Structured Programming (4)</td>
<td>5 - 7</td>
</tr>
<tr>
<td>or CISP 480</td>
<td>Honors Introduction to Structured Programming (5)</td>
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</tr>
<tr>
<td>CISP 310</td>
<td>Assembly Language Programming for Microcomputers</td>
<td>4</td>
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<tr>
<td>CISP 400</td>
<td>Object Oriented Programming with C++</td>
<td>4</td>
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<tr>
<td>CISP 430</td>
<td>Data Structures</td>
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<td>CISP 440</td>
<td>Discrete Structures for Computer Science</td>
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</table>

The Computer Science Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- evaluate various programming language solutions to a proposed problem.
- recommend tools and techniques for each step in the development of a computer program.
- integrate the basic mathematical knowledge that is fundamental to computer science into the solutions of proposed problems.
- evaluate the theories and core techniques of computer science using scientific methods.

A.S. in Cybersecurity and Information Assurance

This program prepares IT professionals to apply knowledge and experience in network security, risk management, intrusion detection, remediation, and digital forensics to safeguard infrastructure and secure data and business operations. Courses deliver proven methods for information security using software analysis techniques, web engineering, cloud management, and networking strategies to prevent, detect, and mitigate cyberattacks. This program also provides preparation for several nationally recognized, high demand certifications in the field of Cybersecurity.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
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<td>CISN 140</td>
<td>CISCO Networking Academy (CCNA)tm: Networking Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>CISN 141</td>
<td>CISCO Networking Academy (CCNA)tm: Routing Protocols and Concepts</td>
<td>3</td>
</tr>
<tr>
<td>CISN 300</td>
<td>Network Systems Administration (3)</td>
<td>3</td>
</tr>
<tr>
<td>CISS 310</td>
<td>Network Security Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>CISS 315</td>
<td>Ethical Hacking</td>
<td>3</td>
</tr>
<tr>
<td>CISS 316</td>
<td>Cisco Networking Academy™: CCNA Cybersecurity Operations</td>
<td>3</td>
</tr>
<tr>
<td>CISS 321</td>
<td>Scripting for Cyber Security</td>
<td>3</td>
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<td>CISS 330</td>
<td>Implementing Internet Security and Firewalls</td>
<td>3</td>
</tr>
<tr>
<td>CISS 350</td>
<td>Disaster Recovery</td>
<td>3</td>
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</table>
The Cybersecurity and Information Assurance Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- define best practices for configuring cyber defense and countermeasures.
- design organizational plans for securing data and while maintaining the confidentiality, integrity, and availability (CIA) of the information transmitted over communication networks.
- explain how security principles and cyber defense concepts impact organizational policies and practices.
- analyze security risks mitigation processes to identify, evaluate, prioritize, and prevent potential security threats.
- critique plans to secure and manage physical and virtual infrastructures for legal and secure cloud operations.
- outline legal issues that should be included within the security awareness training and education program of an organization.
- analyze applicable laws and policies to legally protect the organization against security incident.
- determine how to address vulnerabilities and threats in cellular and mobile network technologies.
- prioritize and establish a disaster recovery plan for the enterprise.
- develop security incident response plans that align to an organization’s security goals and objectives and maintain business continuity.

Career Information


A.A. in Technical Communications

This is an interdisciplinary course of study designed to prepare students for employment as professional writers and communicators in a variety of media intended to instruct and inform audiences. The degree program includes substantial course work in writing, information design, editing, page design, online help development, web site creation, and the use of industry standard applications.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 100</td>
<td>English for the Professional</td>
<td>3</td>
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<tr>
<td>CISA 305</td>
<td>Beginning Word Processing</td>
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<tr>
<td>CISW 300</td>
<td>Web Publishing</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 300</td>
<td>Newswriting and Reporting</td>
<td>3</td>
</tr>
<tr>
<td>TECCOM 300</td>
<td>Introduction to Technical/Professional Communication</td>
<td>3</td>
</tr>
<tr>
<td>TECCOM 310</td>
<td>Technical/Professional Communication: Writing Reports</td>
<td>3</td>
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<tr>
<td>TECCOM 320</td>
<td>Technical/Professional Communication: Proposal Writing</td>
<td>3</td>
</tr>
<tr>
<td>TECCOM 330</td>
<td>Technical/Professional Communication: Writing Technical Manuals</td>
<td>3</td>
</tr>
<tr>
<td>TECCOM 340</td>
<td>Technical/Professional Communication: Developing Help Systems</td>
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A minimum of 12 units from the following:

<table>
<thead>
<tr>
<th>COURSE CODE</th>
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<tbody>
<tr>
<td>ARTNM 328</td>
<td>Beginning Digital Photo Imagery (3)</td>
</tr>
<tr>
<td>ARTNM 330</td>
<td>Intermediate Digital Photo Imagery (3)</td>
</tr>
<tr>
<td>ARTNM 352</td>
<td>Design for Publication (3)</td>
</tr>
<tr>
<td>CISA 331</td>
<td>Intermediate Desktop Publishing (2)</td>
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</tbody>
</table>
The Technical Communications Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- analyze audience information needs and propose solutions to aid the audience.
- design technical communication solutions for a variety of industry and government purposes.
- design and create web sites and help systems with effective visual design, navigation, and written content.
- design and publish printed pages with effective design, organization, content, and indexing.
- compose professional prose for a variety of audiences with a variety of purposes.
- compose and edit professional documents in grammatically correct, concise English.
- create and use style templates in a variety of industry standard software.

Career Information

Technical communicators may be employed in a variety of occupations in government, scientific firms, nonprofits, natural resources, finance, education, and high tech.

Certificates of Achievement

CIS: Computer Networking Management Certificate

The CIS: Computer Networking Management certificate provides instruction for entry-level and IT professionals aiming for skill enhancement on the specific knowledge and skills required to master one of three industry standard network technologies:

- Microsoft Windows networking concentration, focusing on preparing for the Microsoft Certified Systems Engineer (MCSE) and/or the Microsoft Certified Systems Administrator (MCSA) certification.
- Linux/Unix networking concentration, focusing on preparing for the administration of commercial Linux/Unix servers and network environments.
- Cisco router and network administration concentration, which covers all the objectives of the Cisco Certified Network Associate (CCNA) certification exam.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>CISC 323</td>
<td>Linux Operating System</td>
<td>1</td>
</tr>
<tr>
<td>CISC 350</td>
<td>Introduction to Data Communications</td>
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<tr>
<td>CISC 361</td>
<td>Microcomputer Support Essentials - Preparation for A+ Certification</td>
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<tr>
<td>CISS 310</td>
<td>Network Security Fundamentals</td>
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CISCO Concentration
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<tr>
<td>CISC 324</td>
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<tr>
<td>CISN 140</td>
<td>CISCO Networking Academy (CCNA)tm: Networking Fundamentals</td>
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<tr>
<td>CISN 141</td>
<td>CISCO Networking Academy (CCNA)tm: Routing Protocols and Concepts</td>
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<td>CISN 142</td>
<td>CISCO Networking Academy (CCNA)tm: LAN Switching and Wireless</td>
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<td>CISN 143</td>
<td>CISCO Networking Academy (CCNA)tm: Accessing the Wide Area Network</td>
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**Linux Concentration**

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<tr>
<td>CISC 324</td>
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<tr>
<td>CISN 110</td>
<td>Networking Technologies - Preparation for N+ Certification</td>
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<td>CISN 111</td>
<td>Intermediate Networking Technologies</td>
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<tr>
<td>CISN 119</td>
<td>TCP/IP Protocols</td>
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<td>CISN 120</td>
<td>Beginning Network Administration with Linux</td>
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<td>CISN 121</td>
<td>Network Administration with Linux: LAN Services</td>
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<td>CISN 122</td>
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**Windows Concentration**

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<td>CISN 111</td>
<td>Intermediate Networking Technologies</td>
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<tr>
<td>CISN 300</td>
<td>Network Systems Administration</td>
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<td>CISN 302</td>
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<td>CISN 307</td>
<td>Windows Active Directory Services</td>
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**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- demonstrate competency in basic Microsoft Windows and Linux operating system terminology, command line interface commands, account management, and file management and storage.
• define networking terminology, protocols, industry standard models, and best practices for configuring network operating system services.
• configure and implement basic data security methods for protecting servers, workstations and networks from unauthorized access.
• evaluate and demonstrate basic procedures for troubleshooting and replacing field replaceable components in microcomputers.
• implement, evaluate and troubleshoot a transmission control protocol/internet protocol (TCP/IP) addressing scheme.
• define, implement, evaluate and troubleshoot the most common utilities and protocols of the TCP/IP suite.

CISCO CONCENTRATION:
• design, evaluate, construct and implement a routed network using TCP/IP and industry standard routing protocols and state of the technology routing equipment, in a wired or wireless configuration.
• design, evaluate, construct and implement a multilayer switching network using switching protocols, such as Ethernet, in a wired or wireless configuration.
• design, install and test Wide Area Network (WAN) connectivity solutions.
• design and evaluate basic security and access solutions in a switched or routed LAN or WAN.
• evaluate, specify, and install various types of network media.

LINUX/UNIX CONCENTRATION:
• install, configure, monitor, manage, backup, and customize a Linux server.
• design, evaluate and implement and troubleshoot typical Linux server services in the areas of user accounts and security, printing, web server, telnet server, firewall, email server, domain name service, dynamic host configuration protocol, network file system, and Microsoft Windows compatibility.

WINDOWS CONCENTRATION:
• install, configure, monitor, manage, backup, and customize a Microsoft Windows server.
• design, construct and apply group policies and NTFS file system permissions to secure files and network resources.
• design, construct and troubleshoot a Microsoft Active Directory network using Microsoft workstation and server operating systems.

CIS: Computer Programming Certificate

This certificate includes general topics in the field of computer programming as well as focused topics related to one commonly used programming language. General topics include the use of an operating system, and the translation of a problem statement into a generic program solution. Programming language-specific topics include syntax, program structuring, language constructs and proper programming methods.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>CISC 310</td>
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<tr>
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C++ concentration

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<th>UNITS</th>
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<tbody>
<tr>
<td>[ CISP 300</td>
<td>Algorithm Design/Problem Solving (3)</td>
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<tr>
<td>and CISP 360]</td>
<td>Introduction to Structured Programming (4)</td>
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<td>Honors Introduction to Structured Programming (5)</td>
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<td>CISP 400</td>
<td>Object Oriented Programming with C++</td>
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<td>CISP 430</td>
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### C++ concentration

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<tbody>
<tr>
<td>CISC 324</td>
<td>Intermediate Linux Operating System (1)</td>
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<td><strong>Units:</strong></td>
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### Java concentration

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<tbody>
<tr>
<td>[ CISP 300</td>
<td>Algorithm Design/Problem Solving (3)</td>
<td>5 - 7</td>
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<tr>
<td>and CISP 360]</td>
<td>Introduction to Structured Programming (4)</td>
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<tr>
<td>or CISP 480</td>
<td>Honors Introduction to Structured Programming (5)</td>
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<td>CISP 350</td>
<td>Database Programming</td>
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<td>CISP 401</td>
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<td>CISP 310</td>
<td>Assembly Language Programming for Microcomputers (4)</td>
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<td>CISP 362</td>
<td>Programming for Mobile Devices I (4)</td>
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<td>CISP 363</td>
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### Visual Basic concentration

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<th>COURSE TITLE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>CISA 322</td>
<td>Design and Development of Desktop Database Applications</td>
<td>3</td>
</tr>
<tr>
<td>CISP 300</td>
<td>Algorithm Design/Problem Solving</td>
<td>3</td>
</tr>
<tr>
<td>CISP 350</td>
<td>Database Programming</td>
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<tr>
<td>CISP 370</td>
<td>Beginning Visual Basic</td>
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<tr>
<td>CISP 371</td>
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### Student Learning Outcomes

Upon completion of this program, the student will be able to:

- apply techniques of structured programming.
- design programs using object-oriented methodology.
- analyze problems related to computer programming.
- design algorithms to solve problems related to programming.
- develop specifications of an information system based on requirements.
- compare alternative implementations of programmed solutions using a variety of criteria.
- describe how programming fits in the context of the development of an information system.

Career Information

This programming certificate enables people who are already in the information technology or computer fields to develop or supplement their skills with the experience of an additional programming language.

CIS: Database Management Certificate

The CIS: Database Management certificate involves the study of relational database technology used in the business environment. The emphasis is on selecting the appropriate system platform for database deployment. Course work includes database system design and programming for desktop, enterprise and Internet platforms, structure query language (SQL) programming, introductory principles of modular programming, system design and problem solving, desktop operating systems, and electronic spreadsheets.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
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<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
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<tbody>
<tr>
<td>CISA 315</td>
<td>Introduction to Electronic Spreadsheets</td>
<td>2</td>
</tr>
<tr>
<td>CISA 320</td>
<td>Introduction to Database Management</td>
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<td>CISA 322</td>
<td>Design and Development of Desktop Database Applications</td>
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<tr>
<td>CISC 320</td>
<td>Operating Systems</td>
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<td>CISP 300</td>
<td>Algorithm Design/Problem Solving</td>
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</tr>
<tr>
<td>CISP 350</td>
<td>Database Programming</td>
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<tr>
<td>CISP 370</td>
<td>Beginning Visual Basic</td>
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<td>CISW 300</td>
<td>Web Publishing</td>
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<td>CISW 410</td>
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<td><strong>Total Units:</strong></td>
<td><strong>24</strong></td>
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</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- describe relational database technologies for desktop, enterprise and Internet platforms.
- explain and discuss database theory and principles.
- employ relational database technologies for either desktop, enterprise and Internet platforms to solve common business problems using standard database principles and practices.
- assess and document information system requirements.
- employ modular programming concepts in program development.
- design and code elementary programs encountered in business and government.
- identify interactive web publishing situations requiring database solutions.
- create interactive web database applications.

CIS: Microcomputer Applications Certificate

This certificate involves the use of the microcomputer and current, commonly used software to solve problems in a business environment. Course work includes microcomputer applications in database management, desktop publishing, electronic spreadsheets, presentation graphics, operating systems, and word processing.

Career Information

This programming certificate enables people who are already in the information technology or computer fields to develop or supplement their skills with the experience of an additional programming language.
Certificate Requirements

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<td>CISA 305</td>
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<td>Introduction to Electronic Spreadsheets</td>
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<tr>
<td>CISA 320</td>
<td>Introduction to Database Management</td>
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<td>CISA 330</td>
<td>Desktop Publishing</td>
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<tr>
<td>CISA 340</td>
<td>Presentation Graphics</td>
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<tr>
<td>CISC 305</td>
<td>Introduction to the Internet</td>
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<tr>
<td>CISC 310</td>
<td>Introduction to Computer Information Science</td>
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<td>CISC 320</td>
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<td>CISC 306</td>
<td>Introduction to Web Page Creation (1)</td>
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<td>CISC 323</td>
<td>Linux Operating System (1)</td>
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<td>Total Units:</td>
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<td>21</td>
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</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- design and manage database tables, queries and forms.
- produce reports for use in a typical business environment.
- evaluate the basic computing needs of a business by developing associated documentation and presentations.
- create spreadsheet formulas and manipulate business data.
- compose and format typical business communications documents according to industry standards.
- combine data from different software applications into one document.
- apply file management techniques in organizing computer data.

CIS: PC Support Certificate

The CIS: PC Support certificate covers the use and maintenance of a microcomputer’s hardware, software and network connections in today’s business environment. Course work includes basic computer skills in configuration, use, and troubleshooting major hardware components, different operating systems, and applications in a standalone and network environment. This program covers all the objectives of the Computer Technology Industry Associates (CompTIA) A+ certification exam.

Certificate Requirements

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<td>Introduction to Computer Information Science</td>
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### COURSE REQUIREMENTS

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<td>Introduction to Data Communications</td>
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<td>CISC 351</td>
<td>Introduction to Local Area Networks</td>
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<td>CISC 361</td>
<td>Microcomputer Support Essentials - Preparation for A+ Certification</td>
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<td>CISC 362</td>
<td>Microcomputer and Applications Support</td>
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<td>Microcomputer Support Technical - Preparation for A+ Certification</td>
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<td>CISS 315</td>
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<td>BUSTEC 127</td>
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</tr>
<tr>
<td>CISC 306</td>
<td>Introduction to Web Page Creation (1)</td>
<td></td>
</tr>
<tr>
<td>CISC 323</td>
<td>Linux Operating System (1)</td>
<td></td>
</tr>
<tr>
<td>Total Units</td>
<td></td>
<td>26</td>
</tr>
</tbody>
</table>

1Taken on the Windows operating system.

### Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Identify and recognize the names, purpose, and characteristics of system components by sight or definition.
- Evaluate and demonstrate basic procedures for adding and removing field replaceable components for desktop computers.
- Analyze and demonstrate understanding for installation and troubleshooting current operating systems, applications and basic networking technology used in industry.
- Formulate back-up, recovery, and system protection plans for the operating system in a network environment.
- Develop proficiency in customer service skills to effectively diagnose and communicate microcomputer software and hardware-related problems and solutions at the user level.
- Configure and implement data security methods for protecting computers and networks from unauthorized access.

### Computer Information Security Essentials Certificate

This program provides basic cyber operations knowledge of internal and external threats to information assets, compliance requirements, risk management, disaster recovery, and computer forensics. It also provides preparation for the Computing Technology Industry Association (CompTIA) Security+ exam. It is a stackable certificate pathway to the CISS certificate and degree.

Catalog Date: June 1, 2020

### Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISS 310</td>
<td>Network Security Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>CISS 315</td>
<td>Ethical Hacking</td>
<td>3</td>
</tr>
</tbody>
</table>
Student Learning Outcomes

Upon completion of this program, the student will be able to:

- describe the fundamental concepts of the cyber security discipline and use to provide system security.
- identify the Federal, State and Local Cyber Defense partners/structures.
- compare and contrast different types of standards including: laws, regulations, policies, voluntary, and framework-based standards.
- assess the impact of legal/regulatory standards on a given system.
- discuss the rules, laws, policies, and procedures that affect digital forensics.
- describe the steps in performing digital forensics from the initial recognition of an incident through the steps of evidence gathering, preservation and analysis, through the completion of legal proceedings.
- plan, organize, and perform penetration testing on a simple network.
- describe the role of cybersecurity in supporting and encouraging ethics, as well as where cybersecurity practices can cause ethical conflicts.
- evaluate the effectiveness of applications of cybersecurity in preventing crime and abuse.
- assess the effectiveness of a security program.
- develop contingency plans for various size organizations to include: business continuity, disaster recovery and incident response.
- evaluate responsibilities related to the handling of data as it pertains to legal, ethical and/or agency auditing issues.
- evaluate and categorize risk 1) with respect to technology; 2) with respect to individuals, and 3) in the enterprise, and recommend appropriate responses.

Career Information

Cybersecurity Engineer Cyber Operations Planner IT Security Specialist Information Security Analyst IT Privacy Analyst IT Risk Analyst Information Security Auditor

Cybersecurity and Information Assurance Certificate

This certificate prepares IT professionals to apply knowledge and experience in network security, risk management, intrusion detection, remediation, and digital forensics to safeguard infrastructure and secure data and business operations. Courses deliver proven methods for information security using software analysis techniques, web engineering, cloud management, and networking strategies to prevent, detect, and mitigate cyberattacks. This program also provides preparation for several nationally recognized, high demand certifications in the field of Cybersecurity.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISN 140</td>
<td>CISCO Networking Academy (CCNA)tm: Networking Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>CISN 141</td>
<td>CISCO Networking Academy (CCNA)tm: Routing Protocols and Concepts</td>
<td>3</td>
</tr>
<tr>
<td>CISN 300</td>
<td>Network Systems Administration</td>
<td>3</td>
</tr>
<tr>
<td>CISS 310</td>
<td>Network Security Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>CISS 315</td>
<td>Ethical Hacking</td>
<td>3</td>
</tr>
<tr>
<td>CISS 316</td>
<td>Cisco Networking Academy™: CCNA Cybersecurity Operations</td>
<td>3</td>
</tr>
<tr>
<td>CISS 321</td>
<td>Scripting for Cyber Security</td>
<td>3</td>
</tr>
<tr>
<td>CISS 330</td>
<td>Implementing Internet Security and Firewalls</td>
<td>3</td>
</tr>
</tbody>
</table>
Upon completion of this program, the student will be able to:

- define best practices for configuring cyber defense and countermeasures.
- design organizational plans for securing data and while maintaining the confidentiality, integrity, and availability (CIA) of the information transmitted over communication networks.
- explain how security principles and cyber defense concepts impact organizational policies and practices.
- analyze security risks mitigation processes to identify, evaluate, prioritize, and prevent potential security threats.
- critique plans to secure and manage physical and virtual infrastructures for legal and secure cloud operations.
- outline legal issues that should be included within the security awareness training and education program of an organization.
- analyze applicable laws and policies to legally protect the organization against security incidents.
- determine how to address vulnerabilities and threats in cellular and mobile network technologies.
- prioritize and establish a disaster recovery plan for the enterprise.
- develop security incident response plans that align to an organization’s security goals and objectives and maintain business continuity.

Career Information


Internet Marketing Certificate

This certificate offers a program of study for students seeking jobs that require skills in technical marketing applications. It provides opportunities to combine traditional marketing theory with the technical skills needed in today's business environment. Courses address current technology-based business communications, marketing, Internet strategies, applications, and trends.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 310</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>CISA 330</td>
<td>Desktop Publishing</td>
<td>2</td>
</tr>
<tr>
<td>CISA 340</td>
<td>Presentation Graphics</td>
<td>2</td>
</tr>
<tr>
<td>CISA 345</td>
<td>Technical Marketing Applications</td>
<td>2</td>
</tr>
<tr>
<td>CISA 346</td>
<td>Social Media Applications</td>
<td>1</td>
</tr>
<tr>
<td>CISW 350</td>
<td>Imaging for the Web</td>
<td>1</td>
</tr>
<tr>
<td>MKT 330</td>
<td>Internet Marketing</td>
<td>3</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>14</td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:
- identify and create effective Internet marketing strategies that enhance business relationships with present and future customers.
- apply communication theory, effective writing techniques, and presentation skills to business situations.
- utilize software applications designed to present and promote business in print and visual media.
- devise a marketing plan using social media applications and content platforms for marketing both small and large businesses.
- analyze various software applications for Search Engine Optimization (SEO), analytic tools, web-building and blog applications, email marketing, and other technical marketing tools.

Career Information

Career opportunities include titles such as social media administrator, digital marketing director, campaign specialist, marketing/events coordinator, media marketing, social media squad, Internet marketing communications, and communications and social media coordinator.

Network Administration Essentials - Windows Certificate

This program provides the information and skills necessary for network administration professionals to administer a Windows Active Directory domain-based enterprise network. It also provides preparation for several Microsoft Certified Systems Engineer (MCSE) certification exams.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISN 300</td>
<td>Network Systems Administration</td>
<td>3</td>
</tr>
<tr>
<td>CISN 302</td>
<td>Intermediate Network Systems Administration</td>
<td>3</td>
</tr>
<tr>
<td>CISN 307</td>
<td>Windows Active Directory Services</td>
<td>3</td>
</tr>
<tr>
<td>CISN 308</td>
<td>Internetworking with TCP/IP</td>
<td>3</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>12</td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Define best practices for configuring network operating system services.
- Construct and apply group policy settings at the Organizational Unit (OU), domain, site or local machine level.
- Apply Windows group policy and NTFS file system permissions to secure the workstations, the internal network and shared resources.

Technical Communications Certificate

This certificate offers an interdisciplinary program of courses in Technical Communications, Art/New Media, and Computer Information Systems to prepare students for a variety of technical writing and professional communication careers. The certificate includes the theory, writing skills, design background, and computer applications knowledge needed for jobs in technical communication.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTNM 352</td>
<td>Design for Publication (3)</td>
<td>2 - 3</td>
</tr>
<tr>
<td>or CISA 330</td>
<td>Desktop Publishing (2)</td>
<td></td>
</tr>
<tr>
<td>CISA 305</td>
<td>Beginning Word Processing (2)</td>
<td>2 - 3</td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------</td>
<td>-------</td>
</tr>
<tr>
<td>or BUSTEC 310</td>
<td>Introduction to Word/Information Processing</td>
<td>3</td>
</tr>
<tr>
<td>CISW 300</td>
<td>Web Publishing</td>
<td>3</td>
</tr>
<tr>
<td>TECCOM 300</td>
<td>Introduction to Technical/Professional Communication</td>
<td>3</td>
</tr>
<tr>
<td>TECCOM 310</td>
<td>Writing Digital Content</td>
<td>1</td>
</tr>
<tr>
<td>TECCOM 330</td>
<td>Writing Technical Manuals</td>
<td>1</td>
</tr>
</tbody>
</table>

A minimum of 3 units from the following:

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 100</td>
<td>English for the Professional</td>
<td>3</td>
</tr>
<tr>
<td>BUS 310</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>CISW 321</td>
<td>Web Site Development using Dreamweaver</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Units: 15 - 17

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- analyze audience information needs.
- compose concise, clearly written professional documents organized with the audiences' needs in mind.
- design print and online resources that communicate organizations' values, enhance readability, and are easy to use.
- demonstrate basic skills in the use of word processing, page design, and web design applications.
- evaluate organizations' communication goals and needs based on technical writing principles.

**Career Information**

Technical communicators find employment in medical, scientific, high tech, business, university, and government settings. They may write white papers, tutorials, reference and procedure manuals, help systems, user assistance video scripts, grants and proposals, and more.

**Web Developer Certificate**

This certificate offers a program of study for students seeking jobs in the fields of web-based programming and web application development. It provides opportunities to develop the necessary skills and aptitudes for creating and maintaining interactive, database-driven web applications.

**Certificate Requirements**

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISC 320</td>
<td>Operating Systems</td>
<td>1</td>
</tr>
<tr>
<td>CISC 323</td>
<td>Linux Operating System</td>
<td>1</td>
</tr>
<tr>
<td>CISC 324</td>
<td>Intermediate Linux Operating System</td>
<td>1</td>
</tr>
<tr>
<td>CISP 300</td>
<td>Algorithm Design/Problem Solving</td>
<td>3 - 5</td>
</tr>
<tr>
<td>or CISP 360</td>
<td>Introduction to Structured Programming</td>
<td>4</td>
</tr>
<tr>
<td>or CISP 370</td>
<td>Beginning Visual Basic</td>
<td>4</td>
</tr>
<tr>
<td>or CISP 401</td>
<td>Object Oriented Programming with Java</td>
<td>4</td>
</tr>
<tr>
<td>or CISP 480</td>
<td>Honors Introduction to Structured Programming</td>
<td>5</td>
</tr>
<tr>
<td>CISP 350</td>
<td>Database Programming</td>
<td>3</td>
</tr>
<tr>
<td>CISW 300</td>
<td>Web Publishing</td>
<td>3</td>
</tr>
<tr>
<td>CISW 310</td>
<td>Advanced Web Publishing</td>
<td>3 - 4</td>
</tr>
</tbody>
</table>
### Student Learning Outcomes

Upon completion of this program, the student will be able to:

- analyze how an interactive web application is developed using static web pages, forms, client-side scripts, server-side scripts, subroutine or class libraries, and relational databases.
- evaluate informational or business needs that could benefit from a web application and design an appropriate web application that address those needs.
- create and debug scripts in at least one client-side and at least one server-side scripting language.
- construct embedded Structured Query Language (SQL) commands to access, display, modify, add, and delete information via a web application.
- integrate graphic principles and programming functionality with a web application.
- demonstrate basic use of both Linux and Windows Operating System command-line interface.
- devise or choose efficient algorithms for the solution of problems using the control structures of structured programming.
- design software using object-oriented methods to develop event driven programs for both applets and applications.

### Web Publishing Certificate

This certificate offers a program of study for students seeking jobs in the fields of web publishing, design, and development. It provides opportunities to develop the necessary skills for creating and maintaining large web sites for industry, government, and nonprofit agencies. General development of web publishing skills, including a thorough grounding in the HyperText Markup Language (HTML), Internet protocols, and web standards, is emphasized.

**Catalog Date:** June 1, 2020

### Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISC 310</td>
<td>Introduction to Computer Information Science</td>
<td>3</td>
</tr>
<tr>
<td>CISC 320</td>
<td>Operating Systems</td>
<td>1</td>
</tr>
<tr>
<td>CISC 323</td>
<td>Linux Operating System</td>
<td>1</td>
</tr>
<tr>
<td>CISC 300</td>
<td>Web Publishing</td>
<td>3</td>
</tr>
<tr>
<td>CISC 304</td>
<td>Cascading Style Sheets</td>
<td>2</td>
</tr>
<tr>
<td>CISC 350</td>
<td>Imaging for the Web</td>
<td>1</td>
</tr>
<tr>
<td>CISC 370</td>
<td>Designing Accessible Websites</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>A minimum of 4 units from the following:</td>
<td>4</td>
</tr>
<tr>
<td>CISC 310</td>
<td>Advanced Web Publishing (4)</td>
<td></td>
</tr>
<tr>
<td>CISC 400</td>
<td>Client-side Web Scripting (4)</td>
<td></td>
</tr>
</tbody>
</table>
Student Learning Outcomes

Upon completion of this program, the student will be able to:

- research the differences in goals, techniques, and costs between traditional print publishing and web publishing.
- create a functional web site using HyperText Markup Language (HTML) and Cascading Style Sheets (CSS).
- incorporate dynamic and interactive features into a web site using client-side or server-side scripting.
- evaluate web accessibility issues when designing web sites.
- integrate graphic principles and programming functionality with a web application.
- demonstrate basic use of both Linux and Microsoft Windows operating system commands.

Certificate

CIS: Mobile Programming Certificate

This certificate offers a program of study for students seeking jobs in the fields of mobile application development. It provides opportunities to develop the necessary skills and aptitudes for designing, developing, and testing a variety of application programs for mobile devices.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISP 300</td>
<td>Algorithm Design/Problem Solving (3)</td>
<td>3 - 4</td>
</tr>
<tr>
<td>or CISP 370</td>
<td>Beginning Visual Basic (4)</td>
<td></td>
</tr>
<tr>
<td>CISP 362</td>
<td>Programming for Mobile Devices I</td>
<td>4</td>
</tr>
<tr>
<td>CISP 360</td>
<td>Introduction to Structured Programming</td>
<td>4</td>
</tr>
<tr>
<td>CISP 363</td>
<td>Programming for Mobile Devices II</td>
<td>4</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>15 - 16</td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- develop a mobile application program using tools included in a software development kit.
- design software using object-oriented methods to develop event-driven programs for mobile application programs.
- publish mobile applications in an application marketplace.

Career Information
Mobile devices such as tablets and smart phones continue to be more cost effective and versatile. Due to the portability, cost, built-in devices and user-friendliness, mobile devices gain much popularity in end-user and commercial markets. As a result, there is a great demand for developers and software engineers who can write application programs for mobile devices. A developer with this certificate can work as an independent mobile application developer or join a team of developers in software firms that specialize in mobile application development.

Computer Information Science - Applications (CISA)

CISA 126 Outlook: Basics

This course introduces Microsoft Outlook, the industry-leading personal information management software. Topics include understanding and navigating the Outlook environment, creating and sending email, using email special features, managing Outlook contacts, using an electronic calendar, and creating tasks and to-do items.

BUSTEC 126/CISA 126 and BUSTEC 127/CISA 127 taken together are considered sufficient preparation to pass the Microsoft Office Specialist certification for the Microsoft Outlook application and the communications portion of the International Computer Driver's License (ICDL) Module 7: Information and Communication. This course is not open to students who have completed BUSTEC 126.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- send and receive email utilizing the special features of Outlook.
- create and modify contacts in an address book.
- create and organize Outlook calendar items.
- incorporate tasks and to-do items into the personal information management software.
- distinguish between Outlook in an Exchange environment and a stand-alone environment.
- identify the potential risks associated with the use of email.

CISA 127 Outlook: Tools

This course presents the advanced personal information management tools in Outlook. Topics include working with multiple email accounts, using rules and folders, incorporating advanced calendar and contact features, collaborating using sharing and delegate features, and customizing the Outlook user interface. In addition, the course covers the integration of Outlook with other applications in the Microsoft Office suite. Additionally, BUSTEC 126/CISA 126 and BUSTEC 127/CISA 127 taken together are considered sufficient preparation to pass the Microsoft Office Specialist certification for the Microsoft Outlook application and the communications portion of the International Computer Driver's License (ICDL) Module 7: Information and Communication. This course is not open to students who have completed BUSTEC 127.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- incorporate multiple email accounts into Outlook.
- integrate rules and folders into communication management.
- apply Outlook features to find, manage, and archive information.
- collaborate with other Outlook users by using sharing and delegates.
CISA 160 Project Management Techniques and Software

This introductory course covers the responsibilities of a project manager. It includes the knowledge needed to manage a project, control costs, and schedule resources. It also introduces the use of project management software to track project resources, tasks, and milestones. This course is not open to students who have taken MGMT 142.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- construct a basic plan of action utilizing project management software.
- compare and contrast various theories of leadership and motivation.
- explain the principles of project management with regard to case studies.
- demonstrate the ability to formulate a project plan, given specific scenarios.
- assess the inherent advantages and shortcomings in various software packages.

CISA 171 Introduction to Adobe Acrobat

This course introduces Adobe Acrobat tools for creating, editing, reading, and printing Portable Document Format (PDF) documents. Topics include software navigation, converting other file types to PDF, and customizing output quality. Additional topics include modifying PDF files, placing documents on-line, adding digital signatures and security, creating presentations, creating dynamic forms, manipulating graphics, and using Acrobat in a review cycle.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- create and enhance Adobe Portable Document File(s)(PDF).
- convert images, emails and non-PDF file types to a PDF file and evaluate the optimum balance between file size and quality for specific needs.
- formulate a document review cycle, using different levels of document security to limit users' ability to manipulate the contents.
- produce dynamic forms that capture and share information electronically.
- analyze documents for user accessibility and flexibility.
- effectively use Adobe Acrobat Help.
- scan a paper document to a PDF file.

CISA 305 Beginning Word Processing

This course covers the basics of using word processing software. It includes the creation, editing, and printing of documents. It covers the use of features such as font, size, and style, along with the basics of document formatting and page layout. Students will learn how to create, edit, and print documents using the software.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- create and format documents using word processing software.
- use basic features such as font, size, and style.
- use basic formatting options such as bold, italic, and underline.
- use basic page layout features such as margins, columns, and header/footer.
- create, edit, and print documents using word processing software.
- use basic document templates and styles.
- use basic document security and collaboration features.
This course introduces students to fundamental word processing skills and techniques that are essential to global information sharing. It engages students in real-world case studies while demonstrating the entire document production process including creating, editing, and formatting documents. This course culminates with the study of intermediate-level features such as creating tables, working with themes and graphics, and merging multiple documents.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- develop and analyze document requirements.
- create various documents that require the integration of text, charts, and/or graphics for distribution or presentation.
- design strategies for merging and integrating source data from different applications.
- work with multiple documents, templates, as well as techniques for using and editing pre-designed styles from the style gallery.
- analyze appropriate layout and design of documents for specific audiences.
- solve errors in document formatting, layout, unreadable characters, and common error messages.

CISA 306 Intermediate Word Processing

Units: 2  
Hours: 27 hours LEC; 27 hours LAB  
Prerequisite: CISA 305 with a grade of "C" or better  
Transferable: CSU  
Catalog Date: June 1, 2020

This course builds upon previous instruction in the use of a word processing application with an emphasis on advanced information documents and reports. It includes formatting multiple page documents, integrating Word with other programs, advanced graphics, working with templates, building forms, and complex commands. It also covers working with references, building table of contents and figures, and customizing Word.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze document requirements to determine the most efficient page layout and format for multi-column documents that also include graphics.
- develop multipage documents that include section headers and footers, a table of contents, a table of figures, an index, and a citation style.
- manage document styles by explore existing styles, modify built-in styles, create paragraph styles, create character, list, and table styles.
- plan and create online forms and tables for efficient data display and input data into customized forms.
- create references by customizing footnotes, modifying citations and captions, and generating a bibliography.
- develop text for a report that include embedded objects and information and data from another Word file.
- import spreadsheet and database files into word processing applications.
- link and manage linked spreadsheet and database files.
- enhance newsletters and single- or multi-column documents with a variety of graphics, imported clip art and scanned images.
- explore collaboration options such as commenting with a document, tracking changes, managing reviews, and comparing documents.

CISA 308 Exploring Word Processing and Presentation Software

Units: 1  
Hours: 18 hours LEC  
Prerequisite: None.  
Transferable: CSU  
Catalog Date: June 1, 2020

This course introduces word processing and presentation software. The basic features and skills of creating, editing, and formatting documents; inserting tables and graphics, and enhancing word processed documents and presentations are covered.
Upon completion of this course, the student will be able to:

- evaluate efficient techniques in creating and formatting typical business documents
- analyze document requirements and use correct features when creating business documents that require the integration of text, charts, and/or graphics for distribution or presentation
- compare various data manipulation features such as cut/copy/paste, sort, and merge
- choose from among various formatting options such as: margins, headers/footers, and page orientation
- create and format tables for efficient data display utilizing options in table properties
- evaluate and analyze appropriate layout and design for specific audiences
- design a basic presentation

CISA 315 Introduction to Electronic Spreadsheets

Units: 2
Hours: 27 hours LEC; 27 hours LAB
Prerequisite: None.
Advisory: CISC 100 or 300
Transferable: CSU
General Education: AA/AS Area II(b)
Catalog Date: June 1, 2020

This course introduces the basic concepts and applications of an electronic spreadsheet program, including organizing, creating, and modifying a spreadsheet. It presents the basics of entering data in a worksheet using columns and rows, labels, and values; completing worksheet calculations using formulas and functions; and producing professional looking charts. In addition, the course introduces formatting, sorting, querying, and multi-sheet management. It also introduces 3-D cell referencing, financial functions, "Goal Seek," "LOOKUP," "What If," and decision-making.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- navigate to and from storage locations, open and close a spreadsheet application, and recognize window components
- explain spreadsheet software, identify window components, and write labels, values, and simple formulas
- revise cell and worksheet entries, choose worksheet views, and use the auto-summation feature
- create complex formulas and functions, and round a value with a function
- define relative cell reference and absolute cell reference, copy formulas and functions with relative and absolute cell references, and revise relative and absolute cell references formulas and functions
- format all or portions of a worksheet using standard layouts, formats, styles, alignments, and themes
- apply colors, patterns, borders, special number formats, and conditional formatting; as well as renaming and moving worksheets
- apply spreadsheet features such as employing text functions to format data, consolidating data using a formula, using a formula to consolidate data, and identifying and revising errors within formulas
- apply application features such as developing a logical formula with the IF function and the AND function, as well as calculating payments with the PMT function
- plan, design, create, and revise embedded as well as stand-alone charts based on commonly used standards
- perform basic chart tasks such as selecting labels and values, choosing a chart type, and moving and resizing a chart
- perform basic chart tasks such as changing a chart’s design, annotating and drawing on a chart, and inserting images and objects within a chart

CISA 316 Intermediate Electronic Spreadsheets

Units: 2
Hours: 27 hours LEC; 27 hours LAB
Prerequisite: CISA 315 with a grade of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This course introduces the advanced concepts and applications of an electronic spreadsheet program, including organizing, creating, and modifying a spreadsheet. It presents the basics of entering data in a worksheet using columns and rows, labels, and values; completing worksheet calculations using formulas and functions; and producing professional looking charts. In addition, the course introduces formatting, sorting, querying, and multi-sheet management. It also introduces 3-D cell referencing, financial functions, "Goal Seek," "LOOKUP," "What If," and decision-making.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- navigate to and from storage locations, open and close a spreadsheet application, and recognize window components
- explain spreadsheet software, identify window components, and write labels, values, and simple formulas
- revise cell and worksheet entries, choose worksheet views, and use the auto-summation feature
- create complex formulas and functions, and round a value with a function
- define relative cell reference and absolute cell reference, copy formulas and functions with relative and absolute cell references, and revise relative and absolute cell references formulas and functions
- format all or portions of a worksheet using standard layouts, formats, styles, alignments, and themes
- apply colors, patterns, borders, special number formats, and conditional formatting; as well as renaming and moving worksheets
- apply spreadsheet features such as employing text functions to format data, consolidating data using a formula, using a formula to consolidate data, and identifying and revising errors within formulas
- apply application features such as developing a logical formula with the IF function and the AND function, as well as calculating payments with the PMT function
- plan, design, create, and revise embedded as well as stand-alone charts based on commonly used standards
- perform basic chart tasks such as selecting labels and values, choosing a chart type, and moving and resizing a chart
- perform basic chart tasks such as changing a chart’s design, annotating and drawing on a chart, and inserting images and objects within a chart
This course is a continuation of CISA 315 (Introduction to Electronic Spreadsheets) with emphasis on workbook design and integration, template design, use of complex formulas, and built-in financial, logical, and database functions. It also includes look-up tables, the use of worksheet analysis tools, macros, and data integration.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- compile, arrange, and protect worksheets and workbooks, add a worksheet background, group worksheets, and insert hyperlinks.
- confirm custom views of a worksheet and prepare and save a workbook for distribution.
- plan, create, and format a table, add and sort table data, and use a formula in a table.
- locate, revise, and delete table data and distribute a table.
- synthesize a table, create a custom table filter, and filter a table with the advanced filter.
- discover and validate values in a table, extract table data, summarize table data, and create subtotals.
- plan, edit, enable, record, and run a macro.
- use the personal macro workbook, assign a macro to a button, and assign keyboard shortcuts to macros.
- modify a chart, add chart elements and a style, format chart axes, and create a combination chart.
- reorganize a data series, revise a data source, identify data trends, and summarize data with sparklines.
- define what-if analysis, use solver for complex what-if analysis, and use scenario manager to track what-if analysis and generate a summary.
- extend figures using a data table, use goal seek, and use the analysis toolpak to analyze data.

**CISA 318 Exploring Spreadsheet Software**

**Units:** 1  
**Hours:** 18 hours LEC  
**Prerequisite:** None.  
**Transferable:** CSU  
**Catalog Date:** June 1, 2020

This course introduces spreadsheet software. Topics include navigating a spreadsheet, editing and formatting data, using formulas and functions, inserting and formatting charts and graphics, basic database features, and analyzing data.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- plan, build, test, and document worksheets
- create formulas and manipulate data using mathematical operators in addition to financial, statistical, and logical functions
- design spreadsheet formatting using colors, patterns, and borders
- design worksheet entries with relative, mixed, and absolute cell references
- plan and construct various types of charts based on the most effective and appropriate display of data
- analyze worksheet data using "what-if" scenarios and "Goal Seek"
- evaluate basic database sorting and filtering techniques
- assess data from the Internet using a browser, search, and hyperlink capabilities
- create web queries to get real-time spreadsheet data from web sites
- design headers, footers, annotations, and other documentation
- analyze data using subtotals, pivot tables, and pivot charts
- create standardized workbooks using templates, styles, and macros
CISA 320 Introduction to Database Management

This course introduces the use of database management programs on the microcomputer. It includes designing a database; storing, searching, and updating files; and designing and producing printed reports.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe basic database functions, such as developing a query, and sorting, searching, filtering, and calculating data
- create database structures, and import and export data
- design and create database tables, queries, joins, forms, and reports
- use database functions, such as filing, retrieving, updating, and calculating

CISA 322 Design and Development of Desktop Database Applications

This course covers strategies for the design and development of desktop database applications. Topics include database objects, data types, data integrity, relational tables, joins, relationships, domain constraints, complex queries, forms, reports, sharing data with other applications, and data maintenance.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze needs and determine appropriate data structures and solutions.
- create tables, queries, forms, and reports.
- formulate multiple table queries with complex criteria.
- design forms for data entry and data views.
- interpret data with crosstab queries, pivot tables, and reports.
- build tables by importing delimited data and exporting data to spreadsheet applications.
- design and implement multiple table data management systems involving custom forms, reports, and labels.
- manage, backup, and repair database objects.

CISA 330 Desktop Publishing

This course provides an overview of desktop publishing (DTP) and a major desktop publishing application program. It includes page layout skills needed to produce newsletters, brochures, flyers, reports, and other marketing material. Additionally, it covers importing and placing graphics and text, using layers, master pages, frames, creating graphics using the pen tool, and working with color both digitally and in print.
Upon completion of this course, the student will be able to:

- develop settings and preferences to create single and multi-page documents.
- apply the vocabulary and tools associated with navigating the desktop publishing work area.
- define the proper use of text tools, such as leading, tracking, and kerning.
- create and apply styles to format text.
- assemble, import, and arrange text and graphics working with frames and layers.
- create, set up, apply, and modify master pages.
- prioritize layers, and stack, align, and distribute frames/objects on a page.
- apply colors to objects and text.
- create graphics using the Pen tool.
- originate commonly used printed marketing documents using desktop publishing software.
- analyze the potential for desktop publishing use in business and organizational communications.

**CISA 331 Intermediate Desktop Publishing**

**Units:** 2  
**Hours:** 27 hours LEC; 27 hours LAB  
**Prerequisite:** CISA 330 with a grade of "C" or better  
**Advisory:** BUS 100  
**Transferable:** CSU  
**Catalog Date:** June 1, 2020

This course builds upon previous desktop publishing software concepts and study. Topics include working with effects and advanced techniques, applying styles, importing and linking graphics, tabs and tables, and working with transparency effects. It also covers producing long documents and book features, output and exporting to PDF format, and creating interactive documents for online use.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- assemble text using formatting styles and grids.
- apply styles, tabs, and rules to paragraphs and long text.
- create complicated printed documents.
- create or import, modify, and enhance tables.
- apply opacity, effects, color blends, and object styles to visually enhance documents.
- create book files, table of contents, and indexes.
- combine multiple documents into a book file.
- export and generate an Adobe PDF file.
- convert a print document for online use.

**CISA 340 Presentation Graphics**

**Units:** 2  
**Hours:** 27 hours LEC; 27 hours LAB  
**Prerequisite:** None.  
**Advisory:** CISC 300  
**Transferable:** CSU  
**Catalog Date:** June 1, 2020

This course provides an in-depth look at using presentation software in business environments. Topics include elements of good presentation design, slide show...
techniques, integrating and linking of various software applications and media, animation effects, and the production of presentations using a variety of software and hardware.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate effective design principles and concepts when preparing presentations.
- apply audience analysis techniques to establish criteria for the presentation approach.
- evaluate visual presentations by utilizing standard guidelines, tools, and techniques used in today's business world.
- integrate graphics, word processing and spreadsheet information, and sound in the development of a presentation.
- create visual appeal through custom animation, transitions, and motion paths.
- create hyperlinks, and also embed and link objects and files.
- create and edit tables, charts, diagrams, templates, and custom photo album presentations.
- plan and publish presentations for the Web.

CISA 345 Technical Marketing Applications

Units: 2
Hours: 27 hours LEC; 27 hours LAB
Prerequisite: None.
Advisory: CISC 305
Transferable: CSU
Catalog Date: June 1, 2020

This course provides an overview of online marketing applications. It includes creating websites using cloud based software, building media-rich content for blogs, and developing marketing strategies using Search Engine Optimization (SEO) tools such as Google Analytics. It also covers email marketing software to create and manage mailing lists, newsletters, and automated campaigns. Additionally, it covers audience building with other cloud based marketing tools such as podcasts, ebooks, webinars, and more. All software used in this course is free, cloud based, and mobile.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- develop a website using online template tools
- create a blog and connect it with a website
- evaluate and prepare Search Engine Optimization (SEO) and Inbound Marketing tactics
- create SEO content types (content marketing) to include text, images, video, graphics, and presentations
- assess and set up webmaster tool applications and measurement techniques used to evaluate digital marketing (analytics)
- examine paid search marketing pay-per-click (PPC)
- utilize an online application to set up an email marketing campaign
- research other internet marketing platforms such as podcasts, ebooks, and webinars

CISA 346 Social Media Applications

Units: 1
Hours: 18 hours LEC; 18 hours LAB
Prerequisite: None.
Advisory: CISC 305
Transferable: CSU
Catalog Date: June 1, 2020

This course introduces a variety of social media applications and content platforms for marketing both small and large businesses. It includes popular applications for online social networking services (Facebook Pages for business), microblogging (Twitter), visual bookmark boards (Pinterest), video-sharing websites and YouTube channels, Internet based photo and video sharing apps (Instagram and Snapchat), and image editing mobile apps specifically for marketing. It also includes tracking social media, apps and integration, link building, and monetization.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze various forms of social media technology used in marketing
- create a business platform using online social networking services
- set up and use a microblogging application
- create and add content to a visual bookmark board application
- create and use Internet based photo and video sharing applications
- edit, compress, and create graphics using online photo editing and graphic marketing design applications
- originate, edit, and post video for marketing purposes using online video editing and hosting sites
- combine and set up links for all media to connect and promote for business
- critique social media for marketing using analytic tools and applications

CISA 348 Exploring Presentation Graphics

Units: 1
Hours: 18 hours LEC
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

This course provides students with sufficient knowledge and skills to prepare presentations in a variety of courses. Topics include planning, designing, and preparing presentations; enhancing presentations with media; creating posters, tables, and statistical charts; interactivity, advanced animation, and hyperlinks; customizing a slide show; and collaborating, securing, and sharing a presentation.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- plan, design, and prepare a presentation.
- incorporate media into a digital presentation.
- create posters, tables, and statistical charts with presentation graphics software.
- incorporate interactivity, advanced animation, and hyperlinks into a digital presentation.
- adapt a digital slide show.
- develop a digital presentation collaboratively.
- construct, secure, and share a digital presentation.

Computer Information Science - Core (CISC)

CISC 100 Computer Fundamentals with Hands-on Lab

Units: 2
Hours: 27 hours LEC; 27 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

This introductory course develops basic computer skills needed for college-level courses, workplace productivity, and personal enrichment. It provides individuals who are new to computing or who have very little computing experience with slower paced, general, non-technical information as well as in-class hands-on instruction reinforcement. This course introduces common computer terminology and concepts, file management, electronic mail, online course management, productivity application software, and the Internet.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- identify and name the most common digital computing devices
- identify and name basic operating system commands, tasks, and primary user interface components
- identify and name the basic components of a desktop computer system including most common interactive devices
- identify and name differences and similarities between system software and application software
- manage files and documents using file management system procedures
- use contemporary business productivity software
- use Internet and educational technologies
- use an electronic mail system
- define common computer terms

CISC 294 Topics in Computer Information Science - Core

Units: 0.5 - 5
Hours: 9 - 72 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020

Current topics in computer science and information systems not covered by regular catalog offerings are examined. Topics and locations vary, including advanced subjects related to computer science, networking, programming, database, applications, PC support, security, communications, and web development and publishing. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- evaluate current issues and emerging technologies in computer science and information technology.
- apply hands-on experience using current techniques of computer science and information technology.
- examine computer science and information technology issues that affect daily lives.

CISC 295 Independent Studies in Computer Information Science - Core

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

CISC 300 Computer Familiarization

Units: 1
Hours: 18 hours LEC
Prerequisite: None.
Advisory: ENGRD 116 or ESLR 320, and the ability to touch type.
Transferable: CSU
General Education: AA/AS Area II(b); AA/AS Area III(b)
Catalog Date: June 1, 2020

This introductory course develops and improves the basic computer skills necessary for college-level courses, workplace productivity, and personal enrichment. It introduces common computer terminology and concepts, file management, electronic mail, online learning, productivity application software, and the Internet.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- identify and name the most common digital computing devices.
- identify and name basic operating system commands, tasks, and primary user interface components.
- employ the mouse as a navigational tool to select ribbon tabs, icons, text, and screen options.
- manage stored files using file management procedures.
- create, save, and print word processing documents using basic editing and formatting techniques.
- create, preview, save, and print spreadsheets using basic data entry, editing, and formatting techniques.
- employ Internet and educational technologies.
- employ an electronic mail system.
- define common computer terms.

CISC 305 Introduction to the Internet

Units: 1
Hours: 18 hours LEC; 18 hours LAB
Prerequisite: None.
Advisory: CISC 300 and 320
Transferable: CSU
Catalog Date: June 1, 2020

This course introduces how the Internet works and how to effectively use basic Internet services. Topics include browser basics, search engines and search techniques, e-mail, the World Wide Web, Internet security, Internet resources, the Cloud, social networking, and building basic web pages using Hypertext Markup Language (HTML).

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the structure of the Internet, the World Wide Web, the Internet browser, and a web page.
- evaluate and critique various types of information sources on the Internet.
- apply and effectively use the World Wide Web and a web browser to search for and locate specific information on the Internet.
- research how technology can help with life skills, including local and world news, finding health services, educational resources, travel, and banking online.
- create professional email accounts, including using address and mailing lists, attaching files, learning proper etiquette, and identifying security risks.
- analyze Internet security risks and explain how to protect a PC from viruses, trojans, spam, spyware, rootkits, and keyloggers.
- define different types of cloud computing and explain the benefits and security risks.
- utilize social networking sites such as Facebook, Twitter, LinkedIn, photoshare, and other popular sites. Explain the marketing value and the risks with each.
- construct a basic web page using plain HTML code.

CISC 306 Introduction to Web Page Creation

Units: 1
Hours: 18 hours LEC; 18 hours LAB
Prerequisite: None.
Advisory: CISC 305
Transferable: CSU
Catalog Date: June 1, 2020

This course covers the production of web pages, including design, layout, construction, and presentation. A web authoring tool is used to format a web page and Extensible Hypertext Markup Language (XHTML) is introduced.

Student Learning Outcomes

Upon completion of this course, the student will be able to:
• evaluate content needs for a web page.
• design a web page.
• create and format web pages using a web authoring tool.
• publish web pages to a web server.
• apply industry standard web design techniques.

CISC 308 Exploring Computer Environments and the Internet

Units: 1
Hours: 18 hours LEC
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

This course introduces the fundamentals of microcomputer hardware, software, and computer networking, focusing on operating systems. The fundamentals of the Internet and Internet tools are also introduced.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• classify various types of computers and how they work
• distinguish the basic components of a computer
• evaluate effective procedures for creating and managing folders
• design custom computer settings utilizing the control panel and other accessories
• create effective operating system searches to locate files, folders, and data stored within folders using various filenames and wildcards
• choose the correct commands to capture and print screens
• evaluate operating system commands required to store, manage, back-up, access, and maintain files stored on various drives and other storage devices
• create, modify, and delete files using Windows Explorer
• compare and contrast basic operating system and Internet terminology and concepts
• design efficient Internet search techniques using search engines and subject directories

CISC 310 Introduction to Computer Information Science

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
C-ID: C-ID BUS 140; C-ID ITIS 120
Catalog Date: June 1, 2020

This course examines information technology and its role in solving business problems. Topics include information systems, database management systems, networking, e-commerce, ethics and security, and computer systems hardware and software components. These concepts and related methods are applied through hands-on projects to develop computer-based solutions to business problems.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• explain how a computer system works.
• differentiate between the hardware and software components of a computer network.
• differentiate between the hardware components of a computer system.
• differentiate between system software and application software.
• differentiate between the most commonly used computer operating systems.
• explain the basic operation of networks.
• differentiate the types of computer networks.
• demonstrate the secure utilization of Internet resources.
• propose methods for insuring the security of business information systems.
• discuss and relate the different phases of the System Development Cycle.
• demonstrate an understanding of the development and use of information systems in business.
• recommend methods of assessing business information systems.
• solve common business problems using appropriate information technologies.
• manipulate databases using database management software.
• build software solutions to business problems using Internet technologies.
• evaluate the impact of information and computer technology on organizations and society including e-commerce, ethics, copyright, privacy, and security.

CISC 320 Operating Systems

Units: 1
Hours: 18 hours LEC; 18 hours LAB
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

This course introduces the basic features of the Windows operating system for the PC. Topics include managing files, folders, and libraries, operating system services, program management, maintenance of disks and storage media, Windows desktop, browser basics, and the Windows help system. A brief introduction to security and the command prompt is also covered.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• analyze proper file naming conventions and explain file extensions and program associations.
• apply built-in file management utilities to create, organize, copy, move, rename, and delete files, folders, shortcuts, and libraries on storage devices or media.
• explain the purpose of and use the Windows Task Manager.
• explain the purpose of and use the Windows Print manager. describe the properties of Windows objects: desktop, icons, menu structure, tool-bars, windows, dialog boxes, controls, settings, and views.
• utilize the Control Panel to configure and/or customize the properties of the desktop, taskbar, display, keyboard, mouse, and other peripheral devices.
• utilize the various types of help available by using menus, keywords, or the Internet.
• apply basic Windows maintenance utilities.
• apply basic security including anti-virus use.
• use commands at the command prompt.
• use accessory and utility programs that are installed with Windows to accomplish tasks such as write memos, edit clip art, check disk drives, play audio and video files, and burn CDs or DVDs.
• describe the properties of Windows objects: desktop, icons, menu structure, tool-bars, windows, dialog boxes, controls, settings, and views.

CISC 323 Linux Operating System

Units: 1
Hours: 18 hours LEC; 18 hours LAB
Prerequisite: None.
Advisory: CISC 300 and ability to touch type.
Transferable: CSU
Catalog Date: June 1, 2020
This course introduces the Linux operating system for microcomputers. Concepts include the kernel, file structures, daemons, graphical user interfaces (GUI), open source, file security and permissions. Procedures for installing software, basic system administration and utilities, the Bourne again shell (BASH), command line interface utilities, and introduction to scripting topics are also covered.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze the relationship of the operating system kernel, shell interface, windowing system, applications programs and the user to each other.
- utilize a command line interface (CLI) and GUI text editor to create and edit files in the Linux file system.
- employ the use of basic Linux GUI applets and CLI commands in file, disk, video and printer management.
- formulate CLI commands with correct syntax.
- compare Linux with other operating systems.
- utilize the Linux file system and apply industry standard file security.
- explain and define open-source theory, jargon, practice, and licensing.
- utilize a GUI and/or CLI to complete basic system administration and day-to-day tasks on the computer.

CISC 324 Intermediate Linux Operating System

Units: 1
Hours: 18 hours LEC; 18 hours LAB
Prerequisite: CISC 323 with a grade of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This course is a continuation of CISC 323. Topics include boot loaders, Linux devices, and command line interface (CLI) system management utilities. It covers advanced Bourne Again Shell (BASH) shell scripting, including looping and decision making logic structures. Alternates to the BASH shell and regular expressions and text stream editors are introduced.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- set up a Linux and Microsoft Windows dual booting system.
- set up, configure, and troubleshoot a boot loader.
- utilize advanced BASH CLI utilities to inspect and maintain the system and its hardware.
- compare C shell, K shell, and BASH.
- create BASH script files utilizing looping structures: do, while, until.
- create BASH script files implementing decision making logic using: if, for, case and nesting.
- describe the use of text stream editor and filters such as awk and sed.
- compose a regular expression for use by the grep utility.

CISC 350 Introduction to Data Communications

Units: 1
Hours: 18 hours LEC
Prerequisite: None.
Advisory: CISC 300 and ability to touch type.
Transferable: CSU
Catalog Date: June 1, 2020

This course introduces business data communication concepts, systems, technology, protocols, theory, and basic terminology. Specific topics include analog and digital data encoding and transmission; media; interfaces; packet, circuit, and broadcast networks; and data multiplexing.
Upon completion of this course, the student will be able to:

- Explain the evolution of data communications and the impact of technology on communication methods in business and the home.
- Define data communications terminology.
- Analyze the hardware and software needed to communicate using a standalone computer or a local area network.
- Evaluate different methods used for data communications applications.
- Design and select the equipment specifications for a small home or office network.
- Explain the primary differences between various types of data communication technologies.

CISC 351 Introduction to Local Area Networks

| Units: | 1 |
| Hours: | 18 hours LEC; 18 hours LAB |
| Prerequisite: | None |
| Advisory: | CISC 320 and 350 |
| Transferable: | CSU |
| Catalog Date: | June 1, 2020 |

This course introduces local area networks (LAN) and provides hands-on training in LAN applications and network administration. Topics include planning, installing, and maintaining a LAN, responsibilities of the system administrator, and basic network security principles.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the functions of a LAN and the devices that may reside on a LAN.
- examine the advantages and disadvantages of peer-to-peer LANs vs. domain-based LANs.
- explain LAN topologies, types of cabling, standards, media and access methods.
- perform the basic functions required for day-to-day LAN administration, such as: creating a directory structure and network shares, creating users and groups, defining user rights, setting access permissions, and configuring user profiles.
- analyze the advantages and disadvantages of resource sharing on a LAN and the factors to be considered when planning and implementing a LAN.
- analyze the security implications of peer-to-peer vs. centralized LAN administration.
- evaluate the security implications of a user being a member of multiple groups and the potential impacts on the effective permissions for the user.
- analyze best practices for sharing file resources and configure the Microsoft New Technology File System (NTFS) permissions for group and user needs.
- evaluate LAN security and configure shares, permissions and authentication security in accordance with best practices.
- create a plan to combat viruses, Trojans, network worms, spyware and adware as it relates to LAN security and file integrity.

CISC 361 Microcomputer Support Essentials - Preparation for A+ Certification

| Units: | 3 |
| Hours: | 42 hours LEC; 36 hours LAB |
| Prerequisite: | None |
| Advisory: | CISC 310, 320, and 350 |
| Transferable: | CSU |
| Catalog Date: | June 1, 2020 |

This course is the first of two courses covering support and repair for stand-alone personal computers. It includes training to troubleshoot hardware to a field replaceable component. Operating systems installation and simple networking are also covered. The course provides a firm grounding in the supporting software that runs the hardware and in distinguishing hardware from software problems. This course, along with CISC 363, prepares students for the Computing Technology Industry Association (CompTIA) A+ certification.

Student Learning Outcomes

Upon completion of this course, the student will be able to:...
• Identify the names, purpose, and characteristics of typical microcomputer system components.
• Install, configure, optimize and upgrade personal computer components for desktop computers.
• Identify tools, diagnostic procedures and troubleshooting techniques for personal computer components.
• Diagnose common problems associated with components based upon the symptoms.
• Define the types of random access memory (RAM), form factors, and operational characteristics.
• Distinguish between popular central processing unit (CPU) chips in terms of their basic characteristics and performance.
• Assemble and disassemble microcomputers to the component level.
• Perform preventative maintenance on personal computer components.

CISC 362 Microcomputer and Applications Support

Units: 2
Hours: 36 hours LEC
Prerequisite: None.
Advisory: CISC 361 and 363
Transferable: CSU
Catalog Date: June 1, 2020

This course is an in-depth investigation of the technical, business, soft, and self-management skills technicians need to provide effective customer service and support in an information technology (IT) environment. It introduces customer service and problem solving skills needed for success in a small- or large-business environment.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• demonstrate proficiency in customer service skills in the areas of active listening, and written and oral communication.
• diagnose, document, and communicate microcomputer problems and solutions using acceptable terminology.
• analyze and troubleshoot hardware and software problems in a variety of multi-user computer lab environments.
• apply business and team building skills for technical professionals.
• identify the causes of stress in computer support and apply stress reduction coping skills.

CISC 363 Microcomputer Support Technical - Preparation for A+ Certification

Units: 3
Hours: 42 hours LEC; 36 hours LAB
Prerequisite: CISC 361 with a grade of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This course is the second of two courses providing a foundation in personal computer (PC) support. Hands-on skills include advanced component installation and configuration, troubleshooting component hardware, and configuring and troubleshooting major operating systems and networking hardware. This course along with CISC 361 prepares students for the Computing Technology Industry Association (CompTIA) A+ Certification exam.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• Set up, demonstrate, and troubleshoot the three most commonly used PC operating systems.
• Assemble, administer, and troubleshoot a basic networking system.
• Demonstrate the installation, configuration, and troubleshooting of advanced computer devices.
• Differentiate types of physical network architectures.
• Explain disaster recovery procedures.
Support, upgrade, and add peripheral devices to notebook computers.

Identify and recover from viruses.

Identify the fundamental principles of security.

CISC 495 Independent Studies in Computer Information Science - Core

| Units: | 1 - 3 |
| Hours: | 54 - 162 hours LAB |
| Prerequisite: | None. |
| Transferable: | CSU |
| Catalog Date: | June 1, 2020 |

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

CISC 498 Work Experience in Computer Information Science - Core

| Units: | 1 - 4 |
| Hours: | 60 - 300 hours LAB |
| Prerequisite: | None. |
| Enrollment Limitation: | Students must be in a paid or unpaid internship, volunteer position, or job related to computer information science with a cooperating site supervisor. Students are advised to consult with the Computer Information Science Department faculty to review specific certificate and degree work experience requirements. |
| Advisory: | Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340. |
| Transferable: | CSU |
| General Education: | AA/AS Area III(b) |
| Catalog Date: | June 1, 2020 |

This course provides students with opportunities to develop marketable skills in preparation for employment or advancement within the field of computer information science. It is designed for students interested in work experience and/or internships in transfer-level degree occupational programs. Course content includes understanding the application of education to the workforce, completion of Title 5 required forms which document the student’s progress and hours spent at the work site, and developing workplace skills and competencies.

During the semester, the student is required to complete 75 hours of related paid work experience, or 60 hours of related unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. All students are required to attend the first class meeting, a mid-semester meeting, and a final meeting. Additionally, students who have not already successfully completed a Work Experience course will be required to attend weekly orientations while returning participants may meet individually with the instructor as needed. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate application of industry knowledge and theoretical concepts in computer information science related to a transfer degree level career as written in the minimum three (3) learning objectives created by the student and his/her employer or work site supervisor at the start of the course.

- make effective decisions, use workforce information, and manage his/her personal career plans.

- behave professionally, ethically, and legally at work, consistent with applicable laws, regulations, and organizational norms.

- behave responsibly at work, exhibiting initiative and self-management in situations where it is needed.

- apply effective leadership styles at work, with consideration to group dynamics, team and individual decision making, and workforce diversity.

- communicate in oral, written, and other formats, as needed, in a variety of contexts at work.

- locate, organize, evaluate, and reference information at work.

- demonstrate originality and inventiveness at work by combining ideas or information in new ways, making connections between seemingly unrelated ideas, and reshaping goals in ways that reveal new possibilities using critical and creative thinking skills such as logical reasoning, analytical thinking, and problem-solving.

Computer Information Science - Networking (CISN)

CISN 110 Networking Technologies - Preparation for N+ Certification
This is an introductory course in networking software and hardware. Topics include communication protocols; local, wide area, and virtual networks; intra- and inter-networks; network architectures; topologies; cloud computing; security; and the Open Systems Interconnect (OSI) model. This course, along with CISN 111, provides preparation for the Computer Technology Industry Association N+ certification test.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the function and responsibility of each of the seven layers of the OSI model.
- identify industry standards, types of applications, protocols, and network connection devices.
- describe the physical characteristics and Ethernet standards of coaxial cable, STP, UTP, and fiber-optic media.
- identify a variety of media types and their key characteristics, including cost, speed and capacity, resistance to interference, and ease of installation.
- explain basic data transmission concepts, including signaling, data modulation, multiplexing, bandwidth, baseband, and broadband.
- troubleshoot network devices and create a network map to be used for network troubleshooting.
- explain the purpose of ports and sockets, and identify the ports of several common network protocols.
- describe domain names and the name resolution process.
- identify and explain the functions of the core TCP/IP settings on a computer, including IP address, subnet mask, default gateway, and DNS servers.
- understand WLAN (wireless LAN) architecture. Explore wireless security concerns and evaluate common problems experienced with wireless networks.
- demonstrate knowledge of network architectures, topology, hardware, and software.
- identify and test network cables and describe characteristics of NIC and Ethernet interfaces.

### CISN 111 Intermediate Networking Technologies

This is an intermediate course in networking software and hardware. Topics include network operating systems setup, analyzing network performance, diagnosing and repairing of network problems, and network security techniques. This course, along with CISN 110, provides preparation for the Computer Technology Industry Association N+ certification test.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify and describe various types of wireless networking characteristics.
- describe and explain virtualization technologies - how they connect with a network and how infrastructure devices can be virtualized.
- identify the features and benefits of cloud computing.
- secure network connections using encryption protocols.
- explain the purposes of network segmentation.
- explain how virtual local area networks (VLANs) work and how they’re used.
- discuss physical security methods that prevent and detect intrusions.
- describe the basic concepts of network management.
- explain the most common wireless wide area network (WAN) technologies.
- identify best practices for incident response and disaster recovery.
- identify the fundamental elements of WAN service options.
- secure and troubleshoot a wireless (Wi-Fi) network.
- configure various security measures on a wireless network.
- track the processes of authentication, authorization, and auditing on a network.
- describe cloud computing categories and models, and discuss concerns regarding cloud connectivity and security.

### CISN 118 Internet Protocol Subnetting

**Units:** 1  
**Hours:** 18 hours LEC  
**Prerequisite:** None.  
**Advisory:** CISN 110; and MATH 25 OR Math 41  
**Catalog Date:** June 1, 2020

This course introduces Transmission Control Protocol/Internet Protocol (TCP/IP) address assigning and subnetting. Topics include a review of binary, hexadecimal, and decimal numbering systems, classes of Internet Protocol (IP) addresses, Classless Inter-domain Routing (CIDR), and Variable Length Subnet Masks (VLSM). The future of IP addressing, version 4 (IPV4) and version 6 (IPV6), is covered.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- Describe number system structures.
- Perform calculations using different number systems, especially adding and subtracting binary and hexadecimal numbers.
- Classify IP addresses.
- Convert binary number values to decimal number values, and decimal number values to binary number values.
- Evaluate a custom subnet mask for effectiveness in a given scenario.
- Evaluate solutions to problems using VLSMs.
- Analyze solutions to problems using CIDR.
- Explain the need for IPV6.
- Compare and contrast IPV6 and IPV4.

### CISN 119 TCP/IP Protocols

**Units:** 3  
**Hours:** 54 hours LEC  
**Prerequisite:** None.  
**Advisory:** CISC 350  
**Catalog Date:** June 1, 2020

This course covers the TCP/IP protocol suite for the Internet. Information to support and manage TCP/IP is provided. Additional topics include routing; tunneling; IP addressing and subnetting; IP version 4 and IP version 6; virtual private networks; network address translation; ports and sockets; and many other individual protocols.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- compare the Open Systems Interconnection (OSI) model to the TCP/IP model
- construct valid IP addresses
- compare and contrast routing and tunneling
- demonstrate IP subnetting for IPv4
- compare IPv4/IPv6
CISN 120 Beginning Network Administration with Linux

Units: 3
Hours: 45 hours LEC; 27 hours LAB
Prerequisite: CISC 323 with a grade of "C" or better
Advisory: CISC 324
Catalog Date: June 1, 2020

This course covers the basics of installation and administration of the Linux Network Operating System. Topics include installation of the Linux server, connecting to a network, how to utilize network utilities, administer and maintain network printing, protect network data, and install network applications. This course also covers how to plan, access, and manage file systems. Also included are how to plan and implement login and file system security, administer and maintain user accounts, upgrade the kernel, and back up servers.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the major components of a Linux network operating system.
- discuss Linux licensing and copyright issues in layman's terms.
- design, build, and maintain a logical and organized electronic file system.
- analyze and construct user accounts and groups using best practices for security.
- utilize the basic Linux network utilities to troubleshoot network connectivity.
- install and configure network printing resources.
- install and configure network/server applications.
- analyze system backup methodologies and best practices for scheduling backups and restoring files and system state data.
- plan and implement a recompile of the Linux kernel.
- research and identify good Internet resources for obtaining answers to common problems, network anomalies and Linux server problems.

CISN 121 Network Administration with Linux: LAN Services

Units: 2
Hours: 27 hours LEC; 27 hours LAB
Prerequisite: CISN 120 with a grade of "C" or better
Advisory: CISN 119
Catalog Date: June 1, 2020

This course covers Linux network administration of local area network (LAN) services. Topics focus on server and LAN services including the network file system (NFS), share resources between Linux and Microsoft Windows using Server Message Block (SaMBa), network information service (NIS), virtual network computing (VNC), remote network access, the secure shell (SSH) vs. telnet, X-windows as a network service, and dynamic host configuration protocol (DHCP). The course also covers the command scheduler (cron), monitoring and logging system activities and system events (syslog), as well as installing and configuring MySQL Structured Query Language (SQL) database management service.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- discuss core Linux intranet services and daemons.
- configure and troubleshoot core Linux intranet services and daemons.
- install and configure services to allow a Linux system to share network resources with other Linux systems and Microsoft Windows systems.
- customize and maintain auditing and system logs.
- analyze auditing and system event logs.
CISN 122 Network Administration with Linux: Internet Services

This course covers Linux network administration of Internet services. Topics focus on server and TCP/IP services including the internet services daemon (XINETD), file transfer protocol (FTP), email, domain name service (DNS), firewall, secure shell, and proxy services. Installing and configuring the Apache Web Server and Webmin (the Linux web based administration tool) are introduced.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- discuss core Linux Internet services and daemons.
- customize and troubleshoot core Linux Internet services and daemons.
- define and discuss key concepts related to email, web services, and firewalls.
- install, configure and use the major Linux daemons for Internet services such as email, firewall, etc.
- install, configure and use the Apache Web Server.
- install, configure and use the Webmin Linux web-based administration tool.

CISN 140 CISCO Networking Academy (CCNA)tm: Networking Fundamentals

This course introduces the architecture, structure, functions, components, and models of the Internet and other computer networks. It surveys data communication protocols, standards, hardware and software components and basic networking concepts. Topics include the Open Systems Interconnection (OSI) and TCP/IP models, IP addressing and subnetting, routing concepts, LAN media, Ethernet, and network configuration, troubleshooting and analysis. This is the first course in preparation for Cisco CCNA certification examination. ARC is a certified Cisco Networking Academy and all courses are taught by Cisco Certified Academy Instructors (CCAI).

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain the importance of data networks and the Internet in supporting business communications and everyday activities.
- explain how communication works in data networks and the Internet.
- recognize the devices and services that are used to support communications across an Internetwork.
- use network protocol models to explain the layers of communications in data networks.
- describe the importance of addressing and naming schemes at various layers of data networks.
- describe the protocols and services provided by the application layer in the OSI and TCP/IP models and describe how this layer operates in various networks.
- analyze the operations and features of transport layer protocols and services.
- analyze the operations and feature of network layer protocols and services and explain the fundamental concepts of routing.
- design, calculate, and apply subnet masks and addresses to fulfill given requirements.
- describe the operation of protocols at the OSI data link layer and explain how they support communications.
- explain the role of physical layer protocols and services in supporting communications across data networks.
- explain fundamental Ethernet concepts such as media, services, and operation.
• employ basic cabling and network designs to connect devices in accordance with stated objectives.
• build a simple Ethernet network using routers and switches.
• use Cisco command-line interface (CLI) commands to perform basic router and switch configuration and verification.
• analyze the operations and features of common application layer protocols such as Hypertext Transfer Protocol (HTTP), Domain Name System (DNS), Dynamic Host Configuration Protocol (DHCP), Simple Mail Transfer Protocol (SMTP), Telnet, and File Transfer Protocol (FTP).
• utilize common network utilities to verify small network operations and analyze data traffic.

CISN 141 CISCO Networking Academy (CCNA)™: Routing Protocols and Concepts

Units: 3
Hours: 54 hours LEC; 18 hours LAB
Prerequisite: CISN 140 with a grade of "C" or better
Catalog Date: June 1, 2020

This course describes the architecture, components, and operation of routers, and explains the principles of routing and routing protocols. Topics include configuring, verifying, and troubleshooting Routing Information Protocol (RIP) version 1 and 2, Enhanced Interior Gateway Routing Protocol (EIGRP), and Open Shortest Path First (OSPF) routing protocols. Basic router configuration and troubleshooting, networking theory, and IP addressing are also covered. This is the second course in preparation for Cisco CCNA certification examination. ARC is a certified Cisco Networking Academy and all courses are taught by Cisco Certified Academy Instructors (CCAI).

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• describe the purpose, nature, and operations of a router.
• explain the critical role routers play in enabling communications across multiple networks.
• describe the purpose and nature of routing tables.
• describe how a router determines a path and switches packets.
• explain the route look up process and determine the path packets will take in a network.
• configure and verify basic operations for a newly-installed router.
• describe, configure, and certify router interfaces.
• describe the purpose of static routes and the procedure for configuring them.
• configure and verify static and default routing.
• describe the role of dynamic routing protocols and place these protocols in the context of modern network design.
• describe how metrics are used by routing protocols and identify the metric types used by dynamic routing protocols.
• identify the characteristics of distance vector routing protocols.
• describe the network discovery process of distance vector routing protocols using Routing Information Protocol (RIP).
• describe the functions, characteristics, and operations of the RIPv1 protocol.
• compare and contrast classful and classless IP addressing.
• describe classful and classless routing behaviors in routed networks.
• design and implement a classless IP addressing scheme for a given network.
• describe the main features and operations of the Enhanced Interior Gateway Routing Protocol (EIGRP).
• use advanced configuration commands with routers implementing EIGRP and OSPF.
• describe the basic features and concepts of link-state routing protocols.
• describe the purpose, nature, and operations of the Open Shortest Path First (OSPF) Protocol.
• configure and verify basic RIPv1, RIPv2, single area OSPF, and EIGRP operations in a small routed network.
• demonstrate comprehensive RIPv1 configuration skills.
• use router show and debug commands to troubleshoot common errors that occur in small routed networks.
CISN 142 CISCO Networking Academy (CCNA)tm: LAN Switching and Wireless

**Units:** 3  
**Hours:** 54 hours LEC; 18 hours LAB  
**Prerequisite:** CISN 140 with a grade of "C" or better  
**Catalog Date:** June 1, 2020  

This course focuses on Layer 2 switching protocols, concepts and technologies. Topics include hierarchy LAN design, basic switch concepts and configuration, Virtual LANs (VLANs), Virtual Trunking Protocol (VTP), Spanning Tree Protocol (STP), Inter-VLAN routing, basic wireless concepts and configuration. Implementing, verifying, securing and troubleshooting converged switching technologies in a small-to-medium network, including integrating wireless devices into a LAN, are also covered. This is the third course in preparation for Cisco CCNA certification examination. ARC is a certified Cisco Networking Academy and all courses are taught by Cisco Certified Academy Instructors (CCAI).

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- identify and correct common network problems at layers 1, 2, 3, and 7 using a layered model approach.
- interpret network diagrams.
- select the appropriate media, cables, ports, and connectors to connect switches to other network devices and hosts.
- explain the technology and media access control method for Ethernet networks.
- explain basic switching concepts and the operation of Cisco switches.
- perform and verify initial switch configuration tasks including remote access management.
- describe enhanced switching technologies such as VLANs, VLAN Trunking Protocol (VTP), Rapid Spanning Tree Protocol (RSTP), Per VLAN Spanning Tree Protocol (PVSTP), and 802.1 q.
- describe how VLANs create logically separate networks and how routing occurs between them.
- configure, verify, and troubleshoot VLANs, trunking on Cisco switches, interVLAN routing, VTP, and RSTP.
- interpret the output of various show and debug commands to verify the operational status of a Cisco switched network.
- verify network status and switch operation using basic utilities such as ping, traceroute, Telnet, Secure Shell (SSH), Address Resolution Protocol (ARP), and ipconfig, as well as the show and debug commands.
- identify, prescribe, and resolve common switched network media issues, configuration issues, autonegotiation, and switch hardware failures.
- manage Cisco IOS software.
- manage Cisco IOS configuration files (save, edit, upgrade, and restore).
- describe standards associated with wireless media, such as IEEE WI-FI Alliance and ITU/FCC.
- identify and describe the purpose of the components in a small wireless network, such as Service Set Identification (SSID), Basic Service Set (BSS), and Extended Service Set (ESS).
- identify basic configuration parameters on a wireless network to ensure that devices connect to the correct access points.
- compare and contrast Wi-Fi Protected Access (WPA) security features and capabilities of open, Wired Equivalent Privacy (WEP), and WPA-1/2 networks.
- describe common wireless-network implementation issues such as interference and misconfiguration.

CISN 143 CISCO Networking Academy (CCNA)tm: Accessing the Wide Area Network

**Units:** 3  
**Hours:** 54 hours LEC; 18 hours LAB  
**Prerequisite:** CISN 141 and 142 with grades of "C" or better  
**Catalog Date:** June 1, 2020  

This course covers wide area networks (WAN) technologies to connect small- to medium-sized business networks. It focuses on Point to Point Protocol (PPP), Frame Relay, and broadband links. Topics include network security, traffic control and access control lists (ACLs), Virtual Private Networks (VPN) and network troubleshooting, IP addressing services Network Address Translation (NAT) and Dynamic Host Configuration Protocol (DHCP) are covered, and IPv6 is introduced. This is the fourth course in preparation for Cisco CCNA certification examination. ARC is a certified Cisco Networking Academy and all courses are taught by Cisco Certified Academy Instructors (CCAI).

**Student Learning Outcomes**
Upon completion of this course, the student will be able to:

- describe the impact of Voice Over IP and Video Over IP applications on a network.
- identify and correct common network problems at layers 1, 2, 3, and 7 using a layered model approach.
- interpret network diagrams.
- describe the components required for network and Internet communications.
- implement basic switch security measures such as port security, trunk access, and management VLANs.
- explain the operation and benefits of DHCP and DNS.
- configure, verify, and troubleshoot DHCP and DNS operations on a router.
- describe current network security threats and explain how to implement a comprehensive security policy to mitigate common threats to network devices, hosts, and applications.
- describe the functions of common security appliances and applications.
- describe recommended security practices to secure network devices.
- describe the purpose and types of access control lists (ACLs).
- configure and apply ACLs based on network filtering requirements.
- configure and apply an ACL to limit Telnet and SSH access to the router using the Security Device Manager command-line interface (SDM/CLI).
- verify, monitor, and troubleshoot ACLs in a network environment.
- explain the basic operation of Network Address Translation (NAT).
- configure NAT for given network requirements using SDM/CLI.
- troubleshoot NAT issues.
- describe different methods for connecting to a WAN.
- configure and verify a basic WAN serial connection.
- configure and verify a Point-to-Point Protocol (PPP) connection between Cisco routers.
- configure and verify Frame Relay on Cisco routers.
- troubleshoot WAN implementation issues.
- describe the importance, benefits, role, impact, and components of VPN technology.

CISN 300 Network Systems Administration

Units: 3
Hours: 45 hours LEC; 27 hours LAB
Prerequisite: None
Advisory: CISC 320, 350, and 351
Transferable: CSU
Catalog Date: June 1, 2020

This course covers the installation and configuration of a Windows server in a client/server network. Topics include: introduction to Active Directory, local storage, file and print services, Group Policy, and basic security. Additional topics include: implementing IPv4 and IPv6, Dynamic Host Configuration Protocol (DHCP), and Domain Name System (DNS) in Windows. It also introduces server virtualization using Hyper-V. This is one of three courses preparing students for the Microsoft Certified Solutions Associate (MCSA): Windows Server certification exams.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- install and configure a Windows server.
- create, configure and implement a workgroup and a domain-based network using a Windows network operating system.
- examine and explain the administrative tools of a Windows server network operating system.
- describe and define the Windows Active Directory and its main features and uses.
• define and demonstrate the functions and configuration of Windows clients and servers in an Active Directory Domain environment.
• manage Active Directory Domain Services objects.
• configure automated Active Directory Domain Services administration.
• implement and configure IPv4 and IPv6 services.
• implement and configure Dynamic Host Configuration Protocol (DHCP).
• implement and configure Domain Name System (DNS).
• implement and configure local storage.
• implement and configure resource sharing including file and print services.
• analyze and construct user accounts and groups using best practices for security.
• implement Group Policy and secure Windows servers by using Group Policy Objects (GPOs).
• implement basic server virtualization by using Hyper-V.
• analyze and explain network resource utilization using Windows performance monitor, including performance counters and their implications.
• research and identify good Internet resources for obtaining answers to common problems, network anomalies and Windows server problems.

CISN 302 Intermediate Network Systems Administration

Units: 3
Hours: 45 hours LEC; 27 hours LAB
Prerequisite: CISN 300 with a grade of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This course covers intermediate system administration in a Windows client/server network. Topics include core services such as user and group management, network access, and data security. Additional topics include patch management, file services, system monitoring and auditing, Active Directory and Domain Name System, and Network Policy and Group Policy. This is one of three courses preparing students for the Microsoft Certified Solutions Associate MCSA: Windows Server 2019 certification exams.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• deploy and maintain Windows Server images.
• manage and implement system updates and patches.
• configure and implement file services such as Distributed File System (DFS) and File Server Resource Manager (FSRM).
• optimize File Services.
• implement file/disk encryption.
• configure monitoring and advanced auditing.
• configure and troubleshoot Windows Domain Name System (DNS).
• configure, implement, and troubleshoot remote access including Windows Virtual Private Networking (VPN).
• install, configure, and troubleshoot Network Policy Server.
• implement Network Access Protection (NAP).
• maintain Active Directory domain services.
• manage user and service accounts.
• plan and implement Group Policy Infrastructure.
• manage user desktops using Group Policy.

CISN 307 Windows Active Directory Services
This course covers how to install, configure, and administer Microsoft Windows Active Directory services. It also focuses on implementing Group Policy and understanding the Group Policy tasks required to manage users and computers. Group Policies are used to configure and manage the user desktop environment, configure and manage software, and implement and manage security settings. Installation and configuration of Domain Naming System (DNS) and Windows Internet Naming System (WINS) are covered, as well as publishing, replication and the backup of the directory services data base.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- design network architecture, topology, interdependence, and constraints in relation to an Active Directory domain.
- evaluate a plan to install, configure, and administer an Active Directory domain controller.
- analyze a plan to install, configure, administer, and evaluate Group Policy in an Active Directory environment.
- design Active Directory forests, trees, domains, and operational units.
- explain a plan to install, configure, and administer Windows Internet Naming System (WINS) services and settings.
- describe a plan to install, configure, and administer Domain Naming System (DNS) services and settings.
- formulate a plan to publish, backup, and replicate the Active Directory database.

CISN 308 Internetworking with TCP/IP

This course covers how to install, configure, manage, and support a network infrastructure using the Microsoft Windows Server products. It focuses on TCP/IP and related services, including Dynamic Host Configuration Protocol (DHCP), Domain Naming System (DNS), Windows Internet Naming Service (WINS), Internet Information Server (IIS), Public Key Infrastructure (PKI) and certificate service, Internet protocol security (IPSec), Network Address Translation (NAT), and remote access. It also covers configuring Windows as a network router, Virtual Private Network (VPN) connectivity and managing a Windows deployment using Remote Installation Services (RIS).

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- design an overall integration plan for implementing a network services infrastructure using TCP/IP, with connectivity to Netware, Macintosh and UNIX systems.
- evaluate a plan for workstation and server deployment using remote installation services.
- formulate a plan deploying the DHCP server service.
- analyze a plan deploying the DNS and WINS server services.
- explain a plan deploying network security using IPSec, PKI and certificate server services.
- describe a plan for Internet connectivity using NAT and Windows router.
- design a plan deploying the IIS server service.
- formulate a plan for deploying a Virtual Private Network.

Computer Information Science - Programming (CISP)

CISP 300 Algorithm Design/Problem Solving

Units: 3
Hours: 54 hours LEC
This course introduces methods for solving typical computer problems through algorithm design. Topics include assessing and analyzing computer problems in a top-down, divide-and-conquer approach that leads to a programming solution. It also covers programming plans and detailed design documents from which source code versions of programs are created.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- define operators, including arithmetic, comparison, and logical operators.
- differentiate control structures, including branches (conditional statements) and loops (pre-checking and post-checking loops).
- deduce post-condition from pre-condition for control structures, including assignment statements, branches, and loops.
- construct a trace table to emulate the execution of a program that utilizes variables, various control structures, data organizations, subroutines, and parameters.
- contrast the lifespan limits and behaviors of local variables, by-value parameters, and by-reference parameters.
- compare the two methods of passing results: by-reference parameters and return value.
- compare in-line copy-and-paste coding with structured subroutines in terms of maintainability, defect containment, testability, and other metrics.
- create a subroutine to abstract one or more similar blocks of in-line code using local variables, parameters, and return values.
- differentiate roles involved in software development, including developers, analysts, and test engineers.

### CISP 310 Assembly Language Programming for Microcomputers

**Units:** 4  
**Hours:** 54 hours LEC; 54 hours LAB  
**Prerequisite:** CISP 360 or 480 with a grade of "C" or better  
**Transferable:** CSU; UC ((CISP 310 & 319 combined: maximum credit - one course))  
**C-ID:** C-ID COMP 142  
**Catalog Date:** June 1, 2020

This course covers the organization and behavior of real computer systems at the assembly-language level. Topics include the mapping of statements and constructs in a high-level language onto sequences of machine instructions, as well as the internal representation of simple data types and structures. Numerical computation is examined, noting the various data representation errors and potential procedural errors.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- write simple assembly language program segments.
- demonstrate how fundamental high-level programming constructs are implemented at the machine-language level.
- compare Reduced Instruction Set Computer (RISC) versus Complex Instruction Set Computer (CISC) architectures.
- diagnose assembly language programs with common and not-so-common defects.
- structure complex logic into well defined assembly language instruction sequences and subroutines.
- evaluate common coding mistakes in C/C++ in the context of the underlying assembly language implementation.
- describe von Neumann architecture and how its components interact.

### CISP 350 Database Programming

**Units:** 3  
**Hours:** 36 hours LEC; 54 hours LAB  
**Prerequisite:** None.  
**Advisory:** CISA 320 and CISC 310  
**Transferable:** CSU

This course introduces methods for solving typical computer problems through algorithm design. Topics include assessing and analyzing computer problems in a top-down, divide-and-conquer approach that leads to a programming solution. It also covers programming plans and detailed design documents from which source code versions of programs are created.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- define operators, including arithmetic, comparison, and logical operators.
- differentiate control structures, including branches (conditional statements) and loops (pre-checking and post-checking loops).
- deduce post-condition from pre-condition for control structures, including assignment statements, branches, and loops.
- construct a trace table to emulate the execution of a program that utilizes variables, various control structures, data organizations, subroutines, and parameters.
- contrast the lifespan limits and behaviors of local variables, by-value parameters, and by-reference parameters.
- compare the two methods of passing results: by-reference parameters and return value.
- compare in-line copy-and-paste coding with structured subroutines in terms of maintainability, defect containment, testability, and other metrics.
- create a subroutine to abstract one or more similar blocks of in-line code using local variables, parameters, and return values.
- differentiate roles involved in software development, including developers, analysts, and test engineers.
This is an introductory course in Structured Query Language (SQL) database programming. Topics include database normalization, subqueries, joins, import/export, privileges, and Procedural Language (PL)/SQL programming.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- compare and contrast different database implementations.
- design databases conforming to normalization guidelines.
- create and maintain relational databases.
- construct subqueries and table joins.
- construct small programs using PL/SQL.
- import/export data.

CISP 360 Introduction to Structured Programming

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: CISP 300 or 370 with a grade of "C" or better
Transferable: CSU; UC
General Education: AA/AS Area II(b)
C-ID: C-ID COMP 112
Catalog Date: June 1, 2020

This course is an introduction to structured programming and objects. Topics include program design, documentation, testing, and debugging, as well as data representation, data types, variables, constants, and operators. It also includes control structures, functions, interactive and file input/output, standard libraries, arrays, pointers, structures, classes, and objects.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- develop efficient algorithms for the solution of problems using the control structures of structured programming
- implement suitable data structures to support a given algorithm
- formulate and implement algorithms to solve complex problems using a high-level language
- use the top-down development approach to implement modular, maintainable programs
- apply the software development life-cycle for program design, development, coding style, documentation, and testing
- assess the efficiency of differing solutions to a problem
- analyze an existing algorithm implementation for errors, then develop solution program code to correct the errors
- design and use classes and objects
- compare procedural and object-oriented approaches to problem solving

CISP 362 Programming for Mobile Devices I

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: None
Corequisite: CISP 300 or 370
Transferable: CSU
Catalog Date: June 1, 2020

This course introduces mobile device programming, including devices such as cell phones and tablets. Topics include development tools, user interface design, documentation, testing, debugging, and publishing.
CISP 363 Programming for Mobile Devices II

Upon completion of this course, the student will be able to:

- acquire and install the necessary development tools for mobile device software development.
- develop basic programs with a graphical user interface.
- test and debug programs with a graphical user interface.
- publish mobile device programs.
- utilize hardware devices commonly found on mobile devices, such as GPS, accelerometer, compass, proximity sensor, and camera.

CISP 370 Beginning Visual Basic

This introductory programming course covers the development of Windows-based desktop applications using Visual Basic (VB). Topics include best practices for Graphical User Interface (GUI) design, use of the VB application development software, organizing code into procedures and functions, variable scope, structures, arrays, input data validation, calculation, file input and output, and multiple-window applications. This course is designed for those who want a strong foundation in basic programming and building GUI applications.

Upon completion of this course, the student will be able to:

- using the VB Integrated Development Environment, design and implement a GUI application using single or multiple windows.
- design and implement variables at the class level and the procedure level.
- design and implement data storage strategies for text files and databases.
- design and implement structure data types.
- design and implement programming logic using conditional execution structures and looping structures.
- design and implement programming logic using VB procedures and functions and developer defined procedures and functions, and correctly pass parameters to the procedures and functions both by value and by reference.
- design and implement input data validation and calculation.
- organize data in single dimension and multi-dimension arrays.
- build, compile, execute, test, and debug applications.

**CISP 371 Intermediate Visual Basic**

**Units:** 4  
**Hours:** 54 hours LEC; 54 hours LAB  
**Prerequisite:** CISP 370 with a grade of "C" or better  
**Transferable:** CSU  
**Catalog Date:** June 1, 2020

This course in intermediate Visual Basic (VB) programming further examines techniques to solve programming problems. Topics include classes, objects, properties, methods, procedures, functions, hierarchies, inheritance, multiple forms, components, tables, databases, datasets, queries, menus, toolbars, report creation, testing, and debugging.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- create a plan and a program that provides a solution to a well-defined programming problem.
- using tables and datasets, create programs that use text files and database files by linking, importing, exporting, and querying with emphasis on SQL.
- create user interfaces which use multiple forms, classes, objects, properties, methods, procedures, functions, hierarchies, inheritance, components, tables, menus, and toolbars.
- create event code for objects.
- create reports using Crystal Reports.
- build, compile, execute, test, and debug programs.

**CISP 400 Object Oriented Programming with C++**

**Units:** 4  
**Hours:** 54 hours LEC; 54 hours LAB  
**Prerequisite:** CISP 360 or 480 with a grade of "C" or better  
**Advisory:** CISC 323  
**Transferable:** CSU; UC  
**General Education:** AA/AS Area II(b)  
**C-ID:** C-ID COMP 122  
**Catalog Date:** June 1, 2020

This course is an introduction to the C++ programming language and object-oriented programming in the Linux/UNIX environment. Topics include a programming languages overview, program analysis and design, encapsulation, overloading, classes, inheritance, virtual functions, polymorphism, templates, exception handling, and the standard template library. In addition, basic Linux/UNIX commands and make files are covered.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- summarize the evolution of programming paradigms and identify the characteristics of each style.
- choose Linux/UNIX commands to perform various tasks.
- create Linux/UNIX make files to automate the compilation and linking of multi-file C++ programs.
- differentiate between what is done by the preprocessor, the compiler, and the linker.
- design C++ classes that follow given specifications.
- evaluate different object-oriented solutions to programming problems.
• analyze programming problems.
• formulate object-oriented solutions to programming problems.

CISP 401 Object Oriented Programming with Java

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: CISP 380 with a grade of "C" or better
Transferable: CSU; UC
Catalog Date: June 1, 2020

This course introduces object-oriented programming using the Java programming language. Topics include objects, inheritance, polymorphism, interfaces, abstract classes, inner classes, error handling, graphical user interfaces (GUI), applets, threads, files, databases, and packages.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• manipulate Java language syntax.
• develop event driven programs for both applets and applications.
• compare the Java language to other programming languages.
• design software using object-oriented methods.
• develop programs using inheritance and polymorphism.
• write database applications using embedded Structured Query Language (SQL).
• develop multi-threaded applications.
• use Java to create graphical user interfaces.

CISP 430 Data Structures

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: CISP 400 or 401 with a grade of "C" or better
Transferable: CSU; UC
C-ID: C-ID COMP 132
Catalog Date: June 1, 2020

This course applies object-oriented techniques for systematic problem analysis and the managing of program complexity using abstraction. Specification, design, coding, testing, and documentation of large multi-file programs are covered. It uses advanced language features such as classes, strings, non-text files, pointers, and recursion. Abstract data types such as stacks, queues, lists, binary trees, heaps/priority queues, hash tables, and graphs are examined. Various sorting and searching algorithms are presented and analyzed using Big-O notation.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• propose solutions to complex programming problems and create code to implement these solutions.
• implement singly linked lists, doubly linked lists, circular linked lists, stacks, queues, trees, and graphs.
• implement recursive modules.
• implement various sorting and searching techniques.
• estimate the efficiency of various sorting and searching algorithms using Big-O notation.

CISP 440 Discrete Structures for Computer Science

Units: 3

This course applies object-oriented techniques for systematic problem analysis and the managing of program complexity using abstraction. Specification, design, coding, testing, and documentation of large multi-file programs are covered. It uses advanced language features such as classes, strings, non-text files, pointers, and recursion. Abstract data types such as stacks, queues, lists, binary trees, heaps/priority queues, hash tables, and graphs are examined. Various sorting and searching algorithms are presented and analyzed using Big-O notation.
This course is an introduction to the discrete structures used in computer science with an emphasis on their applications. Topics include functions, relations, and sets; basic logic; proof techniques; basics of counting; graphs and trees; and discrete probability.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze how formal tools of symbolic logic are used to model real-life situations, including those arising in computing contexts such as program correctness, database queries, and algorithms.
- compare mathematical induction as a proof technique to recursion and recursively defined structures as programming concepts.
- analyze a problem to create relevant recurrence equations.
- design different traversal methods for trees and graphs.
- choose between the binomial theorem for independent events and Bayes' theorem for dependent events.

CISP 480 Honors Introduction to Structured Programming

Units: 5
Hours: 72 hours LEC; 54 hours LAB
Prerequisite: Placement into ENGWR 480 through the assessment process.
Advisory: CISC 310
Transferable: CSU; UC
General Education: AA/AS Area II(b)
Catalog Date: June 1, 2020

This honors course combines the content of both CISP 300 and CISP 360 and presents it in an accelerated fashion emphasizing projects and collaborative work. It introduces methods for solving typical computer problems by assessing and analyzing computing problems, performing algorithm design using a top-down, divide and conquer approach, and continues with implementation, documentation, testing, and debugging. Topics include structured programming, data representation, data types, variables, constants, operators, and expression evaluation. It also includes control structures, functions, interactive and file input/output, standard libraries, arrays, pointers, structures, classes, and objects. Pseudocode and an object-oriented programming language are used to create program solutions. This course is not open to students who have completed CISP 300 or CISP 360.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- develop, implement, and evaluate expressions using the operators prevalent in most programming languages including arithmetic, comparison, and logical operators
- develop and implement basic algorithms using sequence, selection, and repetition
- deduce pre- and post-conditions for control structures and modules
- construct a trace table to emulate the execution of a program that utilizes variables, various control structures, data organizations, modules, and parameters
- differentiate roles involved in software development, including developers, analysts, and test engineers
- develop efficient algorithms for the solution of problems using structured programming techniques
- implement suitable data structures to support a given algorithm
- formulate and implement algorithms to solve complex problems using a high-level language
- use the top-down, divide and conquer development approach to implement modular, maintainable programs
- assess the efficiency of differing solutions to a problem
- analyze an existing algorithm implementation for errors, then develop solution program code to correct the errors
- utilize standard libraries for common tasks such as file input/output and mathematical operations
- design and use classes and objects
• compare procedural and object-oriented approaches to problem solving
• apply the software development life-cycle for program design, development, coding style, documentation, and testing

Computer Information Science - Security (CISS)

CISS 300 Introduction to Information Systems Security

Units: 1
Hours: 18 hours LEC
Prerequisite: None.
Advisory: CISC 320, 350, and 351
Transferable: CSU
Catalog Date: June 1, 2020

This course provides an introduction to network-based and Internet-based security applications and standards. Topics include encryption, security protocols, network security applications, digital signatures, protecting computers and the network from viruses, Trojans, spyware, unsolicited email, and public and private key exchange.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• describe the fundamental concepts of the cyber security discipline and use to provide system security.
• describe potential system attacks and the actors that might perform them.
• describe cyber defense tools, methods and components, and apply cyber defense methods to prepare a system to repel attacks.
• describe appropriate measures to be taken in the event of a system compromise.
• describe why each principle is important to security and how it enables the development of security mechanisms that can implement desired security policies.

CISS 310 Network Security Fundamentals

Units: 3
Hours: 45 hours LEC; 27 hours LAB
Prerequisite: None.
Advisory: CISN 140 or 300
Transferable: CSU
Catalog Date: June 1, 2020

This course is an introduction to the fundamental principles and skills of Information Technology security and risk management at the organizational level. Topics include network security, compliance and operational security, threats and vulnerabilities, application and data security, host security, access control and identity management, and cryptography. It also covers the required content of the Computing Technology Industry Association (CompTIA) Security+.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• describe the fundamental concepts and principles of the cyber security discipline and use to provide system security.
• evaluate why each principle is important to security and how it enables the development of security mechanisms that can implement desired security policies.
• describe the hardware components of modern computing environments and their individual functions.
• identify the Federal, State and Local Cyber Defense partners/structures.
• explain the basic security implications of modern computing environments.
• analyze cyber defense tools, methods and components and apply cyber defense methods to prepare a system to repel attacks.
• identify appropriate measures to be taken should a system compromise occur.
• properly use the vocabulary associated with cyber security.
• analyze common security failures and identify specific design principles that have been violated.
• evaluate different types of attacks and their characteristics.
**CISS 315 Ethical Hacking**

**Units:** 3  
**Hours:** 45 hours LEC; 27 hours LAB  
**Prerequisite:** None.  
**Corequisite:** CISS 310  
**Advisory:** CISC 300  
**Transferable:** CSU  
**Catalog Date:** June 1, 2020

This course introduces the network security specialist to the various methodologies for attacking a network. Topics include the concepts, principles, and techniques necessary to attack and disable a network within the context of properly securing a network. It emphasizes network attack techniques and methodologies, and appropriate defenses and countermeasures. Supplementary hardware and software may be required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- examine how the internet is used for cybercrime, cyber-stalking, and other abusive behaviors.
- describe different types of attacks and their characteristics.
- examine the placement of security functions in a system and describe the strengths and weaknesses.
- identify the bad actors in cyberspace and compare and contrast their resources, capabilities/techniques, motivations and aversion to risk.
- examine how the internet is used for cybercrime, cyber-stalking, and other abusive behaviors.
- describe Federal and State laws and authorities:  
  a. Computer Security Act  
  b. Sarbanes – Oxley  
  c. Gramm – Leach – Billey  
  d. Privacy (COPPA)  
  e. USA Patriot Act  
  f. Americans with Disabilities Act, Section 508  
  g. other Federal laws and regulations  
  h. other California laws and regulations
- describe the role of cybersecurity in supporting and encouraging ethics, as well as where cybersecurity practices can cause ethical conflicts.
- examine diverse ethical dilemmas.
- explain how ethical foundations are applied to situations arising from the interconnected world.
- evaluate the effectiveness of applications of cybersecurity in preventing crime and abuse.
- describe what an ethical hacker can and cannot do legally.
- identify ports, protocols, and services.
- construct software configuration settings that will assist in protecting the PC.
- defend a computer and a LAN against a variety of different types of security attacks using a number of hands-on techniques.
- practice and use safe techniques on the Internet.
- identify the tools and methods a "hacker" uses to break into a computer or network.
- evaluate the effectiveness of applications of cybersecurity in preventing crime and abuse.
- plan, organize, and perform penetration testing on a simple network.

**CISS 330 Implementing Internet Security and Firewalls**

**Units:** 3  
**Hours:** 45 hours LEC; 27 hours LAB  
**Prerequisite:** CISS 310 with a grade of "C" or better  
**Transferable:** CSU  
**Catalog Date:** June 1, 2020
This course covers network and Internet security and deployment of industry standard countermeasures, including configuring Virtual Private Network (VPN) connections. Topics include the evaluation, implementation, and management of secure remote-access technologies. Also covered is the configuration of network firewalls, and allowing access to key services while maintaining security. This course is not open to students who have completed CISS 325.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze problems, recommend solutions, products, and technologies to meet business objectives.
- recommend best security practices to achieve stated business objectives based on risk assumptions.
- actively protect information technology assets and infrastructure from external and internal threats.
- monitor systems for anomalies, proper updating, and patching.
- evaluate and perform planning, testing, and implementation of software and hardware deployed.
- assist in incident responses for any breaches, intrusions, or theft.
- recommend best practices for effective configurations and maintenance of Virtual Private Networks (VPNs) and firewalls.
- explain how network defense tools (firewalls, IDS, etc.) are used to defend against attacks and mitigate vulnerabilities.
- implement Network Security Components (Data Loss Prevention, VPNs/firewalls).

CISS 341 Implementing Windows Operating System Security

Units: 3
Hours: 45 hours LEC; 27 hours LAB
Prerequisite: None.
Advisory: CISC 320, CISC 351, and CISS 310
Transferable: CSU
Catalog Date: June 1, 2020

This course provides in-depth information on the Microsoft Windows desktop operating system security features, as well as step-by-step configuration for effective operating system security. The techniques needed in order to maintain the integrity, authenticity, availability, and privacy of the system and user data are covered.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- evaluate network security from the perspective of the Microsoft Windows client operating system.
- assess how to secure data using a Microsoft Windows operating system.
- demonstrate use of the tools required to configure client operating system services.
- examine and configure network services in accordance with best current security practices.
- differentiate, describe, and configure file sharing services and file system security permissions in accordance with best security practices.
- evaluate and describe the relationships between major network services.
- compare and contrast the roles of security, ethics, and privacy management issues regarding data storage.
- define and differentiate user rights and file permissions in terms of security.
- set up an appropriate file encryption method to optimize security on a multi-user workstation.

CISS 342 Implementing Linux Operating System Security

Units: 3
Hours: 45 hours LEC; 27 hours LAB
Prerequisite: None.
Advisory: CISC 323 and CISS 310
Transferable: CSU
Catalog Date: June 1, 2020
This course provides in-depth information on Linux/UNIX operating system security features, as well as step-by-step configuration for effective operating system security. The techniques needed in order to maintain the integrity, authenticity, availability, and privacy of the system and user data are covered.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- evaluate network security from the perspective of a Linux/UNIX client operating system.
- assess how to secure data using a Linux/UNIX operating system.
- demonstrate use of the tools required to configure client operating system services.
- examine and configure network services in accordance with best current security practices.
- differentiate and describe file sharing services and file system security permissions.
- configure file sharing services and file system security permissions in accordance with industry standard security practices.
- evaluate and describe the relationships between major network services.
- compare and contrast the roles of security, ethics, and privacy management issues regarding data storage.
- define and differentiate user rights and file permissions in terms of security.
- configure an appropriate file encryption method to optimize security on a multi-user workstation.

CISS 350 Disaster Recovery

This course provides methods for identifying vulnerabilities and implementing countermeasures to prevent and mitigate failure risks in the information technology infrastructure for the business enterprise. Topics include disaster recovery, development of a disaster recovery plan, risk assessment, and development and implementation of disaster recovery policies and procedures.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- compare and contrast different types of standards that impact information systems including: laws, regulations, policies, voluntary, and framework-based standards.
- list the applicable laws and policies related to cyber defense and describe the major components of each pertaining to the storage and transmission of data.
- outline and explain the roles of personnel in planning and managing security, including: board of directors, senior management, Chief Information Security Officer (CISO), IT management (CIO, IT Director, etc.), functional area management, information security personnel, and end users.
- examine the placement of security functions in a system and describe the strengths and weaknesses.
- develop contingency plans for various size organizations to include: business continuity, disaster recovery, technology recovery, and incident response.
- develop system-specific plans for: the protection of intellectual property, the implementation of access controls, and patch and change management.
- describe responsibilities related to the handling of data as it pertains to legal, ethical, and/or agency auditing issues.
- develop a security program, identifying goals, objectives, and metrics.
- apply knowledge to effectively manage a security program.
- assess the effectiveness of a security program.
- describe how risk relates to a system security policy.
- describe various risk analysis methodologies.
- evaluate, categorize, and recommend appropriate responses to risks with respect to technology, individuals, and in the enterprise.
- compare the advantages and disadvantages of various risk assessment methodologies.
- select the optimal risk assessment methodology based on needs, advantages, and disadvantages.
CISS 360 Computer Forensics and Investigation

**Units:** 3  
**Hours:** 45 hours LEC; 27 hours LAB  
**Prerequisite:** None  
**Corequisite:** CISS 310  
**Advisory:** CISC 324 and CISS 350  
**Transferable:** CSU  
**Catalog Date:** June 1, 2020

This course introduces the methods used to conduct a computer forensics investigation. Topics include an overview of computer forensics as a profession, the computer investigation process, operating systems' boot processes and disk structures, data acquisition and analysis, ethics, and a review of standard computer forensic tools. The course topics map to the objectives of the International Association of Computer Investigative Specialists (IACIS) certification.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- define computer forensics concepts as a profession.
- list the applicable laws and policies related to cyber defense and describe the major components of each pertaining to the storage and transmission of data.
- discuss the rules, laws, policies, and procedures that affect digital forensics.
- identify how the type of legal dispute (civil, criminal, private) affects the evidence used to resolve it.
- describe their responsibilities related to the handling of data as it pertains to legal, ethical and/or agency auditing issues.
- assess and compare computer forensic tools used in investigations.
- construct and employ digital evidence controls to safeguard the results of the forensic investigation.
- describe the steps in performing digital forensics from the initial recognition of an incident through the steps of evidence gathering, preservation and analysis, through the completion of legal proceedings.
- evaluate methods for the acquisition/analysis of widespread, non-PC devices.
- critique a forensic analysis and prepare reports for private-sector management and/or law enforcement.
- prepare a report on email investigation methods for a forensic analysis.
- describe and compare graphic image recovery methods.
- compose forensic analysis reports using technical jargon and non-technical terms.
- use one or more common DF tools, such as EnCase, FTK, ProDiscover, Xways, SleuthKit.

Computer Information Science - Web (CISW)

CISW 300 Web Publishing

**Units:** 3  
**Hours:** 36 hours LEC; 54 hours LAB  
**Prerequisite:** None  
**Advisory:** CISC 300 and 305  
**Transferable:** CSU  
**Catalog Date:** June 1, 2020

This course is an introduction to publishing on the World Wide Web. Topics include creating web pages with the Hyper Text Markup Language (HTML), organizing a series of pages into a web site, and uploading web pages to a server. This course makes extensive use of the computer tools necessary to insert HTML tags, create images, and view web documents. It takes beginning web designers through the process of designing, building, and publishing a working web site.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- develop web pages applying structured design principles using current standards of Hyper Text Markup Language (HTML)
• publish documents on the World Wide Web using File Transfer Protocol (FTP) software and Secure Shell (SSH/Telnet) software
• build, maintain, and organize a working web account on a web server
• develop web site design concepts using both Cascading Style Sheet (CSS) structures and table structures
• develop web site navigation using links, buttons, and menu options
• create web forms using standard HTML form tags
• produce basic web graphics and incorporate them on a web page using HTML and CSS

CISW 304 Cascading Style Sheets

Units: 2
Hours: 27 hours LEC; 27 hours LAB
Prerequisite: CISW 300 with a grade of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This course continues the study of technical aspects of standards-based web design for experienced students and web professionals. Topics include the separation of content from presentation, dynamic user interaction, and designing for alternative devices using Cascading Style Sheets (CSS) in combination with Hypertext Markup Language (HTML).

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• describe the differences among versions of CSS, including issues of cross-platform compatibility.
• utilize proper CSS syntax for developing internal and external style sheets.
• differentiate between the class and id attributes, determine which should be used for a specific situation, and apply it using industry standards.
• combine selectors to refine style definitions for a group of elements and/or contextually to one or more elements when used together.
• apply CSS Positioning (CSS-P) to position and layer objects on multiple web pages.

CISW 310 Advanced Web Publishing

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: CISW 300 with a grade of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This course builds upon previous web publishing concepts and study. The primary focus of this course is the systematic development of interactive web sites. Topics include cascading style sheets, dynamic HTML, forms, client-side scripting with JavaScript, Common Gateway Interface (CGI) scripting with Perl, and web-database interactivity.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• develop web pages using advanced design concepts with Cascading Style Sheets (CSS)
• apply the basic concepts and syntax of JavaScript
• construct web pages with structured HTML that incorporate basic JavaScript functions such as mouse rollovers, window popups, slideshows, and form validation
• produce basic web pages using a server-side scripting language such as Perl
• develop a simple server side database using database software such as MySQL and integrate it into a web page using a server-side scripting language
• incorporate JavaScript with the server-side scripting language and database software

CISW 321 Web Site Development using Dreamweaver
This course covers the use of Dreamweaver, a visual web-authoring tool, to develop and publish websites. Topics include creating web pages that contain text, images, links, tables, forms, Cascading Style Sheets, and image maps, as well as how to enhance web pages with Flash elements and built-in scripting languages. Additional topics include developing effective website structures, using website management tools, website documentation, making global updates to a website, and using advanced Dreamweaver features.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- utilize web authoring software to create, manage, and maintain websites.
- develop and manage effective website file structures.
- design and create websites that have effective information design and site navigation.
- develop standards for website consistency.
- utilize built-in scripting languages to industry standard for web page enhancements.
- create documentation for web pages, websites, and website project work flow.
- plan and construct websites.

CISW 350 Imaging for the Web

This course takes an in-depth look at graphics for the Web. Industry standard graphic software is used to technically develop original graphics as well as to manipulate found imagery. Topics include understanding Web file formats, compressing graphics for use on the Web, editing and enhancing graphics, extracting elements, and using layers. This course also covers creating buttons and intuitive navigational elements, making background textures and images, and creating simple animation/video.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify the various graphics file formats and select when to use one format over the other
- compress and optimize graphics for quick uploading on Web pages
- edit and enhance photos using graphic software tools
- select specific areas of an image to extract, copy, combine, or reposition
- create, view, hide, arrange, and select layers
- create buttons, banners and navigation icons for Web pages
- assemble and manipulate background images and textures
- compose simple compressed animations and videos for use in Web pages

CISW 355 Web Imaging Projects

This course covers the use of Dreamweaver, a visual web-authoring tool, to develop and publish websites. Topics include creating web pages that contain text, images, links, tables, forms, Cascading Style Sheets, and image maps, as well as how to enhance web pages with Flash elements and built-in scripting languages. Additional topics include developing effective website structures, using website management tools, website documentation, making global updates to a website, and using advanced Dreamweaver features.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- utilize web authoring software to create, manage, and maintain websites.
- develop and manage effective website file structures.
- design and create websites that have effective information design and site navigation.
- develop standards for website consistency.
- utilize built-in scripting languages to industry standard for web page enhancements.
- create documentation for web pages, websites, and website project work flow.
- plan and construct websites.
This course is a continuation of CISW 350. It covers the creation of graphics for the Web for marketing and advertising. It introduces the steps, procedures, and common problems encountered when producing quality graphics for professional websites. Topics include compressing and upload times, cropping and resizing, digital camera imaging, retouching and fixing photographs, photographic special effects and filters, rasterizing text, and implementing backgrounds, buttons, themes, image maps, and videos. Industry photo editing applications are utilized.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- generate and manipulate graphics from a variety of graphics software
- appraise and implement graphics for client and client base
- compare different technologies that can be used to capture and acquire digital images
- examine how color and image resolution affect image quality
- differentiate among Web graphic file formats and determine when to use them
- analyze website concepts and marketing techniques
- evaluate a user's short-term and long-term goals
- collect information, such as photos or existing logos, from users in a non-technical environment

**CISW 360 Beginning Flash**

**Units:** 3  
**Hours:** 36 hours LEC; 54 hours LAB  
**Prerequisite:** None  
**Advisory:** ARTNM 324, CISW 300, and CISW 350  
**Transferable:** CSU  
**Catalog Date:** June 1, 2020

This course introduces the design and the development of Flash-based interactive web sites and applications. Topics include the creation of simple vector-based graphics, buttons, animation and movies, and the integration of sound, raster graphics, and video.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- create and modify simple Flash objects
- create images and animation using the basic features of Flash
- incorporate simple images on layers to form successful composition
- integrate sound, video, and animation into a web page
- produce interactive interface elements that utilize basic scripting capabilities
- publish multimedia web projects to the Internet

**CISW 370 Designing Accessible Websites**

**Units:** 1  
**Hours:** 18 hours LEC  
**Prerequisite:** CISW 300 with a grade of "C" or better  
**Transferable:** CSU  
**Catalog Date:** June 1, 2020

This course provides an overview of the methods that are used to design websites for people with disabilities. Current legal requirements for accessible websites, especially the Americans with Disabilities Act (ADA), are emphasized.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- describe the current legal requirements for designing websites for people with disabilities.
• compare various tools for the assessment of accessibility of web pages.
• formulate coding strategies for generating accessible websites.
• assess the accessibility levels of various types of websites.
• locate disability and web accessibility resources.
• test specialized browsers and other Internet software for people with disabilities.

CISW 400 Client-side Web Scripting

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: CISW 300 with a grade of "C" or better
Advisory: CISP 300 and CISW 310
Transferable: CSU
Catalog Date: June 1, 2020

This course emphasizes the creation of dynamic and interactive web sites using a client-side scripting language such as JavaScript/Ajax. Topics include the Document Object Model of web pages, core features of the client-side scripting language, event handling, control of windows and frames, functions, and form validation.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• develop web pages using advanced design concepts with Cascading Style Sheets (CSS) and JavaScript.
• analyze the Document Object Model and the concepts behind asynchronous JavaScript and XML (Ajax).
• define the core structures, statements, and syntax of the JavaScript language.
• construct web pages with structured HTML that incorporates basic JavaScript functions such as mouse rollovers, window popups, slideshows, and form validation.
• develop web pages that use the Ajax Engine.
• produce scripts that integrate the Ajax Engine with server-side scripts written in Php or Perl.
• develop database tables using a web database software such as MySQL.
• integrate server-side scripts with Php or Perl using the Ajax Engine.
• write Ajax scripts that incorporate the canvas element and cookies.

CISW 410 Middleware Web Scripting

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: CISW 300 with a grade of "C" or better
Advisory: CISP 300 and CISW 310
Transferable: CSU
Catalog Date: June 1, 2020

This course emphasizes the creation of interactive web sites using a middleware scripting environment such as PHP or Active Server Pages (ASP). Topics include core features of the middleware scripting language, embedding server commands in HTML pages, control structures, functions, arrays, form validations, cookies, environmental variables, email applications, and database-driven web applications.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• compare server-side and client-side scripting languages for the web.
• apply the core structures, statements, and syntax of the middleware scripting language.
• write functions using the middleware web scripting language.
• process form data using the middleware scripting language.
• develop web page navigation using the middleware scripting language.
• produce a web-server based database and apply the basic query structure and table joins.
• develop web pages that use session storage or session cookies.
• apply web page design concepts using the middleware scripting language.
# Associate Degree

## A.A. in Dance

This degree provides an educational and practical foundation for students pursuing a professional career in dance. It is designed to create avenues toward further study and employment in educational dance, choreography, cultural dance, and dance performance. Topics include cultural dance forms, intermediate dance technique, performance studies, and nutrition. Students interested in transferring to a four-year college should meet with a counselor to determine the appropriate coursework.

**Catalog Date:** June 1, 2020

## Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
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<tr>
<td>DANCE 302</td>
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<tr>
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<tr>
<td>DANCE 305</td>
<td>Hawaiian Dance I (1)</td>
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<td>DANCE 306</td>
<td>Polynesian Dance II (1)</td>
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<td>Modern Dance II (1)</td>
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<td>DANCE 390</td>
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<td>DANCE 401</td>
<td>Pre-Pointe and Conditioning (1)</td>
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Choreography:
A minimum of 2 units from the following:

- DANCE 402 Elements of Choreography (1)
- DANCE 403 Choreographic Studies (2)

Production:
A minimum of 3 units from the following:

- DANCE 415 Dance Production: Rehearsal and Backstage Organization (3)
- DANCE 416 Dance Production: Choreography and Costumes (3)
- DANCE 417 Dance Production: Studio and Stage (3)

Performance:
A minimum of 3 units from the following:

- DANCE 430 Jazz Dance Performance Group (3)
- DANCE 431 Performance Group: Master Hip Hop Crew (3)
- DANCE 432 Dance Performance: Contemporary Dance Alliance (3)

Total Units: 18

The Dance Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- describe the basic structure of the human body and its potential for movement
- recount the historical and personal significance of cultural dance
- list the educational requirements for employment as a dance educator
- compare the standards of class etiquette required for participation in ballroom, urban Hip Hop, modern, and ballet dance courses
- discuss the level of training and commitment required for a concentration in dance performance
Dance (DANCE)

DANCE 300 Diverse Cultures in Dance

This course compares and contrasts three forms of indigenous, ethnic, and culturally derived dance. Students learn the traditional significance, origins, movement patterns, and basic steps of the dance form. Field trips may be required.

Upon completion of this course, the student will be able to:

- analyze and discuss the diverse dance culture that he or she is living in.
- list the elements of indigenous dance that act as a form of communication and expression of community beliefs.
- describe the effects of racism, sexism, and ethnocentrism on ethnic, cultural, and indigenous dance forms.
- explain the structure of three different cultural dance forms.
- perform three basic movements from ethnic, cultural, and indigenous dance and be able to compare and contrast these forms.
- explain the definitions for indigenous, cultural, ethnic, and popular dance and classify dances done today into an appropriate category.
- compare and contrast the similarities and differences in three forms of indigenous dance.

DANCE 301 Belly Dancing

This course covers the basic movements, cultural values, and history of belly dance. It includes warmups, movement across the floor, center floor work, combinations, dances, and performance technique. Musical instruments, rhythms, costumes, and choreography are also covered. Field trips may be required.

Upon completion of this course, the student will be able to:

Career Information

This degree is designed for those pursuing a career in professional dance. It prepares dancers for entry-level positions and for transfer to four-year colleges and universities.

Dance (DANCE)

DANCE 300 Diverse Cultures in Dance

Units: 1
Hours: 54 hours LAB
Prerequisite: None.
Transferable: CSU; UC
General Education: AA/AS Area III(a); AA/AS Area VI; CSU Area E2
Catalog Date: June 1, 2020

Student Learning Outcomes

This course compares and contrasts three forms of indigenous, ethnic, and culturally derived dance. Students learn the traditional significance, origins, movement patterns, and basic steps of the dance form. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- evaluate current trends, philosophies, and companies in professional dance
- examine twelve areas for improvement in performance level
- justify the importance of visualization, creativity, and critical feedback in dance education
- demonstrate the necessary technique and performance skill for audition into a four-year institution or application to entry level employment in a professional dance setting
- notate choreography and transpose from video into movement

DANCE 301 Belly Dancing

Units: 1
Hours: 54 hours LAB
Course Family: Cultural Dance (http://arc.losrios.edu/course-families#id_100031)
Prerequisite: None.
Transferable: CSU; UC
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course covers the basic movements, cultural values, and history of belly dance. It includes warmups, movement across the floor, center floor work, combinations, dances, and performance technique. Musical instruments, rhythms, costumes, and choreography are also covered. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- evaluate current trends, philosophies, and companies in professional dance
- examine twelve areas for improvement in performance level
- justify the importance of visualization, creativity, and critical feedback in dance education
- demonstrate the necessary technique and performance skill for audition into a four-year institution or application to entry level employment in a professional dance setting
- notate choreography and transpose from video into movement

Career Information

This degree is designed for those pursuing a career in professional dance. It prepares dancers for entry-level positions and for transfer to four-year colleges and universities.
• discuss the history of belly dance.
• identify three basic on-the-spot movements of belly dance.
• discuss the use of three props often found in belly dance.
• identify the sound of three musical instruments that are used in belly dance.
• perform one movement for each of the three sections of the body.
• demonstrate the difference between side-travel and forward-travel steps.

DANCE 302 African Dance

| Units:     | 1
| Hours:     | 54 hours LAB
| Course Family: | Cultural Dance (http://arc.losrios.edu/course-families#id_100031)
| Prerequisite: | None.
| Transferable: | CSU; UC
| General Education: | AA/AS Area III(a); CSU Area E2
| Catalog Date: | June 1, 2020

This course covers basic movement from African and West African styles of dance. Afro-Haitian and Afro-Caribbean styles may also be included, as well as an investigation of the Dunham technique and process of African dance. It includes beginning level warmup, across the floor movement, and center combinations to varied drum rhythms. No previous dance experience is necessary. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• perform two African dances from different geographic origins.
• explain why African dance is called the 'Mother of All Dance'.
• discuss the impact of Katherine Dunham's technique on African dance.
• evaluate the usefulness of drumming rhythms in African dance.
• demonstrate the range of motion for a basic African dance arm movement.
• define the African vocabulary word used as a greeting and as a signal to begin an African class or dance.
• choreograph and perform a one-minute African dance with three other dancers.

DANCE 304 Polynesian Dance I

| Units:     | 1
| Hours:     | 54 hours LAB
| Course Family: | Cultural Dance (http://arc.losrios.edu/course-families#id_100031)
| Prerequisite: | None.
| Transferable: | CSU; UC
| General Education: | AA/AS Area III(a); CSU Area E2
| Catalog Date: | June 1, 2020

This course covers basic dances from Polynesia, including dances from Tahiti, Hawaii, and New Zealand. Topics include: warm ups, center dances, and cultural vocabulary. The origin, history, and cultural importance of Polynesian dance is presented. No dance experience is necessary for this course. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• demonstrate typical elements from Hawaiian, Tahitian, and New Zealand dance.
• compare and contrast the dances of Hawaii and Tahiti.
• identify individual Polynesian dances by origin.
• warm up using basic movements taken from one New Zealand dance.
• identify the time period of a dance learned in class.
DANCE 305 Hawaiian Dance I

This course covers the basic components of Hawaiian dance within its traditional context. It provides an opportunity to study the history, origin, and cultural importance of hula. Topics include: basic Hawaiian vocabulary for dance and the creation of floral adornments. This course is for students with little or no experience in Hawaiian dance. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- perform ten typical elements of Hawaiian dance.
- explain the differences between the styles of hula called Kahiko and Auana.
- recognize and list the time period and historical context of each dance studied.
- analyze and chart the geographic and cultural origins of each dance studied.
- identify key dance steps and break down the timing, rhythm, and placement in one dance sequence.
- design and create a fresh foliage adornment for Hawaiian dance.

DANCE 306 Polynesian Dance II

This course offers further study of Polynesian dance within its traditional context. It continues the basic technique of Polynesian dance begun in DANCE 304 with a more rigorous training approach by adding faster tempos and more complex components. This course includes more intricate rhythms, timing, and footwork, with the original meanings and historical content intact. The origin, history, and vocabulary of Polynesian dances are explored with an emphasis on the current cultural importance of Polynesian dance within a changing society. This course is for students with previous training in Polynesian dance. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- state the time period and historical context of each dance studied.
- perform a three-minute Polynesian dance.
- correctly spell and pronounce 25 Polynesian vocabulary words.
- write a three-page critique of a live or DVD Polynesian dance performance.
- choreograph a brief contemporary Polynesian dance that uses elements of technique from New Zealand or Tahiti dance.
DANCE 307 Hawaiian Dance II

Units: 1
Hours: 54 hours LAB
Course Family: Cultural Dance (http://arc.losrios.edu/course-families#id_100031)
Prerequisite: None.
Enrollment Limitation: DANCE 305 with a grade of "C" or better or by audition.
Transferable: CSU; UC
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course offers further study of Hawaiian dance within its traditional context. It continues the basic hula technique begun in DANCE 305 with a more rigorous approach by adding faster tempos and more complex components. This course includes more intricate footwork, timing, and communication of the steps with the original meanings and historical content intact. The origin, history, and vocabulary of Hawaiian dances are explored with an emphasis on the current cultural importance of hula in a changing Hawaiian population. This course is for students with previous training in Hawaiian dance. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- recite the history and meaning of three traditional Hawaiian dances.
- explain the importance of continuing to teach the tradition of hula dances.
- describe the effects of European influence on the traditions of Hawaiian dance and culture.
- list the consequences of continuing to allow European traditions, adornments, and rhythms to invade or overwhelm the traditional practices of hula dance.
- create and use in context the traditional adornments for three dances.
- tell the story of connecting with ancestors and the kind of communication with them that is said to be embedded within the act of performing a hula dance.

DANCE 310 Jazz Dance I

Units: 1
Hours: 54 hours LAB
Course Family: Jazz Dance Technique (http://arc.losrios.edu/course-families#id_100032)
Prerequisite: None.
Transferable: CSU; UC
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course covers the concepts of beginning alignment, simple balance, single turns, and basic technique for jazz dance. It provides a foundation in the basic steps, vocabulary, history, and traditions of various jazz dance styles. The focus is on small group dances that use space in a full-out and presentational style. This course is for students without previous dance training. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- define the concepts of dancing full-out, eating space, marking, and dancing on the beat.
- demonstrate within a group, a two-minute jazz dance combination.
- write an evaluation of the basic technique used in a live dance concert.
- explain the origins of three different jazz dance styles.
- list three basic errors in alignment.
- break down a difficult combination or transition by slowing it down, saying it out loud, and greatly enlarging the movements.

DANCE 312 Jazz Dance II

Units: 1
Hours: 54 hours LAB
Course Family: Jazz Dance Technique (http://arc.losrios.edu/course-families#id_100032)
Prerequisite: None.
Enrollment Limitation: DANCE 310 with a grade of "C" or better or by audition.
This course continues to refine the basic skills begun in DANCE 310 and further instills proper alignment and technique for jazz dance. This course offers students an opportunity to explore new learning styles through the continued study of jazz dance with more complex rhythms, new vocabulary, varied methods of counting, and new spatial problems to be solved. This course is for students with some previous jazz dance training. Field trips may be required.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- perform a two-minute jazz dance combination within a group.
- write a critique of a live dance concert performance with the emphasis on expressing and defending a personal opinion concerning the technique of dancers in the performance.
- use two learning styles for learning complicated movement.
- apply one theory of jazz dance technique to a full warm up series.
- name the most common error in isolation technique of moving the head, neck, and shoulders.
- identify the originator of one theory of jazz dance technique.
- explain the progression of movement for chasse kick ball change, rocking horses, and run, run, grand jete.

DANCE 313 Jazz Dance III

Units: 1
Hours: 54 hours LAB
Course Family: Jazz Dance Technique
Prerequisite: None.
Enrollment Limitation: DANCE 312 with a grade of "C" or better or by audition.
Transferable: CSU; UC
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course continues the foundation of basic steps and turns begun in DANCE 312 and further instills proper alignment and technique. It introduces more complex combinations in center, a greater vocabulary of movement across the floor, and a better understanding of technique for multiple jazz turns. This course is for students with previous jazz dance training. Field trips may be required.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- execute two jazz pirouettes, turning in plie, ending in eleve, with proper jazz alignment, and placing the final foot down after the balance in eleve.
- perform a one-minute jazz dance combination with flawless execution.
- use at least one learning method that empowers quick-study learning for dance.
- write a critique of a live dance concert focusing on the showmanship and technique of the dancers.
- recite the progression of the foot and leg as it comes out of any jump or leap and reaches the floor.
- explain the consequences of over-rotation, incorrect alignment, over-extended arms and over-shot foot placement on multiple turns.

DANCE 314 Jazz Dance IV

Units: 1
Hours: 54 hours LAB
Course Family: Jazz Dance Technique
Prerequisite: None.
Enrollment Limitation: DANCE 313 with a grade of "C" or better or by audition.
Transferable: CSU; UC
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course continues the study of jazz dance focusing on allegro movement studies with quicker, more complex combinations in center, a more difficult vocabulary of
movement across the floor, and progressive technique for multiple jazz turns. It emphasizes changes of directions, dynamics, and levels. This course is for students with previous jazz dance training. Field trips may be required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- translate the shape of the turn and circumference of the circle made by the arms into the speed of the turn.
- manipulate shape, angles, energy, and speed to move the body in dance.
- support a balance with the breath by feeling the center of the movement being controlled or released from within the core of the body.
- explain why movements from the floor to standing and from standing to the floor are said to be the most difficult transitions for dancers to make.
- execute eight eight-counts of high energy movement in a presto tempo and an adagio manner without losing the percussive values of the jazz style movement.
- perform a series of center turns with up to four turns integrating showmanship and flawless execution with the technique.

**DANCE 315 Jazz Dance V**

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This course continues the study of jazz dance with rigorous emphasis on allegro movement, jumps, leaps, and technique for multiple turns. Topics include the propensity of jazz dance to absorb the movements of many cultures and to utilize the current social climate in reflecting the era in dance. This course is for students with previous jazz dance training. Field trips may be required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- evaluate a live dance concert for the showmanship, technique, and execution that the dancers exhibit in the performance of their dances.
- create innovative movement that can be expressed in a solo combination by combining jazz styles and using research findings to add cultural content.
- demonstrate a one-minute jazz dance in two different styles of jazz.
- identify the origins of two different styles of jazz dance.
- dramatize a jazz dance combination by transferring the emotional qualities and subtext of a newspaper story into movement for emotional content.
- manipulate a standard dance frame or alignment to support an off-balance movement.
- explain how jazz dance reflects the social and political climate of its era.

**DANCE 320 Ballet I**

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This course covers the basic alignment, steps, and technique suitable for beginners in ballet. It provides a foundation in the etiquette, vocabulary, and traditions of classical ballet and allows for certain physical modifications to the turnout that is required in more advanced coursework. Included is a progression of barre exercises designed to develop alignment, strength, range of motion, and balance. This course is for students with little or no ballet training. Field trips may be required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:
• identify 25 ballet steps as you see them correctly performed.
• explain the relationship of the working foot to the floor in a beginning progression of first position tendu, degage, and grand battement barre exercises.
• use constructive criticism for beginning ballet partner work.
• list the three countries that were the most active in the early evolution of classical ballet.
• explain the use of open fourth and open fifth positions as they relate to the idea of forced turnout in beginning ballet.
• perform basic positions one through five and reverence using proper alignment.
• demonstrate a chaine turn with a final pose ending.

DANCE 321 Ballet II

Units: 1
Hours: 54 hours LAB
Course Family: Ballet Technique (http://arc.losrios.edu/course-families#id_100033)
Prerequisite: None.
Enrollment Limitation: DANCE 320 with a grade of "C" or better or by audition.
Transferable: CSU; UC
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course reinforces the foundation begun in DANCE 320 and offers an opportunity to perfect basic steps while introducing new combinations at the barre. The origins and purpose of ballet are introduced, along with new vocabulary words, more complex barre combinations and more intricate steps across the floor. The emphasis is on balance, using plie, and extending range of motion. This course is for students with some basic ballet training. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• demonstrate a one-minute ballet combination that incorporates steps from the vocabulary list.
• critique a live dance concert by using the errors made and the excellence achieved by the performers.
• define twenty-five ballet vocabulary words and spell them correctly.
• identify the French king who was responsible for most of the development of codified classical ballet.
• explain the origin and meaning of the word cambre.
• explain the relationship between the foot and the floor in the barre exercises tendu, degage, and grand battement.

DANCE 322 Ballet III

Units: 1
Hours: 54 hours LAB
Course Family: Ballet Technique (http://arc.losrios.edu/course-families#id_100033)
Prerequisite: None.
Enrollment Limitation: DANCE 321 with a grade of "C" or better or by audition.
Transferable: CSU; UC
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course refines the technique begun in DANCE 321 and introduces more complex steps, new vocabulary, and longer, more difficult combinations. The emphasis is on technique for vertical jumps, multiple turns, and higher extensions with focus also on the continued development of strength. This course is for students with previous ballet training. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• critique a live dance concert by offering kudos for the selections that were met with approval and alternative solutions for errors in technique, presentation, execution or showmanship.
• demonstrate a one-minute ballet combination that incorporates steps that are included on the vocabulary list.
• identify the correct spelling and definition for twenty-five words of ballet vocabulary
- execute a fluent double pirouette right and left.
- explain concepts for training jumps by formulating a strategy for or against bringing the heels down at the end of each jump.
- perform a developpe extension in second of either leg and hold for five seconds on flat without assistance from the barre.

DANCE 323 Ballet IV

Units: 1  
Hours: 54 hours LAB  
Course Family: Ballet Technique (http://arc.losrios.edu/course-families#id_100033)  
Prerequisite: None.  
Enrollment Limitation: DANCE 322 with a grade of "C" or better or by audition.  
Transferable: CSU; UC  
General Education: AA/AS Area III(a); CSU Area E2  
Catalog Date: June 1, 2020

This course continues the study of ballet begun in DANCE 322, focusing on concepts for improved technique, better balance, and stronger placement for the upper body. Allegro and adagio combinations are introduced and warm ups are designed to prepare for more difficult center work. This course is for students with previous ballet training. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- critique a live dance concert with emphasis on suggestions for correcting errors in technique.
- perform a two-minute dance that includes developpe, pirouette, arabesque, and attitude.
- explain the reasoning behind creating steps that were designed only for royals to perform.
- describe the progress of a fouette that flips but does not turn.
- explain why, in a pique turn, one leg never straightens and the other never bends.
- spell 25 words of vocabulary used in this class.

DANCE 324 Ballet V

Units: 1  
Hours: 54 hours LAB  
Course Family: Ballet Technique (http://arc.losrios.edu/course-families#id_100033)  
Prerequisite: None.  
Enrollment Limitation: DANCE 323 with a grade of "C" or better or by audition.  
Transferable: CSU; UC  
General Education: AA/AS Area III(a); CSU Area E2  
Catalog Date: June 1, 2020

This course continues the study of ballet technique begun in DANCE 323 and promotes greater learning by offering a wider variety of steps, new vocabulary, more difficult barre, turns, leaps, historical information, and the introduction of basic partner dances. This course is designed for students with previous ballet technique and experience. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- perform a double pirouette right and left.
- critique a professional or regional ballet performance.
- explain the reason we speak mostly French in ballet class and give credit to the artist responsible.
- demonstrate an Italian attitude, a professional American attitude, and a Russian attitude and explain the differences.
- explain why a perfect reverence will have the head lowered far enough to show the crown of the head.
- perform a two-minute partner dance in a character style.
DANCE 326 Ballet: Variations and Combinations

This course utilizes technique and history covered in all previous ballet courses and initiates the process of studying and interpreting ballet variations and combinations. Combinations are newly created and appropriate for each dancer, while performance of variations, traditionally given as a reward for hard work, will be assigned by individual merit and group ability. New vocabulary, variation details, shocking dance history, famous performances, and the ballets that they sprang from are covered. This course may only be taken en pointe by permission and is designed for more experienced dancers. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain how the execution of a classical ballet variation is both a work of art and an athletic endeavor.
- describe which major muscle groups are called upon for strength in dancing either the man’s or woman’s Bluebird Variation from the Sleeping Beauty ballet.
- research a classical variation and note what others have said about its historical value to classical ballet as danced by several ballerinas or danseurs.
- explain the value of learning classical variation materials.
- paraphrase the story of at least one classical ballet and pinpoint the social crisis or human dilemma from the ballet that is still in evidence today.
- clarify the use of variations within a classical ballet by describing the focus of the ballet and how this variation exists within it.
- perform one classical ballet variation and one contemporary ballet combination.
- display a portfolio in which an electronic recording of your performance of one classical variation and one contemporary ballet combination is included.

DANCE 330 Modern Dance I

This course provides a solid foundation in technique, alignment, and vocabulary for modern dance. It offers study in the history and traditions of modern dance and an appreciation for its importance in American dance. Individual expression and creativity are encouraged with an emphasis on problem solving and techniques for dealing with basic design, time, shape, and energy concepts for modern dance movement. This course is for students with little or no modern dance training. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain proper alignment for modern dance.
- describe the quality of movement known as percussive.
- list the movement progression and breathing pattern for a suspend-release fall.
- create an across-the-floor combination that includes vibratory and sustained movements.
- demonstrate a running triplet.
- write a live dance performance critique.

DANCE 332 Modern Dance II
This course furthers the study of modern dance begun in DANCE 330 and continues the emphasis on organic movement that fills space with dynamic movements and an energetic flow of the body. Momentum and extension from the core of the body are introduced as well as explorations in space and energy. This course is designed for students with some experience in modern dance technique. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- create a one-minute piece of choreography using the explorations, technique, and topics studied in class.
- spell twenty five words from the modern dance vocabulary list used for this course.
- explain the energy, momentum, and flow for a dancer moving side to side across the floor.
- explain what is meant by the shout, “Eat space!”
- critique a formal live dance concert.
- define the meaning of full out, mark, and hand mark.

DANCE 333 Modern Dance III

This course furthers the technical study of modern dance that was begun in DANCE 332 and extends the technique to include studies of time and distance. It encourages technique that results in full out movement, better alignment for strength and balance, and concepts for hopping, jumping, and leaving the ground. The study of modern dance innovators is included. This course is for students with some experience in modern dance technique. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- perform a two-minute piece of choreography that is developed from explorations included in this course.
- critique the technical ability of dancers in a live dance company performance.
- spell twenty-five modern dance vocabulary words from the vocabulary list for this class.
- present thirty-six eight counts of choreography utilizing the concepts of space, making shapes, and changing intensity that were taught in class.
- perform the same unaccompanied sixteen counts of movement in a fast tempo, a slow-motion speed, and at a moderate rate.
- explain the progression of movement for landing in a modern jump.

DANCE 334 Modern Dance IV

This course furthers the technical study of modern dance that was begun in DANCE 333 and continues the technique to include studies of time and distance. It encourages technique that results in full out movement, better alignment for strength and balance, and concepts for hopping, jumping, and leaving the ground. The study of modern dance innovators is included. This course is for students with some experience in modern dance technique. Field trips may be required.
This course furthers the technique of modern dance studied in DANCE 333 and places the emphasis on explorations of percussive, sustained, and suspended movement qualities with time and effort changes. Utilizing exact repetition, gradual changes, and the human breath, exercises to maintain technique are developed for strength training and imagery as well as inspiration for choreography. This course requires prior modern dance training. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain the concept of working out the middle of the dance before choreographing the beginning or the end.
- write a critique of the choreography for a live dance performance.
- create dance movement out of gestures.
- choreograph and perform a one-minute, modern dance solo.
- explain sustained movement and why it is such an easy source of contrast.
- identify movements that reveal the dancer as an athlete.
- apply the concepts of Haiku poetry to dance movement and beats.

DANCE 335 Modern Dance V

Units: 1  
Hours: 54 hours LAB  
Course Family: Modern Dance Technique (http://arc.losrios.edu/course-families#id_100034)  
Prerequisite: None.  
Enrollment Limitation: DANCE 334 with a grade of "C" or better or by audition.  
Transferable: CSU; UC  
General Education: AA/AS Area III(a); CSU Area E2  
Catalog Date: June 1, 2020

This course furthers the concepts and technique used in DANCE 334 and places the emphasis on explorations of percussive, sustained, and suspended movement qualities with time and effort changes. Utilizing exact repetition, gradual changes, and the human breath, exercises to maintain technique are developed for strength training and imagery as well as inspiration for choreography. This course requires prior modern dance training. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- choreograph a three-minute piece of dance using the essence of topics selected in class such as fear, horror, and safety.
- critique a dance performance that includes the dancers' biographies, educational degrees and dance training.
- explain the progression and intensity of a movement that has the quality of a full body wave, ripple, and droplet of water.
- create a series of movements that flow with, explain, and illustrate the essence of a Haiku poem.
- explain the theory behind retrograde movement and why some parts of it are impossible to execute.
- tell a story through dance that has a beginning, a middle, and an end, but change the order of the dance story to the ending first, the beginning in the middle, and the middle in the end.
- use walking as a dance movement.

DANCE 340 Ballroom Dance

Units: 1  
Hours: 54 hours LAB  
Course Family: Ballroom Dance Technique (http://arc.losrios.edu/course-families#id_100035)  
Prerequisite: None.  
Transferable: CSU; UC  
General Education: AA/AS Area III(a); CSU Area E2  
Catalog Date: June 1, 2020

This course provides a foundation for ballroom dance that includes the etiquette, vocabulary, history, and traditions of ballroom dance. The emphasis is on thoughtful partner work, basic ballroom technique, and basic dances. This course is for students with little or no experience in ballroom dance.
Upon completion of this course, the student will be able to:

- exhibit proper alignment and dance form for a ballroom dancer.
- explain the etiquette and social refinements of ballroom dance.
- show tolerance and respect for the ideas and abilities of others during a dance routine.
- identify the appropriate dance style for a specific piece of music.
- explain how leading and following techniques utilize nonverbal communication skills.
- use dance etiquette to put dance partners at ease and allow for a more positive dancing experience.
- demonstrate a one-minute basic dance routine.

DANCE 341 Ballroom Dance II

Units: 1
Hours: 54 hours LAB
Course Family: Ballroom Dance Technique (http://arc.losrios.edu/course-families#id_100035)
Prerequisite: None
Enrollment Limitation: DANCE 340 with a grade of "C" or better or by audition.
Transferable: CSU; UC
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course furthers the study of ballroom dance technique begun in DANCE 340 and emphasizes swift execution and new partnering concepts. It includes more complex movement and introduces the potential for improvisation. It also refines the basic skills and builds on them to allow for a greater understanding of ballroom dance forms. This course is designed for students with some experience in ballroom dance.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- diagram the appropriate foot pattern and steps for both partners in a basic waltz.
- evaluate the role of proper dance frame and alignment for non-verbal communication in ballroom dance.
- demonstrate social dance etiquette in partnering.
- detail the need for dance etiquette in dealing effectively with the limitations of others on the dance floor.
- chart the foot patterns of both partners for East Coast swing, West Coast swing, and basic swing dance.
- analyze and correct errors in performance related to foot position, dance positions, and technique.

DANCE 342 Ballroom Dance III: Club Dancing

Units: 1
Hours: 54 hours LAB
Course Family: Ballroom Dance Technique (http://arc.losrios.edu/course-families#id_100035)
Prerequisite: None
Enrollment Limitation: DANCE 341 with a grade of "C" or better or by audition.
Transferable: CSU; UC
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course continues the foundation in alignment, etiquette, and ballroom dance styles begun in DANCE 341. It allows for more advanced study and builds confidence and ability in competitive forms of ballroom. The focus is on the execution of those dances known as Club Dances in the competitive ballroom field. These dances introduce showmanship and require more skill, better timing, and specific use of non-verbal communication. This course is designed for students with ballroom dance experience.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain the importance of listening, counting, and using a line of dance.
• debate the pros and cons of the dress codes that are imposed on elite, slammer, and middle-sized dance clubs.
• define the greatest historical safety threat involving ballrooms, discos, and clubs.
• create an original amalgamation of a dance phrase.
• clarify the importance of the names Skippy Blair, Latin Symbolics Dance Company, Tony Manero, and Van McCoy in the world of disco and nightclub dance and identify which are fictional and which are real.
• recite the footwork for a basic nightclub two-step and choose a piece of current music to dance to in this style.
• explain to a partner the need for non-verbal communication in club dances.

DANCE 343 Ballroom Dance IV: Latin

Units: 1
Hours: 54 hours LAB
Course Family: Ballroom Dance Technique (http://arc.losrios.edu/course-families#id_100035)
Prerequisite: None.
Enrollment Limitation: DANCE 341 with a grade of "C" or better or by audition.
Transferable: CSU; UC
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course continues the foundation in alignment, etiquette, and technique that was begun in DANCE 341. It allows for more advanced study specifically in Latin styles of dance. These dances introduce professional showmanship and fluent use of non-verbal communication with a focus on more complicated rhythms. This course is designed for those students with experience in ballroom dance technique.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• predict the outcome of movement errors in direction and the consequences of proceeding in the incorrect direction.
• demonstrate the Latin dance paso doble and explain the meaning and subtext for this dance.
• sketch or draw out a salsa dance costume design for both partners and describe how the length of a skirt or any additions might improve the look of the dancing partners together.
• summarize the differences and similarities in foot patterns, music and meaning for the salsa, rhumba, and samba dances.
• outline a plan of study to learn a choreographed routine for a cha-cha and use some improvisations.
• originate an amalgamation or an improvisation in the Latin style, keeping the movement smooth and continuous.

DANCE 344 Ballroom Dance V: Swing

Units: 1
Hours: 54 hours LAB
Course Family: Ballroom Dance Technique (http://arc.losrios.edu/course-families#id_100035)
Prerequisite: None.
Enrollment Limitation: DANCE 342 with a grade of "C" or better or by audition.
Transferable: CSU; UC
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course maintains the foundation of alignment, etiquette, and basic steps begun in DANCE 342 and furthers the technique and execution with a new vocabulary of steps, and intricate partnering technique. It includes more strenuous movement and introduces the potential for tricks, turns, and more advanced dance sections that connect the basic steps. This course is designed for students with previous ballroom dance experience.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• diagram foot patterns for both partners in a single-time swing, double-time swing, and triple-time swing.
• experiment with turns for an East Coast swing and come up with an innovation or amalgamation for one segment of the dance.
• report the story that began the dance phenomenon and goes along with the name for the Lindy hop.
recommend appropriate music for a West Coast swing, an East Coast swing, and a Lindy hop.

demonstrate in slow motion the common outcomes for errors when using one hand for single-time, double-time or triple-time swing steps.

produce a section of improvisation, an amalgamation of styles, and an innovative turn for any swing dance.

DANCE 345 Ballroom Dance VI: Tango

Units: 1  
Hours: 54 hours LAB  
Course Family: Ballroom Dance Technique  
Prerequisite: None  
Enrollment Limitation: DANCE 343 with a grade of "C" or better or by audition.  
Transferable: CSU; UC  
General Education: AA/AS Area III(a); CSU Area E2  
Catalog Date: June 1, 2020

This course builds on the foundation of DANCE 343. It challenges the student to master difficult forms of tango and requires a comprehensive effort to perfect quick-study, execution, balance, and technical ability. The emphasis is on complex steps that require keen timing, focus, showmanship and partnering skills. This course is designed for students with previous ballroom dance training.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- exhibit showmanship and technique in a one-minute Argentine tango dance routine.
- chart the foot patterns for both partners in two styles of tango.
- define the origins and history of tango.
- create and add video to a portfolio that includes tango styles and demonstrates achievement of required proficiency levels.
- interview your partner, using ballroom etiquette to discern their level of interest in swango, Argentine tango, and American tango styles.
- explain the need for non-verbal communication in both social Tango and competitive tango improvisations.
- discuss the showmanship necessary to execute the quality of passion in a respectful, realistic manner.

DANCE 348 Ballroom Challenge: Competition and Performance

Units: 1  
Hours: 54 hours LAB  
Course Family: Ballroom Dance Technique  
Prerequisite: Audition  
Enrollment Limitation: Audition  
Transferable: CSU; UC  
General Education: AA/AS Area III(a); CSU Area E2  
Catalog Date: June 1, 2020

This course includes ballroom dance training for competition and performance. It focuses on refining performance levels of intermediate-to-advanced technique in at least three classic styles, such as Waltz, Foxtrot, and East Coast Swing, as well as three Latin styles. Topics include audition skills and learning new styles, new routines, and a competition within class for ranking. There are opportunities to compete against other groups and perform outside of class. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- perform three competition-level routines for ballroom dance.
- discuss the value of confidence in showmanship and technique.
- chart memorization progress through the use of repetition with feedback and critique.
- identify the process by which a ballroom routine is recorded.
- construct a list of ten elements vital to a ballroom dance performance.
- demonstrate proper partner positions, alignment, footwork, and focus.
express a professional attitude and apply an aura of joy in dancing.
clarify the difference between practice and performance.

DANCE 351 Urban Hip Hop I

Units: 1
Hours: 54 hours LAB
Course Family: Hip Hop Technique and Competition (http://arc.losrios.edu/course-families#id_100036)
Prerequisite: None.
Transferable: CSU; UC
General Education: AA/AS Area Ill(a); CSU Area E2
Catalog Date: June 1, 2020

This course includes basic urban-style Hip Hop moves with rapid level changes and strong floor work. Choreography is provided on a bare bones theme and developed according to individual style, ability, and personal interpretation. The history of this genre and the traditional competitive elements of Hip Hop dance are examined, as well as the role of dance in Hip Hop culture. An opportunity for exploration of Freestyle, Old Style, Poppin’, Lockin’ is provided. This course is for students with little or no experience in Hip Hop dance technique. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- compare and contrast Old Style, Breakin’, Poppin’, Lockin’ and current Freestyle moves.
- demonstrate a warm up that is designed to support the body during Freestyle moves.
- identify the origins of Hip Hop dance and its role in Hip Hop culture.
- identify one East Coast Old School dancer and compare their style to that of one West Coast Old School dancers.
- explain the origins of Capoeira, Soulstepping, Stomp, and Drill Team.
- demonstrate one Poppin’ and one Lockin’ movement.

DANCE 352 Urban Hip Hop II

Units: 1
Hours: 54 hours LAB
Course Family: Hip Hop Technique and Competition (http://arc.losrios.edu/course-families#id_100036)
Prerequisite: None.
Enrollment Limitation: DANCE 351 with a grade of “C” or better or by audition.
Transferable: CSU; UC
General Education: AA/AS Area Ill(a); CSU Area E2
Catalog Date: June 1, 2020

This course continues the technique and alignment begun in DANCE 351 on a more comprehensive level. It presents rigorous exercises for the development of strength and kinesthetic awareness. It also uses a vocabulary of intricate steps. The focus is on locomotor movements across the floor to improve smooth execution and center combinations to develop hard-hitting percussive styles. This course is for students with some previous urban Hip Hop dance training. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- compare Old School moves with New School moves.
- create a choreographed dance combination by building on the steps taught in class.
- interpret musical timing during a thirty-second improvisational performance of Freestyle urban Hip Hop dance.
- identify ten urban Hip Hop dance steps by name when performed correctly.
- perform a three-minute urban Hip Hop dance.
- create a clear visual punch line within an urban Hip Hop dance combination.

DANCE 353 Urban Hip Hop III
This course builds on the styles and technique studied in DANCE 352. The emphasis is on exercises to encourage strength and agility, developing a dance persona, and on combinations that introduce new styles and increase the degree of difficulty with floor work. This course is for dancers with previous urban Hip Hop dance training. Field trips may be required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- perform a three-minute urban Hip Hop dance that includes floor work, a spot turn, and a punchline move.
- explain the origins of B-boys and B-girls.
- create a signature dance move based on your own dance persona.
- identify Turfing, Waving, and Bone Breaking styles when performed.
- perform a one-minute Freestyle center dance to familiar music.
- demonstrate three differences between Old School moves and New School moves.

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**DANCE 354 Urban Hip Hop IV**

This course builds on the foundation provided in DANCE 353. The focus is on improvisation, Freestyle, Cyphering, and battling. Musicality and storytelling are explored along with floor work, rapid tempos, and building upper body strength. This course is for students with previous urban Hip Hop dance training. Field trips may be required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- choreograph a dance that shows the origins and history of urban Hip Hop dance by using two steps from every style covered in class and placing them in chronological order.
- explain how showmanship, facial expression and dynamics can be helpful in order to to play up the emotion or the storytelling aspect of a random piece of battle music.
- perform a solo thirty-second Freestyle combination to music that is chosen at random.
- build upon the movements of other dancers while battling by biting their moves and re-creating them as a challenge in difficulty.
- explain the moves that lead to a bite, a burn or a Kill Off.
- list the three elements that need to be discovered about the other dancers in a Freestyle battle.
- insert a joke punch line while battling with another dancer by pulling the joke punch line on them or their moves.

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**DANCE 360 Tap Dance I**

This course builds on the styles and technique studied in DANCE 352. The emphasis is on exercises to encourage strength and agility, developing a dance persona, and on combinations that introduce new styles and increase the degree of difficulty with floor work. This course is for dancers with previous urban Hip Hop dance training. Field trips may be required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- perform a three-minute urban Hip Hop dance that includes floor work, a spot turn, and a punchline move.
- explain the origins of B-boys and B-girls.
- create a signature dance move based on your own dance persona.
- identify Turfing, Waving, and Bone Breaking styles when performed.
- perform a one-minute Freestyle center dance to familiar music.
- demonstrate three differences between Old School moves and New School moves.

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This course introduces the basic rhythms, walks, technique, alignment, and footwork of tap dance. It provides a foundation in the history, etiquette, and traditions of tap dance and uses tap dance vocabulary words to focus on step and riff names, their origins and meaning. This course is for students with little or no tap dance training. Field trips may be required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- identify at least eighteen single and amalgamated tap steps.
- demonstrate the components of performance alignment, shuffle step, shuffle ball change, and flap ball change.
- demonstrate clarity of tap sounds within a group.
- critique a live dance concert using knowledge of basic tap dance technique.
- explain the progression of tap sounds for eight basic tap steps.
- perform a three-minute basic tap dance routine.

**DANCE 361 Tap Dance II**

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<tr>
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<tbody>
<tr>
<td>Hours:</td>
<td>54 hours LAB</td>
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<tr>
<td>Course Family:</td>
<td>Tap Dance Technique <a href="http://arc.losrios.edu/course-families#id_100037">Link</a></td>
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<tr>
<td>Prerequisite:</td>
<td>None</td>
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<tr>
<td>Enrollment Limitation:</td>
<td>DANCE 360 with a grade of &quot;C&quot; or better or by audition.</td>
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<td>Transferable:</td>
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<td>General Education:</td>
<td>AA/AS Area III(a); CSU Area E2</td>
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<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
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</tbody>
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This course offers an opportunity to continue the study of tap dance with more complex rhythms, new vocabulary, and varied methods of counting. It furthers the basic technique begun in DANCE 360 and instills tap rhythms, walks, alignment for balance, counts, and footwork. This course is for students with some previous tap dance training. Field trips may be required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- identify at least thirty single and amalgamated rhythm tap steps.
- combine steps to form basic choreography for combinations.
- apply double and triple sounds to steps previously learned as singles.
- critique a dance performance focusing on appropriate tap technique.
- execute proper tap technique for sound by striking, brushing, or placing the correct part of the foot onto the floor.
- perform two three-minute tap routines.

**DANCE 362 Tap Dance III**

<table>
<thead>
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<tbody>
<tr>
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<tr>
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<td>Tap Dance Technique <a href="http://arc.losrios.edu/course-families#id_100037">Link</a></td>
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<td>Prerequisite:</td>
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<td>Catalog Date:</td>
<td>June 1, 2020</td>
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</table>

This course builds on technique studied in DANCE 361 and includes new vocabulary and steps that refine the ability for quick heel or toe balances as well as new exercises for progress in speed and intricacy of taps. Clarity of sounds and timing will be emphasized. This course requires previous experience in tap dance technique. Field trips may be required.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify a vocabulary of at least forty single and amalgamated tap steps.
- demonstrate clarity of single tap sounds.
- explain and execute sound qualities for riffs one through eight.
- perform two three-minute tap routines that utilize steps learned in class.
- choreography a series of tap steps in sequence that create a combination of twenty-four counts of eight.
- identify a progression of tap steps by name when they are demonstrated correctly.

DANCE 363 Tap Dance IV

Units: 1
Hours: 54 hours LAB
Course Family: [Tap Dance Technique](http://arc.losrios.edu/course-families#id_100037)
Prerequisite: None.
Enrollment Limitation: DANCE 362 with a grade of "C" or better or by audition.
Transferable: CSU; UC
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course continues the study of tap dance technique provided in DANCE 362. It furthers instruction with more sounds to each step and introduces the concepts of origin for tap dance. The emphasis is on Irish-based tap and the relaxation of the upper body during performance. This course is designed for students with a background in tap dance technique. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- perform a three-minute tap dance that contains a tap turn, a cut time section, and one sequence with a break.
- explain the origins of the heels-off Irish tap style and the reason for the lack of arm movements in traditional Irish dance.
- execute a series of eight front Irish, back Irish, and traveling Buffalo steps.
- repair a broken tap or buckle with two minutes.
- execute a syncopated time step expanded into three extra counts.
- identify an Irish-based tap sequence, a military tap sequence, and a waltz clog.

DANCE 364 Tap Dance V

Units: 1
Hours: 54 hours LAB
Course Family: [Tap Dance Technique](http://arc.losrios.edu/course-families#id_100037)
Prerequisite: None.
Enrollment Limitation: DANCE 363 with a grade of "C" or better or by audition.
Transferable: CSU; UC
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course combines the elements of tap dance begun in DANCE 363 with the foundation of Shuffle Stride or rhythm tap dance styles of the Harlem Renaissance. The taps sounds are completed very close or into the ground. Along with theatrical jumps, turns, and isolations, steps from an African American Vaudeville dance heritage are included. This course requires previous tap dance training. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- critique a live dance performance.
- explain a' Capella tap.
- perform a one-minute tap routine choreographed in a traditional, heels off, Irish tap style.
- define the system used to record tap dances in their totality by means of symbols, signs, and abbreviations.
- spell 25 words from the tap vocabulary list.
- explain what happened during the Harlem Renaissance.
- perform an A' Capella tap dance in Shuffle Stride and Vaudeville styles.
- identify the elements of tap that come from an African tradition, an Irish tradition, and an African American tradition.

DANCE 377 Musical Theatre Dance I

Units: 2
Hours: 18 hours LEC; 54 hours LAB
Course Family: Musical Theatre Dance (http://arc.losrios.edu/course-families#id_100038)
Prerequisite: None.
Enrollment Limitation: Completion of DANCE 310, 320, 330, 340, or 360, with a grade of "C" or better or by audition.
Transferable: CSU; UC
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course provides an opportunity to explore dance for musical theatre and builds on the basic technique covered in DANCE 310, 320, 330, 340, or 360. This course begins with a mock audition and relies upon many basic dance styles in order to provide preparation for dancing in theatrical productions. Choreographed routines and production numbers are utilized, along with monologues, audition technique, vocabulary, and guides for singing while dancing. The emphasis is on authentic era dance styles, basic partnering, and using dance to shape and define a character. This course is designed for students with some previous dance experience. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- prepare for the musical theatre audition process with practice, intelligent choices, and a fore-knowledge of what is expected.
- convey a basic knowledge of dance history in eras from the twenties until the present.
- summarize one quick-study technique for learning theatre dance.
- explain why self-discipline is necessary in order to dance in the wide range of styles included in musical theatre dance.
- dramatize gestures, impulse actions, and everyday movements into expressions in dance form.
- assemble an organized audition bag containing items needed for an all-day audition and a call back.
- demonstrate the breath control necessary for singing while dancing.

DANCE 390 Contemporary Dance I

Units: 1
Hours: 54 hours LAB
Course Family: Contemporary Dance Technique (http://arc.losrios.edu/course-families#id_100039)
Prerequisite: None.
Enrollment Limitation: DANCE 310, 320, and 330 with a grade of "C" or better, or audition.
Transferable: CSU; UC
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course builds upon the technique covered in DANCE 310, 320, and 330. Abilities drawn from jazz, ballet, and modern dance are required to pursue this new integrated style. Dancers select and merge three dance techniques and incorporate the vocabulary of gestural movement and non-verbal communication. Development of smooth transitions and learning to use dance steps and elements to communicate an emotional state or story line. This course is intended for students with a knowledge of ballet, modern, and jazz dance technique. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- execute smooth transitions from a gestural movement into a turn and into a fall.
- explain the progression and technique required to give the appearance of moving in a chunky modern transition with a choppy quality to the levels.
- choreograph and perform a one-minute contemporary dance solo.
- produce, for audition purposes, a DVD that includes two still head shot photos and two copies of a self-choreographed contemporary solo performance.
- complete two contemporary-style alternative balance pirouettes.
- discuss the components of contemporary dance
- suggest a way to introduce a new avenue of non-verbal communication between two partners while they are dancing a contemporary pas de deux.

DANCE 401 Pre-Pointe and Conditioning

Units: 1
Hours: 54 hours LAB
Course Family: Foundations of Dance
Prerequisite: None
Enrollment Limitation: DANCE 321, 322, 323, 324, or 325, with a grade of "C" or better, or audition.
Transferable: CSU; UC
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course covers the technique and conditioning for dancing on pointe and combined with DANCE 322,323, 324, or 325, builds the strength needed for pointe work. The emphasis is on insuring that the strength and structure of the body is appropriate for pointe work. The course can be taken on flat to increase balance, strength, and alignment for ballet. It is designed for serious students of ballet with previous and on-going ballet training.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain the proper ankle structure and revised alignment needed in order to work on pointe.
- execute a fifteen-second balance in first through fifth positions with both feet on the floor.
- perform an echappe with passe balance combination in center completing the combination on balance.
- relate why, when, and for whom the first pointe shoes were made.
- describe the role of imagery, spotting, and breathing in pointe work.
- put on a pair of pointe shoes quickly, placing all ribbons and elastics properly.
- execute up to fifteen minutes of exercises at the barre en pointe or in eleve or releve on flat.
- demonstrate proper care of pointe shoes and ballet flats.

DANCE 402 Elements of Choreography

Units: 1
Hours: 54 hours LAB
Course Family: Foundations of Dance
Prerequisite: None
Enrollment Limitation: Completion of DANCE 310, 320, 330, 340, 351, or 360 with a grade of "C" or better or by audition.
Transferable: CSU; UC
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course covers the basic elements of choreography and provides an opportunity to explore basic choreographic structure. Choreographic concepts are introduced, developed, applied, and adapted to various dance styles in a manner appropriate for most styles and levels of dance. The emphasis is on the choreographic process. This course is for students with some dance background. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- incorporate twelve elements of choreography into a one-minute dance combination of any style dance.
- demonstrate the basic elements of choreographic composition.
- identify choreography that relies on literal meaning and pantomime when it is performed.
- chart a floor pattern from a section of choreography.
- explain one system of counting beats and movements in a piece of choreography.
- create and present a three-minute piece of original choreography.
- critique a live dance performance.
- explain why it is important to know who the audience is.

DANCE 403 Choreographic Studies

This course furthers the study of choreographic elements begun in DANCE 402. It allows for the study of choreography from an artistic, historical, and personal perspective and encourages students of choreography to mature by providing deeper source materials and less predictable solutions. The emphasis is on imitation and exploration that may uncover inner layers of untapped movement and gesture, including the study of selected influential choreographers and their work. This course is for students with previous dance and choreography training. Field trips may be required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- create a piece of choreography for three or four dancers.
- use a color chart and produce a rendering for a costume suitable for the theme or essence of the piece.
- discuss the most influential choreographers of the Twenty and Twenty-First Centuries.
- explain why choreography is often called a living art form.
- collaborate on a three-minute work of choreography with two other choreographers.
- perform, as a dancer, in a two-minute dance, choreographed by another student.
- venture an opinion on why we say that every work of choreography is a self-portrait.

DANCE 406 Introduction to Improvisation

This course builds on the technique covered in DANCE 312, DANCE 320, and DANCE 330. It introduces strategies for achieving improvisation without self auditing and utilizes concepts for initiating the impulse to move in any dance style. Dancers work through menus and pre-planned improvisational spring boards towards the complete freedom of dancing in a way that is not preconceived. Confidence is developed through repetition, encouragement, facing the emotional risk, and finding a sense of joy by dancing in the moment. This course is designed for students with a background in dance. Field trips may be required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- demonstrate a one-minute section of improvisation.
- improvise a one-minute dance through the use of an improvisation menu.
- explain how to feel, or count intuitively, musical phrases.
• select dance steps from memory for an improvisational dance.
• discuss how to listen to music for an improvisational road map of steps, inspiration, impulse, and dance direction.
• compare total improvisation without music, total improvisation to music, and improvisation to music with an improvisation menu plan.
• listen for inner music cues.

DANCE 415 Dance Production: Rehearsal and Backstage Organization

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Course Family: Dance Composition and Production (http://arc.losrios.edu/course-families#id_100041)
Prerequisite: None.
Enrollment Limitation: Audition
Transferable: CSU; UC
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course provides an opportunity to perform with a focus on the rehearsal period and the importance of backstage organization. It includes lecture, choreography, rehearsal and performance, with an emphasis on production technique and nomenclature for dance. Production technique is presented through a study of the theatre areas and the choreographic necessity they present. Production problems are studied for multiple solutions and organizational requirements for safe rehearsals and performances are explored. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• explain the on-stage areas.
• critique the performance skills of others by means of constructive criticism and suggested rehearsal solutions.
• create a schedule for choreography of a three-minute intermediate technique level dance for performance.
• define the performance space in measurements and levels.
• analyze dance rehearsal and performance space for safety.
• assess and modify problem movement through analytical means during rehearsal.
• review a live performance for application of rehearsal time, technique, and choreographic elements.
• compare and contrast the production values and necessities for modern dance, jazz dance, theatre dance, and ballet.
• choreograph and notate a three minute dance.

DANCE 416 Dance Production: Choreography and Costumes

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Course Family: Dance Composition and Production (http://arc.losrios.edu/course-families#id_100041)
Prerequisite: None.
Enrollment Limitation: Audition
Transferable: CSU; UC
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course provides an opportunity to perform with an emphasis on production technique for dance. Choreography for production and costuming for the choreography are covered as well as how to communicate choreographic ideas and costuming goals. Technique is presented through historical study and choreographic necessity. Production problems in choreography are analyzed for multiple solutions, and safe rehearsals, and performances. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• define 25 words of vocabulary for dance production.
• rehearse and perform effectively in at least three pieces of choreography with three different costumes for a formal dance concert.
• describe the rehearsal and final dress process for a formal one-to-two-hour dance concert.
• collaborate on the creation of a three-to-ten minute work of original choreography with original costume ideas.
• explain the safety rules that apply to production in terms of backstage behavior before, during, and after performances.
• list the rules concerning eating, drinking, smoking, and costumes.
• list three different ways to deal with a quick change in performance.

DANCE 417 Dance Production: Studio and Stage

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Course Family: Dance Composition and Production (http://arc.losrios.edu/course-families#id_100041)
Prerequisite: None.
Enrollment Limitation: Audition
Transferable: CSU; UC
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course is a lecture-demo and production group and is designed for dancers with performance proficiency in several styles of dance. There is an emphasis on public contact with several different performance space configurations and settings. It provides for an opportunity to choreograph, perform, and convert a dance production into three or more different kinds of space configurations. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• perform a three-minute work of choreography in two different space settings.
• explain the differences between performing in the round, in a black box, on a public street, and on a proscenium stage.
• name two ways to deal with a hair ribbon or clip-on tie lost onstage when performing in the round.
• create a short sequence of choreography that contains both straight lines and circles.
• choreograph a dance for the round and convert it to a proscenium stage performance piece.
• work very closely in a closed trio position.

DANCE 430 Jazz Dance Performance Group

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Course Family: Dance Performance Group (http://arc.losrios.edu/course-families#id_100043)
Prerequisite: None.
Enrollment Limitation: Audition
Transferable: CSU; UC
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course is a lecture-demo and performance group and is designed for dancers with performance proficiency in several styles of dance. There is an emphasis on public contact, community outreach, dance demonstrations, and a concert performance. The history of jazz dance is covered and ethnic styles are compared. An opportunity to choreograph is offered as well. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• explain multicultural contributions to jazz dance.
• list twelve performance skills.
• deliver historical information for a cultural dance form by speaking directly to a lecture-demonstration audience.
• compare and contrast two cultural dance forms.
• choreograph and notate a lecture-demonstration presentation based on cultural styles that contribute to the jazz dance idiom.
• identify three jazz dance styles by era and choreographer.
create and lead a warm up for a rehearsal period that includes dancing with head rolls and quick level changes.

describe mistakes that might happen in a performance situation and propose the best way to adapt to such situations.

call a piece of choreography by counts, steps, words, and beats.

compare the performance experience of presenting to a small informal group and performing for three to five hundred people.

explain how European contact, religion, and war have effected cultural dance performances.

DANCE 431 Performance Group: Master Hip Hop Crew

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- use performance technique to make an audience connection.
- perform a six-minute dance piece that includes improvisation, Freestyle, and choreographed steps.
- explain what should happen if something is accidently left on the stage during performance.
- repeat the caveat for finding blame for on-stage problems.
- perform three presentational audience connection movements.
- design costumes, choreograph, clean, and rehearse for a four minute crew dance.
- explain the sequence of events and who is responsible for a three-minute crew dance including the calling of places, lights, sound and blackout or fade.
- perform, as part of a crew, in two hours of a choreographed dance concert.

DANCE 432 Dance Performance: Contemporary Dance Alliance

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- perform in a 3-6 minute work of contemporary dance choreography.
• explain subtext and its relationship to the performance of a contemporary dance piece.
• name two categories of warm up that are appropriate for use in a contemporary dance rehearsal.
• create a sequence of contemporary choreography that is at least one minute in length.
• identify three choreographers who are considered contemporary in style.
• explain the use of verbs, slang language, endowment, and word pictures in contemporary dance.

DANCE 433 Performance Group: ARCH Dance Company

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Course Family: Dance Performance Group ([http://arc.losrios.edu/course-families#id_100043](http://arc.losrios.edu/course-families#id_100043))
Prerequisite: None
Enrollment Limitation: Audition
Transferable: CSU; UC
General Education: AA/AS Area III(a); CSU Area C1; CSU Area E2
Catalog Date: June 1, 2020

This course provides performance opportunities based on "classic" short stories, fables, and myths. The emphasis is on communicating the ideas and sentiments of well-known stories through dance. How characters might move to convey who they are and what they want is covered, as well as making transition choices to build the story line through dance. Individual portfolios are stressed and field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• use positive collaboration tools in order to work with others.
• explain how subtext can be used to make intentions and desires clear.
• explain a "classical" story in a contemporary way.
• identify three well-known choreographers who have created full-length dances on themes of Greek mythology.
• explain the plots from two "classical" ballets.
• identify three choreographic tools to use in foreshadowing.
• suggest the pacing for a dance section leading up to the story climax.
• discuss what is meant by "white" ballets.

DANCE 495 Independent Studies in Dance

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU
General Education: AA/AS Area III(a)
Catalog Date: June 1, 2020

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• describe the topic, theme, and specific subject matter of an independent dance project.
• discuss the research and events of this independent study.
• present a portfolio of photographs, videos, or other multimedia record of dances, exercises, explorations, or choreography that resulted from this independent study.
• document the development of an independent dance project by means of a narrative journal of events.
This course provides students with opportunities to develop marketable skills in preparation for employment or advancement within the field of dance. It is designed for students interested in work experience and/or internships in transfer-level degree occupational programs. Course content includes understanding the application of education to the workforce, completion of Title 5 required forms which document the student’s progress and hours spent at the work site, and developing workplace skills and competencies.

During the semester, the student is required to complete 75 hours of related paid work experience, or 60 hours of related unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. All students are required to attend the first class meeting, a mid-semester meeting, and a final meeting. Additionally, students who have not already successfully completed a Work Experience course will be required to attend weekly orientations while returning participants may meet individually with the instructor as needed. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Upon completion of this course, the student will be able to:

- demonstrate application of industry knowledge and theoretical concepts in the field of dance related to a transfer degree level career as written in the minimum three (3) learning objectives created by the student and his/her employer or work site supervisor at the start of the course
- make effective decisions, use workforce information, and manage his/her personal career plans.
- behave professionally, ethically, and legally at work, consistent with applicable laws, regulations, and organizational norms.
- behave responsibly at work, exhibiting initiative and self-management in situations where it is needed.
- apply effective leadership styles at work, with consideration to group dynamics, team and individual decision making, and workforce diversity.
- communicate in oral, written, and other formats, as needed, in a variety of contexts at work.
- locate, organize, evaluate, and reference information at work.
- demonstrate originality and inventiveness at work by combining ideas or information in new ways, making connections between seemingly unrelated ideas, and reshaping goals in ways that reveal new possibilities using critical and creative thinking skills such as logical reasoning, analytical thinking, and problem-solving.
Associate Degree

A.A. in Deaf Culture and American Sign Language Studies

This degree provides academic coursework based on a Deaf-centered framework that encourages students to embrace an empowered collaboration with Deaf people. It provides an introductory overview of the Deaf community and American Sign Language in a cultural context, with the psychosocial dynamics of people working in the Deaf community. It also emphasizes the development of skills related to paraprofessional services, in an individual or group setting, in an educational or social services agency which serves Deaf clients.

Catalog Date: June 1, 2020

Degree Requirements

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<th>COURSE CODE</th>
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The Deaf Culture and American Sign Language Studies Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- compare and contrast characteristics that impact a Deaf person’s life in the following areas: the world of work, education, family, language, and social development.
• demonstrate ability to carry on American Sign Language conversation consistent with the ability of a 4th semester second language learner with a Deaf individual or groups of Deaf people.

• apply entry-level positions working with the Deaf community.

• demonstrate characteristics related to personal growth and adjustment in various populations within and outside of the Deaf community.

• apply skills in working with various Deaf participants within and outside of the Deaf community.

• demonstrate skills in working with school-age Deaf children in an educational setting.

• compare and differentiate the Deaf individual to individuals of diverse populations when comparing human development.

• demonstrate appropriate cultural interaction within the Deaf community.

• demonstrate ability to communicate respectfully in a Deaf-culture setting.

Career Information

This degree prepares students for entry-level positions such as paraprofessional services in an individual or group setting, in an educational or social services agency which serves Deaf clients.

Certificate of Achievement

Deaf Culture and American Sign Language Studies Certificate

This certificate provides academic coursework based on a Deaf-centered framework that encourages students to embrace an empowered collaboration with Deaf people. It provides an introductory overview of the Deaf community and American Sign Language in a cultural context, with the psychosocial dynamics of people working in the Deaf community. It also emphasizes the development of skills related to paraprofessional services, in an individual or group setting, in an educational or social services agency which serves Deaf clients.

Catalog Date: June 1, 2020

Certificate Requirements

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Student Learning Outcomes

Upon completion of this program, the student will be able to:

• compare and contrast characteristics that impact a Deaf person’s life in the following areas: the world of work, education, family, language, and social development.

• demonstrate ability to carry on American Sign Language conversation consistent with the ability of a 4th semester second language learner with a Deaf individual or groups of Deaf people.

• apply to entry-level positions working with the Deaf community.
• demonstrate characteristics related to personal growth and adjustment in various populations within and outside of the Deaf community.

• apply skills in working with various Deaf participants within and outside of the Deaf community.

• demonstrate skills in working with school-age Deaf children in an educational setting.

• compare and differentiate the Deaf individual to individuals of diverse populations when comparing human development.

• demonstrate appropriate cultural interaction within the Deaf community.

• demonstrate ability to communicate respectfully in a Deaf-culture setting.

Career Information
This certificate prepares students for entry-level positions such as paraprofessional services in an individual or group setting, in an educational or social services agency which serves Deaf clients.

Deaf Culture and American Sign Language Studies (DEAF)

DEAF 310 American Sign Language I

Units: 4
Hours: 72 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC
General Education: AA/AS Area I; IGETC Area 6
Catalog Date: June 1, 2020

This is the first course in a series of five courses in American Sign Language (ASL). The instructional activities are based on an immersion approach, in which the learners develop language competency in source and target language. The emphasis is on non-speech communication. Topics include grammatical features such as adjective descriptors, differentiation between cardinal/ordinal numbers, contrastive structure, temporal aspect markers and temporal sequencing, conversational skills, narrative skills, and discussions with peers. This course is formerly known as SILA 305.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

• assemble short sentence dialogs which demonstrate receptive and expressive competencies of targeted lexical and syntactical forms of American Sign Language.

• compare and contrast the characteristics of the Deaf community and the Deaf community dynamic with the hearing community.

• utilize appropriate vocabulary and communicative strategies using eye contact, body orientation, and social behaviors related to communication interaction.

• demonstrate appropriate cultural interaction within the Deaf community.

• demonstrate ability to communicate respectfully in a Deaf culture setting.

DEAF 312 American Sign Language II

Units: 4
Hours: 72 hours LEC
Prerequisite: DEAF 310 or SILA 305 with a grade of "C" or better.
Advisory: Eligible for ENGRD 310 AND ENGRD 312 and ENGWR 300; OR ESLR 340 and ESLW 340
Transferable: CSU; UC
General Education: AA/AS Area I; IGETC Area 6
Catalog Date: June 1, 2020

This is the second in a series of five courses in American Sign Language (ASL). The emphasis is on nonverbal communication. Topics include grammatical features such as adjective descriptors, differentiation between cardinal/ordinal numbers, contrastive structure, temporal aspect markers and temporal sequencing, conversational skills, narrative skills, and discussions with peers. This course is formerly known as SILA 306.

Student Learning Outcomes
Upon completion of this course, the student will be able to:
• prepare complex dialogues that demonstrate receptive and expressive competencies of targeted lexical items from situations or narratives that occur in daily life activities.
• formulate targeted syntactical forms in ASL in dialogs.
• select appropriate vocabulary and communicative strategies in imitating, conducting, and terminating dialogs.
• analyze social customs and cultural interaction of the various groups within the Deaf community.
• demonstrate ability to communicate respectfully in a Deaf-culture setting.
• demonstrate appropriate cultural interaction within the Deaf community.

DEAF 314 American Sign Language III

Units: 4
Hours: 72 hours LEC
Prerequisite: DEAF 312 with a grade of "C" or better
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 and ESLW 340.
Transferable: CSU; UC
General Education: AA/AS Area I; CSU Area C2; IGETC Area 3B; IGETC Area 6
Catalog Date: June 1, 2020

This course is the third in a series of five courses in American Sign Language. It emphasizes expressive and receptive nonverbal communication skills between signers who have preliminary American Sign Language syntactical and lexical skills. It provides an understanding of deaf cultural processes by identifying behaviors and norms from activities assigned in the class. It also includes dialogs that involve asking, empathizing, negotiating and agreeing or disagreeing. The emphasis is on non-speech communication. This course is formerly known as SILA 315.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• appraise and demonstrate receptive and expressive skills of targeted grammatical features which include the following areas: numbers when expressing time, money, counting, dates and addresses concepts; frequency verbs when expressing time and duration; locative classifiers when describing buildings and floor plans; descriptive classifiers when asked to define and describe furniture, clothing, various objects and food dishes.
• analyze lexical and grammatical patterns by signing selected or self-developed narratives.
• compare and contrast social norms of Deaf people to those personal cultural experience in signed narratives.
• demonstrate ability to communicate respectfully in a Deaf-culture setting.
• demonstrate appropriate cultural interaction within the Deaf community.

DEAF 316 American Sign Language IV

Units: 4
Hours: 72 hours LEC
Prerequisite: DEAF 314 with a grade of "C" or better
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; or ESLR 340 AND ESLW 340.
Transferable: CSU; UC
General Education: AA/AS Area I; CSU Area C2; IGETC Area 3B; IGETC Area 6
Catalog Date: June 1, 2020

This course is the fourth in a series of five courses in American Sign Language (ASL). It emphasizes expressive communication skills that involve locating and signing interesting facts, making major life decisions, discussing health conditions, and using money. It incorporates information and activities previously learned about Deaf culture into these narratives. The emphasis is on non-speech communication. This course is formerly known as SILA 316.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• appraise and demonstrate receptive and expressive mastery of targeted grammatical markers which include: elaborations in narratives, dialogs, utilizing signs that describe specific facts, generalizations, theories, conclusions; describing major life decisions; discussing health conditions and using money.
• formulate previously learned Deaf cultural experiences into narratives.
• apply expressive strategies in signing longer and more complex narratives including use of characterization and narrative styles.
• compose a lecture in ASL, incorporating complex ideas about health conditions.
• differentiate how people share and describe major life decisions in ASL.
• produce communication processes involving money related signs.
• appraise the facts to explain, rephrase, demonstrate, or draw conclusions to clearly present factual information.
• analyze the effectiveness of ASL performance generated by models, self, and peer by applying contemporary theories of performance assessment and peer review.
• compare and contrast Deaf and hearing cultures.
• demonstrate ability to communicate respectfully in a Deaf-culture setting.
• demonstrate appropriate cultural interaction within the Deaf community.

DEAF 318 American Sign Language V

Units: 4
Hours: 72 hours LEC
Prerequisite: DEAF 316 with a grade of "C" or better
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC
General Education: AA/AS Area I; CSU Area C2; IGETC Area 3B; IGETC Area 6
Catalog Date: June 1, 2020

This is the last course in a series of five courses in American Sign Language (ASL). It prepares for the effective communication with Deaf people. It emphasizes expressive communication skills that involve narrating unforgettable moments, telling about accidents, and storytelling. It incorporates information and activities previously learned about Deaf culture into these narratives. The emphasis is on non-speech communication. This course is formerly known as SILA 318.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• appraise receptive targeted grammatical markers which include using role shift to enhance a story, maintaining spatial agreement when using role shift, sequencing classifiers, and timing of reactions to coincide with experiences and mishaps.
• generate expressive mastery of targeted grammatical markers which include using role shift to enhance a story, maintaining spatial agreement when using role shift, sequencing classifiers, and timing of reactions to coincide with experiences and mishaps.
• formulate essential skills for storytelling related to narrating unforgettable moments and telling about accidents.
• incorporate key elements used in ASL storytelling to adapt written stories into ASL.
• organize previously learned cultural experiences into narratives.
• apply expressive strategies in signing longer and more complex narratives including use of characterization and narrative styles.
• evaluate the effectiveness of model, self, and peer ASL performance by applying contemporary theories of performance assessment.
• demonstrate ability to communicate respectfully in a Deaf-culture setting.
• demonstrate appropriate cultural interaction within the Deaf community.

DEAF 320 Fingerspelling, Classifiers and Numbers

Units: 0.5 - 1
Hours: 27 - 54 hours LAB
Prerequisite: DEAF 310 with a grade of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This course provides hands-on experiences with fingerspelling, classifiers and American Sign Language (ASL) numbers. Topics include expressive and receptive fingerspelling, classifiers, and ASL numbers techniques. This laboratory course enables ASL learners to develop, expand, and reinforce hands-on experiences with fingerspelling, classifiers, and ASL numbers skills while working independently, in small groups, and with media such as DVDs and recorded video clips in ASL that incorporate fingerspelling. Coursework includes study topics integrated with expressive and receptive fingerspelling, classifiers, and ASL numbers techniques. Students may register until the sixth week of the semester. This course may be taken up to two times, for a total of 1.0 unit, using different topics. Pass/No Pass only.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- demonstrate basic receptive fingerspelling, classifiers, and ASL numbers skills with at least 70% accuracy.
- synthesize basic expressive fingerspelling, classifiers, and ASL numbers skills.
- demonstrate the ability to communicate respectfully in a Deaf-culture setting.
- demonstrate appropriate cultural interaction within the Deaf community.

DEAF 351 Introduction to American Deaf Culture

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC
General Education: AA/AS Area V(b); AA/AS Area VI; CSU Area D3; CSU Area D7; IGETC Area 4
Catalog Date: June 1, 2020

This course is a survey of four institutions which have critical impact on the psycho-social development of Deaf people: family, education, work, and society. It provides awareness and sensitivity to the unique challenges of deafhood and how they influence personal-social and communication competencies of the Deaf person. Selected visits to community events may be required. This course is formerly known as SILA 330.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- define culture and apply the definition by using examples of typical social norms of Deaf people.
- identify the rules of Social Interaction in the Deaf community.
- define language and apply the definition by giving examples brought out from experiences with Deaf people.
- construct a detailed description of the census, racial/ethnic, education, employment, social/advocacy activities, family environment characteristics of the Deaf community.
- narrate instances of bias connected to Deaf individuals and groups.
- demonstrate appropriate cultural interaction within the Deaf community.
- demonstrate ability to communicate respectfully in a Deaf culture setting.

DEAF 352 Introduction to American Deaf Education

Units: 3
Hours: 54 hours LEC
Prerequisite: DEAF 351 with a grade of "C" or better
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC
General Education: AA/AS Area V(b)
Catalog Date: June 1, 2020

This course surveys topics related to educating Deaf children, adults, and individuals with additional disabilities. It also covers teaching methods and philosophies, school placement issues, child development, and methods of addressing developmental and linguistic stages. Selected visits to a residential Deaf school in Fremont and/or a local mainstreaming/Deaf program school may be required. This course is formerly known as SILA 332.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- validate an analysis of a topic from a research paper that relates to education of Deaf people.
- distinguish and describe essential components of PL 94-142/Individuals with Disabilities Education Act.
- differentiate characteristics of school placement sites for Deaf children and for young deaf adults who transition from a high school education to a post-secondary education.
- list and describe the various hereditary syndromes that occur among Deaf children with additional disability conditions.
• distinguish, assess, and evaluate family dynamics of Deaf children with hearing or Deaf families.
• categorize and evaluate the research done on the effectiveness of the communication systems used by Deaf children in the educational system.
• distinguish and assess developmental processes of cognitive theory as presented by Piaget and of the development of life stages as presented by Erikson.
• demonstrate appropriate cultural interaction within the Deaf community.
• demonstrate ability to communicate respectfully in a Deaf culture setting.

DEAF 355 Audism and Inequality of the Deaf

Units: 3  
Hours: 54 hours LEC  
Prerequisite: DEAF 351 with a grade of "C" or better  
Advisory: SOC 320; AND eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.  
Transferable: CSU; UC  
General Education: AA/AS Area V(b); AA/AS Area VI; CSU Area D3; CSU Area D7  
Catalog Date: June 1, 2020

This course focuses on topics in the field of race and ethnicity in Deaf community. It provides theoretical background and contexts of audism and oppression. It also covers the contribution of minorities including Deaf people to the United States as well as the sociological reasons for inequality of Deaf people in the United States.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• evaluate how social processes, social inequality, and social relationships have shaped the experiences of various minorities in the United States.
• critique the processes of assimilation, accommodation, acculturation, and ethnogenesis.
• identify social processes that lead to conflict and cooperation among Deaf and hearing people in the United States.
• assess the outcomes and identify the origins of prejudice and discrimination against Deaf people in the United States.
• demonstrate appropriate cultural interaction within the Deaf community.
• demonstrate ability to communicate respectfully in a Deaf culture setting.

DEAF 370 Linguistics of American Sign Language

Units: 3  
Hours: 54 hours LEC  
Prerequisite: DEAF 316 with a grade of "C" or better, or placement through the assessment process.  
Transferable: CSU; UC  
General Education: AA/AS Area II(b)  
Catalog Date: June 1, 2020

This course provides a foundation in American Sign Language (ASL) linguistics. Topics include theoretical knowledge and practical application of phonology, morphology, syntax, and sociolinguistic aspects of ASL usage. This course is formerly known as SILA 317.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• identify basic concepts of language.
• analyze phonological aspects of ASL.
• examine morphological structures in ASL.
• produce appropriate syntactical structures in ASL.
• appraise and incorporate features of ASL discourse.
• demonstrate appropriate cultural interaction within the Deaf community.
• demonstrate ability to communicate respectfully in a Deaf culture setting.
DEAF 380 American Sign Language Literature

This course introduces American Sign Language (ASL) literature genres such as folklore and folktale, storytelling, visual vernacular, personification, classifier story, poetry, ABC and number stories and non-fiction narrative. Topics include analyzing and applying ASL usage in ASL literature genres.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze and critique genres in ASL literature.
- identify various techniques and styles of ASL literary works.
- produce and perform different genres in ASL literature.
- analyze ASL literary works for historical, social, and cultural messages.
- comprehend literary analysis, significant linguistic and cultural aspects of ASL narratives.
- demonstrate ability to communicate respectfully in a Deaf culture setting.
- demonstrate appropriate cultural interaction within the Deaf community.

DEAF 390 Introduction to the Interpreting Profession

This course introduces general information about the field of American Sign Language (ASL)/English interpretation. Topics include regulations, certification and educational requirements, fundamental and requisite skills, the Code of Professional Conduct, and pay scale and job opportunities in the field of ASL/English interpretation. An overview of the Interpreter Preparation Program at American River College and hands-on experiences are incorporated. Pass/No Pass only. This course is formerly known as SILA 362.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- compile a list of regulations, ethics, certification, and educational requirements needed to enter the interpreting field.
- assess the core interpersonal, intrapersonal, and linguistic competencies required.
- identify job opportunities and pay scales available for interpreters.
- choose a sequencing of coursework to follow in the Interpreter Preparation program at American River College.

DEAF 495 Independent Study

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.
Diesel/Clean Diesel Technology | American River College

Division Dean
Gary Aguilar

Department Chairs
Craig Weckman

(916) 484-8354

Associate Degree

A.S. in Diesel Technology

This degree provides training in diesel technology. Topics include an introduction to diesel technology, diesel engine repair, basic hydraulic principles of diesel technology, diesel brake systems, and diesel power trains.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>DCDT 101</td>
<td>Diesel Preventive Maintenance</td>
<td>4</td>
</tr>
<tr>
<td>DCDT 110</td>
<td>Diesel Engine Repair</td>
<td>4</td>
</tr>
<tr>
<td>DCDT 120</td>
<td>Basic Hydraulic Principles of Diesel Technology</td>
<td>4</td>
</tr>
<tr>
<td>DCDT 130</td>
<td>Diesel Brake Systems</td>
<td>4</td>
</tr>
<tr>
<td>DCDT 140</td>
<td>Diesel Electrical Systems</td>
<td>4</td>
</tr>
<tr>
<td>DCDT 150</td>
<td>Diesel Power Trains</td>
<td>4</td>
</tr>
<tr>
<td>DCDT 162</td>
<td>Clean Diesel Software Support</td>
<td>4</td>
</tr>
<tr>
<td>Total Units:</td>
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<td>28</td>
</tr>
</tbody>
</table>

The Diesel Technology Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- identify and properly utilize shop equipment and chemicals used in the diesel repair environment including hazardous waste disposal.
- apply proper techniques for complete engine removal, disassembly, cleaning, and reassembly of diesel engine.
- identify and explain brake system components, as well as application of proper technique for removal and repair of diesel brake system components.
- select and use proper test equipment to evaluate electrical systems, including voltmeters, ammeters, and ohmmeters.
- identify and explain diesel power train components and their functions to assist in diagnosis of drive train failure.

Career Information

This degree prepares the students as diesel technicians in the following areas of specialty: brakes, engine repair, hydraulics, and electrical.
Certificates of Achievement

Clean Diesel Hybrid Technology Certificate

This program covers hybrid-diesel components. Topics include heavy duty hybrid-diesel component application, diesel-hybrid motor generators, clean diesel software, and industrial software and systems.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>DCDT 109</td>
<td>Hybrid Diesel Component Application</td>
<td>4</td>
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<tr>
<td>DCDT 113</td>
<td>Diesel Hybrid Motor Generators</td>
<td>4</td>
</tr>
<tr>
<td>DCDT 162</td>
<td>Clean Diesel Software Support</td>
<td>4</td>
</tr>
<tr>
<td>DCDT 163</td>
<td>Industrial Software and Systems</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Total Units:</td>
<td>16</td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- apply basic principles of hybrid diesel component application to proper troubleshooting procedures.
- explain electronic control in diesel hybrid vehicles.
- apply procedural information, illustrations, diagnostic information, and wiring diagrams to Cummins INSITE and Eaton diesel systems.
- locate, download, and apply retrieved data to diesel tractor conditions.

Career Information

Various entry-level positions exist in the hybrid diesel repair industry, such as entry-level technician and hybrid service advisor.

Clean Diesel Industrial Certificate

This certificate prepares students for entry-level positions in the diesel technology industry. Topics include fabrication in the diesel technology industry.

Catalog Date: June 1, 2020

Certificate Requirements

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<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>DCDT 162</td>
<td>Clean Diesel Software Support</td>
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<tr>
<td>DCDT 163</td>
<td>Industrial Software and Systems</td>
<td>4</td>
</tr>
<tr>
<td>DCDT 180</td>
<td>Industrial Fabrication I</td>
<td>4</td>
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<tr>
<td>DCDT 181</td>
<td>Industrial Fabrication II</td>
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<tr>
<td>DCDT 191</td>
<td>Speed and Skill Development</td>
<td>3</td>
</tr>
<tr>
<td>DCDT 280</td>
<td>Professionalism in the Industry</td>
<td>3</td>
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<tr>
<td>DCDT 281</td>
<td>Diesel Shop Operations</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Total Units:</td>
<td>26</td>
</tr>
</tbody>
</table>

Student Learning Outcomes
Upon completion of this program, the student will be able to:

- apply safety precautions while working in a fabrication environment.
- describe the basic steps in the fabrication process.
- show how to sheet and .120 aluminum welding with metal inert gas (MIG) and tungsten inert gas (TIG).
- outline basic frame fabrication techniques.
- explain popular uses of different metals.

Career Information

Entry level positions in the diesel fabrication, suspension, and frame repair industry. Additional career opportunities are likely as the fabrication industry continues to grow.

Clean Diesel Management Systems Certificate

This program covers hybrid diesel technology. Topics include hybrid diesel power trains, hybrid diesel high voltage systems, clean diesel software support, and industrial software systems.

Catalog Date: June 1, 2020

Certificate Requirements

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<tr>
<th>COURSE CODE</th>
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<th>UNITS</th>
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</thead>
<tbody>
<tr>
<td>DCDT 107</td>
<td>Hybrid Diesel Power Trains</td>
<td>4</td>
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<tr>
<td>DCDT 108</td>
<td>Hybrid Diesel High Voltage Systems</td>
<td>4</td>
</tr>
<tr>
<td>DCDT 162</td>
<td>Clean Diesel Software Support</td>
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<tr>
<td>DCDT 163</td>
<td>Industrial Software and Systems</td>
<td>4</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>16</td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- describe and explain power flow of hybrid diesel power trains.
- diagnose and repair high voltage cables, connectors, and components.
- locate, download, and apply retrieved information to diesel tractor conditions.
- communicate technical information about Cummins INSITE and Eaton diesel systems.

Career Information

Various entry-level positions exist in the hybrid diesel repair industry, such as entry-level technician and hybrid diagnostic technician.

Clean Diesel Technology Certificate

This program covers the diesel engine systems. Topics include biodiesel fuel and fuel systems, clean diesel technology, and clean diesel software support.

Catalog Date: June 1, 2020

Certificate Requirements

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<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>DCDT 102</td>
<td>Biodiesel Fuel and Fuel Systems</td>
<td>4</td>
</tr>
</tbody>
</table>
Student Learning Outcomes

Upon completion of this program, the student will be able to:

- access requirements for converting fossil fuel to biodiesel vehicles.
- apply basic principles to the modern diesel engine.
- apply technical information for repowering, rebuilding, and replacing diesel engine components.
- locate, download, and print information specific to diesel tractor manufacturers.
- apply manufacturer specifications for diesel engine retrofit.

Career Information

Various entry level positions exist in the diesel repair industry, such as entry level technician, hydraulic technician, and heavy equipment service advisor.

Diesel Engine Technology Certificate

This certificate is designed for students seeking employment in the diesel industry specializing in diesel engine repair.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>DCDT 100</td>
<td>Diesel Technology Basics</td>
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<tr>
<td>DCDT 101</td>
<td>Diesel Preventive Maintenance</td>
<td>4</td>
</tr>
<tr>
<td>DCDT 110</td>
<td>Diesel Engine Repair</td>
<td>4</td>
</tr>
<tr>
<td>DCDT 111</td>
<td>Clean Natural Gas Engine Repair</td>
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<tr>
<td>DCDT 162</td>
<td>Clean Diesel Software Support</td>
<td>4</td>
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<td>Total Units:</td>
<td>20</td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- comply with safety and environmental regulations and standards required in the diesel repair environment.
- explain and identify natural gas diesel engines, including the proper cleaning, assembly and disassembly.
- demonstrate correct welding techniques for diesel application.
- utilize safety precautions that apply to diagnose and repair electrical/electronic components.
- locate, download, and print information specific to diesel tractor manufacturers and apply it to the diesel tractor conditions.
The diesel industry is growing and is in need of highly trained/skilled technicians that can step into the workforce.

**Diesel Technology Certificate**

This certificate provides training in diesel technology. Topics include diesel brakes, hydraulics, electrical systems, and power trains.

Catalog Date: June 1, 2020

**Certificate Requirements**

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<thead>
<tr>
<th>COURSE CODE</th>
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<th>UNITS</th>
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<tbody>
<tr>
<td>DCDT 101</td>
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<tr>
<td>DCDT 110</td>
<td>Diesel Engine Repair</td>
<td>4</td>
</tr>
<tr>
<td>DCDT 120</td>
<td>Basic Hydraulic Principles of Diesel Technology</td>
<td>4</td>
</tr>
<tr>
<td>DCDT 130</td>
<td>Diesel Brake Systems</td>
<td>4</td>
</tr>
<tr>
<td>DCDT 140</td>
<td>Diesel Electrical Systems</td>
<td>4</td>
</tr>
<tr>
<td>DCDT 150</td>
<td>Diesel Power Trains</td>
<td>4</td>
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<td>Total Units:</td>
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<td>24</td>
</tr>
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</table>

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- apply established procedures in the diesel repair industry.
- inspect and maintain various diesel engine systems.
- diagnose and repair diesel engine systems.

**Career Information**

Various entry level positions exist in the diesel repair industry, such as entry level technician.

**Light Duty Diesel Truck Certificate**

This certificate prepares students for entry-level positions in the diesel technology industry. Topics include theory and operation of light duty diesel engines, computer controlled injection, and emission control systems.

Catalog Date: June 1, 2020

**Certificate Requirements**

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<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>DCDT 162</td>
<td>Clean Diesel Software Support</td>
<td>4</td>
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<tr>
<td>DCDT 163</td>
<td>Industrial Software and Systems</td>
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<tr>
<td>DCDT 200</td>
<td>Light Duty Diesel/Green Diesel Technology</td>
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<tr>
<td>DCDT 201</td>
<td>Advanced Light Duty Diesel/Green Diesel Technology</td>
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</tr>
<tr>
<td>DCDT 280</td>
<td>Professionalism in the Industry</td>
<td>3</td>
</tr>
<tr>
<td>DCDT 281</td>
<td>Diesel Shop Operations</td>
<td>4</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>23</td>
</tr>
</tbody>
</table>
Student Learning Outcomes

Upon completion of this program, the student will be able to:

- describe the basic operations of diesel fueled vehicles.
- perform basic diesel engine turbo charger diagnostic procedures.
- test diesel engine emissions and emission control systems.
- apply procedural information, illustrations, diagnostic information, and wiring diagrams to diesel tractors.
- analyze and evaluate the advantages and disadvantages of working in dealerships, independent shops, and fleet shops.

Career Information

Entry level positions in light duty diesel technology, agriculture, and construction industry. Additional career opportunities are likely as the light duty diesel industry continues to grow.

Preventive Maintenance Certificate

This certificate prepares students for entry-level positions in the diesel technology industry. The topics include safety and environmental regulations and standards, as well as the ability to identify various diesel engine applications.

Catalog Date: June 1, 2020

Certificate Requirements

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<thead>
<tr>
<th>COURSE CODE</th>
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<tbody>
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<td>Diesel Technology Basics</td>
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</tr>
<tr>
<td>DCDT 101</td>
<td>Diesel Preventive Maintenance</td>
<td>4</td>
</tr>
<tr>
<td>DCDT 110</td>
<td>Diesel Engine Repair</td>
<td>4</td>
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<tr>
<td>Total Units:</td>
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<td>12</td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- comply with safety and environmental regulations and standards
- explain the operation of diesel engine components and systems
- identify various diesel engine applications
- demonstrate complete engine reassembly
- apply basic state and federal regulations including Occupational Safety and Health Association (OSHA) and the Environmental Protection Agency (EPA)
- apply basic principles of preventive maintenance to diesel repair

Career Information

Entry level positions in the diesel repair industry.

Diesel/Clean Diesel Technology (DCDT)

DCDT 100 Diesel Technology Basics

Units: 4
This course introduces diesel technology. Topics include shop safety, hazardous waste handling and disposal, and engine components and their function.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- comply with safety and environmental regulations and standards required in the diesel repair environment.
- explain the operation of diesel engine components and systems.
- explain the principles of interpersonal skills as required in the workplace.
- utilize technician reference manuals.

**DCDT 101 Diesel Preventive Maintenance**

**Units:** 4  
**Hours:** 54 hours LEC; 54 hours LAB  
**Prerequisite:** None.  
**Catalog Date:** June 1, 2020

This course introduces the field of clean diesel technology and preventative maintenance. It covers proper safety and hazardous waste training, use of basic hand and power tools, and the basic workings of the diesel engine.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- identify proper use of hand and power tools used in diesel repair.
- utilize correct safety procedures for both hand and power tools used in diesel repair facilities.
- demonstrate basic functions of power tools in the shop.
- identify and properly utilize shop equipment and chemicals used in the diesel repair environment.
- demonstrate proper use of hydraulic and mechanical jacks and hoists.
- apply the basic state and federal regulations including Occupational Safety and Health Association (OSHA) and the Environmental Protection Agency (EPA).
- apply basic principles of preventive maintenance to diesel repair.

**DCDT 102 Biodiesel Fuel and Fuel Systems**

**Units:** 4  
**Hours:** 54 hours LEC; 54 hours LAB  
**Prerequisite:** None.  
**Catalog Date:** June 1, 2020

This course covers the chemistry, production, and impact of biodiesel technology. It also covers how to convert vehicle fuel systems to biodiesel and how this process affects warranties.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- list the requirements for converting fossil fuel vehicles to biodiesel vehicles.
- describe the process for making biodiesel.
- compare fossil fuel to straight vegetable oil, waste vegetable oil, and biodiesel.
DCDT 103 Clean Diesel Systems

This course provides a complete overview of the clean diesel engine system. Topics include fuel injection systems, emission regulations, and diesel emission control systems.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- identify basic principles of the modern diesel engine.
- explain basic diesel engine fundamentals.
- identify diesel fuel injection systems.
- perform visual inspection of diesel engines.

DCDT 104 Clean Diesel Rebuild, Retrofit, Repower, Retire

This course covers clean diesel rebuilding, repowering, retrofitting, or retiring of equipment decisions. Topics include rebuilding, replacement, and retirement of diesel systems and components.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- decide whether to rebuild or replace.
- repair engine components.
- replace engine components.
- retire engine components.

DCDT 107 Hybrid Diesel Power Trains

This course covers diesel hybrid power trains found in current hybrid technology. Topics include basic diesel hybrid power trains, hybrid power modes, and power electronic carriers.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- apply high voltage safety procedures to diagnosis and repair of diesel hybrid vehicles
- explain the power flow found in diesel hybrid powered vehicles
- perform high voltage service shutdown procedures according to manufacturer manuals
- inspect and diagnose diesel hybrid power trains
DCDT 108 Hybrid Diesel High Voltage Systems

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

This course covers high voltage power systems on diesel hybrid powered vehicles. Topics include high voltage main component identification and inspection, inspection of high voltage cables, testing, re-use, and end-of-service decisions.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- diagnose and repair diesel hybrid vehicles.
- explain high voltage flow of diesel hybrid powered vehicles.
- use electrical diagnostic tools to isolate malfunctions.
- diagnose, repair, and replace high voltage cables, connectors, and components.

DCDT 109 Hybrid Diesel Component Application

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

This course covers testing and replacement of diesel hybrid components. Topics include electronic shifting theory and diesel hybrid component application.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain the application and proper troubleshooting of diesel hybrid mounted components
- explain hybrid theory power up found in the Eaton system
- diagnose and repair or replace multiple relays, Push Button Controller, Hybrid Control module, and Transmission Electronic Control Unit

DCDT 110 Diesel Engine Repair

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

This course covers basic engine principles for diesel engine repair. It covers disassembly and reassembly of diesel engine systems, including cleaning and safe removal of engines, fuel injection systems, valve trains, and engine heads.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain diesel engine theory and repair.
- identify various diesel engine applications.
- apply proper techniques for cleaning and removal of diesel engines.
- define engine performance terms.
- describe air intake and exhaust system, lubrication systems, cooling systems, fuel systems, and governors.
- demonstrate complete engine reassembly.
DCDT 111 Clean Natural Gas Engine Repair

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

This course introduces clean natural gas engine repair. Topics include engine application and principles of engine operation, disassembly and reassembly of engine components and systems, and various engine systems as they relate to clean natural gas engines.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain clean natural gas diesel engine theory
- identify various clean natural gas diesel engine applications
- apply proper techniques for cleaning and removal of clean natural gas diesel engines

DCDT 112 Clean Diesel Retrofit

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

This course covers diesel engine retrofit needs for older diesel engines. Topics include troubleshooting, fault codes, welding, and diesel particulate filter systems.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- install selective catalytic reduction filters as part of retrofitting.
- identify diesel particulate filters in need of replacement or retrofit.
- describe current retrofit technologies in the diesel industry.
- demonstrate correct welding techniques for diesel application.

DCDT 113 Diesel Hybrid Motor Generators

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

This course covers diesel hybrid motor/generator found in current hybrid technologies. Topics include basic diesel hybrid motor/generator, hybrid power modes, and power electronic components.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- utilize safety precautions that apply to diagnose and repair electrical/electronic components.
- explain electronic control of multiple systems found in current diesel motor/generator.
- use electronic tools found in current diesel industry and utilize flowcharts to locate the malfunctions.
- diagnose and repair or replace multiple sensors and high voltage wiring harnesses found in full authority systems.

DCDT 120 Basic Hydraulic Principles of Diesel Technology
This course introduces basic hydraulic principles and functions of the diesel engine. Topics include hydraulic fundamentals and principles, functions of hydraulic fluids, directional and flow control valves, welding, and machine hydraulic overview.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- use and apply proper safety procedures for basic hydraulic systems, including proper lifting and blocking procedures.
- demonstrate the proper use of both power and hand tools used in the diesel repair environment.
- explain the function of the basic hydraulic system.
- explain the operation of the components of the basic hydraulic system.
- identify hydraulic symbols.
- use precise measuring tools for hydraulic repair.
- explain the operation of hydraulic cylinders.
- demonstrate correct welding techniques for diesel application.

**DCDT 130 Diesel Brake Systems**

This course covers the operation of diesel brake systems and components. Topics include band, shoe, caliper, and full disc brakes.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- explain the assembly of various brake systems and components.
- utilize the proper safety procedures for repair and replacement of diesel brake systems.
- apply proper techniques for removal and repair of diesel brake system components.
- explain the purpose of each braking component.
- demonstrate the proper use of diesel brake system repair tools.

**DCDT 140 Diesel Electrical Systems**

This course covers the operation of diesel electrical systems. Topics include sensors used in emission control, electrical circuits, test instruments, charging systems, and electrical starting systems.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- select the proper test equipment to evaluate electrical systems.
- describe the function and use of new sensor technology for emissions control.
- describe the functions of various electrical system components.
- explain the differences between voltage and current.
- demonstrate the proper use of voltmeter, ammeter, and ohmmeter.
- read basic wiring diagrams.

**DCDT 142 Diesel Emission Control Systems**

**Units:** 4  
**Hours:** 54 hours LEC; 54 hours LAB  
**Prerequisite:** None.  
**Catalog Date:** June 1, 2020

This course covers the emission control system of the diesel engine. Topics include performance maintenance and emissions control within emission limits.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- identify potential and known health effects of diesel engine emissions.
- diagnose and correct causes of emission system control failure.
- perform visual inspection of emission control systems failure.
- inspect and repair emission system control failure.

**DCDT 150 Diesel Power Trains**

**Units:** 4  
**Hours:** 54 hours LEC; 54 hours LAB  
**Prerequisite:** None.  
**Catalog Date:** June 1, 2020

This course covers the diesel power train. Topics include inspection and adjustment of clutch linkage, flywheel, and replacement of clutch brakes.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- identify power train components and their functions.
- diagnose causes of drive train failure.
- perform visual drive train inspection.
- diagnose clutch problems.
- inspect and repair hydraulic clutch slave and master cylinders.
- inspect release fork, fork shaft, and bushings.

**DCDT 162 Clean Diesel Software Support**

**Units:** 4  
**Hours:** 72 hours LEC  
**Prerequisite:** None.  
**Catalog Date:** June 1, 2020

This course covers the skills needed to adequately retrieve and apply system information using Internet-based technical manuals specifically geared toward diesel tractor emission control systems.

**Student Learning Outcomes**
Upon completion of this course, the student will be able to:

- locate, download, and print information specific to diesel tractor manufacturers.
- apply retrieved data to diesel tractor conditions.
- communicate technical information to technicians as retrieved from the Mitchell1 www.tractor-trailer.net.
- apply procedural information, illustrations, diagnostic information, and wiring diagrams to diesel tractors.

**DCDT 163 Industrial Software and Systems**

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<td>Hours:</td>
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This course covers the skills needed to adequately retrieve and apply Cummins INSITE and Eaton diesel engine information using Internet-based technical manuals specifically geared toward diesel tractor emission control systems.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- locate, download, and print information specific to Cummins INSITE and diesel engines.
- apply retrieved data to Cummins INSITE and diesel engine conditions.
- communicate technical information to technicians as retrieved from Cummins INSITE and aftermarket diesel software.
- apply procedural information, illustrations, diagnostic information, and wiring diagrams to Cummins INSITE and diesel engines.

**DCDT 180 Industrial Fabrication I**

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This course covers the various processes of welding in transportation and industrial repairs using metal inert gas (MIG) and tungsten inert gas (TIG). Topics include proper safety procedures pertaining to the fabrication of metallic and nonmetallic materials, metallic and nonmetallic fabrication techniques, and various metals and plastics used in fabrication.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- list the types of protective clothing that should be worn in a fabrication shop.
- demonstrate safety precautions while aluminum welding with metal inert gas (MIG) and tungsten inert gas (TIG).
- explain welding equipment components and accessories.
- identify and explain how to sheet .120 steel welding with metal inert gas (MIG) and tungsten inert gas (TIG) on standard, high strength steel (HSS), advanced high strength steel (AHSS), and ultra high strength steel (UHSS), and boron steel.

**DCDT 181 Industrial Fabrication II**

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This course covers fabrication which involves cutting, altering, and shaping steel or other materials through the use of different tools, techniques, and processes. Topics include hot-gas and airless fabrication techniques, vehicle frames in relation to fabrication, tack welding, and filler material.
Upon completion of this course, the student will be able to:

- explain how the chassis frame, side rails, and cross-members can be repaired.
- outline basic frame fabrication techniques.
- explain the difference between pipe used for piping systems versus pipe used for structural applications.
- show how to cut and form 18 gauge to 3/8" steel and aluminum.
- demonstrate how to weld similar and dissimilar metal thicknesses to specification.

DCDT 190 Applied Projects in Clean Diesel Technology

Units: 2
Hours: 108 hours LAB
Prerequisite: DCDT 101, 110, 120, 130, 140, or 150 with a grade of "C" or better
Catalog Date: June 1, 2020

This course provides laboratory projects in clean diesel technology. Projects are selected by the Diesel Technology Department.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze performance issues in complex clean diesel technology systems.
- apply clean diesel technology system specifications and tolerances to diesel projects.
- demonstrate skills in fabrication and repair techniques.
- construct a complete clean diesel technology project.
- research clean diesel technology information and specifications using printed and Internet sources.

DCDT 191 Speed and Skill Development

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

This course covers diesel component diagnosis and repair, including electrical, hydraulics, engine, fabrication, and other areas in preparation for competing in the state fair. This course may be taken up to four times for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- interpret customer's complaints, evaluate vehicle condition, and diagnose proper repair procedures in a competitive environment.
- analyze and replace engine cooling and heater system hoses in a competitive environment.
- diagnose electrical system tests and determine necessary action in a competitive environment.
- demonstrate correct welding techniques for diesel fabrication application in a competitive environment.
- solve an engine code problem and correct condition in a competitive environment.
- explain the requirements for the state fair competition.

DCDT 200 Light Duty Diesel/Green Diesel Technology

Same As: AT 156
This course introduces the diagnosis and repair of light duty diesel vehicles and covers the theory and operation of light duty diesel engines and their fuel delivery systems. Topics include diesel engine characteristics, early mechanical fuel delivery systems, early cylinder head design, and early engine construction. It also covers how to prepare these engines for conversion to green technology, such as low sulfur fuel, biodiesel, and alternative fuels. This course along with DCDT 201 is applicable for the field technician seeking training for Automotive Service Excellence (ASE) A9 certification and preparation for green technologies.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- describe the basic operation of diesel fueled vehicles.
- explain the differences between diesel and gasoline engine design.
- diagnose basic diesel engine driveability problems.
- perform basic diesel engine mechanical diagnostic procedures.
- evaluate the diesel fuel injection system's compatibility with low sulfur and biodiesel fuels.

**DCDT 201 Advanced Light Duty Diesel/Green Diesel Technology**

Same As: AT 157  
Units: 4  
Hours: 54 hours LEC; 54 hours LAB  
Prerequisite: None.  
Catalog Date: June 1, 2020

This course focuses on late model turbocharged light duty diesel vehicles operating on low sulfur, biodiesel, or alternative fuels. Topics include computer controlled injection, emission control systems, sensors, actuators, computer modules, exhaust gas recirculation (EGR) systems, particulate traps, selective catalytic reduction (SCR) systems, and lean oxides of nitrogen (NOx) traps. It covers diagnosis and repair of these systems using computer diagnostic equipment to meet state emission compliance. This course along with DCDT 200 is applicable for the field technician seeking training for Automotive Service Excellence (ASE) A9 certification and preparation for green technologies.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- explain the operation of common rail diesel fuel injection systems.
- explain the differences between late model diesel and older diesel engine design.
- diagnose basic driveability problems on late model diesel vehicles.
- perform basic diesel engine turbocharger diagnostic procedures.
- evaluate high pressure fuel system compatibility with biofuels and biofuel impact on diesel emissions.
- test diesel engine emissions and emission control systems.

**DCDT 280 Professionalism in the Industry**

Units: 3  
Hours: 45 hours LEC; 27 hours LAB  
Prerequisite: None.  
Catalog Date: June 1, 2020

This course introduces students to the professionalism and soft skills in the heavy duty clean diesel workplace. It provides an in-depth review of skills needed, ranging from applying for jobs, interviewing by panel, professional behavior, proper diesel technology phrases used in the workplace, how to communicate professionally with clients and other employees, and many other topics for the professional diesel technician work etiquette.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:
• create a professional and concise resume for the clean diesel industry.
• demonstrate interviewing skills within the diesel repair industry.
• describe basic customer service skills as a clean diesel technician.
• discuss examples of appropriate clean diesel technology etiquette in the workplace.

DCDT 281 Diesel Shop Operations

Units: 4
Hours: 72 hours LEC
Prerequisite: None
Catalog Date: June 1, 2020

This course introduces operations of dealerships, independent shops, and fleet shops. It emphasizes the various influences that affect the technician’s position with the various operations. Topics include service, sales, parts, and financial operations. Customer Satisfaction Index (CSI) is also discussed. Field trips to local shops may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:
• identify all of the dealership’s departments and their functions.
• critique dealership, independent, and fleet shop operations.
• analyze and evaluate the advantages and disadvantages of working in dealerships, independent shops, and fleet shops.

DCDT 298 Work Experience in Clean Diesel Technology

Same As: ACT 298
Units: 1 - 4
Hours: 60 - 300 hours LAB
Prerequisite: None
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position, or job related to the clean diesel technology field with a cooperating site supervisor. Students are advised to consult with the Diesel Department faculty to review specific certificate and degree work experience requirements.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
General Education: AA/AS Area III(b)
Catalog Date: June 1, 2020

This course provides students with opportunities to develop marketable skills in preparation for employment or advancement within the clean diesel technology field. It is designed for students interested in work experience and/or internships in associate degree level or certificate occupational programs. Course content includes understanding the application of education to the workforce, completion of Title 5 required forms which document the student’s progress and hours spent at the work site, and developing workplace skills and competencies.

During the semester, the student is required to complete 75 hours of related paid work experience, or 60 hours of related unpaid work experience for one unit. An additional 75 or 60 ours of related work experience is required for each additional unit. All students are required to attend the first class meeting, a mid-semester meeting, and a final meeting. Additionally, students who have not already successfully completed a Work Experience course will be required to attend weekly orientations while returning participants may meet individually with the instructor as needed. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:
• demonstrate mastery of specific job skills in the clean diesel technology field related to an associate degree or certificate occupational program level career as written in the minimum three (3) learning objectives created by the student and his/her employer or work site supervisor at the start of the course.
• make effective decisions, use workforce information, and manage his/her personal career plans.
• behave professionally, ethically, and legally at work, consistent with applicable laws, regulations, and organizational norms.
• behave responsibly at work, exhibiting initiative and self-management in situations where it is needed.
• apply effective leadership styles at work, with consideration to group dynamics, team and individual decision making, and workforce diversity.
• communicate in oral, written, and other formats, as needed, in a variety of contexts at work.
locate, organize, evaluate, and reference information at work.

demonstrate originality and inventiveness at work by combining ideas or information in new ways, making connections between seemingly unrelated ideas, and reshaping goals in ways that reveal new possibilities using critical and creative thinking skills such as logical reasoning, analytical thinking, and problem-solving.

DCDT 1000 ASE Diesel Engines (T2)

Units: 0.25
Hours: 4.5 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020

This course prepares the Medium/Heavy Duty Truck Technician for taking the Automotive Service Excellence (ASE) Exam for the Diesel Engines T2 certification test.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain the ASE certificate exam requirements.
- utilize ASE test taking strategies.
- understand how the ASE exam is scored.
- discuss general engine diagnostics, including cylinder head, valve train, and engine block diagnosis and repair.
- summarize the diagnosis and repair of lubrication, cooling, air induction, exhaust, and fuel systems.
- explain starting and charging systems diagnosis and repair.

DCDT 1001 ASE Drive Train (T3)

Units: 0.25
Hours: 4.5 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020

This course prepares the Medium/Heavy Duty Truck Technician for taking the Automotive Service Excellence (ASE) Exam for the Drive Train T3 certification test.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain the ASE certificate exam requirements.
- utilize ASE test taking strategies.
- understand how the ASE exam is scored.
- explain clutch and transmission diagnosis and repair.
- summarize drive shaft, universal joint, and drive axle diagnosis and repair.

DCDT 1002 ASE Brakes (T4)

Units: 0.25
Hours: 4.5 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020

This course prepares the Medium/Heavy Duty Truck Technician for taking the Automotive Service Excellence (ASE) Exam for the Brakes T4 certification test.

Student Learning Outcomes

Upon completion of this course, the student will be able to:
• explain the ASE certificate exam requirements.
• utilize ASE test taking strategies.
• describe how the ASE exam is scored.
• summarize air brake diagnosis and repair.
• discuss air supply and service systems.
• discuss the mechanical foundation, wheel hub, and parking brakes.
• illustrate hydraulic brakes diagnosis and repair.
• describe Air and Hydraulic Antilock Brakes Systems (ABS), Automatic Traction Control (ATC), and Electronic Stability Control Systems.

DCDT 1003 ASE Suspension & Steering (T5)

Units: 0.25  
Hours: 4.5 hours LEC  
Prerequisite: None  
Catalog Date: June 1, 2020

This course prepares the Medium/Heavy Duty Truck Technician for taking the Automotive Service Excellence (ASE) Exam for the Suspension and Steering T5 certification test.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• explain the ASE certificate exam requirements.
• utilize ASE test taking strategies.
• summarize how the ASE exam is scored.
• discuss steering system, suspension, frame, and 5th wheel diagnosis and repair.
• describe wheel alignment diagnosis, adjustment, and repair.

DCDT 1004 ASE Electrical/Electronic Systems (T6)

Units: 0.25  
Hours: 4.5 hours LEC  
Prerequisite: None  
Catalog Date: June 1, 2020

This course prepares the Medium/Heavy Duty Truck Technician for taking the Automotive Service Excellence (ASE) Exam for the Electrical/Electronic Systems T6 certification test.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• explain the ASE certificate exam requirements.
• utilize ASE test taking strategies.
• understand how the ASE exam is scored.
• summarize general electrical/electronic system diagnosis, and battery and starting system diagnosis and repair.
• explain lighting and vehicle systems diagnosis and repair.

DCDT 1005 ASE Industrial Refrigeration Systems (T7)

Units: 0.25  
Hours: 4.5 hours LEC
This course prepares the Medium/Heavy Duty Truck Technician for taking the Automotive Service Excellence (ASE) Exam for the Industrial Refrigeration Systems T7 certification test.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain the ASE certificate exam requirements.
- utilize ASE test taking strategies.
- summarize how the ASE exam is scored.
- discuss HVAC systems and a/c system and component diagnosis, service, and repair.
- discuss heating and engine cooling systems, operating systems, and related controls diagnosis and repair.

DCDT 1006 ASE Preventive Maintenance Inspection (T8)

Units: 0.25
Hours: 4.5 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020

This course prepares the Medium/Heavy Duty Truck Technician for taking the Automotive Service Excellence (ASE) Exam for the Preventive Maintenance T8 certification test.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain the ASE certificate exam requirements.
- utilize ASE test taking strategies.
- summarize how the ASE exam is scored.
- discuss engine systems, cab, and hood.
- explain automotive electrical/electronics and frame and chassis, including brakes, drivetrain, steering, tires, wheels, suspension, frame, and 5th wheel.
- describe the road/operational test.

DCDT 1007 ASE Light Vehicle Diesel Engines (A9)

Units: 0.25
Hours: 4.5 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020

This course prepares the Medium/Heavy Duty Truck Technician for taking the Automotive Service Excellence (ASE) Exam for the Light Vehicle Diesel Engine A9 certification test.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain the ASE certificate exam requirements.
- utilize ASE test taking strategies.
- summarize how the ASE exam is scored.
- discuss general diagnostics, cylinder head and valve train diagnosis and repair, and engine block diagnosis and repair.
- describe lubrication and cooling systems diagnosis and repair, air induction and exhaust systems diagnosis and repair, and fuel systems diagnosis and repair.
Early Childhood Education | American River College

The course work in the ARC Early Childhood Education department is approved by the California Commission on Teacher Credentialing as meeting the requirements for the California Child Development Educational Permits. Students who complete selected certificates in the ECE program, along with required experience, are recommended by the American River College faculty to the Commission on Teacher Credentialing for direct issuance of Child Development Permits.

All students enrolled in coursework that requires lab work at our campus Child Development Center or at an off-campus facility, must show proof of TB Clearance (done within the previous 6 months), and documentation of all required immunizations.

Division Dean Diana Hicks
Department Chairs Alina Cervantes

(916) 484-8653

Associate Degrees for Transfer

A.S.-T. in Early Childhood Education for Transfer

The Associate in Science degree in Early Childhood Education (ECE) for Transfer provides a clearly articulated curricular track for students who wish to transfer to a CSU campus, while also serving the diverse needs of students interested in the breadth and depth of the field of early childhood education. Additionally, this degree exposes students to the core principles and practices of the field in order to build a foundation for their future personal, academic, or vocational paths.

The degree is designed to facilitate students’ successful transfer to certain California State University (CSU) campuses that prepare them for advanced study in a variety of graduate programs, as well as a variety of careers such as teaching, Child Development Specialist, Program Directors, and Child Life Specialists. With a BA in ECE/Child Development, students are eligible for the Master Teacher and Site Supervisor levels of the CA Child Development Permit, using the Alternative Qualifications category.

The Associate in Science degree in ECE for Transfer provides students with a major that fulfills the general requirements of the California State University for transfer. Students with this degree will receive priority admission with junior status to certain California State University campuses.

The Associate in Science degree in ECE for Transfer (A.S.-T.) may be obtained by the completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program outlined below (earning a C or better in these courses) and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education Breadth Requirements. The ECE courses required in this program are part of the CA Curriculum Alignment Project, Lower Division 8 coursework.

Catalog Date: June 1, 2020

Degree Requirements

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<td>ECE 300</td>
<td>Introduction to Principles and Practices in Early Childhood Education (3)</td>
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<tr>
<td>ECE 312</td>
<td>Child Development (3)</td>
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<td>or PSYC 372</td>
<td>Child Development (3)</td>
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<td>ECE 314</td>
<td>The Child, the Family and the Community</td>
<td>3</td>
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<td>ECE 320</td>
<td>Curriculum and Interactions in Early Childhood Education</td>
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<td>ECE 321</td>
<td>Advanced Practicum in Early Childhood Education</td>
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<tr>
<td>ECE 326</td>
<td>Making Learning Visible Through Observation and Documentation</td>
<td>3</td>
</tr>
<tr>
<td>ECE 415</td>
<td>Children's Health, Safety and Nutrition (3)</td>
<td>3</td>
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<tr>
<td>or NUTRI 320</td>
<td>Children's Health, Safety and Nutrition (3)</td>
<td></td>
</tr>
<tr>
<td>ECE 430</td>
<td>Culture and Diversity in Early Childhood Education</td>
<td>3</td>
</tr>
</tbody>
</table>
The Associate in Science in Early Childhood Education for Transfer for Transfer (AS-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- synthesize child development research with principles and practices for early childhood teaching to create early learning environments that are respectful, supportive, and challenging for all children, from infancy through adolescence.
- design inclusive, culturally and linguistically appropriate learning environments, based on child development, child observations, family information and knowledge of culturally diverse child rearing practices.
- incorporate strategies for building respectful, reciprocal family and community relationships in order to support families with their children's development and learning.
- assess children's learning through observation, documentation, and interpretation, using results to guide curriculum and teaching strategies.
- recommend developmentally appropriate and culturally relevant approaches to teaching and learning that include respectful, supportive relationships with children and families, and curriculum that support foundational skills and concepts in language, math, science, art, and social relationships.
- demonstrate practices that maintain standards of health, nutrition, and safety in group care early childhood settings.
- apply ethical standards of behavior accepted by the profession of early childhood education.

Associate Degrees

A.A. in Early Childhood Education

This program provides a foundation for in-depth early childhood teacher preparation both through strong general education and through introductory studies in child development and in early childhood curriculum and pedagogy. Topics include an introduction to the profession, observation techniques, age-appropriate curriculum, the child in the context of family and culture, and health and safety practices for early childhood educators.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
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<tbody>
<tr>
<td>ECE 300</td>
<td>Introduction to Principles and Practices in Early Childhood Education</td>
<td>3</td>
</tr>
<tr>
<td>ECE 312</td>
<td>Child Development (3)</td>
<td>3</td>
</tr>
<tr>
<td>or PSYC 372</td>
<td>Child Development (3)</td>
<td>3</td>
</tr>
<tr>
<td>ECE 314</td>
<td>The Child, the Family and the Community</td>
<td>3</td>
</tr>
<tr>
<td>ECE 320</td>
<td>Curriculum and Interactions in Early Childhood Education</td>
<td>4</td>
</tr>
<tr>
<td>ECE 321</td>
<td>Advanced Practicum in Early Childhood Education</td>
<td>4</td>
</tr>
<tr>
<td>ECE 325</td>
<td>Positive Guidance Strategies with Young Children</td>
<td>3</td>
</tr>
<tr>
<td>ECE 326</td>
<td>Making Learning Visible Through Observation and Documentation</td>
<td>3</td>
</tr>
<tr>
<td>ECE 331</td>
<td>Care and Education of Infants and Toddlers</td>
<td>3</td>
</tr>
<tr>
<td>ECE 404</td>
<td>Children with Special Needs</td>
<td>3</td>
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<tr>
<td>ECE 415</td>
<td>Children's Health, Safety and Nutrition (3)</td>
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</tr>
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<td>or NUTRI 320</td>
<td>Children's Health, Safety and Nutrition (3)</td>
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<tr>
<td>ECE 430</td>
<td>Culture and Diversity in Early Childhood Education</td>
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A minimum of 3 units from the following:

3
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<th>COURSE CODE</th>
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<tbody>
<tr>
<td>ECE 305</td>
<td>Introduction to Family Child Care (1)</td>
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<tr>
<td>ECE 316</td>
<td>Mass Media and Young Children (1)</td>
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<td>ECE 330</td>
<td>Infant and Toddler Development (3)</td>
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<td>ECE 342</td>
<td>Constructive Math and Science in Early Childhood Education (3)</td>
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<tr>
<td>ECE 343</td>
<td>Language and Literacy Development in Early Childhood (3)</td>
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<tr>
<td>ENGED 324</td>
<td>Introduction to Elementary Teaching with Field Experience (3)</td>
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<td>or ECE 350</td>
<td>Introduction to Elementary Teaching with Field Experience (3)</td>
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<td>ECE 356</td>
<td>Programs for the School-Age Child (3)</td>
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<td>ECE 358</td>
<td>Activities for the School-Age Child (3)</td>
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<td>ECE 361</td>
<td>Introducing Young Children to Visual Arts (3)</td>
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<td>ECE 363</td>
<td>Music and Movement with Young Children (3)</td>
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<td>Curriculum and Strategies for Children with Special Needs (4)</td>
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<td>ECE 414</td>
<td>CPR and Pediatric First Aid (1.5)</td>
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<td>CPR and Pediatric First Aid (1.5)</td>
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<td>ECE 420</td>
<td>Administration I: Programs in Early Childhood Education (3)</td>
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<td>ECE 422</td>
<td>Administration II: Personnel and Leadership in Early Childhood Education (3)</td>
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<tr>
<td>ECE 424</td>
<td>Adult Supervision: Mentoring in a Collaborative Learning Setting (2)</td>
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<tr>
<td>ECE 455</td>
<td>Environment Rating Scales in Early Childhood Programs (1)</td>
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Total Units: 38

The Early Childhood Education Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- synthesize child development research with principles and practices for early childhood teaching to create early learning environments that are respectful, supportive, and challenging for all children, from infancy through adolescence.
- design inclusive, culturally and linguistically appropriate learning environments, based on child development, child observations, family information, and knowledge of culturally diverse child rearing practices.
- incorporate strategies for building respectful, reciprocal family and community relationships in order to support families with their children’s development and learning.
- assess children’s learning through observation, documentation, and interpretation, using results to guide curriculum and teaching strategies.
- recommend developmentally appropriate and culturally relevant approaches to teaching and learning that include respectful, supportive relationships with children and families, and curriculum that supports foundational skills and concepts in language, math, science, art, and social relationships.
- demonstrate practices that maintain standards of health, nutrition, and safety in early childhood settings.
- apply ethical standards of behavior accepted by the profession of early childhood education.

Career Information

Upon completion of this degree, students possess the competencies required to work as a teacher in both private and public early care and education settings, serving infants through preschool-age children. Additionally, the individual can work as a teacher in before-and-after school programs, serving school-age children.

Certificates of Achievement

Associate Teacher Certificate

This certificate provides the educational coursework that serves as the core curriculum for the early childhood education field. Topics include an introduction to the
profession, observation techniques, age-appropriate curriculum, and the child in the context of the family and community. Additionally, there is a focus on practicing these concepts in a supervised field/lab environment. With documented work experience, the student is also eligible to apply to the Commission on Teacher Credentialing for the Associate Teacher Child Development Permit.

**Certificate Requirements**

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<tr>
<th>COURSE CODE</th>
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<tbody>
<tr>
<td>ECE 300</td>
<td>Introduction to Principles and Practices in Early Childhood Education</td>
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<td>ECE 312</td>
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<td>or PSYC 372</td>
<td>Child Development (3)</td>
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<td>ECE 314</td>
<td>The Child, the Family and the Community</td>
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<td>ECE 320</td>
<td>Curriculum and Interactions in Early Childhood Education</td>
<td>4</td>
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<td>Total Units:</td>
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<td>13</td>
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</table>

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- analyze the influence of family, community and culture on the child and identify local resource agencies that support families.
- plan and implement developmentally appropriate indoor and outdoor environments that support children's learning through play, exploration, and problem-solving.
- build on systematic observations of children's behavior to design, implement, and evaluate developmentally appropriate learning activities for young children.
- distinguish and apply positive guidance and conflict-resolution strategies that teach children self-discipline and effective, respectful social skills within a diverse group of peers.

**Career Information**

This certificate allows the student to work as a teacher in a private early care and education (Title 22) program, serving infants/toddlers, preschool-age children, and school-age children in before-and-after school programs. With the Associate Teacher Child Development Permit, an individual can work as an assistant or associate teacher in a publicly funded (Title 5) early care and education program.

**Curriculum Specialist Certificate**

This certificate provides the educational coursework that serves as the core curriculum for the early childhood education field. Topics include an introduction to the profession, observation techniques, age-appropriate curriculum, and two supervised field/lab experiences. Additionally, this specialization provides a choice of coursework focusing on curriculum areas for teaching young children.

**Certificate Requirements**

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<tr>
<th>COURSE CODE</th>
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<td>ECE 321</td>
<td>Advanced Practicum in Early Childhood Education</td>
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<td>A minimum of 6 units from the following:</td>
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<tr>
<td>ECE 342</td>
<td>Constructive Math and Science in Early Childhood Education (3)</td>
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<tr>
<td>ECE 343</td>
<td>Language and Literacy Development in Early Childhood (3)</td>
<td></td>
</tr>
</tbody>
</table>
Student Learning Outcomes

Upon completion of this program, the student will be able to:

- build on systematic observations of children's behavior, interests, and the classroom environment to design, implement, and evaluate developmentally appropriate learning activities for groups of young children.
- formulate an educational philosophy to guide in the curriculum of an early care and education program.
- evaluate curriculum for sound pedagogy, content, and breadth, including planning for the learning environment, the daily routines, and the individual needs of the children.

Career Information

Upon completion of this specialization certificate, students are eligible to be teachers in privately funded (Title 22) early care and education programs and/or associate teachers in publicly funded (Title 5) programs serving young children and their families.

ECE: Culture and Diversity Specialist Certificate

This certificate provides the educational coursework that serves as the core curriculum for the early childhood education field. Topics include an introduction to the profession, observation techniques, child development, health and safety practices, the child in the context of the family and community, age-appropriate anti-bias curriculum and a supervised field/lab experience. Additionally, it offers a specialization in culture and diversity issues within early childhood education settings, including the study of the values, issues, and counseling needs of diverse populations, as well as the cognitive and emotional aspects of prejudice as it relates to institutional and individual discrimination. Upon completion of this specialization certificate, the individual is eligible to be a teacher in a private (Title 22) early care and education program. With verified work experience, the individual is also eligible to apply to the California Commission on Teacher Credentialing for an Associate Teacher Child Development Permit to work as an associate teacher in a public (Title 5) early care and education program.

Catalog Date: June 1, 2020

Certificate Requirements

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<tr>
<th>COURSE CODE</th>
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<td>ECE 320</td>
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<td>ECE 430</td>
<td>Culture and Diversity in Early Childhood Education</td>
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<td>PSYC 365</td>
<td>Issues of Diverse Populations (3)</td>
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<tr>
<td>or HSER 330</td>
<td>Issues of Diverse Populations (3)</td>
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</table>

Total Units: 19

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- analyze the influence of family, community, and culture on the child's development and identify ways to respond to the diversity of cultures represented in an early childhood education setting.
- plan and implement a developmentally appropriate, anti-bias, and culturally relevant classroom environment that supports children's learning through play, exploration, and problem-solving.
• build on systematic observations of children's behavior and the classroom environment to design, implement, and evaluate developmentally appropriate, anti-bias, and culturally relevant learning activities for young children.

• describe and apply positive guidance and conflict-resolution strategies that teach children self-discipline and effective, respectful social skills within a diverse group of peers.

• analyze how one's own cultural background, societal beliefs, and values impact their work with children and families.

• advocate for and promote culturally relevant and anti-biased education in the early childhood education community.

• examine the values, issues, and needs of diverse populations by race, ethnicity, class, gender identity, sexual orientation, developmental ability, and age.

• identify the cognitive and emotional aspects of prejudice as it relates to institutional and individual discrimination.

Career Information

Upon completion of this specialization certificate, the individual is eligible to be a teacher in a private (Title 22) early care and education program and is eligible to apply to the California Commission on Teacher Credentialing for an Associate Teacher Child Development Permit to work as an associate teacher in a public (Title 5) early care and education program.

Early Childhood Education Management Specialist Certificate

This certificate provides the educational coursework that serves as the core curriculum for the early childhood education field. Topics include an introduction to the profession, observation techniques, age-appropriate curriculum, and a supervised field/lab experience. Additionally, it covers administration and management issues relating to the operation of center-based early care and education programs.

Catalog Date: June 1, 2020

Certificate Requirements

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<th>COURSE CODE</th>
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<tbody>
<tr>
<td>ECE 300</td>
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<td>ECE 420</td>
<td>Administration I: Programs in Early Childhood Education</td>
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<td>ECE 422</td>
<td>Administration II: Personnel and Leadership in Early Childhood Education</td>
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<tr>
<td>ECE 424</td>
<td>Adult Supervision: Mentoring in a Collaborative Learning Setting</td>
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<tr>
<td>Total Units:</td>
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<td>24</td>
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</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

• apply child development principles to development of a philosophy statement to guide the design and operation of a child development program.

• appraise and implement quality care for young children in group settings, including curriculum and environments for children birth through adolescence.

• manage respectful and reciprocal interactions between children, families and teachers.

• utilize knowledge of developmentally appropriate curriculum, environments, observation and guidance to assess one's own strengths and weaknesses in working with young children.

• critique and implement practices in maintaining health/safety standards and preventing infectious disease in group care settings.

• support and implement licensing requirements for privately and publicly funded child development programs.

• demonstrate leadership in staffing, budgets, enrollment, professional development and program implementation for privately and publicly funded programs.
Career Information

Upon completion of the certificate and with additional documented experience, the student exceeds the minimum educational requirements for employment as a director/manager of a privately funded early care and education program. The minimum requirements are outlined in Title 22 (Department of Social Services) regulations for child care licensing.

Infant Specialist Certificate

This certificate provides the educational coursework that serves as the core curriculum for the early childhood education field. Topics include an introduction to the profession, observation techniques, and age-appropriate curriculum. Additionally, it focuses on infant development and the care of education of infants/toddlers in group settings along with information for lactation consultants.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
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<tr>
<td>ECE 300</td>
<td>Introduction to Principles and Practices in Early Childhood Education</td>
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<td>or PSYC 372</td>
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<td>ECE 320</td>
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<td>Care and Education of Infants and Toddlers</td>
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<td>HLACT 302</td>
<td>Fundamentals of Lactation Consultant Assisting</td>
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Student Learning Outcomes

Upon completion of this program, the student will be able to:

- evaluate and apply knowledge of infant development to create infant and family programs that are respectful, supportive, and challenging for children from the prenatal period through the first three years after birth.
- design infant and toddler programs that build respectful, reciprocal family relationships and support optimal infant and toddler development and learning both at home and in group settings.
- incorporate systematic assessment strategies using observation, documentation, and interpretation in order to guide decisions about support for infant and toddler development and curriculum.
- design, implement, and evaluate developmentally effective curriculum and teaching plans that connect knowledge of academic content to meaningful and challenging learning environments for infants and toddlers.
- demonstrate practices in maintaining health/safety standards and managing infectious disease in group settings.
- develop a continuing professional growth plan and advocate for public policy that supports infants, toddlers, their families and the profession of early childhood education.

Career Information

Upon completion of this certificate, students exceed the minimum requirements to be a teacher of infants and toddlers in privately funded early childhood education programs (as required by Title 22 of the California Social Services Code of Regulations). Additionally, students qualify as an associate teacher of infants and toddlers in publicly funded early childhood education programs (as required by Title 5 California Code of Regulations).
Master Teacher Certificate

This certificate builds on the teacher level certificate with additional coursework on adult supervision, emphasizing the mentors role in the development of early childhood education professionals. It also includes six units of specialized study, allowing students to select a particular focus (i.e. the arts, health and safety, children's literature, culture and diversity, curriculum, and infant care). Upon completion of this certificate, the student is eligible to be a lead teacher in a private (Title 22) early care and education program, and, with documented work experience teaching children and supervising staff, is eligible to apply to the California Commission on Teacher Credentialing for a Master Teacher Child Development Permit to work as a lead teacher in a public (Title 5) early care and education program.

Catalog Date: June 1, 2020

Certificate Requirements

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<td>Making Learning Visible Through Observation and Documentation</td>
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<td>Culture and Diversity in Early Childhood Education</td>
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A minimum of 16 units from the following:

At least one course from each of the following four areas listed in the ARC graduation requirements: (1) Math/Science: Natural Science or a course satisfying the Mathematics Competency requirement; (2) English: Language & Rationality; (3) Humanities; and (4) Social Sciences: Social and Behavioral Sciences.

Subtotal Units:

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Art with Children Specialization

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<td>ART 430</td>
<td>Art and Children</td>
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<tr>
<td>ECE 361</td>
<td>Introducing Young Children to Visual Arts</td>
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Art with Children Specialization Units:

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Total Units:

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</thead>
<tbody>
<tr>
<td>Total Units</td>
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Children's Health, Safety and Nutrition Specialization

<table>
<thead>
<tr>
<th>COURSE CODE</th>
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<tbody>
<tr>
<td>ECE 415</td>
<td>Children's Health, Safety and Nutrition (3)</td>
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</tr>
<tr>
<td>or NUTRI 320</td>
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<tr>
<td>NUTRI 300</td>
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Children's Literature Specialization

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<th>COURSE CODE</th>
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<tbody>
<tr>
<td>ECE 343</td>
<td>Language and Literacy Development in Early Childhood</td>
<td>3</td>
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<tr>
<td>ENGLT 370</td>
<td>Children and Literature</td>
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Culture and Diversity Specialization

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<tbody>
<tr>
<td>ECE 430</td>
<td>Culture and Diversity in Early Childhood Education</td>
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<tr>
<td>PSYC 365</td>
<td>Issues of Diverse Populations (3)</td>
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Curriculum Specialization

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<tr>
<td>ECE 342</td>
<td>Constructive Math and Science in Early Childhood Education (3)</td>
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<tr>
<td>ECE 343</td>
<td>Language and Literacy Development in Early Childhood (3)</td>
<td></td>
</tr>
<tr>
<td>ECE 361</td>
<td>Introducing Young Children to Visual Arts (3)</td>
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</tr>
<tr>
<td>ECE 363</td>
<td>Music and Movement with Young Children (3)</td>
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Drama with Children Specialization

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<tbody>
<tr>
<td>TA 400</td>
<td>Creative Drama for Children</td>
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### Drama with Children Specialization

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<tbody>
<tr>
<td>TA 404</td>
<td>Techniques of Puppetry (3)</td>
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<tr>
<td>or TA 406</td>
<td>Children's Theatre (3)</td>
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### Infant Care Specialization

<table>
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<th>COURSE TITLE</th>
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<tbody>
<tr>
<td>ECE 330</td>
<td>Infant and Toddler Development</td>
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<tr>
<td>ECE 331</td>
<td>Care and Education of Infants and Toddlers</td>
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<td></td>
<td>Infant Care Specialization Units:</td>
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### Music with Children Specialization

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<th>COURSE CODE</th>
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<tbody>
<tr>
<td>ECE 363</td>
<td>Music and Movement with Young Children</td>
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<tr>
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<tr>
<td>MUFHL 321</td>
<td>Basic Musicianship (3)</td>
<td>3</td>
</tr>
<tr>
<td>MUFHL 330</td>
<td>World Music (3)</td>
<td>3</td>
</tr>
<tr>
<td>MUIVI 200</td>
<td>Introduction to Music Education (0.5)</td>
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</tr>
<tr>
<td>MUIVI 340</td>
<td>Beginning Piano (2)</td>
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</tr>
<tr>
<td>MUIVI 341</td>
<td>Piano II (2)</td>
<td>3</td>
</tr>
<tr>
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### School-Age Care Specialization

<table>
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<th>COURSE CODE</th>
<th>COURSE TITLE</th>
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</thead>
<tbody>
<tr>
<td>ECE 356</td>
<td>Programs for the School-Age Child</td>
<td>3</td>
</tr>
<tr>
<td>ECE 358</td>
<td>Activities for the School-Age Child</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>School-Age Care Specialization Units:</td>
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<td></td>
<td>Total Units:</td>
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### Special Needs Specialization
### Special Needs Specialization

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 404</td>
<td>Children with Special Needs</td>
<td>3</td>
</tr>
<tr>
<td>ECE 407</td>
<td>Curriculum and Strategies for Children with Special Needs (4)</td>
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<tr>
<td></td>
<td>Special Needs Specialization Units:</td>
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</table>

1. If ECE 415/NUTRI 320 was taken for the Teacher Certificate, it may be used towards a Specialization for the Master Teacher level. The certificate will then be a total of 50 units.

2. ECE 430 may be used for this specialization, even if it was used for the Teacher Level Certificate. The certificate will then be a total of 50 units.

3. ECE 331 may be used for the Master Teacher specialization, even when used toward the Teacher Certificate. If ECE 331 is used, then this certificate totals 50 units.

### Student Learning Outcomes

Upon completion of this program, the student will be able to:

- apply child development principles to lead a teaching team in the design and evaluation of environments that are anti-bias, respectful, supportive, and challenging for all children, from infancy through adolescence.
- design early childhood programs that build respectful, reciprocal, and culturally informed family relationships with the intention of engaging families in their children's development and learning.
- select and utilize systematic child, program, and staff assessment tools to lead a teaching team in developing curriculum and teaching strategies.
- demonstrate practices in maintaining health and safety standards and preventing infectious disease in group-care settings.
- evaluate and implement curriculum and teaching plans, as evidenced through documentation, that support foundational skills and concepts in language, math, science, art, and social relationships.
- apply principles and practices for teaching that pull from a selected concentration of early childhood studies.
- create a continuing professional growth plan and advocate for public policy that supports children, families, and the profession of early childhood education.
- examine the role and development of early childhood education professionals as mentors and leaders in creating and leading anti-bias early childhood education programs.

### Career Information

Upon completion of this certificate, the individual is eligible to be a lead teacher in a private (Title 22) early care and education program, and with documented work experience teaching children and supervising staff, is eligible to apply to the California Commission on Teacher Credentialing for a Master Teacher Child Development Permit to work as a lead teacher in a public (Title 5) early care and education program.

### School Age Certificate

This certificate provides the educational coursework that serves as the core curriculum for the early childhood education field. Topics include an introduction to the profession, observation techniques, age-appropriate curriculum, and a supervised field/lab experience. Additionally, it covers specific school-age program requirements and activities.

**Catalog Date:** June 1, 2020

### Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 300</td>
<td>Introduction to Principles and Practices in Early Childhood Education</td>
<td>3</td>
</tr>
<tr>
<td>ECE 312</td>
<td>Child Development (3)</td>
<td>3</td>
</tr>
<tr>
<td>or PSYC 372</td>
<td>Child Development (3)</td>
<td>3</td>
</tr>
<tr>
<td>ECE 314</td>
<td>The Child, the Family and the Community</td>
<td>3</td>
</tr>
<tr>
<td>ECE 320</td>
<td>Curriculum and Interactions in Early Childhood Education</td>
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<td>COURSE CODE</td>
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<td>UNITS</td>
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<tr>
<td>ECE 356</td>
<td>Programs for the School-Age Child</td>
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<td>ECE 358</td>
<td>Activities for the School-Age Child</td>
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<tr>
<td>ECE 415</td>
<td>Children's Health, Safety and Nutrition (3)</td>
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</tr>
<tr>
<td>or NUTRI 320</td>
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<tr>
<td>Total Units</td>
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<td>22</td>
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</tbody>
</table>

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- distinguish developmental levels and appropriate activities for children in grades K-8 using systematic observation.
- create an appropriate and flexible environment for a variety of before- and after-school programs and full-day programs.
- analyze and apply positive guidance strategies that teach school-age children self-discipline and effective and positive interactions among a diverse group of peers.
- demonstrate respectful and positive interactions among a diverse population of children, families, staff and the community.
- implement practices in maintaining health and safety standards and preventing infectious disease in group settings with children ages five through fourteen.

**Career Information**

Upon completion of this certificate and with appropriate documented experience, the student exceeds the minimum requirements for employment as a teacher in privately funded before-and-after school child care programs. These requirements are outlined in Title 22 (Department of Social Services) regulations for child care licensing.

**Site Supervisor Certificate**

Administration of early care and education programs is the main focus of this certificate. Topics include administration, supervision and coordination of staff in early childhood settings. Additionally, it provides the educational coursework that serves as the core curriculum for the early childhood education field. Along with documented experience, this certificate leads to the Site Supervisor Permit issued by the California Commission on Teacher Credentialing and is required of those individuals supervising a publicly funded early childhood education site.

Catalog Date: June 1, 2020

**Certificate Requirements**

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>ECE 300</td>
<td>Introduction to Principles and Practices in Early Childhood Education</td>
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</tr>
<tr>
<td>ECE 312</td>
<td>Child Development (3)</td>
<td>3</td>
</tr>
<tr>
<td>or PSYC 372</td>
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<td>ECE 314</td>
<td>The Child, the Family and the Community</td>
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<td>Curriculum and Interactions in Early Childhood Education</td>
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<tr>
<td>ECE 321</td>
<td>Advanced Practicum in Early Childhood Education</td>
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<tr>
<td>ECE 326</td>
<td>Making Learning Visible Through Observation and Documentation</td>
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<tr>
<td>ECE 331</td>
<td>Care and Education of Infants and Toddlers</td>
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<tr>
<td>ECE 415</td>
<td>Children's Health, Safety and Nutrition (3)</td>
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<td>or NUTRI 320</td>
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<tr>
<td>ECE 420</td>
<td>Administration I: Programs in Early Childhood Education</td>
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<td>ECE 422</td>
<td>Administration II: Personnel and Leadership in Early Childhood Education</td>
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<tr>
<td>ECE 424</td>
<td>Adult Supervision: Mentoring in a Collaborative Learning Setting</td>
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<tr>
<td>ECE 430</td>
<td>Culture and Diversity in Early Childhood Education</td>
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<tr>
<td>A minimum of 23 units from the following:</td>
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</table>
A minimum of 16 units that fulfill the ARC General Education units must be completed in all four of the following areas: Language/Rationality; Humanities; Behavioral Social Science; and Math OR Science. The additional 7 units may also be courses that fulfill the General Education requirement OR any other ECE units.

<table>
<thead>
<tr>
<th>COURSE CODE</th>
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<tbody>
<tr>
<td>ECE 300</td>
<td>Introduction to Principles and Practices in Early Childhood Education</td>
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<td>ECE 314</td>
<td>The Child, the Family and the Community</td>
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<tr>
<td>ECE 404</td>
<td>Children with Special Needs</td>
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<tr>
<td>ECE 407</td>
<td>Curriculum and Strategies for Children with Special Needs</td>
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</tr>
<tr>
<td>SLPA 300</td>
<td>Introduction to Communication Disorders</td>
<td>3</td>
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</tbody>
</table>

| Total Units: | 19 |

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- formulate an educational philosophy to guide the operation of an early childhood program.
- support culturally respectful interactions among children, parents, teachers and the community.
- evaluate curriculum for sound pedagogy, content, and breadth, including planning for the learning environment, the daily routines, and the individual needs of children.
- manage program planning, budgeting, governing boards, enrollment, and personnel in accordance with the regulations of Title 5 (California Education Code of Regulations) and Title 22 (California Social Services Code of Regulations).
- create procedures for implementing standards of health, nutrition, and safety in group care early childhood education settings.
- plan professional and personal growth and advocacy activities to support children, families and teachers.

Career Information

Upon completion of this certificate, the student exceeds the minimum requirements to work as a director/site supervisor in a privately funded early care and education program. With documented experience supervising staff, the student also meets the requirements to work as a director/site supervisor in a publicly funded early care and education program.

Special Needs Specialist Certificate

This certificate provides the educational coursework that serves as the core curriculum for the early childhood education field with a specific focus on working with children with special needs. Topics include an introduction to the profession, observation techniques, age-appropriate curriculum, and a supervised field/lab experience in a fully-inclusive classroom. Additionally, this specialization includes a course introducing the student to issues relating to speech and language development.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>ECE 300</td>
<td>Introduction to Principles and Practices in Early Childhood Education</td>
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</tr>
<tr>
<td>ECE 312</td>
<td>Child Development (3)</td>
<td>3</td>
</tr>
<tr>
<td>or PSYC 372</td>
<td>Child Development (3)</td>
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<td>The Child, the Family and the Community</td>
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<td>ECE 404</td>
<td>Children with Special Needs</td>
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<tr>
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<td>Curriculum and Strategies for Children with Special Needs</td>
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<tr>
<td>SLPA 300</td>
<td>Introduction to Communication Disorders</td>
<td>3</td>
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</tbody>
</table>

| Total Units: | 19 |

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- evaluate and apply knowledge of typical and atypical development to create early childhood classrooms that are respectful, supportive, and challenging for all children.
- design curriculum and programs for children with special needs that build respectful, reciprocal family relationships and support optimal development and learning both at home and in group care settings.
• incorporate systematic assessment strategies using observation, documentation, and interpretation in order to guide decisions about support for children with special needs.

Career Information

Upon completion of this specialization certificate, students are eligible to be teachers in fully-inclusive, privately funded (Title 22) early care and education programs and/or associate teachers in fully-inclusive, publicly funded (Title 5) programs serving young children and their families.

Teacher Certificate

This certificate provides a foundation for in-depth early childhood teacher preparation both through general education and through introductory studies in child development and in early childhood curriculum and pedagogy. Additionally, it covers culture and diversity issues in early childhood and health and safety practices. Students must verify required teaching experience to be recommended to the Commission on Teacher Credentialing for issuance of the Teacher Child Development Permit.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<td>Introduction to Principles and Practices in Early Childhood Education</td>
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<tr>
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<td>or PSYC 372</td>
<td>Child Development (3)</td>
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<tr>
<td>ECE 314</td>
<td>The Child, the Family and the Community</td>
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<tr>
<td>ECE 320</td>
<td>Curriculum and Interactions in Early Childhood Education</td>
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<td>ECE 321</td>
<td>Advanced Practicum in Early Childhood Education</td>
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<td>ECE 326</td>
<td>Making Learning Visible Through Observation and Documentation</td>
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<tr>
<td>ECE 331</td>
<td>Care and Education of Infants and Toddlers</td>
<td>3</td>
</tr>
<tr>
<td>ECE 415</td>
<td>Children's Health, Safety and Nutrition (3)</td>
<td>3</td>
</tr>
<tr>
<td>or NUTRI 320</td>
<td>Children's Health, Safety and Nutrition (3)</td>
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<tr>
<td>ECE 430</td>
<td>Culture and Diversity in Early Childhood Education</td>
<td>3</td>
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<tr>
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<td>At least one course from each of the following four areas listed in the ARC graduation requirements: (1) Math/Science: Natural Science or a course satisfying the Mathematics Competency requirement; (2) English: Language &amp; Rationality; (3) Humanities; and (4) Social Sciences: Social &amp; Behavioral Sciences.</td>
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Student Learning Outcomes

Upon completion of this program, the student will be able to:

• confirm child development principles in creating environments that are healthy, respectful, supportive, and challenging for all children, from infancy through adolescence.

• design early childhood programs that build respectful, reciprocal family relationships with the intention of involving families in their children’s development and learning.

• utilize systematic child assessment strategies in order to guide decisions about curriculum and teaching strategies.

• evaluate and implement curriculum and teaching plans, as evidenced through documentation, that support foundational skills and concepts in language, math, science, art, and social relationships.

• demonstrate practices in maintaining health/safety standards and preventing infectious disease in group-care settings.

• analyze principles of culturally relevant and anti-biased education in developing and analyzing early childhood curriculum and environments that respond to and respect diverse cultures and individual needs of children.

• develop a continuing professional growth plan and advocate for public policy that supports children, families and the profession of early childhood education.
Early Childhood Education (ECE)

Upon completion of this certificate and with appropriate documented experience, the student meets the requirement for employment as a teacher in publicly funded early care and education programs, serving infants through preschool-age children. The student also meets the requirements to work as a teacher in a privately funded early care and education program, as well as in a before-and-after school-age program.

Certificate

Family Child Care Certificate

This certificate provides a foundation in early childhood education and includes courses specific to family child care providers. Additional topics include child development theories and principles, the child in the context of the family, and general health and safety practices.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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</thead>
<tbody>
<tr>
<td>ECE 305</td>
<td>Introduction to Family Child Care</td>
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</tr>
<tr>
<td>ECE 312</td>
<td>Child Development (3)</td>
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<tr>
<td>or PSYC 372</td>
<td>Child Development (3)</td>
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<tr>
<td>ECE 314</td>
<td>The Child, the Family and the Community</td>
<td>3</td>
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<td>ECE 415</td>
<td>Children’s Health, Safety and Nutrition (3)</td>
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<td>or NUTRI 320</td>
<td>Children’s Health, Safety and Nutrition (3)</td>
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<tr>
<td>Total Units:</td>
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<td>10</td>
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Upon completion of this program, the student will be able to:

- describe and implement developmentally appropriate activities for infant through school-age children.
- demonstrate respectful and reciprocal interactions with children and their families.
- construct home-style, appropriate environments for group care of young children.
- evaluate components of a quality family child care program and apply California licensing regulations.
- demonstrate practices in maintaining health/safety standards and preventing infectious disease in family child care settings.
- create a parent contract for family child care.
- assess needs of families and refer them to community resources.

Career Information

Upon completion of this certificate, the student is prepared to offer quality in-home child care to families in the community.

Early Childhood Education (ECE)

ECE 294 Topics in Early Childhood Education

Units: 0.5 - 4
Hours: 9 - 54 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020
This course provides opportunity to study current topics in early childhood education which are either not included in current offerings, or require emphasis beyond that offered in existing courses.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- Examine current topics in Early Childhood Education
- Illustrate best practices with young children based on child development theories and research
- Generalize different levels of professionalism

ECE 295 Independent Studies in Early Childhood Education

Units: 1 - 3  
Prerequisite: None.  
Catalog Date: June 1, 2020

ECE 300 Introduction to Principles and Practices in Early Childhood Education

Units: 3  
Hours: 54 hours LEC  
Prerequisite: None.  
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.  
Transferable: CSU  
C-ID: C-ID ECE 120  
Catalog Date: June 1, 2020

This course is an introduction to early childhood education, including an overview of the history of the field, evolution of professional practices and ethics, educational principles that support child development from birth through the school-age years, and teaching practices based on observation, documentation, and interpretation of children’s behavior. Site visits may be required.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- relate current perspectives on childhood, the care of children, and early childhood education to historical and cultural contexts.
- identify career paths, certification options, professional associations, and dispositions for working within the early childhood field.
- discriminate among philosophies of early childhood education in regards to assumptions about how young children learn and how early childhood teachers should teach.
- describe principles and practices that guide teaching when working with young children, to include the development of play-based learning environments, routines that involve children in applying emerging skills, and strategies that support young children’s social competence.
- identify the role of observation, documentation, and interpretation of children’s play as a tool for planning curriculum for young children and assessing their learning.

ECE 305 Introduction to Family Child Care

Units: 1  
Hours: 18 hours LEC  
Prerequisite: None.  
Transferable: CSU  
Catalog Date: June 1, 2020

This course examines the operation of a family child care business, including developmentally appropriate teaching practices in Early Childhood Education. It includes California licensing regulations, health and safety standards, business practices, and appropriate practices and curriculum for children in a family child care setting.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- identify the components of a successful, culturally responsive, and developmentally appropriate licensed family child care home.
develop a plan for a licensed family child care facility, including philosophy, curriculum, policies, routines, guidance practices, communication and marketing.

interpret and reference the legal regulations of family child care homes in California (Title 22), fire code, and other health and safety requirements.

examine anti-bias and culturally responsive strategies for engaging and supporting diverse families.

ECE 312 Child Development

Same As: PSYC 372
Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC (UC credit limitation: PSYC 372, 373, and ECE 312 combined: maximum credit, one course)
General Education: AA/AS Area V(b); CSU Area D9; CSU Area E1; IGETC Area 4I
C-ID: C-ID CDEV 100
Catalog Date: June 1, 2020

This course is a study of the growth and development of children from the prenatal stage through adolescence. For each stage of development, the physical, cognitive, linguistic, social-moral, and emotional aspects of development, with attention to both typical as well as atypical development in each area, are discussed in reference to relevant research and theories. The course covers research methods and data collection approaches. The influences of culture, family, and the interaction of maturational and environmental factors are studied. The material in this course is designed as a foundation for early child care and education, teaching, and parenting. This course is not open to students who have completed PSYC 372.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the main characteristics of physical, cognitive, and social emotional development from birth through adolescence
- identify the roles of genetic and environmental influence on development
- identify the characteristics that exemplify typical and atypical development from birth through adolescence
- describe current and prominent theories of child development
- compare and contrast diverse parenting approaches and educational experiences in reference to developmental outcomes throughout childhood and adolescence
- apply theories to teaching and child-rearing practices with a focus on current topics in education for children from diverse backgrounds
- identify typical behavior of children and their individual differences and special needs (physical, cognitive, emotional, and social development)
- analyze the influence of culture, race/ethnicity, socioeconomic status, family and society structure on a developing child from birth through adolescence

ECE 314 The Child, the Family and the Community

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC
General Education: AA/AS Area V(b); CSU Area D7; IGETC Area 4G
C-ID: C-ID CDEV 110
Catalog Date: June 1, 2020

This course covers the child's development within the family and the community. It focuses on socialization methods, parenting style, and the impact of family, culture, school, community, and the media on the child's development. This course offers the opportunity to research and review the diverse community resources available to support the child and the family.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify and evaluate changing family structures and roles in relation to social, cultural, and economic influences.
- describe and compare the influence of diverse cultures on the socialization of children.
- critically analyze the impact of stress factors on the child within culture and society.
- examine theories of socialization that address the interrelation of the child, family, and community, with specific reference to Urie Bronfenbrenner's Ecological...
Systems Theory.

- examine the impact of socialization, family history, and life experiences, on one's own developmental outcomes, and assess how this impacts relationships with children and families.
- critically review public policy related to the well-being of children and families.
- identify the roles, functions, and services offered to the child and family by community resources, including resources for children with special needs.

ECE 316 Mass Media and Young Children

Units: 1
Hours: 18 hours LEC
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

This course covers the impact of mass media on socializing young children with emphasis on the influence of mass media on development, including the impact of television, movies, commercial advertising, books, and popular music. It also includes strategies for minimizing the negative influences of mass media on children.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe how media affect children's overall development, attitudes, and behavior
- analyze a wide range of media for messages about race, gender, class, and violence
- identify the political and economic forces that shape and control the media
- utilize effective strategies and resources for combatting the negative effects of media on young children
- employ a variety of developmentally appropriate media literacy activities for young children
- identify approaches and resources for activism and advocacy around media issues

ECE 320 Curriculum and Interactions in Early Childhood Education

Units: 4
Hours: 36 hours LEC; 108 hours LAB
Prerequisite: ECE 300 AND ECE 312 or PSYC 372 with a grade of "C" or better.
Enrollment Limitation: Students must show proof of negative tuberculosis as well as immunizations for influenza, pertussis, and measles prior to participating in the lab.
Advisory: Eligible for ENGRD 116 AND ENGWR 101; OR ESLR 320 AND ESLW 320.
Transferable: CSU
C-ID: C-ID ECE 130
Catalog Date: June 1, 2020

This course provides supervised experience working with children in an early childhood setting. Topics include principles of curriculum development, classroom design, and child guidance, with opportunity to apply these key teaching principles in practical situations.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply developmentally appropriate principles and practices to support young children's optimal development and learning within healthy, safe, respectful, supportive, and challenging learning environments.
- assess one's own teaching with respect to the teacher's role in providing best and promising practices in early childhood education.
- design, develop, and evaluate play-based learning environments for young children, routines that involve young children in applying emerging ideas and skills, and developmentally appropriate and inclusive learning activities for young children.
- plan, implement, and evaluate experiences that support young children in building a foundation for language and literacy, math and science, social sciences, and the arts.
- plan for children's learning using observation, documentation, and interpretation of their actions, ideas, and feelings.
- develop respectful and reciprocal relationships with families, with particular attention paid to those whose children have special needs, and supporting families whose home language is other than English.
demonstrate communication and guidance strategies that support the development of young children’s social competence.

analyze possibilities for children’s learning within play-based curriculum that support children’s cognitive, language, creative, physical, and social/emotional development.

ECE 321 Advanced Practicum in Early Childhood Education

| Units:  | 4 |
| Hours:  | 36 hours LEC; 108 hours LAB |
| Prerequisite: | ECE 320 with a grade of "C" or better |
| Enrollment Limitation: | Current Tuberculosis clearance. |
| Transferable: | CSU |
| C-ID: | C-ID ECE 210 |
| Catalog Date: | June 1, 2020 |

This advanced course provides supervised experience as a teacher in an early childhood education program. It is aimed at leadership in the areas of developing environments for learning, child observation and assessment, documentation of children’s work, behavior guidance, group management, collaborative teaching, building relationships with families, and effective preparation and implementation of curriculum.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- create a statement of philosophy and a list of guiding principles and practices for early childhood teaching, using current research and theory in child development.
- design, arrange, observe, and evaluate a complete classroom environment wherein children construct knowledge within a context of play.
- plan, implement, observe, and evaluate the overall and ongoing curriculum and learning encounters, verifying opportunities to apply emerging skills in the areas of language and literacy; math and science; the arts; physical development; and social sciences.
- demonstrate the use of observation, documentation, and interpretation for curriculum planning, assessment of children’s learning, and advocacy in regards to making visible children’s learning.
- organize communication systems within a classroom that involve families in the process of curriculum and program design.
- support the development of a climate of care and respect among children, teachers, and families by applying strategies for negotiating disputes, fostering caring relations, and sharing responsibility.
- assess one’s own teaching experiences to guide practice.

ECE 325 Positive Guidance Strategies with Young Children

| Units: | 3 |
| Hours: | 54 hours LEC |
| Prerequisite: | None. |
| Transferable: | CSU |
| Catalog Date: | June 1, 2020 |

This course introduces strategies that teachers and parents can use to help young children develop social and emotional skills. It examines theories, research, and practical applications for teachers in early childhood classrooms and parents at home. Developmental stages of children’s behavior, positive discipline techniques, and promotion of social-emotional skills are also covered.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- examine child development theories and research in regard to positive guidance strategies.
- summarize key practices from dominant guidance theories.
- analyze early childhood care and education physical environments, schedules, materials, activities, and practices for the effects on children’s behavior.
- assess children’s behavior and apply effective guidance practices in daily interactions.
- identify teaching and parenting practices that foster social-emotional skills.
- identify factors which have both positive and negative impacts on brain development and how these variables influence the development of executive functioning.
ECE 326 Making Learning Visible Through Observation and Documentation

This course links critical and reflective thinking to observation and assessment of young children’s development. It prepares teachers of young children to use observation, documentation, and interpretation strategies to improve program quality in early childhood settings. Multiple forms of child assessment and early childhood program assessment are explored. Site visits may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- compare the purpose, value, and use of formal and informal assessments, including ethical and legal concerns.
- evaluate the strengths and limitations of common assessment tools with respect to children’s diverse cultures, home languages, and developmental capabilities.
- recommend changes to play environments, guidance strategies, curriculum activities, and care routines based on systematically recorded observational data that documents children’s actions, ideas, and feelings.
- demonstrate children’s developmental progress using observational documentation of children’s ideas and behavior.
- analyze the effectiveness of photo documentation in conveying how young children learn within quality early childhood settings.
- integrate observed documentation of children’s ideas, feelings, and actions to engage children’s families and others as active partners in developing early childhood curriculum and programs.

ECE 330 Infant and Toddler Development

This course provides a study of infants and toddlers from pre-conception to age three including physical, cognitive, language, social, and emotional growth and development. It applies theoretical frameworks to interpret behavior and interactions between heredity and environment. Additionally, it emphasizes the role of family and relationships in development.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- evaluate biological and environmental factors that influence pre-conception and prenatal health, development, and early parenting.
- outline the major developmental milestones, characteristics, and growth patterns of children from conception through 36 months.
- demonstrate developmentally appropriate observation skills in the areas of physical, social, emotional, and/or cognitive development of infants and toddlers.
- analyze the multiple contextual influences on infant and toddler development, including the influence of culture, diverse family practices, and interrelationships between heredity and environment.
- use current research to explain a variety of developmental issues in the first three years including the impact of birth practices on the newborn and family.
- relate developmental theory to infant and toddler development, interactions, and relationships.
- compare and contrast caregiving practices and environments that support optimal development.

ECE 331 Care and Education of Infants and Toddlers

Units: 3
Hours: 54 hours LEC
Prerequisite: ECE 312
Corequisite: ECE 312
Advisory: Eligible for ENGRD 116 AND ENGWR 101; OR ESLR 320 AND ESLW 320
Transferable: CSU
C-ID: C-ID ECE 200
Catalog Date: June 1, 2020

This course links critical and reflective thinking to observation and assessment of young children’s development. It prepares teachers of young children to use observation, documentation, and interpretation strategies to improve program quality in early childhood settings. Multiple forms of child assessment and early childhood program assessment are explored. Site visits may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- compare the purpose, value, and use of formal and informal assessments, including ethical and legal concerns.
- evaluate the strengths and limitations of common assessment tools with respect to children’s diverse cultures, home languages, and developmental capabilities.
- recommend changes to play environments, guidance strategies, curriculum activities, and care routines based on systematically recorded observational data that documents children’s actions, ideas, and feelings.
- demonstrate children’s developmental progress using observational documentation of children’s ideas and behavior.
- analyze the effectiveness of photo documentation in conveying how young children learn within quality early childhood settings.
- integrate observed documentation of children’s ideas, feelings, and actions to engage children’s families and others as active partners in developing early childhood curriculum and programs.
This course applies current theory and research to the care and education of infants and toddlers in group settings. It examines essential policies, principles, and practices that lead to quality care and developmentally appropriate curriculum for children birth to 36 months.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- summarize the essential policies and practices of quality infant and toddler programs, including primary caregiving, quality indicators, and practices that support the unique abilities of children from birth through 36 months of age.
- demonstrate strategies to promote healthy relationships in the care and education of infants and toddlers, including reciprocal communication techniques and respectful practices with diverse families served.
- evaluate and design appropriate infant and toddler curriculum and environments based on observation, documentation, and reflection.

ECE 342 Constructive Math and Science in Early Childhood Education

| Units: | 3 |
| Hours: | 54 hours LEC |
| Prerequisite: | None. |
| Advisory: | Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340. |
| Transferable: | CSU |
| Catalog Date: | June 1, 2020 |

The course is an introduction to the constructivist approach to teaching math and science concepts in early childhood education. The content and teaching techniques support the perspective that children construct knowledge through a dynamic, interactive process that facilitates their development of working theories related to math and science. Topics include an overview of the role of the teacher in developing appropriate experiences for children and a review of current standards and guidelines, including California's Early Learning Foundations and Frameworks.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify inquiry skills and concepts children are building in early childhood and provide meaningful opportunities for children to apply and master these skills and concepts.
- define and implement effective approaches to teaching and learning science and mathematics in early childhood education.
- demonstrate teaching techniques that encourage and support children in actively developing understandings of the processes involved in mathematical and scientific knowledge.
- develop and evaluate important elements of a science-rich and math-rich learning environment.
- design and evaluate curriculum in math and science using an inquiry-based approach.
- generalize knowledge of the constructivist/inquiry approach to design curriculum that is culturally respectful and inclusive as well as considerate of children's prior experiences gaining knowledge about the world.
- analyze mathematic and science curriculum concepts based on the knowledge of relevant research and knowledge of child development.
- critique the important concepts in children's construction of knowledge in mathematics and science in comparison to product-driven repetition and drill practices.

ECE 343 Language and Literacy Development in Early Childhood

| Units: | 3 |
| Hours: | 54 hours LEC |
| Prerequisite: | None. |
| Advisory: | Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340 |
| Transferable: | CSU |
| Catalog Date: | June 1, 2020 |

This course prepares early childhood educators and others working with young children to recognize, understand, and enhance the emergent language and literacy experiences and skills of young children. The knowledge of developmentally appropriate language and literacy practices improves early childhood educators' ability to support young children in the early years (birth to five years) to build a strong foundation for learning to read and write in the primary grades. Topics include an overview of the teachers' role in developing appropriate language and literacy experiences for young children, including ways to support the child learning English as a second language.
Upon completion of this course, the student will be able to:

- describe developmental patterns in early literacy learning and research-based teaching practices that help children build a foundation for rich vocabularies and language fluency for reading and writing.
- design and define developmentally appropriate goals and expectations for young children’s achievement in reading and in writing.
- incorporate developmentally appropriate teaching practices that support children’s language and literacy knowledge from birth through age five.
- evaluate and define program policies (staff development, curricular resources, and assessment) that support early childhood language and literacy teaching and learning.
- analyze practices and assess issues that support young children learning a second language while simultaneously maintaining competence in the home language.
- evaluate and demonstrate strategies of collaboration with children’s families to implement projects that support children’s literacy experiences both at school and at home.

**ECE 350 Introduction to Elementary Teaching with Field Experience**

Same As: ENGED 324  
Units: 3  
Hours: 36 hours LEC; 54 hours LAB  
Prerequisite: None.  
Enrollment Limitation: Before students can attend the school site for field work, they are required to show proof of TB clearance. They may also need to complete a fingerprint clearance through the cooperating school district, if the district requires it.  
Advisory: ECE 312 or PSYC 372  
Transferable: CSU  
General Education: AA/AS Area III(b)  
C-ID: C-ID EDUC 200  
Catalog Date: June 1, 2020

This course introduces the concepts and issues related to teaching diverse learners in today’s contemporary schools, kindergarten through grade 12 (K-12). Topics include teaching as a profession and career, historical and philosophical foundations of the American education system, contemporary educational issues, California’s content standards and frameworks, and teacher performance standards. In addition to class time, this course requires a minimum of 45 hours of structured fieldwork in public school elementary classrooms that represent California’s diverse student population, and includes cooperation with campus-approved certificated classroom teachers.

This course is not open to students who have completed ENGED 324.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- identify academic requirements and experiences needed to become a credentialed elementary school teacher
- evaluate attitudes, actions, behaviors, and responsibilities that define the role of a professional educator in a public school setting
- demonstrate objective, descriptive, and interpretative observation skills
- analyze learning theory through planning, teaching, and interaction with elementary students
- examine and assess issues concerning diversity in elementary student backgrounds, interests, experiences, and abilities
- identify school and community resources that address issues concerning diversity
- develop a personal preliminary philosophy of teaching, examining personal characteristics, assumptions and beliefs, and experiences which could affect development as a teacher
- apply course content to classrooms through structured assignments, observations, and reflections

**ECE 356 Programs for the School-Age Child**

Units: 3  
Hours: 54 hours LEC  
Prerequisite: None.  
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; or ESLR 340 AND ESLW 340  
Transferable: CSU  
Catalog Date: June 1, 2020

This course introduces students to the fundamentals of planning, implementing, and evaluating programs for out-of-school time programs (before-school, after-school, and...
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify the developmental milestones of children in grades K-8
- demonstrate how developmental milestones are characterized within a school-age program setting
- design, implement, and evaluate high-quality, age-appropriate activities for school-age programs
- develop schedules and routines for school-age children
- identify the differences in program models for school-age children
- differentiate between programs offered to school-age children
- analyze budget, staffing patterns, staff qualifications, and facility management for use in before-school, after-school, and summer programs
- evaluate a variety of environments for school-age programs

ECE 358 Activities for the School-Age Child

This course focuses on design, implementation, and evaluation of developmentally appropriate activities for the school-age child (K-8). Curriculum areas include games, construction, art, music and movement, science and nature, and drama. It explores other topics including cooperative program planning, environments, guidance techniques, and the importance of positive interpersonal relationships between the adults and the children in the program. This course may require students to conduct observations in a school-age classroom.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- recall developmental stages and characteristics of children TK-8, including risk factors or stress related issues school-aged children might face.
- examine and analyze children's activities, ideas, and interests as sources for developmentally-appropriate curriculum planning.
- design and evaluate a variety of activities appropriate for school-aged children in group settings including strategies and activities that reduce stress.
- analyze and apply guidance strategies for school-age children in a group setting.
- describe strategies for establishing supportive adult-child relationships in the school-age classroom.
- discuss the role of environment in developmentally appropriate curriculum planning for school-age children.
- critique school-age child care practices through observation and practical research.

ECE 361 Introducing Young Children to Visual Arts

This course prepares teachers in early childhood education with strategies for introducing young children to the media and tools of drawing, painting, sculpting, and other visual arts commonly used by young children to represent and understand the world around them. The focus is on observing children’s natural ways of exploring each medium and learning strategies to facilitate and document children's emerging skills and relationship with each medium. Included are strategies for designing early childhood environments that promote children's exploration of visual arts.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- evaluate and observe the developmental progression of children's exploration and use of the tools and media of drawing, painting, sculpting, and construction.
- demonstrate the attributes, selection, and use of expressive media and tools commonly used with young children.
- create interest areas within an early childhood classroom that provide developmentally appropriate media, tools, and settings for young children's independent exploration and use of a variety of expressive media.
- design encounters with expressive arts media and tools that present challenges and problems appropriate to children's developmental interests and abilities for each phase of development from infancy through eight years of age.
- evaluate early childhood classroom environments for their capacity to promote young children's comfort and competence in using expressive media to represent impressions, feelings, and experiences.
- summarize anecdotal observations of children's encounters with the tools and media of expressive art and make visible children's learning through developmental portfolios and displays.
- design documentation that supports reflective examination among teachers, families, and children of the aesthetic and cognitive dimensions of children's work.

ECE 363 Music and Movement with Young Children

| Units: | 3 |
| Hours: | 54 hours LEC |
| Prerequisite: | None. |
| Transferable: | CSU |
| General Education: | AA/AS Area I |
| Catalog Date: | June 1, 2020 |

This course introduces students to theoretical principles and practical applications for integrating appropriate music and movement experiences in early childhood settings. It focuses on using music and movement as strategies for forming a classroom community of learners, and managing behaviors, routines, and transitions. This course also explores incorporating culturally diverse music and movement activities to support children's understanding and acceptance of differences.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe how music and movement supports a young child's growth in all developmental domains.
- plan, implement, and evaluate music and movement experiences and environments for young children, including children with special needs.
- use music and movement as a strategy for forming a classroom community of learners, and for managing behaviors, routines, and transitions.
- create a repertoire of songs, finger plays, rhymes, chants, and movement activities to support children's development.
- identify strategies for using culturally diverse music and movement experiences to support children's understanding and acceptance of differences.

ECE 404 Children with Special Needs

| Units: | 3 |
| Hours: | 54 hours LEC |
| Prerequisite: | ECE 312 or PSYC 372 with a grade of "C" or better |
| Transferable: | CSU |
| Catalog Date: | June 1, 2020 |

This course introduces the variations in development of children with special needs ages birth through eight and the resulting impact on families. It includes an overview of historical and societal influences, laws relating to children with special needs, and the identification and referral process. Observations in public or private children's centers, schools, and agencies may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- recognize various exceptionalities and conditions of children and identify interventions based on the developmental continuum.
- evaluate the role of history and society in shaping current policies related to best practices of inclusion and serving children with special needs.
- collaborate with families and community members in supporting inclusion of children with special needs.
• describe the sequence of development and the inter-relationships among developmental areas.
• identify community resources that meet the needs of children with special needs and their families.
• explain various strategies that support collaborative practices in promoting the optimal development of children within the context of their families and communities.
• summarize the steps in the referral process including observation, documentation, screening, and assessment.
• identify the benefits of using a strength-based approach in working with children with special needs and their families.

ECE 407 Curriculum and Strategies for Children with Special Needs

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: ECE 404 with a grade of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This course provides supervised experience working with young children with special needs in inclusive early care and education settings with an option to work in a non-inclusive classroom (e.g., a diagnostic preschool, preschool communication class, social communication class, or autism special day classroom). This course covers curriculum and intervention strategies for working with children with special needs and partnering with their families as well as the importance of cultural competence. It focuses on the use of observation and assessment in meeting the individualized needs of children and families in inclusive and non-inclusive classrooms. Topics include integration strategies, classroom environments, and individualized instructional strategies for children. This course emphasizes creating modifications, accommodations, and/or adaptations to the environment, routines and curriculum, role of the teacher in partnering with families, and working with interdisciplinary teams.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• evaluate program, educational, and professional policies, based on special education laws and evidence-based practices.
• design and implement curriculum strategies based on children’s individualized needs in inclusive and natural environments.
• advocate for effective partnerships with families, interdisciplinary team members, and community resource specialist.
• explain current special education laws and their impact on early childhood practice.
• describe strategies that support the central role of families and their collaborative partnerships with team members and community professionals.
• demonstrate knowledge of reflective practice, cultural responsiveness, confidentiality, and professional practices when working with colleagues, children, and families.
• practice various formal and informal observation and assessment procedures used to guide identification and intervention decisions.
• identify curriculum, environment, and natural learning opportunities to meet individualized outcomes and goals of young children and families.
• design modifications and accommodations based on observation, evidence-based practices, and legal requirements to support children’s development.

ECE 414 CPR and Pediatric First Aid

Same As: HEED 311
Units: 1.5
Hours: 27 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC (HEED 310, 311, 316 & ECE 414 combined: maximum credit-1 course)
Catalog Date: June 1, 2020

This course meets the requirements for American Red Cross certification in California Child Care Health & Safety Training which includes adult, child, and infant CPR and pediatric first aid. It also includes legal considerations, avoiding disease transmission, responding to sudden illnesses and injuries, and recognition of common childhood diseases. This course is not open to students who have completed HEED 311.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• analyze and implement triage techniques
• assess the emergency care of life-threatening conditions
• evaluate and formulate emergency first aid techniques for common childhood injuries and illnesses
• demonstrate infant, child, and adult CPR skills
• appraise disease transmission prevention techniques as they relate to CPR and first aid procedures
• plan and design a functional first aid kit

ECE 415 Children's Health, Safety and Nutrition

Same As: NUTRI 320
Units: 3
Hours: 54 hours LEC
Prerequisite: None
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU
C-ID: C-ID ECE 220
Catalog Date: June 1, 2020

This course examines basic nutrition, health, and safety needs of children from the prenatal period through school age. Topics include introduction to early childhood curriculum, laws, regulations, standards, policies, and procedures related to child health, safety, and nutrition. It emphasizes integrating and maintaining the optimal health, safety, and nutritional concepts in everyday planning and program development for all children, along with the importance of collaboration with families and health professionals. This course is not open to students who have taken NUTRI 320.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• analyze the interrelationship between health, safety, and nutrition as it relates to the well-being of children.
• develop various methods of collaboration with families and teachers that promote the health, safety, and nutrition of children.
• identify community resources that promote the health, safety, and nutrition of children.
• evaluate assessment tools and policies that protect the health, safety, and nutrition of children in child care settings.
• employ safe food handling techniques for preventing food-borne illnesses.
• assess the general symptoms and management of common infectious diseases that may occur in childhood.
• identify potential hazards in children's environments and describe how to make them safer.
• identify nutrient needs during fetal development, infancy, and childhood.
• identify and explain the major nutrients and their food sources.
• evaluate a child's nutrient intake by comparing it with current nutrition standards and recommendations.
• compare nutrition, health, and safety practices from the perspective of culturally diverse communities.

ECE 420 Administration I: Programs in Early Childhood Education

Units: 3
Hours: 54 hours LEC
Prerequisite: ECE 300 with a grade of "C" or better; and either ECE 312 or PSYC 372 with grades of "C" or better; Or, BA in Child Development or related field from a regionally accredited college or university.
Advisory: ECE 320
Transferable: CSU
Catalog Date: June 1, 2020

This course is an introduction to the administration of early childhood programs. It covers program types, budgets, management, regulations, laws, and the development and implementation of policies and procedures. It also examines various administrative tools, philosophies, and techniques needed to open, organize, and operate an early care and education program.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• apply administration skills in various types of early care and education programs.
• compare and contrast various program structures, philosophies, and curriculum models.
• identify strategies to ensure equity and respect for children, families, staff, and colleagues.
• demonstrate knowledge of strategic and fiscal planning.
• summarize systems and methods to support sound fiscal operations in a variety of early care and education settings.
• demonstrate knowledge of compliance with regulatory systems.
• evaluate components of quality programs, facilities, and operations.
• assess various methods and tools of evaluation.
• examine effective policies and procedures for staffing and scheduling.

ECE 422 Administration II: Personnel and Leadership in Early Childhood Education

<table>
<thead>
<tr>
<th>Units:</th>
<th>3</th>
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</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>54 hours LEC</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>ECE 420 with a grade of &quot;C&quot; or better</td>
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<tr>
<td>Transferable:</td>
<td>CSU</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course covers effective strategies for personnel management and leadership in early care and education settings. It includes legal and ethical responsibilities, supervision techniques, professional development, and reflective practices for a diverse and inclusive early care and education program.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• demonstrate effective practices for managing and leading staff and administering early care and education programs.
• implement ongoing professional development plans based on evaluation of staff and administrator needs.
• establish professional relationships and facilitate collaboration and communication between colleagues, families, and stakeholders.
• evaluate the factors needed to create a diverse and inclusive environment.
• identify components of hiring practices, observation, and evaluation practices of staff.
• describe the legal requirements and responsibilities of administering an early care and education program.
• formulate strategies for compensation and professional growth opportunities in programs.
• summarize essential practices for collaboration with staff, families, and community.
• articulate the importance of professional integrity and confidentiality.

ECE 424 Adult Supervision: Mentoring in a Collaborative Learning Setting

<table>
<thead>
<tr>
<th>Units:</th>
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<tbody>
<tr>
<td>Hours:</td>
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<tr>
<td>Prerequisite:</td>
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<td>CSU</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
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</tbody>
</table>

This course covers principles and methods of supervising student teachers, volunteers, staff, and other adults in early care and education settings. Emphasis is on the roles and development of early childhood professionals as mentors and teachers working collaboratively to guide a teaching team or individual within a classroom setting. This course satisfies the adult supervision requirement for the CA Child Development Master Teacher Permit and Site Supervisor permit issued by the CA Commission on Teacher Credentialing.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• individualize mentoring and supervision strategies based on the roles and developmental stages of adult learners, including student teachers.
• demonstrate competency in communication and reflective practices when working with diverse adult populations.
• evaluate and use a variety of personnel, program, and environmental assessment tools to inform leadership decisions.
• identify characteristics of effective leaders and mentors.
• critique and practice strategies to support adult learners.
• demonstrate reflective practice, cultural competency, and ethical conduct.

ECE 430 Culture and Diversity in Early Childhood Education

Units: 3
Hours: 54 hours LEC
Prerequisite: None
Advisory: Eligible for ENGRD 116 AND ENGWR 101; OR ESLR 320 AND ESLW 320.
Transferable: CSU
General Education: AA/AS Area V(b); AA/AS Area VI
C-ID: C-ID ECE 230
Catalog Date: June 1, 2020

This course examines the development of social identities in diverse societies, including theoretical and practical implications of oppression and privilege as they apply to young children, families, early childhood programs, and teaching practices. Various classroom strategies are explored emphasizing culturally and linguistically appropriate anti-bias approaches supporting all children in becoming competent members of a diverse society. It also includes self-examination and reflection on issues related to social identity, stereotypes and bias, social and educational access, media, and schooling.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• critique theories and identify ways in which cultural and family patterns affect children’s behavior and identity.
• analyze various aspects of children’s experience as members of families targeted by social bias considering the significant role of education in reinforcing or contradicting such experiences.
• compose rationale and goals for a multicultural, anti-bias early childhood program.
• distinguish stereotypic and biased classroom materials and environments.
• examine how children develop an awareness of differences and how prejudice may be formed in the early years.
• describe various techniques teachers can use when responding to children’s developing discriminatory behaviors.
• evaluate the impact of personal experiences and social identity on teaching effectiveness.

ECE 432 Leadership in Diversity

Units: 3
Hours: 54 hours LEC
Prerequisite: ECE 430 with a grade of “C” or better
Transferable: CSU
Catalog Date: June 1, 2020

This course expands upon ideas developed in ECE 430. It discusses ways for teachers to effectively engage in and support anti-bias work and the creation of equitable education systems. Specific cultural differences and ways to respond to the unique needs of diverse classroom communities are addressed. Additionally, it critically discusses the role of individual perspective and suggests ways for teachers to respond to diverse viewpoints of families and staff in an anti-bias classroom.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• choose specific ways to respond to the unique needs of diverse classroom populations and families when implementing anti-bias education.
• demonstrate effective techniques early childhood education professionals can use to communicate about anti-bias education with families and communities, including policy and philosophy statements.
• analyze approaches that most effectively involve parents and staff as partners in the learning environment of an anti-bias classroom, including support for English language learners and multicultural families.
• devise and apply strategies to recruit and support under-represented groups, including men, to become more involved in the field of early childhood education.
• identify ways to take part in anti-bias work, focusing on the teacher as an agent of change and developing effective strategies when working with administrators and
staff who are indifferent or opposed to this approach.

ECE 455 Environment Rating Scales in Early Childhood Programs

Units: 1
Hours: 18 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU
Catalog Date: June 1, 2020

This course examines Environment Rating Scales (ERS): Infant/Toddler (ITERS), Early Childhood (ECERS), School-Age Care Programs (SACERS), and Family Child Care (FCCERS) as tools for quality improvement in a variety of child development programs. It emphasizes theory and best practices in order to evaluate classrooms, materials, and interactions between adults and children. Site visits will be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- define the basic quality components, subscales, and items contained within the ERS.
- administer an ERS by evaluating early childhood classrooms and playgrounds.
- measure early childhood classrooms and playgrounds using ERS quality scales for a total score, average score, and subscale scores.
- evaluate strategies while using an ERS to improve efficiency in collecting information and ensure accurate scores.
- apply observer guidelines to minimize the effect on a classroom while conducting an ERS.
- compose an action plan to improve quality components of the students' own early childhood classrooms and playgrounds.
- effectively communicate summary reports and results of ERS evaluations to classroom teachers and administrators.

ECE 495 Independent Studies in Early Childhood Education

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.
Economics is the study of how individuals and societies choose to use limited resources for production of goods and services and how they distribute them for current and future consumption. Economics is divided into two major areas: macroeconomics and microeconomics. Macroeconomics studies decision-making at the national level. Macroeconomics topics include gross domestic product, unemployment, inflation, and money and banking. Microeconomics studies decision-making at the individual household, business firm, and industry levels. Microeconomics topics include theories of the firm and consumer behaviors.

Courses offered by the Economics Department are designed to satisfy general education requirements at American River College, and they are transferable to the CSU system, the UC system, and other fine institutions of higher learning in the United States. Furthermore, these economics courses will provide students with essential tools to analyze contemporary national and international economic issues.

Division Dean  Kathy Sorensen (Interim)
Department Chairs  Chiuping Chen

(916) 484-8283

Associate Degree for Transfer

A.A.-T. in Economics

The Associate in Arts degree in Economics for Transfer provides students with a major that fulfills the general requirements of the California State University for transfer. Students with this degree will receive priority admission with junior status to the California State University system. The Associate in Arts degree in Economics for Transfer (AA-T) may be obtained by the completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program outlined below (earning a C or better in these courses) and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education Breadth Requirements.

Students interested in transferring to a CSU campus to pursue a bachelor's degree in Economics should meet with a counselor to confirm the courses required for lower-division preparation in the major.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>ECON 302</td>
<td>Principles of Macroeconomics</td>
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<tr>
<td>ECON 304</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
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<td>A minimum of 3 units from the following:</td>
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<tr>
<td>PSYC 330</td>
<td>Introductory Statistics for the Behavioral Sciences (3)</td>
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<tr>
<td>STAT 300</td>
<td>Introduction to Probability and Statistics (4)</td>
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<td>STAT 305</td>
<td>Statway, Part II (6)</td>
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<td>A minimum of 3 units from the following:</td>
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<td>MATH 340</td>
<td>Calculus for Business and Economics (3)</td>
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<tr>
<td>MATH 400</td>
<td>Calculus I (5)</td>
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<td>A minimum of 6 units from the following:</td>
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<td>ACCT 301</td>
<td>Financial Accounting (4)</td>
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<td>ACCT 311</td>
<td>Managerial Accounting (4)</td>
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<tr>
<td>CISA 315</td>
<td>Introduction to Electronic Spreadsheets (2)</td>
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<td>CISC 310</td>
<td>Introduction to Computer Information Science (3)</td>
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COURSE CODE | COURSE TITLE | UNITS
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CISP 360 | Introduction to Structured Programming (4) |  
CISP 370 | Beginning Visual Basic (4) |  
MATH 336 | College Algebra (5) |  
MATH 370 | Pre-Calculus Mathematics (5) |  
MATH 401 | Calculus II (5) |  
MATH 402 | Calculus III (5) |  
MATH 410 | Introduction to Linear Algebra (3) |  
Total Units: | | 18

The Associate in Arts in Economics for Transfer (AA-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- explain terms and concepts used in macroeconomics and microeconomics.
- evaluate models to explore consequences of economic policy proposals on households and businesses.
- evaluate economic models to explore the consequences of macroeconomic events and the probable consequences of macroeconomic policy proposals on the whole economy.
- solve problems requiring the application of economics, statistics, and mathematics.
- apply accounting and economic concepts and principles in making decisions about firm operations.

**Economics (ECON)**

**ECON 302 Principles of Macroeconomics**

Units: 3
Hours: 54 hours LEC
Prerequisite: MATH 100 or 132 with a grade of "C" or better, or placement through the assessment process.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferrable: CSU; UC
General Education: AAAS Area V(b); CSU Area D2; IGETC Area 4B
C-ID: C-ID ECON 202
Catalog Date: June 1, 2020

This course is an introduction to macroeconomics. It is concerned with the economic well-being of the national economy. Topics include supply, demand, aggregate supply, aggregate demand, equilibrium, money, banking, taxation, inflation, employment, and economic growth.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- explain terms and concepts used in macroeconomics
- examine the effects of government policy on individuals and businesses
- evaluate economic models to explore consequences of economic events and probable consequences of economic proposals
- relate the concepts of macroeconomics to his or her own community and personal experiences
- assess the relationship between economic stability and public policy
- list the causes of macroeconomic instability
- predict the role of United States in the global economy given the present international economic conditions
ECON 304 Principles of Microeconomics

This course covers the interaction with individuals and business firms in the marketplace to determine prices, output, employment, and efficient utilization of economic resources. Topics include marginal utility, costs of production, and natural resource economics. This course also covers resource allocation under conditions of competition, monopoly, oligopoly, and monopolistic competition.

Upon completion of this course, the student will be able to:

- explain terms and concepts used in microeconomics
- construct analytical economic models
- evaluate models to explore consequences of economic proposals on households and businesses
- relate the concepts of microeconomics to his or her own community and personal experiences
- assess the relationship between government policies and business decisions
- list and explain examples of government intervention in the market system

ECON 305 Introduction to Economies of Africa

This course introduces various topics on Africa's economies, such as indigenous economic systems, why Africa remains poor, pre- and post-colonial development strategies, the cold war factor, development finance, and new theories on development. Additionally, the politics of international development including China's expanding role in Africa are examined.

Upon completion of this course, the student will be able to:

- apply macroeconomics concepts to the economies of Africa.
- list the causes of poverty in Africa.
- assess the relationship between colonialism and current economic systems in Africa.
- predict Africa's role in the future global economy.
- explain why Africa matters to the rest of the world.
- compare the challenges of job creation in Africa to those in United States.

ECON 320 Concepts in Personal Finance

This course focuses on the principles of personal finance, including investment strategies, financial planning, and the role of financial institutions. Students will learn to develop effective money management skills and understand the impact of financial decisions on personal financial health.

Upon completion of this course, the student will be able to:

- explain the role of financial institutions in the economy.
- evaluate different types of financial instruments and investment options.
- develop a personal budget and manage finances effectively.
- understand the consequences of credit usage and debt management.
- analyze and interpret financial statements and reports.
This course covers how to analyze financial affairs for lifelong decision making. It examines the basics of financial planning, analysis, and decision making in areas of budgeting, taxes, credit, money management, insurance, investments, and retirement with an emphasis on principles to develop economic decision-making skills. This course is not open to students who have completed BUS 320.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- examine economic needs, establish financial goals, and design a personal financial plan to achieve them
- apply economic principles and concepts to develop a financial plan
- assess the changing economic environment and develop alternative plans or contingency plans so the personal financial plan remains viable
- analyze the various investment options to aid in successful financial planning
- apply the concept of the time value of money
- explain types of risk and risk management methods to develop a risk management plan
- analyze advantages and disadvantages of credit, determine the cost of credit, and assess the types and sources of credit
- construct, implement, review, and revise a financial plan

ECON 495 Independent Studies in Economics

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College (ARC). They must also discuss the study with a professor from the Department of Economics at ARC in this subject and secure approval. Only one independent study for each catalog course will be allowed.
Electronic equipment is present everywhere in our lives. From computerized traffic signals to personal computers and cellular telephones, modern electronic systems make our everyday lives easier, safer, and more efficient. Electronic technicians design, develop, build, install, repair and maintain many different types of sophisticated electronic devices.

The American River College Electronics program combines broad based Electronic and Telecommunications training with the newest specialty areas (such as Robotics, Fiber Optics, Programmable Interface Controllers and Stamp Microcontrollers). By working closely with our industry partners, we ensure our curriculum is relevant and meets industry current and future needs. This relevant and up-to-date education prepares graduates for excellent career opportunities in the Electronics, Robotics or Telecommunications fields.

American River College is an official NARTE (National Association of Radio and Television Engineers) Federal Communication Commission (FCC) test site and offers an FCC license preparation course.

Division Dean
Gary Aguilar

Department Chairs
Gary George

(916) 484-8354

Associate Degrees

A.S. in Electronic Systems Technology

This degree combines broad-based electronic and telecommunications training with specialty areas such as robotics, fiber optics, programmable interface controllers (PICs), and stamp micro-controllers.

Catalog Date: June 1, 2020

Degree Requirements

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<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<td>First Semester - Basic Certificate:</td>
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<tr>
<td>ET 115</td>
<td>Fiber Optics and Telecommunication Cabling</td>
<td>4</td>
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<tr>
<td>ET 302</td>
<td>Principles of Electricity and Electronics</td>
<td>4</td>
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<tr>
<td>ET 308</td>
<td>Technical Soldering Practices and Techniques</td>
<td>2</td>
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<tr>
<td>Second Semester - Advanced Certificate:</td>
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<tr>
<td>ET 312</td>
<td>Mathematics for Circuit Analysis</td>
<td>3</td>
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<tr>
<td>ET 322</td>
<td>Semiconductors and Nanotechnology</td>
<td>4</td>
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<td>Following Semesters:</td>
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<td>ET 381</td>
<td>Electronic Communication Regulations</td>
<td>3</td>
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<tr>
<td>ET 253</td>
<td>Industrial Communication Systems Support</td>
<td>4</td>
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<tr>
<td>ET 335</td>
<td>Integrated Circuits with Computer Applications</td>
<td>4</td>
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<tr>
<td>ET 380</td>
<td>Introduction to Electronic Communications</td>
<td>4</td>
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<tr>
<td>ET 420</td>
<td>Microcontrollers and Digital Signal Processors</td>
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The Electronic Systems Technology Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus
sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- design and build several of the most common circuits used in electronics technology.
- calculate the mathematical relationships among voltage, current, resistance, capacitance, inductance, reactance, frequency, and phase angle as they relate to electronic circuits.
- analyze aviation, marine, and commercial communication systems that are covered in the FCC General Class Radiotelephone license examination.
- analyze operating and defective electronic circuits by interpreting data from a variety of test and measurement equipment.
- differentiate and diagram schematic symbols used in electronic and electrical industrial applications.
- use common hand tools in the mechanical installation of copper and fiber optic cabling used in sophisticated communication systems.
- research and interpret basic electronic components using manufacturers’ data manuals, library resources, and the Internet.
- evaluate electrical parameters using various types of test and measurement equipment used in the analysis of power supply, amplifier, and general electronic circuits.

Career Information

This degree provides students with the knowledge to successfully enter a variety of electronics and telecommunication careers. Working closely with our industry partners and contacts ensures our curriculum is relevant and meets the current and future needs of the Electronics and Telecommunications Industry. American River College is an official test site of the National Association of Radio and Telecommunication Engineers (NARTE) for the Federal Communication Commission (FCC) General Radio Telephone License. Obtaining the Associate of Science degree and the certificate improves the opportunities for quality employment and career advancement.

A.S. in Mechatronics

This degree provides training in a multi-disciplinary field focusing on industrial automation. Topics include electricity, electronics, industrial motor controls, programmable logic controllers, robotics, AC/DC drives, mechanical design, and manufacturing technologies.

Catalog Date: June 1, 2020

Degree Requirements

<table>
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<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<td>First Semester:</td>
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<tr>
<td>DESGN 301</td>
<td>Introduction to Computer Aided Drafting and Design (CADD)</td>
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<td>ET 302</td>
<td>Principles of Electricity and Electronics</td>
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<td>WELD 300</td>
<td>Introduction to Welding</td>
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<td>Other Semesters:</td>
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<tr>
<td>DESGN 302</td>
<td>Technical Documentation with CADD (3)</td>
<td>3</td>
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<tr>
<td>or ENGR 312</td>
<td>Engineering Graphics (3)</td>
<td>3</td>
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<tr>
<td>ET 193</td>
<td>Introduction to Robotics and Sensors</td>
<td>4</td>
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<tr>
<td>ET 197</td>
<td>Introduction to Mechatronics</td>
<td>4</td>
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<tr>
<td>ET 253</td>
<td>Industrial Communication Systems Support</td>
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The Mechatronics Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:
• integrate the principles of mechanical, electronic, and electrical technologies into the design of mechatronic systems.

• evaluate mechanical and electrical solutions to technological problems.

• apply industry-appropriate design techniques to develop technical design documents from a conceptual design.

• design robotic and machine automation systems using mechatronic principles.

• evaluate welding projects in accordance with welding procedures and specifications.

• contrast DC, AC, brushless, servo, and stepper motor operation.

• create technical documentation/presentations of models from the mechanical engineering discipline in both technically correct and visually pleasing solid, orthographic, and section view formats.

• design programmable logic controller (PLC) programs demonstrating input/output capabilities.

• design programs for an operator interface terminal (OIT) demonstrating input/output capabilities.

Career Information

This degree prepares students for the following technical and supervisory career opportunities: industrial mechanical/electrical systems technician, food processing machine service technician, facilities systems technician, waste water systems technician, manufacturing coordinator, field service technician, and mechanical electrical machine systems installer.

Certificates of Achievement

Advanced Electronics and Telecommunications Certificate

This certificate provides training in electronic system component identification and characteristics, semiconductor theory and application, power supply design and operation, telecommunication copper and fiber optic systems, the mathematics for circuit analysis, and advanced troubleshooting. It is designed to be completed in two semesters.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
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<tr>
<th>COURSE CODE</th>
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<tbody>
<tr>
<td>ET 115</td>
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<td>ET 308</td>
<td>Technical Soldering Practices and Techniques</td>
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<td>ET 312</td>
<td>Mathematics for Circuit Analysis</td>
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<td>ET 322</td>
<td>Semiconductors and Nanotechnology (4)</td>
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<tr>
<td>or ET 380</td>
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<td>or ET 335</td>
<td>Integrated Circuits with Computer Applications (4)</td>
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</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

• analyze circuit operating characteristics by applying Ohm's, Watt's, and Kirchhoff's laws.

• research and interpret basic electronic components using manufacturers' data manuals, library resources, and the Internet.

• analyze and apply mathematics, including logarithms and decibels to determine, analyze, and control outputs when problem solving transistor and field effect transistor (FET) circuits.

• evaluate electrical parameters using various types of test and measurement equipment used in the analysis of power supply and amplifier circuits.

• apply mathematics and semiconductor theory to identify, evaluate, and troubleshoot electronic circuits.

• calculate the mathematical relationships among voltage, current, resistance, capacitance, inductance, reactance, frequency, and phase angle as they relate to electronic circuits.
• construct and test circuits on prototyping boards and printed circuit boards.
• design and simulate circuits in software.

Career Information

This certificate program enables students to find employment in the electronics industry or to progress up the career ladder. Skills development in the critical areas along with electronics and telecommunications theory and laboratory practice make this an ideal certificate for those wishing to upgrade and update their electronics skills.

Biomedical Equipment Technology Certificate

This certificate covers the theory, operation, maintenance, troubleshooting, and certification of biomedical equipment used in hospitals, medical device manufacturers, or other service organizations. It includes an in-depth study of frequently used medical equipment.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ET 302</td>
<td>Principles of Electricity and Electronics</td>
<td>4</td>
</tr>
<tr>
<td>ET 312</td>
<td>Mathematics for Circuit Analysis</td>
<td>3</td>
</tr>
<tr>
<td>ET 322</td>
<td>Semiconductors and Nanotechnology (4)</td>
<td>4</td>
</tr>
<tr>
<td>or ET 335</td>
<td>Integrated Circuits with Computer Applications (4)</td>
<td></td>
</tr>
<tr>
<td>or ET 380</td>
<td>Introduction to Electronic Communications (4)</td>
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</tr>
<tr>
<td>ET 425</td>
<td>Introduction to Biomedical Equipment Technology</td>
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<tr>
<td>ET 426</td>
<td>Advanced Biomedical Equipment Technology</td>
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<td></td>
<td>A minimum of 1 unit from the following:</td>
<td>1</td>
</tr>
<tr>
<td>ET 260</td>
<td>Introduction to Medical Ultrasound Equipment (0.5)</td>
<td></td>
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<tr>
<td>ET 261</td>
<td>Introduction to Biomedical Equipment Networking (0.5)</td>
<td></td>
</tr>
<tr>
<td>ET 262</td>
<td>Introduction to Respiratory Therapy Ventilators (0.5)</td>
<td></td>
</tr>
<tr>
<td>ET 263</td>
<td>Introduction to Medical X-ray Imaging Equipment (1)</td>
<td></td>
</tr>
<tr>
<td>Total Units</td>
<td></td>
<td>20</td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

• evaluate the data from basic preventive maintenance tests on the following equipment: multi-parameter physiological monitor, electrocardiogram (ECG) machine, blood pressure monitor, defibrillator, pulse oximeter, infusion pump, and electrosurgical unit.
• distinguish and list various medical imaging technologies.
• set up standard electrical measurement tools and differentiate the uses for calibration and troubleshooting of medical equipment.
• set up the following equipment: multi-parameter physiological monitor, ECG machine, blood pressure monitor, defibrillator, pulse oximeter, infusion pump, and electrosurgical unit.
• categorize biopotentials and electrodes as they relate to basic human anatomy and physiology systems.
• associate the applicable regulation with the regulating organizations.
• list and compare the different types of bioelectric amplifiers, signal processing circuits, and isolation circuits.
• compare and contrast the protocols for working in the operating room and special care units in the hospital.

Career Information
Digital Home Technology Integration Certificate

This certificate provides training to configure, integrate, maintain, and troubleshoot electronic and digital home integration systems. Coursework provides the essential skills for residential networking concepts, components, and information on home network installation. This includes techniques to install, trim, terminate, and troubleshoot cabling systems. In addition, it provides the training and skills necessary to integrate audio, security, and environmental controls in a complete system.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ET 115</td>
<td>Fiber Optics and Telecommunication Cabling</td>
<td>4</td>
</tr>
<tr>
<td>ET 253</td>
<td>Industrial Communication Systems Support</td>
<td>4</td>
</tr>
<tr>
<td>ET 302</td>
<td>Principles of Electricity and Electronics</td>
<td>4</td>
</tr>
<tr>
<td>ET 385</td>
<td>Digital Home Technology Integration</td>
<td>4</td>
</tr>
<tr>
<td>ET 388</td>
<td>Fiber Optics</td>
<td>4</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>20</td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- design a home data network
- construct a home telephone network
- evaluate and troubleshoot a home network
- assemble a home audio and video network
- build a wireless home network
- certify a home data and telephone network
- set up a security and fire alarm system in a home
- apply industry standards to system design for a home

Career Information

This certificate prepares individuals to design, install, and support residential networks and home integration for employment in the home technology industry. It develops the technicians' ability to configure, integrate, maintain, and troubleshoot home theater, music, security, and home networks.

Digital Repair and Upgrade Technician Certificate

This certificate combines basic electronics theory and application with computer repair and support skills. Topics including high-tech soldering along with component and system level electronics are focused on in the electrical area. Computer repair skills and support are covered in the computer area.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISC 320</td>
<td>Operating Systems</td>
<td>1</td>
</tr>
<tr>
<td>CISC 361</td>
<td>Microcomputer Support Essentials - Preparation for A+ Certification</td>
<td>3</td>
</tr>
<tr>
<td>CISC 363</td>
<td>Microcomputer Support Technical - Preparation for A+ Certification</td>
<td>3</td>
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</table>
COURSE CODE | COURSE TITLE | UNITS
--- | --- | ---
ET 253 | Industrial Communication Systems Support | 4
ET 298 | Work Experience in Electronics Technology | 1 - 4
ET 302 | Principles of Electricity and Electronics | 4
ET 308 | Technical Soldering Practices and Techniques | 2

Total Units: 18 - 21

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- apply the rules of electrical safety for working with personal computers and associated equipment.
- describe the terminology used for working with personal computers.
- categorize the components inside a personal computer.
- upgrade and install new and updated software programs.
- research and download updated system drivers from the Internet.
- compare and evaluate solder connections in accordance with industry standards.
- evaluate operational characteristics of electronic components and devices operating under normal and abnormal conditions.
- differentiate resistance, capacitance and inductive devices and their operating characteristics.
- analyze and troubleshoot basic electronic circuits.
- research and interpret basic electronic components using manufacturers’ data manuals, library resources, and the Internet.

Career Information

This certificate prepares the student for a wide variety of jobs in the computer industry such as network communication cable installer, interface troubleshooter, and fiber optic installer.

Electronic Systems Technology Certificate

This certificate combines broad-based electronic and telecommunications training with specialty areas such as robotics, fiber optics, programmable interface controllers (PICs), and stamp micro-controllers.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
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<tbody>
<tr>
<td>ET 115</td>
<td>Fiber Optics and Telecommunication Cabling</td>
<td>4</td>
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<tr>
<td>ET 302</td>
<td>Principles of Electricity and Electronics</td>
<td>4</td>
</tr>
<tr>
<td>ET 308</td>
<td>Technical Soldering Practices and Techniques</td>
<td>2</td>
</tr>
<tr>
<td>ET 312</td>
<td>Mathematics for Circuit Analysis</td>
<td>3</td>
</tr>
<tr>
<td>ET 322</td>
<td>Semiconductors and Nanotechnology</td>
<td>4</td>
</tr>
<tr>
<td>ET 381</td>
<td>Electronic Communication Regulations</td>
<td>3</td>
</tr>
<tr>
<td>ET 253</td>
<td>Industrial Communication Systems Support</td>
<td>4</td>
</tr>
<tr>
<td>ET 335</td>
<td>Integrated Circuits with Computer Applications</td>
<td>4</td>
</tr>
<tr>
<td>ET 380</td>
<td>Introduction to Electronic Communications</td>
<td>4</td>
</tr>
<tr>
<td>ET 420</td>
<td>Microcontrollers and Digital Signal Processors</td>
<td>4</td>
</tr>
</tbody>
</table>
Student Learning Outcomes

Upon completion of this program, the student will be able to:

- design and build several of the most common circuits used in electronics technology.
- calculate the mathematical relationships among voltage, current, resistance, capacitance, inductance, reactance, frequency, and phase angle as they relate to electronic circuits.
- analyze aviation, marine, and commercial communication systems that are covered in the FCC General Class Radiotelephone license examination.
- analyze working and defective electronic circuits by interpreting data from a variety of test and measurement equipment.
- differentiate and diagram schematic symbols used in electronic and electrical industrial applications.
- use common hand tools in the mechanical installation of copper and fiber optic cabling used in sophisticated communication systems.
- research and interpret basic electronic components using manufacturers’ data manuals, library resources, and the Internet.
- evaluate electrical parameters using various types of test and measurement equipment used in the analysis of power supply, amplifier, and general electronic circuits.

Career Information

This certificate provides students with the knowledge to successfully enter a variety of electronics and telecommunication careers. Working closely with our industry partners and contacts ensures our curriculum is relevant and meets the current and future needs of the Electronics and Telecommunications Industry. American River College is an official test site of the National Association of Radio and Telecommunication Engineers (NARTE) for the Federal Communication Commission (FCC) General Radio Telephone License.

Fiber Optics Certificate

This certificate is an introduction to fiber optics technology. Topics include fusion and mechanical splicing, fiber connectivity, optical time domain reflectometer (OTDR), and other specialized test equipment operations. System design, installation, troubleshooting, and repair are emphasized. Courses in communication theory and copper cabling are included in the certificate, producing a technician with a wide variety of skills.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
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<tbody>
<tr>
<td>ET 115</td>
<td>Fiber Optics and Telecommunication Cabling</td>
<td>4</td>
</tr>
<tr>
<td>ET 302</td>
<td>Principles of Electricity and Electronics</td>
<td>4</td>
</tr>
<tr>
<td>ET 388</td>
<td>Fiber Optics</td>
<td>4</td>
</tr>
</tbody>
</table>

Total Units: 12

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- define the terminology used with single mode fiber optic cable.
- apply correct safety procedures when working with high power fiber optic modules and test equipment.
- calculate the attenuation in a complete fiber optic communication system.
- inspect and identify fiber optic system problems.
- evaluate communication system components for a given application.
- compare fiber optic component specifications using manufacturers’ data manuals, reference books, and the Internet.
• perform inspection and quality control of fusion and mechanical fiber optic splices.

Career Information

This certificate prepares students for entry-level employment in a wide variety of positions in the telecommunication and fiber optic industry. It is also valuable for people working in the industry to upgrade their skill level to include the newest advancements in fiber technology.

Mechatronics Certificate

This certificate provides training in a multi-disciplinary field focusing on industrial automation. Topics include electricity, electronics, industrial motor controls, programmable logic controllers, robotics, AC/DC drives, mechanical design, and manufacturing technologies.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>DESGN 301</td>
<td>Introduction to Computer Aided Drafting and Design (CADD)</td>
<td>3</td>
</tr>
<tr>
<td>ET 302</td>
<td>Principles of Electricity and Electronics</td>
<td>4</td>
</tr>
<tr>
<td>WELD 300</td>
<td>Introduction to Welding</td>
<td>3</td>
</tr>
<tr>
<td>ET 197</td>
<td>Introduction to Mechatronics</td>
<td>4</td>
</tr>
<tr>
<td>DESGN 302</td>
<td>Technical Documentation with CADD (3)</td>
<td>3</td>
</tr>
<tr>
<td>or ENGR 312</td>
<td>Engineering Graphics (3)</td>
<td>4</td>
</tr>
<tr>
<td>ET 193</td>
<td>Introduction to Robotics and Sensors</td>
<td>4</td>
</tr>
<tr>
<td>ET 253</td>
<td>Industrial Communication Systems Support</td>
<td>4</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>25</td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

• integrate the principles of mechanical, electronic, and electrical technologies into the design of mechatronic systems.
• evaluate mechanical and electrical solutions to technological problems.
• apply industry-appropriate design techniques to develop technical design documents from a conceptual design.
• design robotic and machine automation systems using mechatronic principles.
• evaluate welding projects in accordance with welding procedures and specifications.
• contrast DC, AC, brushless, servo, and stepper motor operation.
• create technical documentation/presentations of models from the mechanical engineering discipline in both technically correct and visually pleasing solid, orthographic, and section view formats.
• design programmable logic controller (PLC) programs demonstrating input/output capabilities.
• design programs for an operator interface terminal (OIT) demonstrating input/output capabilities.

Career Information

This certificate prepares students for the following career opportunities: industrial mechanical/electrical systems technician, food processing machine service technician, facilities systems technician, waste water systems technician, manufacturing coordinator, field service technician, and mechanical electrical machine systems installer.

Robotics Certificate

The certificate provides an overview of the application, programming, and design of robotic systems and components. It covers the theory and application of electronics,
sensors, controllers, and robots. Various robotic platforms are used to give a wide understanding of all types of current and future systems.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
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</tr>
</thead>
<tbody>
<tr>
<td>ET 302</td>
<td>Principles of Electricity and Electronics</td>
<td>4</td>
</tr>
<tr>
<td>ET 197</td>
<td>Introduction to Mechatronics</td>
<td>4</td>
</tr>
<tr>
<td>ET 193</td>
<td>Introduction to Robotics and Sensors</td>
<td>4</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>12</td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- identify and describe the terminology used when working with microcontrollers.
- program a microcontroller.
- compare brushed DC, brushless DC, stepper, and RC servo motor characteristics.
- construct and program mobile and pick-and-place robots.
- calculate speed and acceleration of robotic motion.
- describe the principles of sensors used to measure pressure and temperature.
- create simple electronic schematics using basic schematic symbols.
- analyze and troubleshoot basic electronic circuits.
- diagnose simple circuit failures with standard electronic measurement devices.
- design a PLC Logic circuit demonstrating input/output capabilities and timer and counter operation.

Career Information

This certificate may lead to careers in the following: robotics technician, manufacturing technician, automated warehouse technician, and facilities technician.

Telecommunication Specialist Certificate

This certificate provides both theory and hands-on application using fiber optics, coaxial cable, and CAT 6 data cable. All aspects of communication systems are covered including antennas, transmitters and receivers, transmission lines, and signal propagation. System design and troubleshooting are also included.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
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<th>UNITS</th>
</tr>
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<tbody>
<tr>
<td>ET 115</td>
<td>Fiber Optics and Telecommunication Cabling</td>
<td>4</td>
</tr>
<tr>
<td>ET 302</td>
<td>Principles of Electricity and Electronics</td>
<td>4</td>
</tr>
<tr>
<td>ET 308</td>
<td>Technical Soldering Practices and Techniques</td>
<td>2</td>
</tr>
<tr>
<td>ET 312</td>
<td>Mathematics for Circuit Analysis</td>
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</tr>
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<td>ET 322</td>
<td>Semiconductors and Nanotechnology</td>
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</tr>
<tr>
<td>ET 381</td>
<td>Electronic Communication Regulations</td>
<td>3</td>
</tr>
<tr>
<td>ET 253</td>
<td>Industrial Communication Systems Support</td>
<td>4</td>
</tr>
<tr>
<td>ET 380</td>
<td>Introduction to Electronic Communications</td>
<td>4</td>
</tr>
</tbody>
</table>
Upon completion of this program, the student will be able to:

- evaluate potential problems associated with electrostatic discharge (ESD).
- analyze and troubleshoot basic electronic circuits.
- compare and contrast series and parallel resistive, capacitive, and inductive devices.
- analyze the differences between surface-mount techniques and through-hole techniques.
- analyze and describe the components of a complete telecommunication system.
- design an office building telecommunication system using fiber optics and copper cable.
- examine and evaluate the decibel losses and gains in a complete fiber optic communication system.
- assess safety hazards when working with fiber optic systems and associated test equipment.
- perform repairs and adjustments to electronic communication systems according to factory specifications.
- install epoxy, hotmelt, anaerobic, and mechanical connectors on multimode fiber optic cable.
- prepare cost estimates for fiber optic and copper network installation using computer software.
- identify and diagram schematic symbols used in industrial electronic and electrical applications.
- analyze aviation, marine and commercial communication systems that are covered in the FCC General Class Radiotelephone license examination.
- apply FCC rules and regulations governing commercial, aviation, and marine communication systems to practical communication systems.

Career Information

This certificate provides training for design, installation, and maintenance of any type of wired or wireless communication system such as remote monitoring, radio frequency (RF) control, radio and television transmitters, public safety and government communication equipment, and fiber optic systems.

Certificates

Basic Electronics and Telecommunications Certificate

This certificate provides training in basic electronics theory and applications, telecommunication copper and fiber optic systems, and surface mount soldering devices (SMD). It also includes schematic symbol interpretation and basic electronic troubleshooting. This certificate can be completed in one semester, making it an ideal stepping stone to the Advanced Electronics and Telecommunications certificate.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ET 302</td>
<td>Principles of Electricity and Electronics</td>
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<td>A minimum of 5 units from the following:</td>
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<tr>
<td>ET 115</td>
<td>Fiber Optics and Telecommunication Cabling (4)</td>
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<tr>
<td>ET 308</td>
<td>Technical Soldering Practices and Techniques (2)</td>
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</tr>
<tr>
<td>ET 312</td>
<td>Mathematics for Circuit Analysis (3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Units:</td>
<td>9</td>
</tr>
</tbody>
</table>
Upon completion of this program, the student will be able to:

- evaluate potential problems associated with electrostatic discharge (ESD).
- assess safety hazards when working with electronic systems.
- create simple electronic schematics using basic schematic symbols.
- construct, analyze, and troubleshoot basic electronic circuits.
- apply electrical concepts to measure and evaluate resistance, capacitance, and inductive devices and circuits.
- synthesize and analyze electronic circuitry using computer electronic-simulation software.
- diagnose simple circuit failures with basic electronic measurement devices.
- assemble electronic circuits using basic soldering techniques.
- solve mathematical and algebraic problems as applied to electronic circuits.
- apply Ohm's, Watt's, and Kirchhoff's laws to determine and analyze circuit operating characteristics.

Career Information

This certificate is designed for anyone wanting to enter the electronics or telecommunications industry. It satisfies the requirements of a variety of entry-level positions such as printed circuit board (PCB) assembler, telecommunication field technician, or rework technician.

Basic Mechatronics Certificate

This certificate provides introductory training in the multidisciplinary field of mechatronics, which combines mechanical and electronic technologies. Topics include introductory courses in electronics, programmable logic controllers, basic CAD design, and welding.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
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</tr>
</thead>
<tbody>
<tr>
<td>DESGN 301</td>
<td>Introduction to Computer Aided Drafting and Design (CADD)</td>
<td>3</td>
</tr>
<tr>
<td>ET 197</td>
<td>Introduction to Mechatronics</td>
<td>4</td>
</tr>
<tr>
<td>ET 302</td>
<td>Principles of Electricity and Electronics</td>
<td>4</td>
</tr>
<tr>
<td>WELD 300</td>
<td>Introduction to Welding</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Total Units:</td>
<td>14</td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- integrate the basic principles of mechanical, electronic, and electrical technologies into the design of mechatronic systems.
- evaluate mechanical and electrical solutions to technological problems.
- apply basic design techniques to develop technical design documents.
- design basic robotic and machine automation systems using mechatronic principles.
- create and evaluate welding projects in accordance with welding procedures and specifications.

Career Information

This certificate prepares students for internships and entry-level employment with local industries using mechatronic and design principles.
ET 101 Introduction to Amateur Radio

This course introduces the fundamentals of amateur radio for public and emergency communication. It covers the equipment, procedures, and uses for amateur (Ham) radio.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain the fundamental purpose for amateur radio services.
- diagram a typical amateur radio setup.
- describe the typical method to contact and disconnect from an amateur radio station.
- describe the licensing requirements for an amateur radio license.

ET 103 Ham Radio Technician License Preparation

This course covers the fundamentals of amateur radio required to pass the national Association for Amateur Radio Relay League (ARRL) amateur radio operators technician license. Topics include wave theory, operator rules, proper radio operation, electronics review, and regulations.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- list the fundamental purposes of Amateur Radio Services.
- solve basic problems using Ohm's Law and problems involving frequency, wavelength, and power.
- describe basic electronic components such as resistors, capacitors, inductors, transistors, diodes, and integrated circuits.
- describe the concepts of modulation and demodulation.
- describe basic types of radio wave propagation.
- describe the basic functions of dipole, ground plane, and beam antennas.
- recognize the symptoms of receiver overload, over and under modulation, distortion, radio frequency (RF) feedback, off frequency signal fading, and noise.
- recognize electrical, radiation, and lightning hazards associated with transmitters and antennas.

ET 115 Fiber Optics and Telecommunication Cabling

This course introduces the concepts of telecommunication cable installation and connection practices and standards. It includes the study of commonly used fiber optic and copper cable types and connectors, installation tools, and test equipment. It emphasizes installation techniques in practical situations. Laboratory activities provide practical hands-on experience in the operation and use of tools and test equipment specific to the telecommunication industry. Field trips may be required.
Student Learning Outcomes
Upon completion of this course, the student will be able to:

- analyze and describe the components of a complete telecommunication system.
- assemble and construct connectors and plugs used in telecommunication systems.
- design an office building telecommunication system using copper cable.
- inspect and repair, if necessary, copper cable connections and installations.
- employ common hand tools in the mechanical and electrical installation of a communication system.
- analyze test equipment data to determine the location of a communication system failure.
- identify and describe the use of tools and test equipment necessary for fiber optic and copper cable installations.
- identify safety hazards when working with telecommunication systems.
- evaluate communication system components and select the best equipment for a given application.

ET 193 Introduction to Robotics and Sensors

| Units: | 4 |
| Hours: | 54 hours LEC; 54 hours LAB |
| Prerequisite: | None. |
| Catalog Date: | June 1, 2020 |

This course is an introduction to robotics, controllers, and sensors. Topics include the operation and design of robots and sensors, hardware component selection, assembly, and software programming of various types of sensors and robotic assemblies. Field trips may be required.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- apply the rules of electrical safety and work envelope dangers.
- identify and describe the terminology used when working with robots and sensors.
- diagnose robot hardware and software problems.
- describe the principles of pressure, pressure indicators, and pressure transducers.
- compare the principles of temperature, temperature indicators, and temperature transducers.
- identify robot end-effectors used to accomplish special tasks.
- list the different detection methods used to sense objects.
- evaluate the increased complexity and usefulness of robots through history.
- identify the physical construction of robotic bases and carriers.
- compare DC, stepper, and servo motor characteristics.

ET 197 Introduction to Mechatronics

| Units: | 4 |
| Hours: | 54 hours LEC; 54 hours LAB |
| Prerequisite: | ET 302 with a grade of "C" or better |
| Catalog Date: | June 1, 2020 |

This course introduces mechatronics, the combination of electronic and mechanical components and systems used in the control and transmission of mechanical power. Topics include the analysis of electric controls, programmable logic controllers (PLCs), electromagnetic devices, sensors, pneumatic devices, and electric motors.

Student Learning Outcomes
Upon completion of this course, the student will be able to:
- differentiate open- and closed-loop electrical control methods.
- describe and diagram a PLCs architecture.
- design a PLC Logic circuit demonstrating input/output capabilities and timer and counter operation.
- contrast DC (direct current), AC (alternating current), and stepper motor operation.
- compare digital sensor technologies.
- differentiate and diagram pneumatic power systems.
- compare pneumatic schematic symbols and analyze the operation of pneumatic valves and actuators.
- diagnose PLC hardware and software issues.

ET 250 Employability Skills for Technical Careers

**Same As:** AT 107 and WELD 150

**Units:** 2

**Hours:** 36 hours LEC

**Prerequisite:** None.

**Advisory:** ENGWR 102 or 103, and ENGRD 116 with a grade of "C" or better; OR ESLR 320, ESLL 320, and ESLW 320 with a grade of "C" or better.

**General Education:** AA/AS Area III(b)

**Catalog Date:** June 1, 2020

This course provides the opportunity to explore technical careers while developing valuable work and life skills. It is an introduction to a variety of technically-related occupations, emphasizing technical careers in the Sacramento area. Activities are designed to enhance personal development, employability skills, and self esteem through leadership, citizenship, and character development. This course is not open to students who have completed AT 107 or WELD 150.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- identify personal interests.
- demonstrate effective communication skills.
- demonstrate personal qualities that are desirable in the workplace.
- create long-term and short-term goals.

ET 253 Industrial Communication Systems Support

**Units:** 4

**Hours:** 54 hours LEC; 54 hours LAB

**Prerequisite:** ET 302 with a grade of "C" or better

**Catalog Date:** June 1, 2020

This course covers the operation, repair, and assembly of personal computers (PC), portable test units (PTU), and communication systems. Safety, terminology, component identification, file management, industry specific hardware and software, and upgrades in industry are among the topics covered. Wired, wireless, voice over Internet protocol (VoIP), analog/digital communications, and synchronous optical networks (SONET) are also covered. Field trips may be required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- support electrostatic discharge (ESD) safety devices and procedures.
- evaluate the major components inside a PTU.
- set up, install, and configure a hard drive to meet industry specifications.
- diagnose computer memory modules and industry-specific cards.
- test upgraded and installed software programs.
- plan, download, install, configure, and test updated system drivers.
- evaluate different features of cable and digital subscriber line (DSL) modems.
- choose common hardware and software test systems for troubleshooting and repair of PTUs.
- research and evaluate electronic communications equipment.
- set up test media and voice communication systems.
- set up and configure security and surveillance systems.
- assess Internet protocol (IP) based measurement setup and control systems using static and dynamic IP addresses.
- evaluate wireless fidelity (Wi-Fi) and VoIP systems.

ET 260 Introduction to Medical Ultrasound Equipment

Units: 0.5
Hours: 9 hours LEC
Prerequisite: None.
Corequisite: ET 425
Catalog Date: June 1, 2020

This course provides in-depth training for maintaining ultrasound equipment used in the biomedical field. It covers imaging modes, physical principles, transducers, system block diagrams, common peripherals, Doppler effect, image quality, test equipment, and troubleshooting.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- compare ultrasound transducers that convert physiological properties to electrical signals.
- configure standard electrical measurement tools and differentiate the uses for calibration and troubleshooting of ultrasound equipment.
- diagnose typical failures of transducers from displayed waveforms.
- compare standard and Doppler ultrasound technologies.
- create a block diagram and list the different components, transducers, signal processing circuits, and displays used in ultrasound equipment.

ET 261 Introduction to Biomedical Equipment Networking

Units: 0.5
Hours: 9 hours LEC
Prerequisite: None.
Advisory: ET 253 and 302;
Catalog Date: June 1, 2020

This course provides an overview of the Digital Information Communication of Medicine (DICOM) system. DICOM is a patient data system for medical devices to communicate with the hospital database. Topics include interface standards, test equipment, troubleshooting, and applications.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- compare DICOM networking protocols.
- set up standard and specialized electrical measurement tools for the testing and troubleshooting of medical networks.
- diagram a typical medical equipment network.
- create a network interface cabling diagram including color codes and connector types.
- list typical test equipment used for DICOM communication troubleshooting.

ET 262 Introduction to Respiratory Therapy Ventilators

Units: 0.5
Hours: 9 hours LEC
Prerequisite: None.
This course provides in-depth training for the maintenance of respiratory ventilation machines used in the biomedical field. It covers respiratory ventilator basics, ventilator block diagrams, patient circuits, test equipment, and troubleshooting.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- diagram the patient circuit for a respiratory ventilator.
- demonstrate the use of standard electrical measurement tools.
- differentiate the uses of electronic instruments for calibration and troubleshooting of respiratory ventilator equipment.
- diagnose typical failures of respiratory ventilators.
- create a block diagram and list the different components, transducers, signal processing circuits, and displays used in respiratory ventilation equipment.

ET 263 Introduction to Medical X-ray Imaging Equipment

Units: 1
Hours: 18 hours LEC
Prerequisite: ET 425 with a grade of "C" or better
Catalog Date: June 1, 2020

This course provides an introduction to the maintenance of medical X-ray imaging equipment. It covers X-ray generators, components of vacuum tube and solid state imaging chains, cameras, digitizing methods, processing, display methods, and radiation safety.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- differentiate types of X-ray and nuclear medicine equipment used for diagnostic purposes.
- set up standard electrical measurement tools and specialized instruments for the calibration and troubleshooting of X-ray equipment.
- diagnose typical failures of X-ray imaging equipment.
- create a block diagram and list the different components used in the imaging system.
- describe the dangerous health effects from the exposure of X-rays and nuclear radiation.
- diagram typical vacuum tube and digital X-ray generators.
- differentiate legacy film displays from digital imaging systems.

ET 294 Topics in Electronics Technology

Units: 0.5 - 5
Hours: 9 - 90 hours LEC; 27 - 270 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

This is an individualized course developed in cooperation with industry to meet specialized training needs. It may be taken four times with no duplication of topics.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Apply the rules of electrical safety when working with stamp microcontrollers.
- Identify and describe the terminology used when working with stamp microcontrollers.
- Safely work with line voltage components that are interfaced to stamp microcontrollers.
- Demonstrate the proper use of Electro Static Discharge (ESD) precautions when working with stamp microcontrollers.
- Program and troubleshoot the stamp microcontroller using P-Basic language.
- Identify and properly name the internal components that make up the stamp microcontroller.
- Demonstrate the assembly of the Parallax Boe-Bot kit.
- Download updated microcontroller software from Parallax.
- Program the Parallax Boe-Bot for various robotic tasks.

### ET 295 Independent Studies in Electronics Technology

| Units: | 1 - 3 |
| Hours: | 54 - 162 hours LAB |
| Prerequisite: | None. |
| Catalog Date: | June 1, 2020 |

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

### ET 298 Work Experience in Electronics Technology

| Units: | 1 - 4 |
| Hours: | 60 - 300 hours LAB |
| Prerequisite: | None. |
| Enrollment Limitation: | Students must be in a paid or unpaid internship, volunteer position, or job related to the electronics industry with a cooperating site supervisor. Students are advised to consult with the Electronics Technology Department faculty to review specific certificate and degree work experience requirements. |
| Advisory: | Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340. |
| General Education: | AAAS Area II(b) |
| Catalog Date: | June 1, 2020 |

This course provides students with opportunities to develop marketable skills in preparation for employment or advancement within the electronics industry. It is designed for students interested in work experience and/or internships in associate degree level or certificate occupational programs. Course content includes understanding the application of education to the workforce, completion of Title 5 required forms which document the student's progress and hours spent at the work site, and developing workplace skills and competencies.

During the semester, the student is required to complete 75 hours of related paid work experience, or 60 hours of related unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. All students are required to attend the first class meeting, a mid-semester meeting, and a final meeting. Additionally, students who have not already successfully completed a Work Experience course will be required to attend weekly orientations while returning participants may meet individually with the instructor as needed. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate mastery of specific job skills in the electronics industry related to an associate degree or certificate occupational program level career as written in the minimum three (3) learning objectives created by the student and his/her employer or work site supervisor at the start of the course.
- make effective decisions, use workforce information, and manage his/her personal career plans.
- behave professionally, ethically, and legally at work, consistent with applicable laws, regulations, and organizational norms.
- behave responsibly at work, exhibiting initiative and self-management in situations where it is needed.
- apply effective leadership styles at work, with consideration to group dynamics, team and individual decision making, and workforce diversity.
- communicate in oral, written, and other formats, as needed, in a variety of contexts at work.
- locate, organize, evaluate, and reference information at work.
- demonstrate originality and inventiveness at work by combining ideas or information in new ways, making connections between seemingly unrelated ideas, and reshaping goals in ways that reveal new possibilities using critical and creative thinking skills such as logical reasoning, analytical thinking, and problem-solving.

### ET 302 Principles of Electricity and Electronics

| Units: | 4 |
This introductory course explores the field of electronics and electricity. Topics include the theory of AC, DC, Ohm's law, inductance, and capacitance. Theory is reinforced through the use of electronic simulation software and hands-on lab experiments using industry instruments. Field trips to local electronics industries may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- create simple electronic schematics using basic schematic symbols.
- analyze and troubleshoot basic electronic circuits.
- apply electrical concepts to measure and evaluate resistance, capacitance, and inductive devices.
- compare and contrast series and parallel resistive, capacitance, and inductive circuits.
- synthesize and analyze electronic circuitry using computer electronic-simulation software.
- diagnose simple circuit failures with standard electronic measurement devices.
- assemble electronic circuits using basic soldering techniques.

ET 308 Technical Soldering Practices and Techniques

| Units:     | 2 |
| Hours:     | 18 hours LEC; 54 hours LAB |
| Prerequisite: | None. |
| Transferable: | CSU |
| Catalog Date: | June 1, 2020 |

This course provides training in the standards, processes, and techniques related to the field of lead and lead-free soldering. It emphasizes the differences between lead and lead-free soldering processes. Topics include safety, Electrostatic Discharge (ESD), Printed Circuit Board (PCB) components and assembly, electronic components and identification, lead and lead-free soldering and desoldering techniques in Plated Through Hole (PTH), Surface Mount Device/Technology (SMD/SMT), and fine to ultra-fine-pitch soldering. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- differentiate, set up, and operate a wide variety of soldering and desoldering equipment, workstations, and fixtures that may require visual observation
- describe the difference between lead and lead-free soldering processes, plated through hole and surface mount technology, and various soldering wire and fluxes
- recognize, prepare for, and prevent potential problems associated with electrostatic discharge (ESD)
- inspect and evaluate solder connections in accordance with industry standards
- identify quality soldering and correct defective solder connections
- compile and assemble materials required for soldering electronic circuit components
- demonstrate the skill of soldering and desoldering under varying conditions

ET 309 Soldering and Cabling Quality Standards

| Units:     | 3 |
| Hours:     | 54 hours LEC |
| Prerequisite: | None. |
| Advisory: | ET 115 and 308 |
| Transferable: | CSU |
| Catalog Date: | June 1, 2020 |

This course covers Interconnecting and Packaging Council (IPC) standards for the inspection and evaluation of printed circuit boards and cable assemblies used in the electronics industry. It prepares students to take the tests for IPC Electronic Circuits Specialist and Certified IPC Application Specialist certifications. Field trips may be required.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the purpose and application of the IPC/WHMA-A-620 (A-620 Standard) requirements and acceptance for cable and wire harness assemblies certifications.
- identify the materials, components, and requirements to meet the standards of the IPC J-standard and A-standard.
- describe hardware installation for wire and terminals, plated through-hole technology (PTHT) components, and surface mount technologies (SMT) components to meet the IPC J-STD-001 J-standard and IPC A-standard.
- describe the general soldered connection acceptance requirements for PTHT and SMT connections including lead and lead-free solder.
- describe the test methods and related standards including statistical process control methodology and inspection skills to meet the IPC standards.
- describe cable and wire preparation, measuring cable assemblies, wire bundle securing, shielding, and protective coverings to meet the IPC A-620 standard.

ET 312 Mathematics for Circuit Analysis

| Units: | 3 |
| Hours: | 54 hours LEC |
| Prerequisite: | None. |
| Transferable: | CSU |
| Catalog Date: | June 1, 2020 |

This course covers the foundations for the analysis of electrical and electronic circuits. It includes the analysis of direct current (DC), alternating current (AC), transformer, capacitor, inductor, and energy conversion circuits.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- solve mathematical and algebraic problems as applied to electronic circuits.
- apply Ohm's, Watt's, and Kirchhoff's laws to determine and analyze circuit operating characteristics.
- analyze and organize data into graphs and perform simple transformations.
- demonstrate the operation of a scientific calculator for solving math, word, and circuit problems.
- evaluate the operating parameters of voltage and current divider circuits.
- analyze and interpret the mathematical relationships between voltage, current, resistance, capacitance, inductance, reactance, frequency, and phase angle as they relate to AC circuits.
- calculate voltage, current, power, turns, and impedance ratios for transformers.
- evaluate resistor-inductor (RL) and resistor-capacitor (RC) circuits and time constants.

ET 322 Semiconductors and Nanotechnology

| Units: | 4 |
| Hours: | 54 hours LEC; 54 hours LAB |
| Prerequisite: | ET 302 with a grade of "C" or better |
| Corequisite: | ET 312 |
| Transferable: | CSU |
| Catalog Date: | June 1, 2020 |

This course is a detailed study of semiconductor devices and their applications. Semiconductor components - such as diodes, transistors, op-amps, including their use in complex circuits - are covered. Nanotechnology theory and devices, including their present and possible future applications, are studied. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:
• compare the physical construction and theory of operation of junction diodes, bipolar junction transistors, field effect transistors, and operational amplifiers.

• troubleshoot linear and switch-mode power supplies.

• diagnose amplifier, power supply, and driver circuit problems.

• calculate theoretical operating characteristics and compare to measured results on operating amplifier circuits.

• diagram and label the functional blocks of amplifiers and power supplies.

• interpret schematic diagrams and formulate solutions to problems in electronic circuitry.

• assess data from a variety of test and measurement equipment used in the analysis of power supply, and amplifier circuits.

• describe basic nanotechnology building blocks and their possible uses.

• design and simulate circuits in software.

• construct and test circuits on prototyping boards and printed circuit boards.

ET 335 Integrated Circuits with Computer Applications

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: ET 302 with a grade of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This course covers integrated circuits (ICs) and applications used in industrial and consumer products. Topics include digital theory and applications from standard transistor-transistor-logic (TTL) logic circuits to complex circuits built on programmable logic devices (PLDs). Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• operate an oscilloscope and a variety of measurement equipment to measure and interpret electrical signals.

• analyze schematic diagrams.

• evaluate a signal through a circuit using a schematic diagram and an oscilloscope.

• compare the schematic symbol, truth-table, and theory of operation of the seven basic logic gates.

• generate decoder circuits from logic gates and evaluate the output of decoder circuits.

• convert logic circuits to Boolean equations.

• convert Boolean equations to logic circuits.

• analyze and simplify Karnaugh maps from Boolean equations.

• compare the schematic symbol, truth-table, and theory of operation of the three basic latches.

• design and evaluate decoder display circuits.

• analyze the operation of "divide by n" counter circuits.

• design timer circuits using the 555 timer and RC circuits.

• construct and evaluate analog-to-digital converters.

• compare the operational characteristics of digital devices.

ET 369 The Design and Fabrication of Electronics Projects

Units: 2
Hours: 18 hours LEC; 54 hours LAB
Prerequisite: ET 322 with a grade of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This course provides an opportunity to design and build advanced projects. It includes work on approved electronics projects outside the scope of typical classroom
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- plan and design an electronics project that is marketable or meets a need of society.
- build an electronics project to meet industry specifications.
- assemble a working electronics model using commercially and custom fabricated components.
- research material and components using manufacturers’ data books and the Internet.
- fabricate plastic, metal, and composite parts for an electronics project.
- design electrical circuits using computer simulation software.
- prepare a list of materials, a cost spreadsheet, and an estimate of manufacturing costs.
- create a clear and concise operation or instruction manual that would enable someone with no engineering background to successfully operate the project.
- prepare and present an industry-style presentation on the design, application, and manufacturing of the project.

ET 380 Introduction to Electronic Communications

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: ET 302 with a grade of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This course covers electronic communications including UHF, VHF, microwave, satellite, and fiber optics. AM and FM transmitters, transmission lines, antennas, and receivers are analyzed down to the component level. Propagation, wave theory, decibels, and signal transmission limitations are also covered. Technician safety and proper test equipment use are stressed throughout the course. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- operate a variety of major electronic circuits used in communication equipment.
- analyze and troubleshoot various problems in electronic communication circuits.
- perform repairs and adjustments to electronic communication systems to operate at factory specifications.
- design and build several common circuits used in electronic communication systems.
- diagnose problems in electronic communication systems.

ET 381 Electronic Communication Regulations

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ET 312, 322, or 380
Transferable: CSU
Catalog Date: June 1, 2020

This course provides an overview of the Federal Communication Commission (FCC) General Radiotelephone license requirements. It also covers the electronics theory and the rules and regulations mandated by the FCC. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the requirements for the FCC General Class Radiotelephone license.
differentiate maritime and international law and operating procedures.
apply alternating current (AC) and direct current theory.
apply basic semiconductor principles for diodes and transistors.
apply operational amplifier and digital theory.
apply receiver and transmitter theory.
apply antenna theory.
apply aircraft navigation equipment theory.
apply marine navigation equipment theory.

ET 385 Digital Home Technology Integration

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: ET 115 with a grade of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This course covers the fundamentals of Home Technology Integration (HTI). It includes the study of and practical experience in installation, integration, and troubleshooting of entertainment, voice, security, data, and networking systems found in the home or small office. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze and describe the components in a Home Technology Integration (HTI) system.
- design a complete HTI system according to factory specifications.
- assess safety hazards when working with HTI systems.
- analyze test equipment data to determine the location of a HTI system failure.
- evaluate HTI components and select the best for a given application.
• identify and describe the use of tools and test equipment necessary for HTI system installations.

• inspect and repair, if necessary, existing HTI system installations.

ET 388 Fiber Optics

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: ET 302 with a grade of "C" or better
Advisory: ET 380
Transferable: CSU
Catalog Date: June 1, 2020

This course in fiber optics covers optical theory and operation including the complete fiber optic communication system. It includes fiber optic terminology and instruction in the use of tools and equipment associated with fiber optic installation and maintenance. Tests of the fiber optic systems are performed using sophisticated equipment such as optical power meters and optical time domain reflectometers (OTDR). It also includes system design and troubleshooting procedures. A field trip may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• analyze and describe the components in a complete fiber optic communication system.

• analyze and troubleshoot basic fiber optic system problems.

• compare fiber optic component specifications using manufacturers' data manuals, reference books, and the Internet.

• calculate the losses and gains in a complete fiber optic communication system.

• contrast the differences between a fusion splice and a mechanical splice.

• evaluate ST fiber optic jumper cables using a laser source and an optical power meter.

• contrast the differences between ST, SC, and FC fiber optic connectors.

• calculate the attenuation of a complete fiber optic communication system.

• assess safety hazards when working with fiber optic systems.

• compose a parts list for a typical fiber optic system installation.

• design a complete operational fiber optic communication system.

ET 420 Microcontrollers and Digital Signal Processors

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: None.
Corequisite: ET 335
Transferable: CSU
Catalog Date: June 1, 2020

This course is an in-depth study of microcontrollers and digital signal processors (DSP). It focuses on digital concepts, such as data flow, internal architecture, memory, data converters, special registers, and the interfacing of input/output devices, sensors, and motors. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• categorize tasks best handled by a microcontroller or DSP.

• analyze software routines of typical digital input and output devices.

• modify and troubleshoot software routines demonstrating digital system operations.

• design interface circuits and modify software routines for input and display devices.

• design circuits and modify microcontroller software routines to interface with sensors and motors.

• create and troubleshoot DSP routines for power supplies and motor control.
diagnose and correct microcontroller hardware and software problems.

ET 421 Advanced Electronic Communications

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: ET 253 and 380 with grades of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This course covers advanced analog and digital electronic communications including digital two-way radio, cellular, microwave, satellite, and broadcast communications. Topics include digital radio frequency theory, digital transmitters and receivers, P25 digital radio, antennas, software-defined radios, and related industry test equipment.

Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate the programming of a function generator to generate basic electronic communication signals and use an oscilloscope for measuring and analyzing signals.
- program a software defined radio (SDR) to tune in radio frequency (RF) signals and display the frequency spectrum.
- create and display digital communication signals using an arbitrary function generator.
- organize blocks describing FM transmitters and receivers.
- differentiate RF and microwave frequencies, wavelengths, feedline characteristics, and safety precautions.
- differentiate broadcast and broadband communication.
- describe and measure the radiation patterns for different types of antennas.
- describe P25 digital radio characteristics and the benefits over analog two-way radios.

ET 425 Introduction to Biomedical Equipment Technology

Units: 4
Hours: 72 hours LEC
Prerequisite: ET 302 with a grade of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This course covers the fundamentals of biomedical equipment and the responsibilities of electronics technicians in the medical device service industry for hospitals, medical device manufacturers, or other service organizations. It includes a detailed study of the theory, operation, and maintenance of hospital equipment, systems and procedures, and the related electronic systems. Additional topics include basic anatomy and physiology as they relate to the biomedical equipment. Field trips are required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- categorize biopotentials and electrodes as they relate to basic human anatomy and physiology systems.
- compare and contrast various temperature and pressure transducers (e.g. ECG electrodes, ultrasound transducers, pressure transducers) that convert physiological properties to electrical signals.
- set up different types biomedical equipment and differentiate their uses for calibration and troubleshooting.
- list and compare the different types of bioelectric amplifiers, signal processing circuits, and isolation circuits.
- distinguish and list various medical imaging technologies.
- identify and describe medical equipment used to measure physical and electrical functions of the heart such as flow rate, pressure, bioelectricity, and electroconduction.
- diagram the leads used in a standard 3-lead, 5-lead, and 12-lead electrocardiogram.
- list the major electrical, chemical, radiation, biological, and fire hazards.
list the regulatory agencies affecting the biomedical business.
identify and describe medical equipment used to analyze blood.
compare and contrast the protocols for working in the operating room and special care units in the hospital.
identify and describe medical equipment and respiratory transducers used to test the mechanics of breathing and typical parameters of respiration.
diagnose typical failures of transducers from displayed waveforms.

ET 426 Advanced Biomedical Equipment Technology

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: ET 425 with a grade of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This course covers the operation, maintenance, troubleshooting, and certification of biomedical equipment used in the medical device industry. It includes an in-depth, hands-on study of frequently used medical equipment preparing electronic technology students for a biomedical technician internship or trainee position in a hospital, medical device manufacturer, or other service organization. Field trips are required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- measure grounding and leakage current with an electrical safety analyzer.
- associate the applicable regulation with the regulating organizations.
- diagram the standard leads and set up an electrocardiogram (ECG) simulator to performance test an ECG monitor.
- set up the following equipment: multi-parameter physiological monitor, ECG machine, blood pressure monitor, defibrillator, pulse oximeter, infusion pump, and electrosurgical unit.
- evaluate the data from basic preventive maintenance tests on the following equipment: multi-parameter physiological monitor, ECG machine, blood pressure monitor, defibrillator, pulse oximeter, infusion pump, and electrosurgical unit.
- analyze electrical measurements from specialized testers for electrosurgery and defibrillator equipment.

ET 490 Advanced Student Projects Laboratory

Units: 2
Hours: 108 hours LAB
Prerequisite: ET 335 or 380 with a grade of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This course provides an opportunity for students to pursue advanced electronics projects to learn and practice skills needed in the construction, installation, maintenance, and repair of electronic devices.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze malfunctions in complex electronic equipment.
- describe the functions and operation of various electronic equipment.
- demonstrate skills in fabrication and repair techniques.
- design and construct an electronics project.
- research electronics information and specifications from printed and Internet sources.
Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.
Emergency Medical Technology | American River College

Paramedicine is an allied health specialty whose practitioners respond to emergencies before a patient reaches a hospital, rendering basic and advanced medical treatment before and during transport to a medical facility. Classroom, clinical and field internship training prepares paramedics to assess and treat a wide variety of medical emergencies. The knowledge, skills and experience gained through the 12-month paramedic program allows students to meet the responsibilities outlined in the Department of Transportation’s Emergency Medical Services Education Standards. (/academics/arc-program-road-maps)

Division Dean
Jan DeLapp
Department Chairs
Grant Goold

Certificate

Emergency Medical Technician (EMT) Certificate

This program prepares students to function as certified Emergency Medical Technicians. Training topics include the skills necessary to provide emergency medical care at a basic life support level with a fire, ambulance, or other specialized service. This program is conducted in compliance with Title 22, Division 9, Chapter 2 of the California Code of Regulations and Emergency Medical Technician (EMT). A "C" or better is required to obtain a course completion certificate.

Catalog Date: June 1, 2020

Certificate Requirements

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<th>COURSE CODE</th>
<th>COURSE TITLE</th>
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<td>Emergency Medical Technician (EMT) Didactic</td>
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<tr>
<td>EMT 111</td>
<td>Emergency Medical Technician (EMT) Practicum</td>
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<td>Total Units:</td>
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Enrollment Eligibility

To be eligible for enrollment in the program, the student must meet the following criteria:

- Documentation of current American Heart Association CPR Basic Life Support certification. No other form of CPR certification is accepted. Students must be present and provide a copy of the AHA CPR certification on the first day of the course. Not open to students with current NREMT or California State certification or licensure as an EMT, EMT-Basic, Advanced EMT or paramedic.

Enrollment Process

Eligible students are selected for the program according to the following steps:

- Verification of current American Heart Association Basic Life Support CPR certification. No other form of CPR certification is accepted. Students must be present and provide a copy of the AHA CPR certification on the first day of the course. Not open to students with current NREMT or California State certification or licensure as an EMT, EMT-Basic, Advanced EMT or paramedic.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- evaluate the nature and seriousness of the patient's condition or extent of injuries.
Emergency Medical Technology (EMT)

EMT 110 Emergency Medical Technician (EMT) Didactic

This course provides academic preparation and psychomotor skills training to prepare the student for EMT 111, the Basic Life Support (BLS) clinical and field practicum. Successful completion of EMT 110 and EMT 111 will make the student eligible to take the National Registry of EMTs (NREMT) EMT certification exam. Topics include the BLS knowledge, application, and problem solving necessary to work as an EMT (formerly known as EMT-Basic or EMT-1) in the Emergency Medical Services (EMS) field for an ambulance service, fire department, emergency department, or other specialized service. A "C" letter grade as well as successful completion of the EMT 110 Exit Exam and psychomotor skill tests are required to be eligible for EMT 111. The course conforms to the 2007 National EMS Scope of Practice Model and 2009 EMS National Education Standards and complies with Title 22, Division 9, Chapter 2 of the California State Code of Regulations. This course is approved by the Emergency Medical Services (EMS) Agency of the Sacramento County Health Department. Field trips and off-campus lab assignments may be required.

Upon completion of this course, the student will be able to:

- evaluate the acuity of an illness or injury during simulated patient care encounters based on a given scenario, assessment findings and diagnostic data.
- formulate a field diagnosis, a differential diagnosis and an appropriate plan for treatment and transport, given a set of typical signs, symptoms and vital signs data.
- perform typical BLS tasks safely and effectively while conforming to NREMT and California State standards.
- demonstrate the requisite knowledge, knowledge application and problem-solving ability appropriate for an entry-level EMT during a validated, predictive Exit Exam covering the same topic areas as the NREMT certification exam.
- list the appropriate pharmacological knowledge required for the medications outlined in the National EMT Scope of Practice Model.
- describe the methods and skills needed to safely and effectively administer the medications outlined in the National EMT Scope of Practice Model during a simulated patient encounter.
- demonstrate the affective attributes expected of an entry-level EMT and Allied Healthcare professional.

EMT 111 Emergency Medical Technician (EMT) Practicum

This course provides academic preparation and psychomotor skills training to prepare the student for EMT 111, the Basic Life Support (BLS) clinical and field practicum. Successful completion of EMT 110 and EMT 111 will make the student eligible to take the National Registry of EMTs (NREMT) EMT certification exam. Topics include the BLS knowledge, application, and problem solving necessary to work as an EMT (formerly known as EMT-Basic or EMT-1) in the Emergency Medical Services (EMS) field for an ambulance service, fire department, emergency department, or other specialized service. A "C" letter grade as well as successful completion of the EMT 110 Exit Exam and psychomotor skill tests are required to be eligible for EMT 111. The course conforms to the 2007 National EMS Scope of Practice Model and 2009 EMS National Education Standards and complies with Title 22, Division 9, Chapter 2 of the California State Code of Regulations. This course is approved by the Emergency Medical Services (EMS) Agency of the Sacramento County Health Department. Field trips and off-campus lab assignments may be required.

Upon completion of this course, the student will be able to:

- apply emergency medical care based on assessments and findings.
- demonstrate proper procedures in lifting, moving, and positioning a patient to minimize discomfort and prevent further injury.
- utilize communicating, transporting, and record keeping skills.

Career Information

Emergency Medical Technicians operate in a variety of settings from public emergency services, private industry and health care facilities. EMT employment varies from community to community and is considered a growing occupation within the Allied Health professions.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply emergency medical care based on assessments and findings.
- demonstrate proper procedures in lifting, moving, and positioning a patient to minimize discomfort and prevent further injury.
- utilize communicating, transporting, and record keeping skills.
This course provides the supervised practical lab hours necessary to complete EMT education after completion of EMT 110. Successful completion of EMT 110 and EMT 111 will make the student eligible to take the National Registry of EMTs (NREMT) EMT certification exam. The student is placed in the clinical and field environments necessary to obtain the minimum required patient contacts. This course conforms to the 2007 National EMS Scope of Practice Model as well as the 2009 EMS National Education Standards and complies with Title 22, Division 9, Chapter 2 of the California State Code of Regulations. This course is approved by the Emergency Medical Services (EMS) Agency of the Sacramento County Health Department. Field trips or off-campus lab assignments are required. This course is Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate the affective attributes associated with both an EMT and an Allied Healthcare professional.
- assess, manage, treat and either transport or prepare for transport a minimum of ten ill or injured patients utilizing fundamental EMT knowledge and skills.
- explain the practical responsibility of the EMT during the transfer of care using personal experience with actual prehospital and hospital patient contacts.
- demonstrate, during simulated or actual patient contacts, the appropriate strategies used when confronted by a patient-initiated refusal of care and/or transport.
- draft patient care reports, for at least five actual patient contacts, that exceed the minimum standards for prehospital documentation and data entry.
- interview, using the appropriate therapeutic communication techniques, all the parties necessary to acquire the information necessary to ascertain an actual or simulated patient's condition.

EMT 150 Advanced Emergency Medical Technician (AEMT) Didactic

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: HEED 310 and 323 with grades of "C" or better
Enrollment Limitation: Current Healthcare Provider CPR or equivalent recognition and California State EMT certification are required. The student must be able to purchase online resources as well as a uniform and other lab equipment. This course is not available to certified NREMT or California State Advanced EMTs or paramedics.
Advisory: AH 110, BIOL 102, and PMED 105; ENGWR 102, and ENGRD 116 with a grade of "C" or better; OR ESLR 320 and ESLW 320 with a grade of "C" or better; MATH 32 (Pre-Algebra), or MATH 42 (Algebra Readiness - Part II)
Catalog Date: June 1, 2020

This course provides academic preparation and psychomotor skills training to prepare the student for EMT 151, the Advanced Emergency Medical Technician (AEMT) clinical and field Internship. Successful completion of EMT 150 and EMT 151 will make the student eligible to take the National Registry of EMTs (NREMT) Advanced EMT certification exam. Topics include the Limited Advanced Life Support (LALS) knowledge, application and problem solving skills necessary to work as an AEMT (formerly known as EMT-Intermediate or EMT-2) in the Emergency Medical Services (EMS) field for an ambulance service, fire department, emergency department or other specialized service. A "C" letter grade as well as successful completion of the EMT 150 Exit Exam and psychomotor skill tests are required to be eligible for EMT 151. The course conforms to the 2007 National EMS Scope of Practice Model and 2009 EMS National Education Standards and complies with Title 22, Division 9, Chapter 3 of the California State Code of Regulations. This course is approved by the Emergency Medical Services (EMS) Agency of the Sacramento County Health Department. Field trips or off-campus lab assignments are required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- distinguish between sub-acute, acute and unmanageably ill or injured patients during simulated patient care encounters based on a given scenario, assessment findings and diagnostic data.
- formulate a field diagnosis, a differential diagnosis and an appropriate plan for LALS treatment and transport, given a set of typical signs, symptoms and vital sign data.
- demonstrate the willingness and ability to perform the typical LALS procedures and tasks safely and effectively while conforming to NREMT and California State standards.
- demonstrate the requisite knowledge, knowledge application and problem-solving ability appropriate for an entry-level AEMT during an Exit Exam covering the same topic areas as the NREMT certification exam.
- perform, in a safe and effective manner, the administration of LALS medications outlined in the National EMT Scope of Practice Model during a static skill exam or simulated patient encounter.
- choose the BLS and LALS airway management techniques optimal for a simulated patient with a given condition in a variety of typical field conditions.
- demonstrate the affective attributes expected of an entry-level AEMT and Allied Healthcare professional.

EMT 151 Advanced Emergency Medical Technician (AEMT) Internship

Units: 3.5

This course is not available to certified NREMT or California State Advanced EMTs or paramedics.

Enrollment Limitation:
AH 110, BIOL 102, and PMED 105; ENGWR 102, and ENGRD 116 with a grade of "C" or better; OR ESLR 320 and ESLW 320 with a grade of "C" or better; MATH 32 (Pre-Algebra), or MATH 42 (Algebra Readiness - Part II)

Advisory:
June 1, 2020
Catalog Date:

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- distinguish between sub-acute, acute and unmanageably ill or injured patients during simulated patient care encounters based on a given scenario, assessment findings and diagnostic data.
- formulate a field diagnosis, a differential diagnosis and an appropriate plan for LALS treatment and transport, given a set of typical signs, symptoms and vital sign data.
- demonstrate the willingness and ability to perform the typical LALS procedures and tasks safely and effectively while conforming to NREMT and California State standards.
- demonstrate the requisite knowledge, knowledge application and problem-solving ability appropriate for an entry-level AEMT during an Exit Exam covering the same topic areas as the NREMT certification exam.
- perform, in a safe and effective manner, the administration of LALS medications outlined in the National EMT Scope of Practice Model during a static skill exam or simulated patient encounter.
- choose the BLS and LALS airway management techniques optimal for a simulated patient with a given condition in a variety of typical field conditions.
- demonstrate the affective attributes expected of an entry-level AEMT and Allied Healthcare professional.
This course provides supervised clinical and field internship experience at the Limited Advanced Life Support (LALS) scope of practice. Successful completion of EMT 150 and EMT 151 makes the student eligible to take the National Registry of EMTs (NREMT) Advanced Emergency Medical Technician (AEMT) certification exam. The course conforms to the 2007 National EMS Scope of Practice Model and 2009 EMS National Education Standards and complies with Title 22, Division 9, Chapter 3 of the California State Code of Regulations. This course is approved by the Emergency Medical Services (EMS) Agency of the Sacramento County Health Department. Field trips or off-campus lab assignments are required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- assess, manage, treat, and either transport or prepare for transport ill and injured patients utilizing fundamental AEMT knowledge and skills.
- analyze typical and unusual case studies that reflect the practical responsibility of the AEMT during the transfer of care using his or her experience with actual prehospital patient contacts.
- critique, in a quality improvement format, simulated or actual patient contacts including the LALS treatment of medical and trauma patients as well as cases of patient-initiated refusal or care and/or transport.
- draft patient care reports for at least ten actual LALS patient contacts that exceed the minimum standards for prehospital documentation and data entry.
- interview, using the appropriate therapeutic communication techniques, all the parties needed to acquire the information necessary to ascertain an actual or simulated patient's condition.
- demonstrate the affective attributes associated with both an AEMT and an Allied Healthcare professional.
- assess, provide care for, and document a minimum of ten individual ALS patients to whom the intern appropriately administered intravenous fluids, LALS medications, a perilaryngeal airway or defibrillation in either the hospital or field setting.

**EMT 298 Work Experience in Emergency Medical Technology**

- **Units:** 1 - 4
- **Hours:** 60 - 300 hours LAB
- **Prerequisite:** None.
- **Enrollment Limitation:** Students must be in a paid or unpaid internship, volunteer position, or job related to the emergency medical technology field with a cooperating site supervisor. Students are advised to consult with the Emergency Medical Technology faculty to review specific certificate and degree work experience requirements.
- **Advisory:** Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
- **General Education:** AA/AS Area III(b)
- **Catalog Date:** June 1, 2020

This course provides students with opportunities to develop marketable skills in preparation for employment or advancement within the emergency medical technology field. It is designed for students interested in work experience and/or internships in associate degree level or certificate occupational programs. Course content includes understanding the application of education to the workforce, completion of Title 5 required forms which document the student's progress and hours spent at the work site, and developing workplace skills and competencies.

During the semester, the student is required to complete 75 hours of related paid work experience, or 60 hours of related unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. All students are required to attend the first class meeting, a mid-semester meeting, and a final meeting. Additionally, students who have already successfully completed a Work Experience course will be required to attend weekly orientations while returning participants may meet individually with the instructor as needed. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- demonstrate mastery of specific job skills in the emergency medical technology field related to an associate degree or certificate occupational program level career as written in the minimum three (3) learning objectives created by the student and his/her employer or work site supervisor at the start of the course.
- make effective decisions, use workforce information, and manage his/her personal career plans.
- behave professionally, ethically, and legally at work, consistent with applicable laws, regulations, and organizational norms.
- behave responsibly at work, exhibiting initiative and self-management in situations where it is needed.
• develop effective leadership skills at work, with consideration to group dynamics, team and individual decision making, and workforce diversity.

• communicate in oral, written, and other formats, as needed, in a variety of contexts at work.

• locate, organize, evaluate, and reference information at work.

• demonstrate originality and inventiveness at work by combining ideas or information in new ways, making connections between seemingly unrelated ideas, and reshaping goals in ways that reveal new possibilities using critical and creative thinking skills such as logical reasoning, analytical thinking, and problem-solving.
This certificate provides training in all aspects of solar photovoltaic (PV) system design, cost estimation, sales, and installation. It also includes training in oral presentations and management skills. The courses included in the certificate also qualify students to take the North American Board of Certified Energy Practitioners (NABCEP) PV Entry Level Certificate of Knowledge Exam.

Division Dean
Gary Aguilar

Department Chairs
Gary George

(916) 484-8354

Certificates of Achievement


This certificate provides training in all aspects of solar photovoltaic (PV) system design, cost estimation, sales, and installation. It also includes training in oral presentations and management skills. The courses included in the certificate also qualify students to take the North American Board of Certified Energy Practitioners (NABCEP) PV Associate Certificate of Knowledge Exam.

Catalog Date: June 1, 2020

Certificate Requirements

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<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
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<tbody>
<tr>
<td>ET 302</td>
<td>Principles of Electricity and Electronics</td>
<td>4</td>
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<tr>
<td>ENERGY 140</td>
<td>Electrical Applications for Solar Installers</td>
<td>3</td>
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<tr>
<td>ENERGY 141</td>
<td>Electrical &amp; Mechanical Applications for Solar Installers</td>
<td>3</td>
</tr>
<tr>
<td>ENERGY 142</td>
<td>NABCEP Associate Certification Preparation</td>
<td>2</td>
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<tr>
<td>ENERGY 143</td>
<td>Solar Photovoltaic Systems Design, Installation, and Troubleshooting</td>
<td>4</td>
</tr>
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<td>SPEECH 301</td>
<td>Public Speaking</td>
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<td>BUS 300</td>
<td>Introduction to Business (3)</td>
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<tr>
<td>or BUS 350</td>
<td>Small Business Management/Entrepreneurship (3)</td>
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Total Units: 22

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- describe the components in a complete grid-tie PV system.
- construct solar PV battery charging systems.
- analyze test equipment data to determine the location of the "sweet spot" on a solar PV panel's Current-Voltage (IV) curves.
- identify tools and test equipment necessary for solar PV panel installations.
- identify different sizes of wire according to American Wire Gauge (AWG) tables.
- describe the advantages of obtaining the NABCEP Associate Certificate of Knowledge Certificate.
construct a simulated roof system using industry standard building materials.

calculate the amount of yearly solar radiance in relationship to shading using the Solmetric's SunEye predictor and software.

inspect and repair malfunctioning components in a functioning grid tie solar PV system.

estimate the yearly power output for a solar photovoltaic system using both the SunEye and the Pathfinder sun angle and shade predictor.

identify typical locations of electrical/mechanical failures in PV systems.

maximize communication effectiveness by specifying, planning for, and adapting to the specific audience.

identify and analyze factors that contribute to effective design, development, and delivery of presentations.

relate the communication process to public speaking situations.

assess the ways to start a business and which form of business organization should be used.

explain the importance of a business plan, a financial plan, and a marketing plan.

describe the financing process and how to access capital.

apply principles of management and marketing relevant to the small business.

evaluate financial reports.

analyze the impact of legal requirements and government regulations as related to the operation of the small business.

Career Information

This certificate prepares students for entry level employment in a wide variety of positions in the PV industry. It is also valuable for people working in the PV industry to upgrade their skills to include the newest advancements in solar technology. Career opportunities include PV system designers, PV systems outside sales, PV equipment and associated component sales representatives, and a variety of other emerging careers in this field.

Solar Energy Technology Certificate

This certificate provides training in all aspects of solar photovoltaic (PV) system design, installation, troubleshooting, and repair. The courses included in the certificate also qualify students to take the North American Board of Certified Energy Practitioners (NABCEP) PV Associate Certificate of Knowledge Exam.

Catalog Date: June 1, 2020

Certificate Requirements

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<th>COURSE CODE</th>
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<tr>
<td>ENERGY 143</td>
<td>Solar Photovoltaic Systems Design, Installation, and Troubleshooting</td>
<td>4</td>
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<td>Total Units:</td>
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<td>16</td>
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Student Learning Outcomes

Upon completion of this program, the student will be able to:

- describe the components in a complete grid-tie PV system.
- construct solar PV battery charging systems.
- analyze test equipment data to determine the location of the “sweet spot” on a solar PV panel's Current-Voltage (IV) curves.
- identify tools and test equipment necessary for solar PV panel installations.
- identify different sizes of wire according to American Wire Gauge (AWG) tables.
- analyze and describe the advantages of obtaining the NABCEP Associate Certificate of Knowledge Certificate.
Energy (ENERGY)

ENERGY 140 Electrical Applications for Solar Installers

This is an introductory course in Solar Photovoltaic (PV) energy. It covers how solar PV energy works and how to assess if PV is feasible in a variety of situations. Topics include calculating and measuring PV power outputs for different conditions, using software tools and hardware for calculating and sizing PV systems, and measuring and analyzing shading conditions. Additionally, it addresses how to install and connect necessary components. Field trips may be required.

Upon completion of this course, the student will be able to:

- describe the components in a complete grid-tie PV system.
- construct solar PV battery charging systems.
- calculate the correct gauge wire for a given solar PV panel array.
- inspect and repair, if necessary, malfunctioning components in a grid-tie solar PV system.
- employ common hand tools in the mechanical installation of both a grid-tie and a battery solar PV system.
- analyze test equipment data to determine the location of the "sweet spot" on a solar PV panel's current-voltage (IV) curves.
- identify tools and test equipment necessary for solar PV panel installations.
- evaluate which different types of solar PV panels would have the most power output for a given application.
- assess safety hazards when working with PV systems.
- estimate the power output for a solar PV panel for a given sun angle.
- construct an electrical conduit that has both right and left 90-degree bends.
- identify different sizes of wire according to American Wire Gauge (AWG) tables.
- calculate the battery amperage required for a stand-alone PV system.

Career Information

This certificate prepares the student for entry level employment in a wide variety of positions in the PV industry. It is also valuable for people working in the PV industry to upgrade their skills to include the newest advancements in solar technology. Career opportunities include PV installers, PV service technicians, and other emerging careers in this field.

Energy (ENERGY)

ENERGY 141 Electrical & Mechanical Applications for Solar Installers

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Corequisite: ET 302
Catalog Date: June 1, 2020

This is an introductory course in Solar Photovoltaic (PV) energy. It covers how solar PV energy works and how to assess if PV is feasible in a variety of situations. Topics include calculating and measuring PV power outputs for different conditions, using software tools and hardware for calculating and sizing PV systems, and measuring and analyzing shading conditions. Additionally, it addresses how to install and connect necessary components. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- construct a simulated roof system using industry standard building materials.
- calculate the amount of yearly solar radiance in relationship to shading using the Solmetric's SunEye predictor and software.
- inspect and repair malfunctioning components in a functioning grid-tie solar PV system.
- assess safety hazards in respect to fire, shock, and falls when installing or repairing PV systems.
- estimate PV system using both the SunEye and the Pathfinder sun angle and shade predictor.
- identify typical locations of electrical/mechanical failures in PV systems.
- calculate the correct gauge wire and number of wires in a metal raceway according to National Electrical Code standards.
- construct an emergency backup power system using solar PV panels and gel-cell batteries.
This is an advanced course in Solar Photovoltaic (PV) energy. Topics include using hardware and software tools for shading and correct orientation of solar panels, the effect PV panel orientation has on system power output and efficiency, what effect optimum PV panel loading has on power produced, and how to perform a load analysis on a residence. Additionally, it covers the use of various manufacturers’ software to calculate PV panel string sizing for optimum efficiency when working with grid-tie inverters. National Electrical Code (NEC) and fire code wire sizing, fusing, and other safety instructions and procedures are stressed. The successful completion of this course and ENERGY 142 qualify students to take the North American Board of Certified Energy Practitioners (NABCEP) Associate Achievement Exam leading to the NABCEP PV Installation Professional Certificate. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze and describe the advantages of obtaining the NABCEP Associate Achievement Award and the PV Installation Professional Certificate.
- construct a simulated roof system using industry standard building materials.
- calculate the amount of yearly solar radiance in relationship to shading using the Solmetric’s SunEye predictor and software.
- calculate the correct gauge wire and number of wires in a metal raceway according to NEC code standards.
- inspect and repair malfunctioning components in a functioning grid-tie solar PV system.
- employ common hand tools such as saws, drills, and framing squares used in building a simulated roof structure.
- analyze test equipment data to determine the voltage drop on low voltage, high current wires.
- attach solar PV panel mounting rails and associated hardware to a roof while retaining the ability of the roof to be watertight.
- evaluate the different types of solar grid-tie inverters and determine which configurations would have the highest efficiency and most power output for a given situation.
- assess safety hazards with respect to fire, shock, and falls when installing or repairing photovoltaic systems.
- estimate the yearly power output in watt-hours per year for a solar PV system using both the SunEye and the Pathfinder sun angle and shade predictor.
- evaluate, draft, and construct a simple solar panel one-line drawing using graphics software.
- examine and classify different sizes of wire according to American Wire Gauge (AWG) tables.
- develop a solar PV panel string size using SMA America LLC. string sizing software and then modify the design for one half of the power output.

ENERGY 142 NABCEP Associate Certification Preparation

This advanced course in solar photovoltaic (PV) energy includes preparation for the North American Board of Certified Energy Practitioners (NABCEP) PV Associate Certificate of Knowledge Exam. Topics include hardware and software tools used for determining percent of shade and orienting solar panels, the effect of PV panel orientation on system power and efficiency, and the load analysis. Additionally, it covers calculating PV panel string sizing when working with grid tie inverters as related to the NABCEP test. National Electrical Code (NEC) and fire code wire sizing, fusing, and other safety instructions and procedures are reviewed. The successful completion of this course and ENERGY 141 meets the requirements to take the NABCEP certified associate solar PV installers and service technicians entry level certificate of knowledge of PV systems test. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the advantages of obtaining the NABCEP PV Associate Certificate of Knowledge
- calculate the amount of yearly solar radiance in relationship to shading using the Solmetrics SunEye predictor and software
- calculate the correct wire gauge according to National Electrical Code standards
- analyze test equipment data to determine the voltage drop on low voltage, high current wires
- identify hazards involved with PV installation, maintenance, and troubleshooting
- calculate AC and DC current, voltage, and resistance in a given circuit
- use maps, compasses, and other instruments to determine true south
- identify key points on current-voltage (IV) curves
- describe the qualification tests for PV cells and modules
- describe the effect of cell temperature to PV panel output voltage and power
- calculate the battery amperage required for a stand-alone PV system
- calculate voltage drops in wiring, fuses, combiners, and connectors
- identify typical electrical/mechanical failures in PV systems

ENERGY 143 Solar Photovoltaic Systems Design, Installation, and Troubleshooting

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: ENERGY 141 with a grade of 'C' or better
Catalog Date: June 1, 2020

This advanced course in solar photovoltaic (PV) energy offers the opportunity for hands-on experience designing, installing, and troubleshooting grid-tie and stand-alone PV systems. Topics include hardware and software tools used in the solar PV industry, blueprint reading, calculating component size and capacity, and personal safety. Additionally, it covers calculating PV panel string sizing when working with grid-tie inverters and battery sizing when designing stand-alone PV systems. National Electrical Code (NEC) and fire code wire sizing, fusing, and other safety instructions and procedures are reviewed. Ten-hour Occupational Safety and Health Administration (OSHA) training is provided. Students must pay the OSHA required fee in order to obtain the OSHA safety card. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- assess safety hazards when working with photovoltaic (PV) systems.
- evaluate which types of solar PV panels are best in various PV installations.
- employ common hand tools in the mechanical installation of both a grid-tie and a battery solar PV system.
- calculate the battery amp-hours required for a stand-alone PV system.
- construct solar PV grid-tie systems.
- interpret blueprint drawings and what their symbols represent.
- calculate the voltage and amperage of bi-modal PV systems.
- diagram fuses, combiner boxes, and disconnects in grid-tie and stand-alone PV systems.
- interpret NEC wiring codes for PV installations.
- calculate voltage drops for short and long distances.
- calculate the maximum number of wires allowed in a conduit using NEC tables.
- describe the benefits of solar incentives.
- resolve typical problems with solar PV systems.
- label all equipment and cable runs per NEC code.
- describe various energy sources that can be interfaced with photovoltaic systems.
- identify new career paths in the solar power industry.

ENERGY 303 Energy and Sustainability

Same As: NATR 303
Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: MATH 120, 125, 129, 133 or higher; NATR 300, or an equivalent transferable life science course; and Eligible for ENGRD 310 or ENGRD 312
This course investigates fundamentals of energy and impacts of energy systems on society and the environment. It explores energy resources, efficiency, conservation, and emerging technologies. Specifically addressed are mechanics, advantages, disadvantages, and sustainability of current and future energy systems. This course also focuses on economic, cultural, political, and environmental aspects of energy production and consumption in the context of the built environment, transportation, food systems, manufacturing, and public services. Field trips may be required. This course is not open to students who have completed NATR 303 or ET 303.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- examine the concept of sustainability as it relates to energy
- examine geographic, socioeconomic, cultural, and environmental considerations of energy production and consumption
- explain technologies involved in solar thermal, solar photovoltaic, hydroelectric (large and small scale), nuclear fission, wave/current/tidal, geothermal, biomass, and wind (onshore and offshore) energy systems
- compare conventional fossil-fuel based energy systems with current alternatives
- examine the relationships between energy production and consumption scenarios and their contributions to atmospheric greenhouse gas concentrations and air, water, and soil pollution
- evaluate alternative energy policies for North America, Europe, and the world
- interpret the results of a residential energy audit and recommend actions
- critically evaluate more sustainable approaches and practices in energy use for heating, lighting, food systems, the built environment/transportation/infrastructure, manufacturing, and public services
- examine strategies for dealing with production and consumption fluctuations and energy storage issues
- understand considerations for energy systems related to temporal and spatial scale and connectivity, including potential for distributed energy systems, aging of the electrical grid, land use conflicts, and timelines for taking newer technologies to scale
- evaluate the potential for emerging opportunities in nanotechnology and biomimicry with respect to energy systems
The Engineering program offers courses necessary to transfer to a four-year university where students can complete a bachelor’s degree in various branches of engineering. Most lower division engineering programs require the following ARC courses: Mathematics 400, 401, 402, 420; Physics 410, 421, 431; Chemistry 400; Engineering 401, 413, 420. Students should consult the institution to which they wish to transfer for specific lower division requirements.

Division Dean  Dr. Rina Roy
Department Chairs  Shih-Wen Young

(916) 484-8107

Associate Degrees

A.S. in Civil Engineering

This degree provides the foundation in mathematics, science, and engineering needed to transfer to a four-year institution as a major in civil engineering. The courses in this degree meet most of the lower division requirements for several nearby universities. Since each university has its own unique requirements, additional coursework will be required prior to transfer. Students should meet with a counselor to determine which additional courses are required for successful transfer to a particular institution.

Catalog Date: June 1, 2020

Degree Requirements

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<th>COURSE CODE</th>
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<td>General Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>ENGR 310</td>
<td>Engineering Survey Measurements</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 312</td>
<td>Engineering Graphics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 412</td>
<td>Properties of Materials</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 420</td>
<td>Statics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 400</td>
<td>Calculus I</td>
<td>5</td>
</tr>
<tr>
<td>MATH 401</td>
<td>Calculus II</td>
<td>5</td>
</tr>
<tr>
<td>MATH 402</td>
<td>Calculus III</td>
<td>5</td>
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<tr>
<td>MATH 420</td>
<td>Differential Equations</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 410</td>
<td>Mechanics of Solids and Fluids</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 421</td>
<td>Electricity and Magnetism</td>
<td>4</td>
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<tr>
<td>Total Units :</td>
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</table>

The Civil Engineering Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- solve problems by applying knowledge of mathematics, including differential and integral calculus and differential equations.
solve problems by applying knowledge of science, including chemistry and physics.

use technology to increase productivity.

apply knowledge of mathematics, science, and engineering to identify, formulate, and solve basic civil engineering problems.

describe the ethical and professional responsibilities of an engineer and situations where engineering solutions can impact society.

A.S. in Electrical Engineering

This degree provides the foundation in mathematics, science, and engineering needed to transfer to a four-year institution as a major in electrical engineering. The courses in this degree meet most of the lower division requirements for several nearby universities. Since each university has its own unique requirements, additional coursework will be required prior to transfer. Students should meet with a counselor to determine which additional courses are required for successful transfer to a particular institution.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>CHEM 400</td>
<td>General Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>ENGR 401</td>
<td>Introduction to Electrical Circuits and Devices</td>
<td>4</td>
</tr>
<tr>
<td>MATH 400</td>
<td>Calculus I</td>
<td>5</td>
</tr>
<tr>
<td>MATH 401</td>
<td>Calculus II</td>
<td>5</td>
</tr>
<tr>
<td>MATH 402</td>
<td>Calculus III</td>
<td>5</td>
</tr>
<tr>
<td>MATH 420</td>
<td>Differential Equations</td>
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<tr>
<td>PHYS 410</td>
<td>Mechanics of Solids and Fluids</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 421</td>
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<td>4</td>
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<tr>
<td><strong>Total Units:</strong></td>
<td><strong>37</strong></td>
<td></td>
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</table>

*The Electrical Engineering Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.*

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- solve problems by applying knowledge of mathematics, including differential and integral calculus and differential equations.

- solve problems by applying knowledge of science, including chemistry and physics.

- use technology to increase productivity.

- apply knowledge of mathematics, science, and engineering to identify, formulate, and solve basic electrical engineering problems.

- describe the ethical and professional responsibilities of an engineer and situations where solutions can impact society.

A.S. in Mechanical Engineering

This degree provides the foundation in mathematics, science, and engineering needed to transfer to a four-year institution as a major in mechanical engineering. The courses in this degree meet most of the lower division requirements for several nearby universities. Since each university has its own unique requirements, additional coursework will be required prior to transfer. Students should meet with a counselor to determine which additional courses are required for successful transfer to a particular institution.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
</table>
ENGR 300 Introduction to Engineering

This course is an introduction to the engineering and engineering technology professions, and their place in industry. It includes an explanation of the engineering and engineering technology options and curricula involved. Topics include an emphasis on problem-solving techniques used in engineering and engineering technology. This course is recommended for all entering engineering, engineering technology, and design technology students.

Upon completion of this course, the student will be able to:

- solve problems by applying knowledge of mathematics including differential and integral calculus and differential equations.
- solve problems by applying knowledge of science, including chemistry and physics.
- use technology to increase productivity.
- apply knowledge of mathematics, science, and engineering to identify, formulate, and solve basic mechanical engineering problems.
- describe the ethical and professional responsibilities of an engineer and situations where engineering solutions can impact society.

Student Learning Outcomes

Engineering (ENGR)

ENGR 300 Introduction to Engineering

Units: 1
Hours: 18 hours LEC
Prerequisite: None
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC
Catalog Date: June 1, 2020

This course is an introduction to the engineering and engineering technology professions, and their place in industry. It includes an explanation of the engineering and engineering technology options and curricula involved. Topics include an emphasis on problem-solving techniques used in engineering and engineering technology. This course is recommended for all entering engineering, engineering technology, and design technology students.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the engineering and engineering technology professions and explain their place in society and industry.
- identify, compare, and contrast the various options in engineering and engineering technology, and coursework leading to them.
- evaluate engineering or engineering technology as a potential career objective, and explain the necessary aptitudes, abilities, and training needed to succeed in these professions.
- analyze the applicability of the engineering profession and related fields to life experience and interests.
ENGR 310 Engineering Survey Measurements

This course covers the basic fundamentals of surveying for engineers. Electronic surveying instruments are used to develop the principles of measurement for distance, elevations, and angles. Additional topics include systematic and random errors, line directions, profiles and cross sections, traverse computations, horizontal and vertical curves, earthwork quantity calculations, and manual and CAD (computer-aided drafting) production of engineering plans. This course is intended for civil engineers, but may also be required for other programs.

Upon completion of this course, the student will be able to:

- compare survey equipment typically encountered by engineers.
- interpret and evaluate surveying related problems.
- formulate concepts from construction, surveying, and engineering topics to solve problems.
- construct a neat, well organized, logical presentation of surveying problems and their solutions.
- use field work data to produce manual and CAD engineering plans.
- describe the surveyor's role in developing civil engineering projects.

ENGR 312 Engineering Graphics

This course covers the principles of engineering drawings in visually-communicated engineering designs and an introduction to computer-aided design (CAD). Topics include the development of visualization skills, orthographic projections, mechanical dimensioning and tolerancing practices, the engineering design process, and design analysis. Assignments develop sketching and 2D and 3D CAD skills. The use of solid modeling CAD software is an integral part of the course.

Upon completion of this course, the student will be able to:

- apply rules of orthographic projection to create multi-view drawings.
- create pictorials from orthographic views.
- use computer-aided design (CAD) software to create 2D engineering drawings, including working drawings and assembly drawings.
- use CAD software to create 3D models and assemblies.
- create auxiliary and section views of an object following correct conventions.
- apply standards of dimensioning and tolerancing to engineering drawings.
- apply the engineering design process to a design project.

ENGR 401 Introduction to Electrical Circuits and Devices

Units: 4
Hours: 72 hours LEC
Prerequisite: PHYS 421 with a grade of "C" or better
Corequisite: MATH 420
Transferable: CSU; UC

This course covers the principles of electrical circuits and devices, with an emphasis on the analysis and design of electrical systems. Topics include DC circuits, AC circuits, and semiconductor devices. The course also covers the basics of circuit simulation using computer-aided engineering software.
This course covers the fundamentals of electrical circuit theory and analysis for engineers. Topics include time domain circuit analysis techniques, circuit reduction techniques, frequency domain circuit analysis, first- and second-order circuits with natural and step responses, and operational amplifiers. This course provides a solid foundation for upper division engineering courses.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- interpret the effects of instrumentation used for measurement on those measurements.
- differentiate the optimum method of circuit analysis for a particular circuit configuration.
- evaluate boundary conditions on first- and second-order circuits.
- construct and evaluate the solutions to electrical circuit problems.
- verify solutions from one system by the design and analysis of an equivalent system that reduces the complexity of the original circuit.

ENGR 412 Properties of Materials

This course presents the internal structures and resulting behaviors of materials used in engineering applications, including metals, ceramics, polymers, composites, and semiconductors. It emphasizes developing the ability both to select appropriate materials to meet engineering design criteria and to understand the effects of heat, stress, imperfections, and chemical environments upon material properties and performance. Laboratories provide opportunities to directly observe the structures and behaviors discussed in the course, to operate testing equipment, and to analyze experimental data. This course was formerly known as ENGR 413.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain the relationship between the internal structure of materials and their macroscopic properties.
- analyze and explain methods of altering the structure of materials by mechanical, chemical, or thermal means in order to change material properties.
- perform mathematical calculations in materials applications.
- interpret and evaluate data regarding the properties, processing, and performance characteristics of materials, and use it as a basis to recommend appropriate material(s) to meet engineering design criteria.
- measure material properties and/or evaluate processing treatments using standard materials testing equipment and techniques.
- compose laboratory reports that communicate the collection, analysis (including statistical), and interpretation of experimental data according to professional engineering standards.

ENGR 420 Statics

This course covers the study of bodies in equilibrium with emphasis on force systems, structures, distributed loads, and friction. It emphasizes analytical rather than graphical methods of problem solving.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- resolve basic engineering mechanics problems through the use of free-body diagrams and static equilibrium principles.
analyze any equilibrium problem in a simple and logical manner.

generate diagrams that summarize the relationship between load, shear, and bending moments.

combine methodologies and principles of friction to solve problems involving dry friction.

produce and solve equilibrium equations for forces on members of engineering structures such as trusses and frames.

ENGR 495 Independent Studies in Engineering

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.
Associate Degrees for Transfer

A.A.-T. in Elementary Teacher Education

The Associate in Elementary Teacher Education for Transfer provides a clearly articulated curricular track for students who wish to transfer to a CSU campus, while also serving the diverse needs of students interested in the breadth and depth of the field of Elementary Teacher Education. Additionally, this degree exposes students to the core principles and practices of the field in order to build a foundation for their future personal, academic, or vocational paths.

The Associate in Arts degree in Elementary Teacher Education for Transfer provides students with a major that fulfills the general requirements of the California State University for transfer. Students with this degree will receive priority admission with junior status to the California State University system. The Associate in Arts degree in Elementary Teacher Education for Transfer (AA-T) may be obtained by the completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program outlined below (earning a C or better in these courses) and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 310</td>
<td>General Biology (4)</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 305</td>
<td>Introduction to Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>ECE 312</td>
<td>Child Development (3)</td>
<td>3</td>
</tr>
<tr>
<td>or PSYC 372</td>
<td>Child Development (3)</td>
<td>3</td>
</tr>
<tr>
<td>ENGED 324</td>
<td>Introduction to Elementary Teaching with Field Experience (3)</td>
<td>3</td>
</tr>
<tr>
<td>or ECE 350</td>
<td>Introduction to Elementary Teaching with Field Experience (3)</td>
<td>3</td>
</tr>
<tr>
<td>ENGWR 300</td>
<td>College Composition (3)</td>
<td>3</td>
</tr>
<tr>
<td>or ENGWR 480</td>
<td>Honors College Composition (3)</td>
<td>3</td>
</tr>
<tr>
<td>ENGWR 301</td>
<td>College Composition and Literature (3)</td>
<td></td>
</tr>
<tr>
<td>or ENGWR 303</td>
<td>Argumentative Writing and Critical Thinking Through Literature (4)</td>
<td></td>
</tr>
<tr>
<td>or ENGWR 481</td>
<td>Honors College Composition and Literature (3)</td>
<td></td>
</tr>
<tr>
<td>ENGWR 302</td>
<td>Advanced Composition and Critical Thinking</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 320</td>
<td>World Regional Geography</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 305</td>
<td>Earth Science</td>
<td>3</td>
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<tr>
<td>GEOL 306</td>
<td>Earth Science Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>HIST 307</td>
<td>History of World Civilizations to 1500</td>
<td>3</td>
</tr>
<tr>
<td>HIST 308</td>
<td>History of World Civilizations, 1500 to Present</td>
<td>3</td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
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<tr>
<td>-------------</td>
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</tr>
<tr>
<td>HIST 310</td>
<td>History of the United States (3)</td>
<td>3</td>
</tr>
<tr>
<td>or HIST 483</td>
<td>History of the United States - Honors (3)</td>
<td></td>
</tr>
<tr>
<td>MATH 311</td>
<td>Mathematical Concepts for Elementary School Teachers - Number Systems</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 310</td>
<td>Conceptual Physics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 312</td>
<td>Conceptual Physics Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>POLS 301</td>
<td>Introduction to Government: United States (3)</td>
<td>3</td>
</tr>
<tr>
<td>or POLS 481</td>
<td>Introduction to Government: United States - Honors (3)</td>
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<tr>
<td>SPEECH 301</td>
<td>Public Speaking</td>
<td>3</td>
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A minimum of 3 units from the following:

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTH 300</td>
<td>Introduction to Art (3)</td>
</tr>
<tr>
<td>MUFHL 300</td>
<td>Introduction to Music (3)</td>
</tr>
<tr>
<td>TA 300</td>
<td>Introduction to the Theatre (3)</td>
</tr>
</tbody>
</table>

Total Units: 56 - 57

The Associate in Arts in Elementary Teacher Education for Transfer (AA-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- apply the scientific method using inquiry, data collection, quantitative reasoning, and basic mathematical concepts to analyze results
- assess teaching practices and learning conditions through application of child development theories
- evaluate attitudes, actions, and behaviors indicative of a professional educator
- apply analytical reading and writing, research, and critical thinking essential for completing assigned tasks
- explain relationships and interactions between humans and the earth
- apply knowledge of world history and cultures to identify the values of a culture and work with others of diverse cultures
- analyze statistical data
- present information effectively to an intended audience
- compare and contrast various forms and styles of music, artworks, and theatrical performances

**Career Information**

Public or private instructional assistant or classroom aide, grades K-8; private tutor; publishing and textbook salesperson; curriculum and test developer; teacher, grades K-12 with additional education

**A.A.-T. in English**

The Associate in Arts in English for Transfer (AA-T) degree provides a clearly articulated curricular track for students who wish to transfer to a CSU campus, while also serving the diverse needs of students interested in the breadth and depth of the field of English. Additionally, this degree exposes students to the core principles and practices of the field in order to build a foundation for their future personal, academic, or vocational paths.

The Associate in Arts in English for Transfer (AA-T) degree provides students with a major that fulfills the general requirements of the California State University for transfer. Students with this degree will receive priority admission with junior status to the California State University system. The Associate in Arts in English for Transfer (AA-T) degree may be obtained by the completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program outlined below (earning a "C" or better in these courses) and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

Catalog Date: June 1, 2020
# Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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</thead>
<tbody>
<tr>
<td>ENGWR 303</td>
<td>Argumentative Writing and Critical Thinking Through Literature</td>
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<tr>
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<td>A minimum of 9 units from the following:</td>
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<tr>
<td>ENGLT 310</td>
<td>English Literature I (3)</td>
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<tr>
<td>ENGLT 311</td>
<td>English Literature II (3)</td>
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<tr>
<td>ENGLT 320</td>
<td>American Literature I (3)</td>
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<td>ENGLT 321</td>
<td>American Literature II (3)</td>
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<tr>
<td>ENGLT 340</td>
<td>World Literature I (3)</td>
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</tr>
<tr>
<td>ENGLT 341</td>
<td>World Literature II (3)</td>
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<td>A minimum of 3 units from the following:</td>
<td>3</td>
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<tr>
<td>ENGCW 400</td>
<td>Creative Writing (3)</td>
<td></td>
</tr>
<tr>
<td>ENGLT 300</td>
<td>Introduction to Fiction (3)</td>
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</tr>
<tr>
<td>ENGLT 304</td>
<td>Introduction to Poetry (3)</td>
<td></td>
</tr>
<tr>
<td>ENGLT 338</td>
<td>Native American Literature (3)</td>
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<tr>
<td>ENGLT 345</td>
<td>Mythologies of the World (3)</td>
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<tr>
<td>ENGLT 370</td>
<td>Children and Literature (3)</td>
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<tr>
<td>ENGLT 380</td>
<td>Introduction to Shakespeare (3)</td>
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<tr>
<td>ENGLT 382</td>
<td>Introduction to Dramatic Literature (3)</td>
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<td>A minimum of 3 units from the following:</td>
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<tr>
<td>ENGCW 410</td>
<td>Fiction Writing Workshop (3)</td>
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<tr>
<td>ENGCW 420</td>
<td>Poetry Writing Workshop (3)</td>
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<tr>
<td>ENGCW 430</td>
<td>Creative Non-Fiction Writing Workshop (3)</td>
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<tr>
<td>ENGCW 441</td>
<td>Feature Film Screenwriting Workshop I (3)</td>
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<tr>
<td>ENGCW 450</td>
<td>College Literary Magazine (3)</td>
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<tr>
<td>ENGLT 308</td>
<td>The Graphic Novel and Manga (3)</td>
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<tr>
<td>ENGLT 327</td>
<td>Literature of California (3)</td>
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<tr>
<td>ENGLT 335</td>
<td>Latino, Mexican-American, and Chicano Literature (3)</td>
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<tr>
<td>ENGLT 360</td>
<td>Women in Literature (3)</td>
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<tr>
<td>ENGLT 365</td>
<td>Introduction to Gay, Lesbian, Bisexual and Transgender Literature (3)</td>
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<tr>
<td>ENGLT 378</td>
<td>Young Adult Literature (3)</td>
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<tr>
<td>ENGLT 392</td>
<td>Science Fiction and Fantasy (3)</td>
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<tr>
<td>ENGLT 403</td>
<td>Film Adaptations (3)</td>
<td></td>
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<tr>
<td></td>
<td>Total Units:</td>
<td>19</td>
</tr>
</tbody>
</table>

1Students may also substitute any course from the previous list not already taken to fulfill degree requirements.

2Students may also substitute any course from previous lists not already taken to fulfill degree requirements.

The Associate in Arts in English for Transfer (AA-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

# Student Learning Outcomes

Upon completion of this program, the student will be able to:
• analyze rhetorical and literary patterns to extract meaning, whether stated directly or implied
• discuss authors, forms, and movements of literature in English
• define and employ terminology of literary analysis
• compose essays that are generally free of sentence errors and that support a clear thesis with unified paragraphs
• evaluate and integrate research materials to support an original argument
• employ current Modern Language Association (MLA) bibliographic methods and forms

Certificate

Literary Publishing Certificate

This certificate benefits students who are interested in the business of publishing literary works. Work required to edit and publish American River Review forms the core of the certificate. Additional coursework focuses on the various literary genres from reading, writing, and editing perspectives. The College Literary Publishing course serves as the capstone experience for the certificate program and provides students an opportunity to work in the role of acquisitions editors for Ad Lumen Press, American River College's university-style literary press.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>ENGCW 450</td>
<td>College Literary Magazine</td>
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</tr>
<tr>
<td>ENGCW 455</td>
<td>College Literary Publishing</td>
<td>3</td>
</tr>
<tr>
<td>ENGLT 300</td>
<td>Introduction to Fiction (3)</td>
<td>3</td>
</tr>
<tr>
<td>ENGCW 400</td>
<td>Creative Writing (3)</td>
<td></td>
</tr>
<tr>
<td>ENGCW 410</td>
<td>Fiction Writing Workshop (3)</td>
<td></td>
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<tr>
<td>ENGCW 420</td>
<td>Poetry Writing Workshop (3)</td>
<td></td>
</tr>
<tr>
<td>ENGCW 430</td>
<td>Creative Non-Fiction Writing Workshop (3)</td>
<td></td>
</tr>
<tr>
<td>ENGCW 450</td>
<td>College Literary Magazine (3)</td>
<td></td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>12</td>
</tr>
</tbody>
</table>

*ENGCW 450 must be taken one time, but it may be taken a second time as elective credit toward the certificate.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

• compose literary works using the full process of drafting, receiving feedback, revising, editing, and proofreading.
• examine literary works from various genres, styles, cultural perspectives, and historical periods.
• critique literary works.
• assess literary works for publication.
• recommend editorial changes to authors of literary works.
• assemble a collection of literary works for publication.

Career Information

This certificate prepares students for careers in publishing houses of full-length or periodical literature. In addition, students may use the skills to work on publications such as yearbooks, creative writing magazines, newspapers, and newsletters in a commercial or educational setting.
English - Creative Writing (ENGCW)

ENGCW 400 Creative Writing

This introductory creative writing course provides writing experience with three or four of the following genres: short story, poetry, creative nonfiction, and script writing for theater or film. In addition, it covers the relationship between cultural events and literary conventions and to do so with an awareness of literature's role in culture, emphasizing diverse experiences and perspectives. This course includes analysis of literary models from diverse cultures, faculty and class critiques of texts, and discussion of literary techniques, such as voice, metaphor, imagery, dialogue, and narrative in each covered genre. This course encourages students to develop an original voice, reflecting their unique backgrounds and experiences.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze works of creative literature in their historical and cultural contexts.
- compose and revise manuscripts in at least three of these four genres: poetry, short fiction, creative nonfiction, and script writing for theater or film.
- assess creative work by other writers, using workshop principles.
- investigate sources of publication, including traditional and new media.

ENGCW 410 Fiction Writing Workshop

This creative writing course concentrates on fiction writing, including the analysis of fiction written during the semester. Topics include the examination of literary styles in traditional and contemporary fiction as well as revising and editing processes. A portfolio of original work and a conference with the instructor are required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- compose short stories or novel chapters
- evaluate fiction using literary standards
- interpret and analyze published stories
- revise original fiction
- investigate sources of publication
- create a portfolio of original short fiction

ENGCW 420 Poetry Writing Workshop

This introductory writing course: focuses on poetry, including the analysis of poetry written during the semester. Topics include the examination of literary styles in traditional and contemporary poetry as well as revising and editing processes. A portfolio of original work and a conference with the instructor are required.
This creative writing course focuses on poetry, offering students the opportunity to develop a personal voice while also developing the skills to analyze and appreciate contemporary poetry. Students examine literary styles and elements in traditional and contemporary poetry, practice revision, and offer constructive critiques.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- compose poems using a variety of techniques
- analyze and evaluate published poetry for elements and meaning
- evaluate peers’ writing using workshop principles
- revise poems to develop purpose and style
- investigate sources of publication, including traditional and new media

ENGCW 421 A Short Course in Poetry Writing

Units: 1
Hours: 18 hours LEC
Prerequisite: ENGWR 101 with a grade of "C" or better; or placement into ENGWR 300 or ENGWR 480 through the assessment process.
Advisory: ENGCW 400
Transferable: CSU; UC
Catalog Date: June 1, 2020

This creative writing course is an abbreviated version of the three-unit Poetry Writing Workshop, ENGCW 420, focusing on the writing of several poems. It examines literary styles in traditional and contemporary poetry and demonstrates revising and editing processes.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- compose formal and free verse poems.
- evaluate narrative and lyrical elements of poems.
- analyze themes in poems.
- revise poems for style and content.

ENGCW 430 Creative Non-Fiction Writing Workshop

Units: 3
Hours: 54 hours LEC
Prerequisite: ENGWR 101 with a grade of "C" or better, or placement through the assessment process.
Transferable: CSU; UC
Catalog Date: June 1, 2020

This creative writing course concentrates on the literary essay and explores the factual and experiential sources of creative non-fiction. It covers the writing of various kinds of essays, such as memoir, autobiography, personal essays, reflective nature writing, prose with poetic elements (prose-poetry), and fact-based or philosophical writing with a definite literary, stylistic component. Course readings include one full-length work of creative non-fiction. Topics in this course also include analysis of classical and modern essays for elements such as voice, point of view, and structure.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- use methods for exploring various sources of factual and personal writing
- analyze published works for factual content, structure, voice, and literary style
• compose creative non-fiction essays according to the ethical principles of the genre
• critique unpublished writing in a workshop setting
• revise creative nonfiction writing
• devise prompts for heuristic writing exercises leading to the development and revision of drafts

ENGCW 441 Feature Film Screenwriting Workshop I

Units: 3
Hours: 54 hours LEC
Prerequisite: ENGWR 101 with a grade of "C" or better; or placement into ENGWR 300 or ENGWR 480 through the assessment process.
Advisory: ENGCW 400, ENGWR 300, or ENGWR 480
Transferable: CSU; UC
Catalog Date: June 1, 2020

This course introduces the writing of feature-length film scripts. It requires three proposals for projects, one of which is developed through the first act in official screen format, plus scene descriptions for major scenes, character sketches, and plot outlines. Several classic feature films and/or scripts are analyzed for their writing strengths.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• outline a three-act feature film plot.
• create film characters.
• compose visual description.
• formulate film dialogue.
• draft scripts in the industry-standard "speculation" format.
• evaluate professional scripts and peer writing.
• construct scenes, sequences, and a first act of a feature length script.

ENGCW 450 College Literary Magazine

Units: 3
Hours: 54 hours LEC; 18 hours LAB
Prerequisite: ENGWR 101 with a grade of "C" or better, or placement through the assessment process.
Advisory: ENGCW 400, ENGCW 410, ENGCW 420, ENGCW 430, ENGWR 300, or ENGWR 480
Transferable: CSU
Catalog Date: June 1, 2020

This course provides instruction and editorial staff experience in producing a literary and fine arts magazine. Editorial staff collaborate with art selection or design staff in Art New Media to prepare ARC's college magazine, the American River Review, for national competitions sponsored by organizations such as the Columbia Scholastic Press Association and the Associated Collegiate Press. The course focuses on the selection and editing of literary content, and on the publicity, marketing, fund-raising, and distribution of a magazine. It may be taken four times for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• create and develop competitive literary standards for the American River Review
• evaluate and analyze submissions for publication in the American River Review
• compose publicity and other business communication for the magazine's purposes
• recommend revisions to authors seeking publication in the magazine and awards in contests
• manage data and e-mail for the magazine's purposes
• collaborate effectively with editorial and design teams to compete in national magazine contests
• prepare literary manuscripts for national competitions
ENGCW 455 College Literary Publishing

Units: 3
Hours: 54 hours LEC; 18 hours LAB
Prerequisite: ENGCW 450 with a grade of "C" or better
Advisory: ENGCW 400, ENGCW 410, ENGCW 430, ENGLT 300, ENGLT 321, ENGLT 341, ENGWR 300, ENGWR 301, ENGWR 303, ENGWR 480, or ENGWR 481
Transferable: CSU
Catalog Date: June 1, 2020

This course provides instruction and editorial staff experience in the selection of literary works of high artistic merit for publication by Ad Lumen Press, American River College's professional literary press. It focuses on evaluating and selecting literary works submitted for publication by the public, making of editorial recommendations to the Ad Lumen Press Editorial Board, communicating in a professional manner with the public, and providing publicity for the press.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- develop competitive literary standards for Ad Lumen Press
- evaluate and analyze submissions for publication by Ad Lumen Press
- recommend submissions to the Ad Lumen Press Editorial Board
- manage data and correspondence with internal and external entities for purposes related to the business of Ad Lumen Press
- collaborate effectively with editorial staff and the Ad Lumen Press Editorial Board
- prepare literary manuscripts for national competitions

ENGCW 495 Independent Studies in English - Creative Writing

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

English - Education (ENGED)

ENGED 305 Structure of English

Units: 3
Hours: 54 hours LEC
Prerequisite: ENGWR 300 or 480 with a grade of "C" or better
Transferable: CSU; UC
General Education: AA/AS Area II(b)
Catalog Date: June 1, 2020

This course is a study of the structure of English grammar, both descriptive and prescriptive. It includes the study and practice of traditional grammar and standard usage, with emphasis on the relationship to writing (2000 word writing requirement) and the teaching of language arts; it also includes an introduction to the history of the English language as it relates to irregularities in modern English. This course is designed for those who plan to teach or who are especially interested in grammar as it relates to writing.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- evaluate the effectiveness of commonly used semantic, morphological, and syntactic definitions of parts of speech
- identify the various grammatical structures used in English, such as phrases, clause types, and sentence types
create examples of the various grammatical structures used in English, such as phrases, clause types, and sentence types

explain grammatical structures, sentences types, and movement tests used in traditional English grammar

distinguish between standard and nonstandard usage as applied to writing and correct common writing errors in English grammar, punctuation, orthography, usage, and convention

apply the principles of traditional English grammar to writing and writing instruction

design an audience-appropriate grammar lesson plan

ENGED 320 Service Learning: Tutoring Elementary Students in Reading

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Enrollment Limitation: Students are required to show proof of TB clearance and, if required by the school district, complete a fingerprint clearance through the cooperating school district before they can attend the school site for field work.
Advisory: Eligible for ENGRD 310 or ENGRD 312; OR ESLR 340
Transferable: CSU
General Education: AA/AS Area III(b)
Catalog Date: June 1, 2020

This course covers basic methods of tutoring elementary school children reading below grade level. The class meets on campus for the first part of the semester for tutor training. Students are then placed at a nearby elementary school for in-depth practice tutoring elementary children in reading. This course offers field experience for teacher preparation.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- evaluate elementary students' reading and comprehension skills using a variety of assessment techniques
- develop appropriate strategies to motivate students, modify behavior, and enhance reading skills
- design lesson plans incorporating activities for the improvement of fluency and reading comprehension
- critique children's literature for its quality and reading level appropriateness
- demonstrate interpersonal communicative skills with diverse student populations

ENGED 324 Introduction to Elementary Teaching with Field Experience

Same As: ECE 350
Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Enrollment Limitation: Before students can attend the school site for field work, they are required to show proof of TB clearance. They may also need to complete a fingerprint clearance through the cooperating school district, if the district requires it.
Advisory: ECE 312 or PSYC 372
Transferable: CSU
General Education: AA/AS Area III(b)
C-ID: C-ID EDUC 200
Catalog Date: June 1, 2020

This course introduces the concepts and issues related to teaching diverse learners in today's contemporary schools, kindergarten through grade 12 (K-12). Topics include teaching as a profession and career, historical and philosophical foundations of the American education system, contemporary educational issues, California's content standards and frameworks, and teacher performance standards. In addition to class time, this course requires a minimum of 45 hours of structured fieldwork in public school elementary classrooms that represent California's diverse student population, and includes cooperation with campus-approved certificated classroom teachers.

This course is not open to students who have completed ECE 350.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify academic requirements and experiences needed to become a credentialed elementary school teacher
- evaluate attitudes, actions, behaviors, and responsibilities that define the role of a professional educator in a public school setting
demonstrate objective, descriptive, and interpretative observation skills
analyze learning theory through planning, teaching, and interaction with elementary students
examine and assess issues concerning diversity in elementary student backgrounds, interests, experiences, and abilities
identify school and community resources that address issues concerning diversity
develop a personal preliminary philosophy of teaching, examining personal characteristics, assumptions and beliefs, and experiences which could affect development as a teacher
apply course content to classrooms through structured assignments, observations, and reflections

ENGED 495 Independent Studies in English - Education

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

English - Laboratory (ENGLB)

English - Literature (ENGLT)

ENGLT 300 Introduction to Fiction

Units: 3
Hours: 54 hours LEC
Prerequisite: ENGWR 101 with a grade of "C" or better
Advisory: ENGWR 300 or ENGWR 480, AND ENGWR 301, ENGWR 303 or ENGWR 481.
Transferable: CSU; UC
General Education: AA/AS Area I; CSU Area C2; IGETC Area 3B
Catalog Date: June 1, 2020

This course covers the study of fiction as a type of literature. It typically examines at least twenty short stories and at least three novels, critically analyzing plot, setting, character, theme, and style. This course includes fiction written in English, as well as fiction in translation.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• distinguish fiction as a specialized literary genre.
• discover and analyze literary devices used in works of fiction.
• analyze the larger patterns and historical continuity of short stories and novels.
• analyze works of fiction as a reflection of the authors' cultures and values.
• compose essays and other writings that analyze, interpret, and evaluate fiction.

ENGLT 304 Introduction to Poetry

Units: 3
Hours: 54 hours LEC
Prerequisite: ENGWR 101 with a grade of "C" or better
Advisory: ENGWR 300 or ENGWR 480, AND ENGWR 301, ENGWR 303 or ENGWR 481.
Transferable: CSU; UC
General Education: AA/AS Area I; CSU Area C2; IGETC Area 3B
This course introduces the art of poetry. It includes the analysis and appreciation of poetry as a type of literature with careful attention to the elements of poetics, the various styles of poetry, and major poets and poetic movements. Poetic theories and poems by a wide variety of traditional and contemporary poets as well poetic theory are examined.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- distinguish poetry as a specialized literary genre.
- identify poetic devices and effectively integrate a discussion of those devices into analysis of poetry.
- analyze poetic movements and forms of poetry while investigating specific works and writers.
- compose essays and other writings that analyze, evaluate, and respond to poetry.
- analyze poetry as a reflection of poets’ cultures and values.

### ENGLT 308 The Graphic Novel and Manga

**Units:** 3  
**Hours:** 54 hours LEC  
**Prerequisite:** ENGWR 101 with a grade of "C" or better  
**Advisory:** ENGWR 300 or ENGWR 480, AND ENGWR 301, ENGWR 303 or ENGWR 481.  
**Transferable:** CSU; UC  
**General Education:** AA/AS Area I; AA/AS Area VI; CSU Area C2; IGETC Area 3B  
**Catalog Date:** June 1, 2020

This course critically examines graphic novels and manga. It explores the social, cultural, and historical contexts reflected in these mixed-media genres, analyzing thematic, character, and structural development and exploring the relationship of image and text in this development. This course typically includes at least five full-length works as well as numerous background readings.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- differentiate between comics, graphic novels, and manga
- differentiate between icons, symbols, and metaphors
- evaluate the qualities of icons and analyze how those qualities affect the text and story
- evaluate graphic novels and manga for elements of narrative structure
- evaluate the page layout and panel transitions
- analyze the relationship of images to text
- compose essays and other written responses that analyze and evaluate graphic novels and manga

### ENGLT 310 English Literature I

**Units:** 3  
**Hours:** 54 hours LEC  
**Prerequisite:** ENGWR 300 or 480 with a grade of "C" or better  
**Advisory:** ENGWR 301, 303, or 481  
**Transferable:** CSU; UC  
**General Education:** AA/AS Area I; CSU Area C2; IGETC Area 3B  
**C-ID:** C-ID ENGL 160  
**Catalog Date:** June 1, 2020

This course surveys representative works in English literature from the Anglo-Saxon period through the eighteenth century. It traces the development of medieval, Renaissance, and Restoration prose, poetry, and drama, introducing methods of literary analysis and research. Historical movements and the cultural contexts of particular works and authors are also covered. Whenever possible, works are read in their entirety.

**Student Learning Outcomes**
Upon completion of this course, the student will be able to:

- identify literary devices and apply them effectively to literary works.
- analyze the larger patterns and historical continuity of early English literature from the Anglo-Saxon period through the 18th century.
- compose essays that respond to, analyze, and evaluate literary works.
- analyze early English poetry, prose, fiction, and drama as a reflection of the authors' cultures and values.

**ENGLT 311 English Literature II**

- **Units:** 3
- **Hours:** 54 hours LEC
- **Prerequisite:** ENGWR 300 or 480 with a grade of "C" or better
- **Advisory:** ENGWR 301 or 481
- **Transferable:** CSU; UC
- **General Education:** AA/AS Area I; CSU Area C2; IGETC Area 3B
- **C-ID:** C-ID ENGL 165
- **Catalog Date:** June 1, 2020

This course is a survey of representative works in English literature from the late eighteenth century through the present, covering the Romantic, Victorian, modernist, and postmodern periods. Prose, poetry, and drama are represented, and whenever possible, works are read in their entirety.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- identify literary devices and apply them effectively to literary works.
- analyze the larger patterns and historical continuity of English literature from the late 18th century to the present.
- compose essays that respond to, evaluate, and analyze literary works.
- analyze English poetry, prose, fiction, and drama of the late 18th century through the present as reflections of the authors' culture and values.

**ENGLT 320 American Literature I**

- **Units:** 3
- **Hours:** 54 hours LEC
- **Prerequisite:** ENGWR 300 or 480 with a grade of "C" or better
- **Advisory:** ENGWR 301, 303, or 481
- **Transferable:** CSU; UC
- **General Education:** AA/AS Area I; CSU Area C2; IGETC Area 3B
- **C-ID:** C-ID ENGL 130
- **Catalog Date:** June 1, 2020

This course surveys representative texts in American literature from the precolonial period to the Civil War and introduces students to a literary tradition born from many languages and ethnicities. Considering a variety of contexts, it examines writing as a device to reflect and create a rapidly changing world marked by political revolution, expanding commerce, and the rise of print culture. Readings—from a variety of fictional and nonfictional texts—and discussion highlight the multicultural nature of American literature and society. Whenever possible, texts are read in their entirety.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- compose appropriate academic discourse, using the conventions of critical literary analysis.
- analyze and interpret themes found in the literature and intellectual movements of the period, using a variety of rhetorical strategies and modes of literary criticism.
- relate specific literary works to their historical, philosophical, social, political, regional, or aesthetic contexts.
- integrate research, evidence, and independent and collaborative thought into writing and critical thinking.

**ENGLT 321 American Literature II**

- **Units:** 3
- **Hours:** 54 hours LEC
- **Prerequisite:** ENGWR 300 or 480 with a grade of "C" or better
- **Advisory:** CSU; UC
- **Transferable:** AA/AS Area I; CSU Area C2; IGETC Area 3B
- **General Education:** C-ID ENGL 130
- **C-ID:** June 1, 2020
- **Catalog Date:** June 1, 2020

This course surveys representative texts in American literature from the precolonial period to the Civil War and introduces students to a literary tradition born from many languages and ethnicities. Considering a variety of contexts, it examines writing as a device to reflect and create a rapidly changing world marked by political revolution, expanding commerce, and the rise of print culture. Readings—from a variety of fictional and nonfictional texts—and discussion highlight the multicultural nature of American literature and society. Whenever possible, texts are read in their entirety.
This course surveys representative American literature from the post-Civil War period until the present, with consideration of important aspects of American literary history. Readings—from a variety of stories, novels, plays, and poetry—and discussion highlight the multicultural nature of American literature and society.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify literary devices and apply them effectively to literary analysis.
- analyze the larger patterns and historical continuity of America's literature while investigating specific works and writers.
- compose focused analyses and arguments showing insights into themes explored and arguments made by American authors, using various rhetorical strategies and modes of literary criticism.
- relate the literary works to their historical, philosophical, social, political, regional, and/or aesthetic contexts.
- integrate research, evidence, and independent and collaborative thought into writing and critical thinking.

ENGLT 327 Literature of California

This course examines the literature of California in the context of its ethnic, social, political, geographical, and intellectual history. It covers a wide range of multi-ethnic, multicultural, and cross-cultural literature (fiction, non-fiction, poetry, memoirs, essays, and films), such as Native American legends, early California exploration accounts, prose and poetry from the California heartland, and Hollywood crime fiction, with emphasis on what makes the California experience unique.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify literary devices and apply them correctly to literary analysis.
- analyze the larger patterns, the multi-ethnic and multicultural contrasts and conflicts, and the historical continuity of California's literature while investigating specific works and writers.
- compose essays and other writings that respond to, evaluate, and analyze literary works.
- analyze California literature as a reflection of the authors' cultures and values.

ENGLT 330 African American Literature

This course is a survey of representative African American writers from the slave narratives to the present. This comprehensive literary study includes analysis of significant historical and cultural influences and relevant critical approaches and contexts in a variety of literary genres. This course is not open to students who have completed ENGLT 486.

Student Learning Outcomes

Upon completion of this course, the student will be able to:
• evaluate African American literature critically
• assess historical significance of African American literature
• compose transfer-level essays analyzing African American literature
• demonstrate an appreciation for the contributions of African American writers and the political, social, and historical significance of their works
• demonstrate critical thinking skills through discussions and written analytical essays
• incorporate bibliographic research effectively into analytical papers

ENGLT 335 Latino, Mexican-American, and Chicano Literature

Units: 3
Hours: 54 hours LEC
Prerequisite: ENGWR 101 with a grade of “C” or better, or placement through the assessment process.
Transferable: CSU; UC
General Education: AA/AS Area I; AA/AS Area VI; CSU Area C2; IGETC Area 3B
Catalog Date: June 1, 2020

This course explores literature (poetry, short stories, novels, creative nonfiction, and performance) authored by Latino writers. It typically examines the following themes: resistance, survival, identity, homeland, immigration, the border, socio-political activism, gender, and sexuality. All or most of each text is in English. Knowledge of the Spanish language is helpful but not required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• appraise influences from other arts to literary production by Latinos.
• research complexity of identity (including multiethnic, multiracial, and multinational aspects) depicted in literary works by Latinos.
• compare and contrast literary devices used in literary works by Latinos.
• build upon knowledge of the forms and themes of literature by Latinos.
• evaluate and critique literature by Latinos and make connection to an author’s geographic region and socio-historical context.

ENGLT 338 Native American Literature

Units: 3
Hours: 54 hours LEC
Prerequisite: ENGWR 101 with a grade of “C” or better
Advisory: ENGWR 300 or ENGWR 480, AND ENGWR 301, ENGWR 303, or ENGWR 481
Transferable: CSU; UC
General Education: AA/AS Area I; AA/AS Area VI; CSU Area C2; IGETC Area 3B
Catalog Date: June 1, 2020

This course examines a range of Native American perspectives as expressed through autobiography, fiction, poetry, and drama. Emphasis is placed on Native authorship. The literature highlights the survival strategies of indigenous cultures in the face of historical and present-day colonization. This course examines how Native literature is a reflection of the social and cultural movements that have shaped, been shaped by, and interacted with the Native community. Included are samples of Native literary voices from North, South, and Central America. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• explain the major themes in the Native American experience
• evaluate personal values and ideas relative to a text
• analyze major literary elements and employ a variety of critical approaches
• apply critical theory about race, ethnicity, and ethnocentrism to a text
• judge a text’s level of authenticity as a Native work of literature
• compare literary texts
compose essays and other writing that respond to, evaluate, and analyze literary texts

identify important cultural themes in a work of literature

ENGLT 340 World Literature I

Units: 3
Hours: 54 hours LEC
Prerequisite: ENGWR 300 or 480 with a grade of "C" or better
Advisory: ENGWR 301 or 481
Transferable: CSU; UC
General Education: AA/AS Area I; CSU Area C2; IGETC Area 3B
C-ID: C-ID ENGL 140
Catalog Date: June 1, 2020

This course surveys world literature in translation from antiquity through the early seventeenth century. In addition to significant works in the western tradition, masterpieces of non-western literature are studied. Ancient world cultures and historical movements are introduced, along with methods of literary analysis and research. The entire range of genres is represented and, whenever possible, works are read in their entirety.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• identify literary devices and apply them effectively to literary analysis
• analyze the larger patterns and historical continuity of early world literature while investigating specific works and writers
• compose essays and other writings that respond to, evaluate, and analyze literary works
• analyze early world poetry, prose, fiction, and drama as a reflection of the authors' cultures and values

ENGLT 341 World Literature II

Units: 3
Hours: 54 hours LEC
Prerequisite: ENGWR 300 or 480 with a grade of "C" or better
Advisory: ENGWR 301 or 481
Transferable: CSU; UC
General Education: AA/AS Area I; CSU Area C2; IGETC Area 3B
C-ID: C-ID ENGL 145
Catalog Date: June 1, 2020

This course surveys world literature in translation from the late seventeenth century to the present. In addition to significant works in the Western tradition, masterpieces of non-Western literature from Asia, Africa, the Middle East, and Central and South America are studied. The entire range of genres is represented, and, whenever possible, works are read in their entirety.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• identify literary devices and apply them correctly to literary analysis.
• analyze the larger patterns and historical continuity of later world literature while investigating specific works and writers.
• compose essays and other writings that respond to, evaluate, and analyze literary works.
• assess later world poetry, prose, fiction, and drama as a reflection of the authors' cultures and values.

ENGLT 345 Mythologies of the World

Units: 3
Hours: 54 hours LEC
Prerequisite: ENGWR 101 with a grade of "C" or better
Advisory: ENGWR 300 or ENGWR 480, AND ENGWR 301, ENGWR 303 or ENGWR 481.
Transferable: CSU; UC
General Education: AA/AS Area I; CSU Area C2; IGETC Area 3B
This course of mythic literature introduces characters and themes in stories from world literature: creation stories, heroic journeys, and moments of transcendent transformation. It explores the timeless metaphors of these stories, metaphors which continue to not only influence characters and stories in modern literature, but also captivate contemporary readers.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- differentiate between characteristics of oral and written traditions.
- evaluate traditional and contemporary texts for the functions of myth.
- analyze traditional and contemporary texts for mythic archetypes.
- evaluate a literary text for the elements of the hero’s journey.
- analyze the transformation of hero and society.
- examine liminal events and situations, assessing the effect of these events and situations.
- compose essays and other written responses that evaluate and analyze mythic texts.

ENGLT 360 Women in Literature

This course examines women as both creators of and characters in literature. It includes reading and analyzing literature from a broad range of periods, genres, and cultures. Works by both men and women are included, with emphasis on works written by women and the social and cultural contexts that produced those works.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify literary devices and apply them effectively to literary analysis.
- analyze the larger patterns and historical continuity of literature by or about women while investigating specific works and writers.
- compose essays and other writings that respond to, evaluate, and analyze literary works.
- assess literature by or about women as a reflection of the authors’ cultures and values.

ENGLT 365 Introduction to Gay, Lesbian, Bisexual and Transgender Literature

This course surveys representative literature concerning gay, lesbian, bisexual, transgender, and queer or questioning (GLBTQ) themes and issues as written by or about GLBTQ people from throughout its literary history to the present day. The comprehensive literary study includes analysis of significant historical and cultural influences.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate a basic knowledge of GLBTQ literature and the cultural and intellectual trends it represents.
- recognize the contributions of GLBTQ writers to mainstream literature and the GLBTQ subculture.
ENGLT 370 Children and Literature

Units: 3
Hours: 54 hours LEC
Prerequisite: ENGWR 101 with a grade of "C" or better
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU
General Education: AA/AS Area I; CSU Area C2
Catalog Date: June 1, 2020

This course is a survey of high-quality literature, past and present, created for children, and of the criteria for selecting, evaluating, and discussing children's literature. It includes discussion of the history of children's literature and current issues such as censorship, literacy, multiculturalism, and diversity. This course is intended for prospective teachers, early childhood education (ECE) majors, librarians, parents, those interested in writing or publishing children's books, and those who enjoy children's literature. It includes reading to children in a formal group setting.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- examine the genres of children's literature.
- analyze and apply theories and criteria for selecting and evaluating children's literature.
- describe and interpret the contributions of outstanding authors, illustrators, and critics of children's literature.
- interpret and apply the theories and practices of oral reading and storytelling.
- develop ideas and practical activities for helping children to experience, appreciate, and respond to literature.
- examine literature portraying diverse and multicultural perspectives.

ENGLT 378 Young Adult Literature

Units: 3
Hours: 54 hours LEC
Prerequisite: ENGWR 101 with a grade of "C" or better
Advisory: ENGWR 300 or ENGWR 480, AND ENGWR 301, ENGWR 303 or ENGWR 481.
Transferable: CSU; UC
General Education: AA/AS Area I; CSU Area C2; IGETC Area 3B
Catalog Date: June 1, 2020

This course presents an overview of young adult literature and is designed to incorporate the ever-changing nature of this genre. The literature addressed reflects themes of interest to young people. Topics include a review of the history of young adult literature, readings of contemporary award-winning young adult literature, as well as a look at some of the classics from the past. Authors may include Suzanne Collins, Orson Scott Card, Markus Zusak, Yann Martel, Alexandre Dumas, J. K. Rowling, Sandra Cisneros, Lois Lowry, John Knowles, and J. D. Salinger. Censorship concerns and culturally diverse selections also form a core part of the course. This course includes an analysis of literary elements, an examination of an author's style and content, and reflection on what makes a piece of literature a classic.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply criteria for evaluating young adult literature
- analyze the contributions of outstanding authors and critiques of young adult literature
- identify the significant literary elements and an author's style for a given text
- analyze and explain the influence of society on young adult literature
- compose analytical expository essays and other writing about young adult literature
This course provides an introduction to Shakespeare's works. Six to ten plays, representing the range of Shakespeare's achievement, are covered. Topics include strategies for reading Shakespeare's English, exploration of dramatic genres, and contemporary approaches to interpreting the plays. Field trips to live Shakespearean performances may be required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- evaluate the significance of Shakespeare's literary achievement
- analyze the language of Shakespeare's plays
- evaluate the contemporary relevance of Shakespeare's plays
- compose analytical and interpretive essays about particular Shakespearean plays
- synthesize multiple interpretations of Shakespeare
- analyze and compare dramatic genres

This course introduces drama as a type of literature. Plays from various historical periods and cultures are covered, with an emphasis on the analysis of plot, characterization, setting, theme, and other literary elements of drama. Attendance at a live theater production may be required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- identify elements of literature as they apply to the study of drama.
- apply literary evaluation criteria to different plays.
- analyze the cultures that produced particular plays.
- examine and evaluate dramatic styles and their place in literature.
- assess the contemporary importance of particular plays.
- compose arguments about the interpretation of particular plays.

This course introduces science fiction and fantasy as distinct literary genres. Students will explore the literary conventions, themes, and theories associated with science fiction and fantasy through a variety of texts and media. The course emphasizes critical reading and analysis, and may include discussions of social, cultural, and historical contexts.
This course explores the literature of science fiction and fantasy. It includes an exploration of the roots of these genres—the fantastic, the Gothic, terror and horror—and the development of their diverse contemporary forms. Texts may include selections from television, film, anime, short stories, and novels.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- evaluate the use of Gothic characteristics in various texts.
- compose essays and other writings that respond to, evaluate, and analyze critically the literary elements of a text.
- examine the social, cultural, historical, or political contexts that might have influenced a text.
- distinguish and assess the role of the Other.
- analyze literary works by applying various critical approaches.
- differentiate among individual subgenres, such as classic fantasy, sword and sorcery, terror, horror, space opera, and cyber punk.

ENGLT 403 Film Adaptations

Units: 3
Hours: 54 hours LEC
Prerequisite: ENGWR 101 with a grade of "C" or better
Advisory: ENGWR 300 or ENGWR 480, AND ENGWR 301, ENGWR 303 or ENGWR 481.
Transferable: CSU; UC
General Education: AA/AS Area I; CSU Area C2; IGETC Area 3B
Catalog Date: June 1, 2020

This course examines the processes, problems, and successes of adapting literary, stage, and previous film material into films. It discusses faithful and unfaithful adaptations through reading the original texts and viewing the adapted films with an awareness of their historical and cultural contexts. This course analyzes intention, creative distinctions, and the limits and strengths of each medium.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply basic terminology from narrative theory, literary studies, and film studies.
- distinguish between the strengths and weaknesses inherent in the genres of short story, novel, drama, and film.
- analyze differences among genres and media.
- construct criteria for judging strengths and weaknesses of adaptations.
- evaluate films based on course concepts, such as narrative modes, genre conventions, and production exigencies.
- evaluate both literature and film in cultural context, as cultural and artistic expressions in their historical and social moments.
- compare and contrast the works studied.

ENGLT 486 Honors African American Literature

Units: 3
Hours: 54 hours LEC
Prerequisite: Eligibility for the Honors Program.
Transferable: CSU
General Education: AA/AS Area I (effective Summer 2020); AA/AS Area VI (effective Summer 2020)
Catalog Date: June 1, 2020

This course is an advanced seminar on African American literature from the slave narratives to the present. This comprehensive literary study includes analysis of significant historical and cultural influences and relevant critical approaches and contexts in a variety of literary genres. In comparison to ENGLT 330, this honors course uses an intensive instructional methodology designed to challenge motivated students and cultivate advanced critical thinking skills. Instruction emphasizes critical thinking in a seminar style, where the focus is on analysis and evaluation of literature and literary theories. Honors students will also develop proficiency in library and internet-based research, make oral and written presentations, and participate in student-led group discussions. An MLA style research paper is also required. This course is not open to students who have completed ENGLT 330.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- evaluate African American literature critically
- assess historical significance of African American literature
- compose transfer-level essays analyzing African American literature
- demonstrate an appreciation for the contributions of African American writers and the political, social, and historical significance of their works
- demonstrate critical thinking skills in seminar-style discussion and in written analytical essays
- incorporate extensive bibliographic research effectively into analytical papers
- apply literary criticism effectively into analytical papers
- present independent research on African American literature

ENGLT 494 Topics in Literature

Units: 3
Hours: 54 hours LEC
Prerequisite: ENGWR 300 with a grade of "C" or better
Transferable: CSU
General Education: AA/AS Area I; CSU Area C2
Catalog Date: June 1, 2020

This is a literature course to be scheduled as needed under a title describing specific content. It provides the opportunity to focus on an in-depth study of specific literary subjects or genres. The course offers an extensive study of works by significant writers of literature defined by theme, region, vocation, or human experiences. Possible titles include Retelling Stories or Literature of War.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- examine and compare works studied according to theme, author's style, or genre.
- compose essays and other writings that respond to, evaluate, and analyze literary works.
- analyze the use and effect of literary devices in a variety of works.
- assess poetry, prose, fiction, or drama as a reflection of the authors' culture and values.

ENGLT 495 Independent Studies in Literature

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

English - Reading (ENGRD)

ENGRD 12 Reading Center: Individualized Support Skills for ENGRD 14

Units: 0.5
Hours: 9 hours LEC
Prerequisite: None.
This course offers supplemental instruction in basic reading skills for those concurrently enrolled in ENGRD 14. Pass/No Pass only.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- define an unfamiliar word using a variety of techniques
- identify stated main idea in a paragraph
- formulate the unstated main idea of a paragraph
- identify the stated thesis in an essay
- formulate the unstated main idea of an essay
- identify the supporting ideas in an essay

**ENGRD 14 Reading Skills**

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<td>Hours:</td>
<td>54 hours LEC</td>
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<td>Prerequisite:</td>
<td>Placement through the assessment process.</td>
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This course covers the foundations of reading skills, such as vocabulary development and basic reading comprehension.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- comprehend unfamiliar words in basic level texts using word attack skills, syllabication, context clues, and the dictionary
- apply study strategies including notetaking, annotating, and time management appropriately to promote academic success
- identify stated and implied main ideas and supporting details in fiction and nonfiction basic-level texts
- recognize paragraph patterns in nonfiction basic-level texts

**ENGRD 15 Strategic Reading**

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<td>Hours:</td>
<td>54 hours LEC</td>
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<tr>
<td>Prerequisite:</td>
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<td>Catalog Date:</td>
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This is a multifaceted course meant to engage all aspects of foundational reading skills. Topics include vocabulary strategies, textbook comprehension, and study skills, all of which can be applied to other courses. This course is not open to students who have successfully completed ENGRD 56 or ENGWR 56.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- apply a variety of vocabulary techniques, including structural analysis, dictionary skills, and context clues to derive the definition of an unfamiliar word
- identify stated main ideas in paragraphs
- recognize supporting details in paragraphs
- distinguish inferred meanings and draw appropriate conclusions in textbooks, periodicals, and various appropriate-level materials
- apply comprehension and study techniques such as Study, Question, Read, Recite, Review (SQ3R), highlighting, annotating, and others
- adjust techniques dependent upon the purpose for reading
- use time management and test taking skills
analyze the five elements of fiction: characters, plot, theme, setting, and conflict

differentiate text structures in paragraphs, such as example, comparison/contrast, cause and effect, sequence, definition, or classification at the appropriate reading level

identify a stated thesis in a multi-paragraph selection

formulate implied main ideas from major supporting details

ENGRD 17 Vocabulary and Spelling with Study Strategies

Units: 2
Hours: 36 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020

This course emphasizes the improvement of vocabulary and spelling with the use of learning and study strategies. Individual learning styles are utilized to learn new words in a number of contexts. Thematic readings, writing, and individual word journals are required throughout the course to supplement and reinforce spelling rules and the use of new vocabulary.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- develop personal study strategies to fit individual learning styles.
- practice pronouncing words correctly to avoid spelling errors.
- use the dictionary to find word meanings, pronunciations, and parts of speech.
- use a word correctly in a sentence by knowing the word's part of speech.
- use words in a sentence around an unfamiliar word to determine that word's meaning.

ENGRD 50 Reading Center: Individualized Support Skills for ENGRD 15

Units: 0.5
Hours: 9 hours LEC
Prerequisite: None.
Corequisite: Concurrent enrollment in ENGRD 15.
Catalog Date: June 1, 2020

This course offers supplemental practice in beginning reading skills for those concurrently enrolled in ENGRD 15. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- locate a stated thesis in an expository or persuasive essay
- formulate an unstated thesis in an expository or persuasive essay
- identify the major details that support a thesis
- apply inferential comprehension techniques to paragraphs and expository or persuasive essays

ENGRD 54 Succeeding in College Reading

Units: 1.5
Hours: 27 hours LEC
Prerequisite: Placement through the assessment process.
Corequisite: Concurrent enrollment in ENGRD 310 (Critical Reading as Critical Thinking) or ENGRD 312 (Academic Textbook Reading); AND ENGRD 314 (Speed Reading)
Catalog Date: June 1, 2020

This course offers small- and large-group instruction on reading processes, reading strategies, and critical thinking skills necessary for success in college reading.
Assignments are connected to students' ENGRD 310 or ENGRD 312 coursework. Pre-reading, reading, and post-reading processes are covered. This is a corequisite course for students who are concurrently enrolled in ENGRD 310 or 312 and ENGRD 314. Pass/No pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply the reading process, which includes pre-reading, reading, and post-reading to a variety of reading tasks.
- identify the stated or implied thesis, primary and secondary supports, and patterns of organization of a variety of readings.
- apply effective and efficient study reading strategies for college-level material, such as annotating, outlining, mapping, and summary writing.
- analyze words contextually and structurally.

ENGRD 55 Reading Center: Individualized Reading Skills II

Units: 1.5  
Hours: 27 hours LEC  
Prerequisite: Placement through the assessment process.  
Advisory: ESLR 50 with a "C" or better for non-native speakers.  
Catalog Date: June 1, 2020

This course offers individualized instruction focused on discrete reading comprehension skills and application of those skills to persuasive and expository essays, textbooks, and fiction. Subjects include SQ3R (Study, Question, Read, Recite, and Review), patterns of development, and inferential comprehension. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply comprehension and study techniques such as Study, Question, Read, Recite, Review (SQ3R)
- analyze five elements of fiction: character, plot, theme, setting, and conflict
- differentiate text structures, such as comparison and contrast, cause and effect, example, sequence, definition, or classification in paragraphs and essays
- formulate implied main ideas from major supporting details

ENGRD 56 Integrated Reading, Writing and Study Skills

Same As: ENGWR 56  
Units: 6  
Hours: 108 hours LEC  
Prerequisite: ENGRD 14 (Reading Skills) with a grade of "C" or better; or 1.5 units of ENGRD 54 with a grade of "P" AND ENGRD 55 with a grade of "P"; or placement through the assessment process  
Advisory: CISC 100 with a grade of "C" or better, or equivalent skill level.  
Catalog Date: June 1, 2020

This course emphasizes the interrelationships among reading, writing, and study skills at the basic skills level. Course content, activities, and assignments integrate all three areas, providing opportunities to improve reading and writing skills in a student-centered environment. This course provides students with ongoing practice with the reading and writing processes and covers strategies for reading and writing in response to a variety of texts. Additional topics include a review of campus services and programs and effective study strategies. This is a learning community course taught by one reading and one writing instructor. Completing this course is equivalent to completing both ENGRD 15 and ENGWR 50. This course is not open to students who have already completed ENGRD 15, ENGWR 50, ENGWR 51, or ENGWR 56 with a grade of "C" or better.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply the writing and reading processes in completing writing and reading assignments.
- apply a variety of idea-generating tools, such as previewing, brain-storming, and clustering, appropriate to specific reading and writing tasks.
- assess the key ideas of texts by different authors on related topics.
- assess and differentiate among main ideas, stated or implied; supporting details; and patterns of organization in paragraphs and essays.
- evaluate the different points of view of a variety of texts and distinguish the key points in the texts by using appropriate annotating and note-taking skills.
• analyze the meanings of words by applying a variety of vocabulary evaluation techniques, such as structural analysis, dictionary skills, and context clues.
• compose well-organized essays supported by specifics/details from assigned texts.
• organize paragraphs and essays to support a point of view in ways appropriate to the topic.
• compose clear, effective, and grammatically correct sentences in a variety of structures.
• format essays according to MLA guidelines.
• identify and employ appropriate and expected college-student behaviors.
• evaluate various learning styles and apply them to individual study habits.
• describe campus programs and student services and assess their relevance to student success.
• describe the types of and ways to receive counseling at American River College.
• apply time management strategies to develop an effective study schedule.

ENGRD 111 Reading Across the Disciplines: Academic and Professional Development

Units: 0.5
Hours: 9 hours LEC
Prerequisite: None.
Corequisite: Enrollment in a below transfer-level course.
Catalog Date: June 1, 2020

This Reading Across the Disciplines (RAD) course offers reading skills to students as they apply to various below transfer-level courses. Topics include annotating, vocabulary development, schema building, and other strategies to increase reading focus and retention. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• analyze lectures, readings, and handouts to meet course requirements.
• synthesize material from lectures, assigned readings, and research to create appropriate study tools.
• identify the purpose for reading and adjust reading style (careful reading, general reading, skimming, or scanning) to fit the purpose.
• assess the reading process and use metacognitive strategies to increase focus.
• develop vocabulary building techniques.

ENGRD 116 Preparation for Academic Study

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020

This course analyzes expository and argumentative essays, textbooks, and literature in preparation for ENGRD 310 and other transfer-level classes across the disciplines. It emphasizes recognition of an author's thesis, supporting details, point of view, purpose, and tone through an in-depth analysis of an essay's structure. This course also focuses on applying study strategies for comprehending and retaining information from textbooks in preparation for tests.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• analyze words contextually and structurally
• apply the reading process such as SQ3R, PRO, and BWA to textbook selections
• apply appropriate annotations, notetaking, and mnemonic techniques
• analyze the structure of expository or argumentative essays
• identify an essay's stated or implied thesis, primary and secondary supports, and pattern of organization
• critically analyze an author's purpose, tone, bias, and point of view
- distinguish fact from opinion and claim from premise in an argumentative essay
- analyze literature or narrative non-fiction to identify elements of fiction such as setting, plot, characters, conflict, and theme
- infer authors' tone by identifying connotation, denotation, and figurative language

ENGRD 117 Reading Center: Individualized Support Skills for ENGRD 116

Units: 0.5
Hours: 9 hours LEC
Prerequisite: None.
Corequisite: Concurrent enrollment in ENGRD 116.
Catalog Date: June 1, 2020

This course offers instruction in intermediate reading skills. It provides supplementary practice to students who are concurrently enrolled in ENGRD 116. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- distinguish author's tone using inferential comprehension techniques
- differentiate organizational patterns in expository or persuasive essays
- apply note-taking strategies to textbook selections
- implement inferential comprehension techniques in expository and persuasive college-level selections

ENGRD 310 Critical Reading as Critical Thinking

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Concurrent enrollment in ENGWR 300.
Transferable: CSU
General Education: AA/AS Area II(b); CSU Area A3
Catalog Date: June 1, 2020

This course covers the theory and practice of critical and speed reading skills needed for successful academic performance with an emphasis on the following: (1) critical and analytical evaluation of college-level expository and argumentative essays, (2) development of flexible reading rate and speed, (3) critical analysis and evaluation of independent research, (4) vocabulary development, and (5) application of these skills to multicultural essays, journals, fiction, and nonfiction reading.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify thesis statements, stated or implied in college-level essays and articles.
- analyze content to determine major details and patterns of development.
- assess critical comprehension elements in written arguments: inference, fact and opinion, judgment, tone, bias, style, and purpose.
- evaluate the logic of arguments in college-level texts, focusing on propaganda, assumptions, faulty analogies, non-sequiturs, and deductive and inductive patterns.
- evaluate the quality and sufficiency of evidence and other forms of support for a written argument.
- create effective and efficient study reading strategies for college-level material such as annotating, outlining, mapping, and summary.
- assess reading strategies appropriate to regulate reading rate depending on reader’s purpose and varied college-level materials.
- introduce analysis and critical thinking using inductive and deductive reasoning.

ENGRD 312 Academic Textbook Reading

Units: 3
Hours: 54 hours LEC
This course concentrates on the refinement of the ability to read, understand, and respond to transfer-level textbooks across the curriculum. Emphasis is on critical and analytical reading, thinking and writing; graphics and other visual materials; discipline-based vocabulary; and reading rates as they relate to academic success.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- choose appropriate study skills for various content area courses including previewing, annotating, paraphrasing, and reviewing.
- evaluate purpose and structure in college-level textbooks with specific applications related to careers and disciplines.
- compose written responses to textbook readings.
- employ college-level, discipline-based vocabulary.
- analyze and apply appropriate reading rates to college-level material.

ENGRD 314 Reading Across the Disciplines: Speed Reading

This course offers reading skills to transfer-level students as applied to various content-area courses. Topics include the following: assessing the reading process and material to employ appropriate strategies to meet the purpose for reading; utilizing one's reading rates and styles based on purpose and material; utilizing college-level, discipline-based vocabulary; and mastering the skills needed to critically read and analyze current and future transfer-level course texts. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- assess the reading process and material for appropriate strategies.
- identify the purpose for reading.
- adapt reading rate and style based on reading purpose and material.
- utilize college-level, discipline-based vocabulary.
- analyze college-level texts, essays, journals, and research material.

ENGRD 315 Reading Across the Disciplines for Content Courses

This course offers reading skills to students as they apply to various content-area courses. Topics include the principles of the reading process, analysis of discipline-specific reading assignments, strategies for retention, and research strategies particular to the chosen discipline. Students should contact the RAD center before enrolling. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze lectures, readings, assignments, and handouts to meet course requirements.
ENGRD 316 Reading Across the Disciplines for Content Courses II

| Units: | 0.5 |
| Hours: | 9 hours LEC |
| Prerequisite: | ENGRD 315 |
| Transferable: | CSU |
| Catalog Date: | June 1, 2020 |

This course offers individualized or small-group sessions to help students who have already completed ENGRD 315 improve classroom performance. It focuses on application of inferential and critical reading strategies and study skills to specific content classes and programs. Topics include learning style assessment, how to implement appropriate reading strategies, and how to choose the best study methods. Students must come to the RAD Center and meet with a RAD staff member before enrolling. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- connect learning styles to reading strategies.
- analyze content-course material to determine the best reading strategies to use to study and retain the information in that material.
- evaluate the usefulness of different active reading strategies and apply the appropriate strategy to the assigned task.
- assess performance on content-course exams in order to modify study strategies.

ENGRD 495 Independent Studies in English - Reading

| Units: | 1 - 3 |
| Hours: | 54 - 162 hours LAB |
| Prerequisite: | None. |
| Transferable: | CSU |
| Catalog Date: | June 1, 2020 |

Independent Study is an opportunity for the student to extend classroom experience in Reading, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in Reading and secure approval. Only one independent study for each catalog course will be allowed.

English - Writing (ENGWR)

ENGWR 50 Developmental Composition

| Units: | 3 |
| Hours: | 54 hours LEC |
| Prerequisite: | None. |
| Corequisite: | Concurrent enrollment in ENGWR 95 or ENGWR 96. |
| Advisory: | BUSTEC 300.1 |
| Catalog Date: | June 1, 2020 |

This course focuses on developmental writing skills, emphasizing the connection between writing and reading with the goal of building fluency. It includes writing in response to assigned readings as well as practicing the writing process: prewriting, thesis development and organization of ideas, drafting of essays, and revision.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- compose summaries of assigned texts.
- distinguish between fact and opinion.
- respond to issues raised in texts.
- analyze assignments and create strategies for addressing them.
- organize ideas to improve focus.
- compose short essays with controlling ideas and support.
- demonstrate document formatting/setup.
- revise essay drafts.
- compose complete sentences with a variety of patterns.

**ENGWR 51 Developmental Writing**

| Units:     | 4 |
| Hours:     | 72 hours LEC |
| Prerequisite: | None. |
| Advisory:  | Concurrent enrollment in ENGRD 15 |
| Catalog Date: | June 1, 2020 |

This course focuses on basic writing skills, emphasizing the connection between writing and reading. It includes writing in response to short reading selections. In addition, the writing process and development of specific skills within the sentence, paragraph, and essay forms are covered in preparation for ENGWR 102 or ENGWR 103. A minimum of 3000 words of full-process writing is required. This course is not open to students who have completed ENGWR 56 or ENGRD 56 with a grade of "C" or better.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- summarize main ideas in an assigned reading
- distinguish between fact and opinion
- compose a variety of paragraphs with clear controlling ideas and support
- analyze assignments and create strategies for addressing them
- compose a clear and organized short essay
- construct a variety of sentences that demonstrate conventions of standard written English

**ENGWR 56 Integrated Reading, Writing and Study Skills**

| Same As: | ENGRD 56 |
| Units:   | 6 |
| Hours:   | 108 hours LEC |
| Prerequisite: | ENGRD 14 (Reading Skills) with a grade of "C" or better; or 1.5 units of ENGRD 54 with a grade of "P" AND ENGRD 55 with a grade of "P"; or placement through the assessment process |
| Advisory: | CISC 100 with a grade of "C" or better, or equivalent skill level. |
| Catalog Date: | June 1, 2020 |

This course emphasizes the interrelationships among reading, writing, and study skills at the basic skills level. Course content, activities, and assignments integrate all three areas, providing opportunities to improve reading and writing skills in a student-centered environment. This course provides students with ongoing practice with the reading and writing processes and covers strategies for reading and writing in response to a variety of texts. Additional topics include a review of campus services and programs and effective study strategies. This is a learning community course taught by one reading and one writing instructor. Completing this course is equivalent to completing both ENGRD 15 and ENGWR 50. This course is not open to students who have already completed ENGRD 15, ENGWR 50, ENGWR 51, or ENGRD 56 with a grade of "C" or better.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- apply the writing and reading processes in completing writing and reading assignments.
• apply a variety of idea-generating tools, such as previewing, brain-storming, and clustering, appropriate to specific reading and writing tasks.

• assess the key ideas of texts by different authors on related topics.

• assess and differentiate among main ideas, stated or implied; supporting details; and patterns of organization in paragraphs and essays.

• evaluate the different points of view of a variety of texts and distinguish the key points in the texts by using appropriate annotating and note-taking skills.

• analyze the meanings of words by applying a variety of vocabulary evaluation techniques, such as structural analysis, dictionary skills, and context clues.

• compose well-organized essays supported by specifics/details from assigned texts.

• organize paragraphs and essays to support a point of view in ways appropriate to the topic.

• compose clear, effective, and grammatically correct sentences in a variety of structures.

• format essays according to MLA guidelines.

• identify and employ appropriate and expected college-student behaviors.

• evaluate various learning styles and apply them to individual study habits.

• describe campus programs and student services and assess their relevance to student success.

• describe the types of and ways to receive counseling at American River College.

• apply time management strategies to develop an effective study schedule.

ENGWR 94 Succeeding in College Composition

Units: 2
Hours: 36 hours LEC
Prerequisite: None.
Corequisite: Concurrent enrollment in ENGWR 300; AND ENGWR 95 or ENGWR 96; AND ENGRD 111.
Catalog Date: June 1, 2020

This course offers small- and large-group instruction on writing processes, writing strategies, and critical thinking skills necessary for success in ENGWR 300 (College Composition). Assignments are connected to the students’ ENGWR 300 coursework. It covers drafting, revision, and editing processes. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• apply a recursive writing process that includes pre-writing, drafting, revising, and editing.

• summarize, analyze, and respond to readings.

• analyze and use researched sources in one’s own writing.

ENGWR 95 Beginning Writing Across the Curriculum (WAC)

Units: 0.5
Hours: 9 hours LEC
Prerequisite: None.
Advisory: BUSTEC 300.1 or CISC 300
Catalog Date: June 1, 2020

This course offers both individualized and group instruction in appropriate writing processes and strategies for a variety of basic written assignments in all academic disciplines. Topics include understanding writing assignments, strategies for revision, and proofreading. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• demonstrate proficiency in the beginning writing skills studied

• compose and revise basic writing

• apply basic writing strategies to a variety of assignments
ENGWR 96 Intermediate Writing Across the Curriculum (WAC)

This course offers both individualized and group instruction in appropriate writing processes and strategies for a variety of college-level writing assignments in all academic disciplines. Topics include understanding writing assignments, strategies for revision, and basic documentation. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate proficiency in the college-level writing skills studied
- compose and revise college-level writing
- apply appropriate writing strategies to a variety of assignments

ENGWR 101 College Writing

This course focuses on the connections between critical thinking, writing, and reading that are necessary for the independent development of essays in ENGWR 300 and other transfer-level courses. It emphasizes writing in response to various reading selections, including at least one full-length work. The essay writing process includes prewriting, thesis development and organization of ideas, drafting of essays, and revision. The course also requires outside research and includes an introduction to basic formatting and referencing of sources using MLA-style documentation. Written final drafts totaling at least 4,500 words are required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze issues and ideas raised in a variety of texts
- distinguish among fact, inference and opinion
- respond to issues raised in texts
- compose essays with clear controlling ideas
- compose essays with a logical progression and organization of ideas
- develop and expand ideas that are supported by a variety of relevant details
- format documents properly
- parenthetically reference sources used in paper
- cite sources in a properly formatted works-cited page
- evaluate source credibility
- integrate credible sources using appropriate formatting standards
- revise essay drafts to improve focus and strengthen ideas
- construct sentences that demonstrate control of grammar, sentence variety, word choice, and conventions of standard written English

ENGWR 300 College Composition

This course offers both individualized and group instruction in appropriate writing processes and strategies for a variety of college-level writing assignments in all academic disciplines. Topics include understanding writing assignments, strategies for revision, and basic documentation. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate proficiency in the college-level writing skills studied
- compose and revise college-level writing
- apply appropriate writing strategies to a variety of assignments

ENGWR 50 with a grade of "C" or better, or placement through the assessment process.

Catalog Date: June 1, 2020

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze issues and ideas raised in a variety of texts
- distinguish among fact, inference and opinion
- respond to issues raised in texts
- compose essays with clear controlling ideas
- compose essays with a logical progression and organization of ideas
- develop and expand ideas that are supported by a variety of relevant details
- format documents properly
- parenthetically reference sources used in paper
- cite sources in a properly formatted works-cited page
- evaluate source credibility
- integrate credible sources using appropriate formatting standards
- revise essay drafts to improve focus and strengthen ideas
- construct sentences that demonstrate control of grammar, sentence variety, word choice, and conventions of standard written English

Catalog Date: June 1, 2020
This course emphasizes writing and includes reading, research, and critical thinking skills essential for successful completion of a college degree. It covers writing assignments, including expository and argumentative essays (6,000 words minimum for course) using MLA documentation and format. It also includes reading assignments selected from a variety of transfer-level texts of substantial length. This course is not open to students who have successfully completed ENGWR 480.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- assess complex texts for audience, purpose, tone, and development.
- evaluate arguments for logical consistencies and fallacies.
- synthesize concepts and evidence from complex texts and sources.
- compose effective transfer-level essays.
- incorporate a variety of rhetorical strategies.
- integrate credible sources using appropriate citation and formatting standards.
- construct grammatically correct sentences employing a variety of structures and transfer-level diction.

ENGWR 301 College Composition and Literature

Units: 3
Hours: 54 hours LEC
Prerequisite: ENGWR 300 or 480 with a grade of "C" or better
Transferable: CSU; UC
General Education: AA/AS Area II(b); CSU Area A2; IGETC Area 1A
C-ID: C-ID ENGL 100
Catalog Date: June 1, 2020

This course offers study of literary texts, with emphasis on analytical reading and writing. It covers principles of argument and analysis, such as reasoning inductively and deductively. Assigned texts include novels, short stories, poems, plays or films, and literary criticism. Essays written for the course (6,000 words minimum) generalize from the texts to present carefully reasoned arguments. At least one essay includes citations from secondary sources, documented according to current MLA format. Not open to students who have successfully completed ENGWR 481.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze the cultural and historical contexts of literary works
- reason inductively from examples, patterns, and structures to form generalizations
- reason deductively by drawing conclusions about literary works
- compose a thesis-driven argument of interpretation or evaluation and support it with textual evidence, using a sufficient variety and number of appropriate examples
- compare opposing interpretations by literary scholars

ENGWR 302 Advanced Composition and Critical Thinking

Units: 3
Hours: 54 hours LEC
Prerequisite: ENGWR 300 or 480 with a grade of "C" or better
Advisory: ENGRD 310 or 312
Transferable: CSU; UC
General Education: AA/AS Area II(b); CSU Area A3; IGETC Area 1B
C-ID: C-ID ENGL 120
Catalog Date: June 1, 2020

This course develops analytical skills through writing and discussion. It examines methods by which people are persuaded to think, believe, and act. It also includes
analyses of arguments or expressions of opinions for their validity and soundness. Assigned readings include a variety of essays and a book-length text. Finally, this course focuses on critically assessing, developing, and effectively expressing and supporting opinions. Essays written for the course (6,000 words minimum) draw from the texts to present carefully reasoned arguments. At least one essay includes citations from secondary sources, documented according to current MLA format. This course is not open to students who have successfully completed ENGWR 482.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze, compare, and evaluate divergent perspectives
- evaluate complex systems of values, contexts, and assumptions in texts
- compose thesis-driven arguments of interpretation or evaluation and support them with textual evidence, using a sufficient variety and number of appropriate examples
- assemble, synthesize, and evaluate online and library research for use in a written argument
- compose rhetorically sophisticated sentences to help achieve their purposes in writing

ENGWR 303 Argumentative Writing and Critical Thinking Through Literature

Units: 4  
Hours: 72 hours LEC  
Prerequisite: ENGWR 300 or 480 with a grade of "C" or better  
Transferable: CSU; UC  
General Education: AA/AS Area I(b); CSU Area A3; IGETC Area 1B  
C-ID: C-ID ENGL 105; C-ID ENGL 110; C-ID ENGL 120  
Catalog Date: June 1, 2020

Through the study of complex literary works in all major genres, this course offers instruction in analytical, critical, and argumentative writing; critical thinking; research strategies; information literacy; and proper documentation. Close reading skills and the aesthetic qualities of literature are also studied. A minimum of 6000 words of formal writing is required. Attendance at readings, plays, and/or films may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze and compare the social, historical, cultural, psychological, or aesthetic assumptions of complex literary texts
- analyze formal and informal fallacies in literary analysis
- analyze and employ inductive and deductive reasoning and argumentative appeals using logos, ethos, and pathos
- analyze and interpret literary texts by identifying key elements of major genres
- analyze and interpret specific literary texts, defining and applying common literary devices
- synthesize appropriate textual evidence and examples, demonstrating appropriate academic discourse and the conventions of literary analysis
- synthesize primary and secondary sources into written work without plagiarism, demonstrating appropriate documentation format
- compose thesis-driven arguments to suit a variety of rhetorical situations, including interpretation, evaluation, and analysis
- compose essays in a style and tone appropriate to the academic community that are generally free of sentence errors of grammar, usage, and punctuation
- analyze complex literary texts, applying skills such as note-taking, annotating, and paraphrasing
- apply strategies to self-assess learning and comprehension

ENGWR 304 Advanced Writing in the Disciplines (WID)

Units: 0.5 - 1  
Hours: 9 - 18 hours LEC  
Prerequisite: None.  
Transferable: CSU  
Catalog Date: June 1, 2020

This course offers small and large group instruction on the writing processes and writing strategies necessary to compose academic essays and reports that follow the guidelines and requirements of a specific discipline. Additionally, approaches to composing longer, more complex writing tasks following a discipline's style are taught.
Topics vary according to need and may include the principles of the writing process, analysis of discipline-specific writing assignments, strategies for revision, and research and documentation skills such as APA or MLA. In order to take this course, students must be enrolled in at least one other transfer-level course. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply discipline-specific writing strategies for transfer-level writing assignments
- demonstrate proficiency in the discipline-specific writing skills studied
- compose and revise written transfer-level assignments following the academic style required for a specific discipline

ENGWR 306 Advanced Writing Across the Curriculum (WAC)

<table>
<thead>
<tr>
<th>Units:</th>
<th>0.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>9 hours LEC</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Transferable:</td>
<td>CSU</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course offers individualized and small-group instruction focused on helping students from all academic disciplines apply appropriate writing processes and use transfer-level writing strategies required for academic composition. Topics vary according to need and may include the principles of the writing process, analysis of writing assignments, strategies for revision, and research and documentation skills. In order to take this course, students must be enrolled in at least one other transfer-level course. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply writing strategies for a variety of written assignments
- demonstrate proficiency in the advanced writing skills studied
- compose and revise written transfer-level assignments

ENGWR 360 Writing in the Disciplines: Composing Essays in History

<table>
<thead>
<tr>
<th>Units:</th>
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</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>9 - 18 hours LEC</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Transferable:</td>
<td>CSU</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
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</tbody>
</table>

This course offers small and large group instruction on the writing processes and writing strategies necessary to compose academic essays and reports that follow the guidelines and requirements of the History discipline. Additionally, approaches to composing longer, more complex writing tasks following this discipline's style are covered. Topics include the principles of the writing process, analysis of discipline-specific writing assignments, strategies for revision, and research and documentation skills such as Chicago or MLA style. In order to take this course, students must be concurrently enrolled in at least one transfer-level History course. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply discipline-specific writing strategies for transfer-level History assignments
- demonstrate proficiency in the discipline-specific writing skills studied
- compose and revise written transfer-level assignments following the academic style required for the History discipline

ENGWR 361 Writing in the Disciplines: Composing Essays in the Social Sciences

<table>
<thead>
<tr>
<th>Units:</th>
<th>0.5 - 1</th>
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</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>9 - 18 hours LEC</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Transferable:</td>
<td>CSU</td>
</tr>
</tbody>
</table>

This course offers individualized and small-group instruction focused on helping students from all academic disciplines apply appropriate writing processes and use transfer-level writing strategies required for academic composition. Topics vary according to need and may include the principles of the writing process, analysis of writing assignments, strategies for revision, and research and documentation skills. In order to take this course, students must be enrolled in at least one other transfer-level course. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply discipline-specific writing strategies for transfer-level History assignments
- demonstrate proficiency in the discipline-specific writing skills studied
- compose and revise written transfer-level assignments following the academic style required for the History discipline
This course offers small and large group instruction on the writing processes and writing strategies necessary to compose academic essays and reports that follow the guidelines and requirements of the courses in the social science disciplines. Additionally, approaches to composing longer, more complex writing tasks following the styles of one or more disciplines in this area are covered. Topics include the principles of the writing process, analysis of discipline-specific writing assignments, strategies for revision, and research and documentation skills such as APA or Chicago style. In order to take this course, students must be concurrently enrolled in at least one transfer-level social science course, such as Psychology or Sociology. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply discipline-specific writing strategies for transfer-level assignments in social science courses
- demonstrate proficiency in the discipline-specific writing skills studied
- compose and revise written transfer-level assignments following the academic style required for the social science discipline studied

ENGWR 362 Writing in the Disciplines: Composing Essays in English

This course offers instruction on the writing processes and writing strategies necessary to compose academic essays. It includes an examination of the rationale for using a process-based approach to writing as well as specific writing strategies for prewriting, conducting and using research, drafting, revising, editing, and composing metacognitive reflections.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply a variety of writing strategies for different aspects of the writing process
- demonstrate understanding of the writing strategies studied
- compose metacognitive reflections about writing that demonstrate awareness of the importance of the process and strategies taught
- compose and revise written transfer-level assignments

ENGWR 480 Honors College Composition

This honors composition course requires the analysis of professional essays and at least one full-length volume of non-fiction that exhibits complexity in both subject and structure. It emphasizes the composition of carefully reasoned, stylistically sophisticated essays of varying lengths and in varying rhetorical modes, at least one of which includes research and appropriate MLA documentation. Essays written in this course will total at least 6,500 words. The course also emphasizes presentation of independent and collaborative research. This course is not open to students who have successfully completed ENGWR 300.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze essays, articles, and books that are complex in both subject and structure
- evaluate one full-length volume of non-fiction for style, tone, and content
- compose carefully reasoned essays, using various rhetorical strategies
- conduct research to gather information
apply complex critical thinking skills by defining issues; gathering, analyzing, evaluating, and synthesizing ideas; and developing conclusions

evaluate sources for credibility

collaborate in presenting responses, analyses, and evaluations of reading and writing assignments

organize and present individual project results

ENGWR 481 Honors College Composition and Literature

Units: 3
Hours: 54 hours LEC
Prerequisite: ENGWR 480 with a grade of "C" or better; OR ENGWR 300 with a grade of "C" or better AND placement into ENGWR 480.
Transferable: CSU; UC
General Education: AA/AS Area II(b); CSU Area A3; IGETC Area 1B
C-ID: C-ID ENGL 120
Catalog Date: June 1, 2020

This course is an advanced seminar in critical reading and writing about literature. Through complex, in-depth reading assignments, it examines the four major genres—the novel, the short story, poetry, and drama—in works by authors representing diverse perspectives and cultures. It covers inductive and deductive reasoning about literature and the written analysis of literature, requiring at least 6,500 words of formal, analytical writing. This course also examines literary theory and research, the use of primary and secondary sources, and MLA documentation. This course is not open to students who have successfully completed ENGWR 391.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• analyze the cultural, historical, biographical, ethnic, and philosophical contexts of literary works
• assess a variety of perspectives about literary works
• examine a wide range of literary conventions
• reason inductively from examples, patterns, themes, and structures to form generalizations about literary works
• reason deductively by drawing conclusions about the meaning of literary works
• compose interpretations of diverse literary works
• analyze works of literary criticism and theory

ENGWR 482 Honors Advanced Composition and Critical Thinking

Units: 3
Hours: 54 hours LEC
Prerequisite: ENGWR 480 (Honors College Composition) with a grade of "C" or better; OR ENGWR 300 with a grade of "C" or better AND placement into ENGWR 480.
Transferable: CSU; UC
General Education: AA/AS Area II(b); CSU Area A3; IGETC Area 1B
C-ID: C-ID ENGL 105
Catalog Date: June 1, 2020

This is an honors course in critical reasoning, reading, and writing, requiring a high level of competence in English composition. Complex texts—essay and book-length works—reflecting a variety of social, cultural, and historical contexts are read, discussed, and analyzed. Although this course focuses primarily on non-fictional texts, selected works of fiction may be included. This course focuses on the writing of formal academic essays which include primary and secondary research; MLA format is required for all essays, and a minimum of 6500 words is required for the course. Group and individual class presentations are required; at least one essay assignment requires independent reading. This course is not open to students who have successfully completed ENGWR 392.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• analyze the social, cultural, and historical contexts of various texts
• compose summaries of various texts
• evaluate texts for logical and emotional content
• evaluate content information for accuracy and credibility
• compose essays that integrate a variety of texts which reflect differing points of view
• compose essays that effectively address audience expectations
• reason inductively from examples, patterns, themes, and structures to form generalizations
• reason deductively by drawing conclusions about the meaning of specific details, words, or phrases
• demonstrate familiarity with a variety of schools of critical and rhetorical theory
• demonstrate appropriate documentation of sources
• demonstrate a sophisticated and effective style and vocabulary

ENGWR 495 Independent Studies in English - Writing

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.
American River College offers courses in English as a Second Language (ESL) designed exclusively to provide non-native speakers of English with a command of the language necessary to pursue career, transfer and degree goals. Students whose native language is English but who need help with language fundamentals should seek courses offered in the English Department.

Division Dean
Diana Hicks

Department Chairs
Sanda Valcu

Certificates of Achievement

Advanced Proficiency Certificate in English as a Second Language Certificate

The Advanced Proficiency Program recognizes attainment of English language abilities to an advanced-low level of English in listening, speaking, reading, writing, and grammar skills. It is suitable for use in academic classes at the community college level as well as in the workplace community.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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</thead>
<tbody>
<tr>
<td>ESL 320</td>
<td>Advanced-Low Listening and Speaking</td>
<td>3</td>
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<tr>
<td>ESLG 320</td>
<td>Advanced-Low Grammar</td>
<td>3</td>
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<td>A minimum of 6 units from the following:</td>
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<tr>
<td>ESL 325</td>
<td>Advanced-Low Integrated Reading and Writing (6)</td>
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<tr>
<td>ESLR 320</td>
<td>Advanced-Low Reading (4)</td>
<td></td>
</tr>
<tr>
<td>ESLW 320</td>
<td>Advanced-Low Writing (4)</td>
<td></td>
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<tr>
<td>Total Units:</td>
<td></td>
<td>12</td>
</tr>
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</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- write and edit clear, well-developed, and soundly structured essays on academic topics.
- summarize, paraphrase, and quote readings to integrate outside sources into writing.
- evaluate a variety of reading selections by critically analyzing, critiquing, and responding to readings both in class and out of class.
- compile accurate notes while listening to lectures and presentations.
- formulate and use a variety of interactive speaking strategies effectively such as clarification, polite interruption, and agreement/disagreement strategies using clear and comprehensible pronunciation.
- employ appropriate reading strategies and adjust reading speed appropriately to address a full range of reading tasks including reading for inferences and bias.
- demonstrate mastery of verb tenses and modal auxiliary uses.
- combine sentences, with emphasis on the ability to recognize, contrast, and analyze subordination and coordination.
Advanced-High Proficiency Certificate in English as a Second Language Certificate

This certificate recognizes attainment of English language abilities to an advanced-high level in listening, speaking, reading, writing, and grammar skills. It is suitable for use in academic classes at the community college level as well as in the workplace.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>ESL 350</td>
<td>Critical Reading, Research and Writing Through Literature</td>
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<tr>
<td>ESLR 340</td>
<td>Advanced Reading Skills Through Literature</td>
<td>4</td>
</tr>
<tr>
<td>ESLW 340</td>
<td>Advanced Composition</td>
<td>4</td>
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<tr>
<td>ESLG 320</td>
<td>Advanced-Low Grammar (3)</td>
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<tr>
<td>ESLL 320</td>
<td>Advanced-Low Listening and Speaking (3)</td>
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<td>Total Units</td>
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<td>16</td>
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</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- demonstrate comprehension of written and spoken English at an advanced-high level.
- produce written and spoken English at an advanced-high level.
- appraise texts and use appropriate reading strategies and reading rate effectively across a full range of reading tasks.
- comprehend a variety of complex fiction and nonfiction reading selections.
- analyze fiction and nonfiction readings for structure, audience, author intent and bias, main ideas, and literary and rhetorical devices.
- demonstrate advanced comprehension of fiction and nonfiction texts by composing written responses.
- evaluate arguments in nonfiction expository and argumentative texts.
- synthesize ideas from several complex readings, demonstrating critical thinking skills.
- draft, revise, edit, and proofread a wide variety of essay types effectively, showing mastery of English writing style, grammar, vocabulary, and mechanics.
- appraise and synthesize information on a variety of topics using library resources and credible Internet sources.
- compose a fully documented research paper based on a variety of reference works.

Certificates

Intermediate-High Proficiency in English as a Second Language Certificate

This certificate recognizes attainment of English language abilities at an intermediate-high level in listening, speaking, reading, writing, and grammar.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td></td>
<td>A minimum of 6 units from the following:</td>
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<tr>
<td>ESL 315</td>
<td>Intermediate-High Integrated Reading and Writing (6)</td>
<td>6</td>
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<tr>
<td>ESLR 310</td>
<td>Intermediate-High Reading (4)</td>
<td></td>
</tr>
</tbody>
</table>
Student Learning Outcomes

Upon completion of this program, the student will be able to:

- identify the central message and key supporting details of intermediate-high listening passages.
- apply oral skills to convey meaning clearly in brief oral presentations.
- analyze a text closely and recognize patterns of organization.
- outline, paraphrase, and summarize basic concepts from readings.
- write soundly structured, unified essays in response to prompts.
- demonstrate competency in using the 12 verb tenses.

Intermediate-Low Proficiency in English as a Second Language Certificate

This certificate recognizes attainment of English language abilities at an intermediate-low level in listening, speaking, reading, and writing.

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLR 40</td>
<td>Intermediate-Low Reading</td>
<td>4</td>
</tr>
<tr>
<td>ESLW 40</td>
<td>Intermediate-Low Writing</td>
<td>4</td>
</tr>
<tr>
<td>ESLL 40</td>
<td>Intermediate-Low Listening and Speaking</td>
<td>4</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>12</td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- communicate orally in basic English in common social and work situations.
- demonstrate comprehension of written and spoken English in familiar contexts.
- write basic, comprehensible English on familiar topics.

Intermediate-Mid Proficiency in English as a Second Language Certificate

This certificate recognizes attainment of English language abilities to an intermediate-mid level in listening, speaking, reading, writing, and grammar.

Catalog Date: June 1, 2020
Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>A minimum of 6 units from the following:</td>
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<tr>
<td>ESL 55</td>
<td>Intermediate-Mid Integrated Reading and Writing (6)</td>
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<tr>
<td>ESLR 50</td>
<td>Intermediate-Mid Reading (4)</td>
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<tr>
<td>ESLW 50</td>
<td>Intermediate-Mid Writing (4)</td>
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<td>A minimum of 7 units from the following:</td>
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<tr>
<td>ESL 54</td>
<td>Intermediate-Mid Skills Lab (0.5 - 1.5)</td>
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<tr>
<td>ESL 94</td>
<td>Intermediate-High Skills Lab (0.5 - 1.5)</td>
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<tr>
<td>ESLG 50</td>
<td>Intermediate-Mid Grammar (4)</td>
<td></td>
</tr>
<tr>
<td>ESLL 50</td>
<td>Intermediate-Mid Listening and Speaking (4)</td>
<td></td>
</tr>
<tr>
<td>Total Units:</td>
<td>13</td>
<td></td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- communicate orally in grammatical English in everyday social and work situations.
- demonstrate comprehension of written and spoken English in work and social contexts.
- write comprehensible, grammatical English on everyday topics.

English as a Second Language (ESL)

ESL 34 Novice-High Skills Lab

Units: 0.5 - 1.5
Hours: 27 - 81 hours LAB
Prerequisite: ESLL 20, ESLR 20, or ESLW 20 with a grade of "C" or better, or placement through the assessment process.
Catalog Date: June 1, 2020

This course develops, expands, and reinforces multiple English language skills at the novice-high level in an independent and/or small group environment. Coursework includes integrated study topics relative to vocabulary and study skills, reading and grammar use, idiomatic language study and application, conversation and listening skills, and assorted integrated software programs. Late registration is allowed as long as space is available and with the permission of the instructor. This course may be taken up to 3 times, for a total of 1.5 units, using different modules. This course is not a substitute for other ESL courses. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- utilize a variety of methods to communicate effectively.
- recognize and produce practical speech on topics such as family, health, employment, recreational activities, culture, and geography.
- identify main ideas, topic sentences, and supporting details in reading passages and in own writing.
- identify vocabulary meaning based on context clues.
- apply basic punctuation and capitalization rules.
- construct simple sentences using simple present, simple past, and future tenses.

ESL 37 Novice-High Integrated Reading and Writing

Units: 6
This course focuses on learning academic reading and writing skills at the novice-high level, with an emphasis on vocabulary development, reading comprehension, and the development of compositions. It covers developmental compositions with a clear beginning, middle, and end. This course is part of the reading and writing sequence which prepares ESL students to take college courses leading to a certificate, degree, and/or transfer.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- use an American English dictionary.
- recognize and use a larger vocabulary.
- use reading strategies such as skimming and scanning to identify general ideas and locate specific information.
- use background knowledge and schemata to improve understanding of a reading.
- use context clues to determine the meaning of new words.
- identify basic prefixes, suffixes and roots and use that information to determine the part of speech and meaning.
- employ the writing process to complete multi-paragraph writing assignments.
- write focused compositions with a clear beginning, middle, and end based on topics covered in the course.
- apply basic steps in the writing process including prewriting, writing, editing, and revising for in-class and out-of-class writing assignments.
- use basic writing and formatting conventions including punctuation, capitalization, margins, indentations, spelling, and legible handwriting.
- produce simple sentences as well as basic compound and complex sentences with correct English syntax, punctuation, and capitalization.
- apply critical thinking skills in the context of reading and writing a new language.
- use grammar such as the simple present, present progressive, simple past, and simple future correctly according to context.
- compose basic essays of at least three paragraphs with introductions, body paragraphs, and conclusions.
- demonstrate knowledge of high frequency words.

ESL 44 Intermediate-Low Skills Lab

Units: 0.5 - 1.5
Hours: 27 - 81 hours LAB
Prerequisite: ESSL 30, ESLR 30, or ESLW 30 with a grade of "C" or better, or placement through the assessment process.
Catalog Date: June 1, 2020

This course develops, expands, and reinforces multiple English language skills at the intermediate-low level in an independent and/or in small group environment. Coursework includes integrated study topics relative to vocabulary and study skills, reading and grammar use, idiomatic language study and application, conversation and listening skills, and assorted integrated software programs. Late registration is allowed as long as space is available and with the permission of the instructor. This course may be taken up to 3 times, for a total of 1.5 units, using different modules. This course is not a substitute for other ESL courses. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- utilize a variety of methods to communicate effectively.
- identify key information from listening to others, such as main idea and details.
- increase receptive and productive vocabulary.
- read clearly-organized, short, timed readings and answer comprehension and vocabulary-in-context questions.
- write clear simple and compound sentences and basic complex sentences.
- correctly use verbs in the present, past, and future in simple and progressive tenses.
- use modals correctly.
ESL 47 Intermediate-Low Integrated Reading and Writing

**Units:** 6  
**Hours:** 108 hours LEC  
**Prerequisite:** ESL 37, ESLR 30, and ESLW 30 with grades of "C" or better, or placement through the assessment process.  
**Catalog Date:** June 1, 2020

This integrated-skills course for non-native speakers of English focuses on developing academic reading and writing skills at the intermediate-low level with an emphasis on vocabulary, reading comprehension, critical thinking, and the writing process. With the information gathered through readings, students begin to use academic content to supplement their ideas in writing. Students build skills in pre-writing, structuring paragraphs, writing basic essays, and constructing a variety of sentence types. Completion of this course is equivalent to completion of both ESLW 40 and ESLR 40, and is not open to students who have completed both ESLW 40 and ESLR 40.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- demonstrate comprehension of multi-paragraph level-appropriate texts.
- employ level-appropriate vocabulary building strategies.
- synthesize content from readings and apply it to writing assignments.
- use common basic English sentence patterns.
- produce academic paragraphs and simple five-paragraph essays on a variety of topics following instructions in prompts.
- exhibit an emerging ability to revise essays for content and edit for language and grammar based on feedback.

ESL 54 Intermediate-Mid Skills Lab

**Units:** 0.5 - 1.5  
**Hours:** 27 - 81 hours LAB  
**Prerequisite:** ESLL 40, ESLR 40, or ESLW 40 with a grade of "C" or better, or placement through the assessment process.  
**Catalog Date:** June 1, 2020

This course develops, expands, and reinforces multiple English language skills at the intermediate-mid level in an independent and/or small group environment. Coursework includes integrated study topics relative to vocabulary and study skills, reading and grammar use, idiomatic language study and application, conversation and listening skills, and assorted integrated software programs. Late registration is allowed as long as space is available and with the permission of the instructor. This course may be taken up to 3 times, for a total of 1.5 units, using different modules. This course is not a substitute for other ESL courses. Pass/No Pass only.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- utilize a variety of methods to communicate effectively.
- increase both speaking rate, vocabulary, and listening comprehension in rehearsed and impromptu situations.
- initiate and respond to questions and conversations.
- show increased reading speed and comprehension.
- show increased vocabulary and comprehension of idiomatic American English.
- decide meanings of words based on context clues.
- write using a variety of compound and complex sentences with connecting words and phrases.
- correctly use verbs in the present, past and future in simple, progressive, and perfect tenses.
- use modals and gerunds correctly.
- edit writing for verb tense consistency and errors in verb tense and form.

ESL 55 Intermediate-Mid Integrated Reading and Writing

**Units:** 6  
**Hours:** 108 hours LEC  
**Prerequisite:** ESLR 40 and ESLW 40 with grades of "C" or better, or placement through the assessment process.
This intermediate-mid level integrated-skills course for non-native speakers of English is an accelerated pathway to complete 50-level coursework in reading and writing. This course integrates two existing courses, ESLR 50 and ESLW 50 and introduces academic reading skills through analyzing readings from a number of rhetorical styles as well as techniques and processes essential to reading comprehension and essay writing. Language instruction focuses on strengthening individual proofreading and editing skills. Completion of this course is equivalent to completion of both ESLW 50 and ESLR 50 and serves as a prerequisite to ESLR 310 and ESLW 310. This course is not open to students who have completed both ESLW 50 and ESLR 50.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the point, purpose, and point-of-view in readings.
- identify main ideas and supporting details in readings.
- analyze context to guess the meanings of words and to understand readings.
- identify basic organizational patterns (e.g., cause-effect, comparison-contrast, and opinion).
- identify specific elements of fiction (e.g., plot, character, setting, theme, and figurative language).
- produce simple summaries and personal responses based on readings.
- read and clearly respond to writing prompts.
- generate ideas for writing short essays by using techniques such as freewriting, listing, and clustering.
- produce well-developed, logically-organized final drafts through multiple drafts.
- use transitions to connect ideas and paragraphs effectively.
- produce essays and paragraphs with focused thesis statements, relevant topic sentences, specific examples, and details.
- use basic essay format, including titles and paragraph and margin indentations.
- write clear compound and complex sentences using correct capitalization, spelling, and punctuation.
- edit for basic verb tenses, verb tense consistency, and verb forms.
- apply strategies for writing timed essays.

ESL 94 Intermediate-High Skills Lab

Units: 0.5 - 1.5
Hours: 27 - 81 hours LAB
Prerequisite: ESL 55, ESLG 50, ESLL 50, ESLR 50, or ESLW 50 with a grade of "C" or better, or placement through the assessment process.
Catalog Date: June 1, 2020

This course develops, expands, and reinforces multiple English language skills at the intermediate-high level in an independent and/or in small group environment. Coursework includes integrated study topics relative to vocabulary and study skills, reading and grammar use, idiomatic language study and application, conversation and listening skills, workplace skills, composition and writing, and assorted integrated software programs. Late registration is allowed as long as space is available and with the permission of the instructor. This course is not a substitute for other ESL courses. This course may be taken up to three times for a total of 1.5 units, using different modules. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- utilize a variety of methods to communicate effectively.
- produce clear speech and increase speaking rate, vocabulary, and listening comprehension in rehearsed and impromptu situations.
- summarize extended oral discourse and take lecture notes.
- analyze texts and identify main ideas, supporting details, and patterns of organization.
- show increased vocabulary and comprehension of idiomatic American English.
- deduce meanings of words based on context clues.
- write using a variety of compound and complex sentences with connecting words and phrases.
- apply level-appropriate grammar and usage patterns.
ESL 311 College ESL Newsletter Production

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: ESLL 50, ESLR 50, and ESLW 50 with grades of "C" or better, or placement through the assessment process.
Transferable: CSU
Catalog Date: June 1, 2020

This course offers experience in developing and producing newsletters featuring ESL student writing, interviews of students, staff, and faculty, various advice and information columns, and language tips that include grammar, vocabulary development, and pronunciation for basic language skills acquisition (four to six times a semester).

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- contribute to the development and publication of a college newsletter
- research, gather, assemble, and assess original student essays, columns, poetry, photographs, Internet articles, and materials for learning English
- plan the layout of the newsletter, utilizing a desktop publishing program
- edit for accuracy
- market and distribute the newsletter on campus
- conduct and record interviews of campus figures, including faculty, staff, and fellow students, and transcribe the results

ESL 315 Intermediate-High Integrated Reading and Writing

Units: 6
Hours: 108 hours LEC
Prerequisite: ESLR 50 (Intermediate-Mid Reading) and ESLW 50 (Intermediate-Mid Writing), OR ESL 55 (Intermediate-Mid Integrated Reading and Writing)
Transferable: CSU; UC (The UC limits ESL course credit - ESL and/or ESLW courses, combined maximum credit, 8 units)
Catalog Date: June 1, 2020

This intermediate-high level integrated-skills course for non-native speakers of English is an accelerated pathway to complete 310-level coursework in reading and writing. This course integrates two existing courses, ESLR 310 and ESLW 310, and introduces academic reading skills through analyzing readings from a number of rhetorical styles as well as techniques and processes essential to reading comprehension and essay writing. Language instruction focuses on strengthening individual proofreading and editing skills. Completion of this course is equivalent to completion of both ESLR 310 and ESLW 310 and serves as a prerequisite to ESLR 320, ESLW 320, and ESL 325. This course is not open to students who have completed both ESLR 310 and ESLW 310.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the point, purpose, and point-of-view in readings.
- distinguish main ideas from supporting details in readings.
- infer author's intent from explicit statements.
- differentiate facts from opinions.
- demonstrate increased reading speed and comprehension.
- integrate context clues and word-attack skills in building vocabulary.
- demonstrate increased vocabulary by using new words in writing.
- outline, paraphrase, and summarize basic concepts from readings.
- synthesize soundly structured, unified essays in response to prompts.
- develop introductory, body, and concluding paragraphs in narrative, descriptive, cause-effect, and argumentative essays.
- revise essays for greater focus and clarity.
- write clear phrases; clauses; and simple, compound, and complex sentences.
• edit for verb and word form; indirect and direct speech; and passive vs. active voice.
• compose essays under time constraints.

ESL 325 Advanced-Low Integrated Reading and Writing

Units: 6
Hours: 108 hours LEC
Prerequisite: ESLR 310 and ESLW 310 with grades of "C" or better
Transferable: CSU; UC (The UC limits ESL course credit - ESL and/or ESLW courses, combined maximum credit, 8 units)
Catalog Date: June 1, 2020

This advanced-low level integrated-skills course for non-native speakers of English is an accelerated pathway to complete 320-level coursework in reading and writing. This course integrates two existing courses, ESLR 320 and ESLW 320, and focuses on refining academic reading and writing skills, as well as practice in synthesizing and integrating research into argumentative writing. Reading instruction emphasizes speed, vocabulary development, and analytical comprehension. Language instruction includes the construction of well-organized and focused academic essays on a variety of topics with a focus on the development of ideas in body paragraphs, sentence variety, and the mechanics of English. Written final drafts of essays totaling at least 6,000 words are required. Completion of this course is equivalent to completion of both ESLR 320 and ESLW 320 and serves as a prerequisite for ESLR 340 and ESLW 340. This course is not open to students who have completed both ESLR 320 and ESLW 320.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• examine long, complex reading passages and make inferences.
• appraise and critique reading passages for bias.
• adapt reading speed and style to material.
• recognize and use a wide variety of academic and idiomatic vocabulary.
• synthesize information from a range of texts and integrate it into writing by outlining, quoting, paraphrasing, and/or summarizing.
• apply basic research steps in the writing process.
• analyze sentence, paragraph, and essay structure and apply these concepts to composing clear, well-developed, and soundly structured essays on academic topics.
• develop effective persuasive essays under time constraints.
• demonstrate near-mastery of English writing style, grammar, vocabulary, and mechanics by revising, editing, and proofreading writing effectively.

ESL 350 Critical Reading, Research and Writing Through Literature

Units: 4
Hours: 72 hours LEC
Prerequisite: A grade of "C" or better in ESLW 340 OR a grade of "C" or better in ENGWR 300.
Transferable: CSU; UC ((maximum ESL & ESLW credits accepted - 8 units total))
General Education: AA/AS Area II(b); CSU Area A3
Catalog Date: June 1, 2020

This course covers reading and written analysis of culturally diverse complex literary works in all major genres, including poetry, drama, and fiction. It includes the development of analytical, integrative, and research skills in reading and writing. A variety of cultural and social perspectives are explored through the comparison of different ethnic groups within the U.S. as well as through library and outside research focusing on the influence of non-European and non-Western cultures on the content or style of the texts. Formal writing assignments total at least 6000 words. Attendance at readings, plays, and/or films may be required. This course is designed for students whose native language is not English.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• identify the elements of a variety of multicultural literary texts of differing genres, demonstrating the ability to use appropriate literary terms.
• analyze and respond to diverse academic level texts with a variety of cultural, social, historical, ethnic, and philosophical perspectives.
• evaluate credibility and bias in literary print and electronic research sources.
• integrate and synthesize information by paraphrasing, quoting, and summarizing readings within interpretative, analytical, and argumentative writing.
• incorporate and correctly cite relevant literary sources into writing.
• demonstrate advanced-level sentence structure, grammar, and vocabulary by revising, proofreading, and editing effectively.

English as a Second Language - Grammar (ESLG)

ESLG 31 Basic English Grammar

Units: 3
Hours: 54 hours LEC
Prerequisite: ESLW 20 with a grade of "C" or better, or placement through the assessment process.
Advisory: Concurrent enrollment in other ESL courses at the appropriate level.
Catalog Date: June 1, 2020

This is a course for English language learners at the novice-high level, which provides an introduction to the basics of English grammar including parts of speech, word form, word order, and the fundamental verb tenses necessary for spoken and written discourse. It is part of the grammar sequence that prepares ESL students to take college courses leading to a certificate, degree, and/or transfer.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• exhibit skill in using basic English grammar in spoken and written discourse.
• apply fundamental rules of mechanics and demonstrate skill and accuracy in using basic English handwriting and spelling.
• understand the use of auxiliary verbs and main verbs when constructing the past, present, and future tenses and creating negative statements, yes/no questions, and information questions.
• recognize and construct simple sentences and basic compound and complex sentences.
• apply basic editing steps to discover and correct errors.
• discuss basic U.S. academic and cultural expectations.

ESLG 41 Elements of English Sentences

Units: 3
Hours: 54 hours LEC
Prerequisite: ESLG 31 with a grade of "C" or better, or placement through the assessment process.
Advisory: Concurrent enrollment in other ESL courses at the appropriate level.
Catalog Date: June 1, 2020

This course focuses on learning academic grammar skills at the intermediate-low level, with an emphasis on fundamental grammatical structures in conversation, writing, and reading. It is part of the grammar sequence that prepares ESL students to take college courses leading to a certificate, degree, or transfer.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• apply rules in using basic English grammar in writing, reading, listening, and speaking.
• apply fundamental punctuation and capitalization rules, such as period, comma, and question mark.
• demonstrate skill and accuracy in using basic English handwriting and spelling.
• distinguish when to use verbs in the simple (present, past, and future) and progressive tenses.
• recognize and use basic modal verbs and expressions.
• differentiate between singular and plural noun forms and count/non-count nouns.

ESLG 50 Intermediate-Mid Grammar

Units: 4
This course concentrates on the fundamental grammatical structures of English at the intermediate-mid level. It focuses on grammatical structures in appropriate contexts. Oral and written practice with an emphasis on sentence structure and verb tenses is included.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate skill and accuracy in using basic English grammar
- use simple and progressive verb forms in past, present, and future
- ask questions with correct English word order
- distinguish and apply the rules for count and noncount nouns
- choose appropriate modal auxiliary verbs in different situations
- explain the differences and uses of adjectives and adverbs
- distinguish and apply the rules of gerunds and infinitives
- compare and differentiate the uses of present perfect and present perfect progressive verb tenses

ESLG 51 Grammar for Intermediate ESL Writers

Units: 3
Hours: 54 hours LEC
Prerequisite: ESLG 41 with a grade of "C" or better, or placement through the assessment process.
Advisory: Concurrent enrollment in an ESL Listening and Speaking and/or Integrated Reading and Writing course at the student's assessed level(s).
Catalog Date: June 1, 2020

This course focuses on further practice of the forms, meanings, and usage of grammatical structures of English at the intermediate-high level. New focal points include

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- use simple and progressive verb forms in past, present, and future tenses.
- formulate a variety of questions such as yes-no, wh-, choice and tag questions with correct English word order.
- use count and non-count nouns correctly with basic control of articles and other determiners.
- distinguish and apply the rules of gerunds and infinitives.
- choose appropriate modal auxiliary verbs in different situations.
- compare and differentiate the uses of present perfect and present perfect progressive verb tenses.
- apply basic editing steps to discover and correct errors.

ESLG 310 Intermediate-High Grammar

Units: 3
Hours: 54 hours LEC
Prerequisite: ESLG 50 or 51 with a grade of "C" or better, or placement through the assessment process.
Advisory: Enrollment in an ESL Listening and Speaking, Reading, and/or Writing course at the student's assessed level(s).
Transferable: CSU
Catalog Date: June 1, 2020

This course focuses on further practice of the forms, meanings, and usage of grammatical structures of English at the intermediate-high level. New focal points include
student will be able to:

- demonstrate skill in using targeted, level-appropriate grammar when speaking, listening, and writing.
- demonstrate both written and oral competency of the 12 verb tenses and present and past modal auxiliary verbs.
- apply rules for gerund and infinitive construction.
- construct sentences containing adjective clauses.
- compose grammatically correct sentences in active and passive voice.
- create both real and unreal conditional sentences in both the present and past tenses.
- analyze writing and oral conversation which contain direct and indirect speech.

ESLG 320 Advanced-Low Grammar

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate skill in using targeted, level-appropriate grammar when speaking, listening, and writing.
- demonstrate both written and oral competency of the 12 verb tenses and present and past modal auxiliary verbs.
- apply rules for gerund and infinitive construction.
- construct sentences containing adjective clauses.
- compose grammatically correct sentences in active and passive voice.
- create both real and unreal conditional sentences in both the present and past tenses.
- analyze writing and oral conversation which contain direct and indirect speech.

English as a Second Language - Listening (ESLL)

ESLL 20 Novice Listening and Speaking

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate skill in using targeted, level-appropriate grammar when speaking, listening, and writing.
- demonstrate both written and oral competency of verb tenses and modal auxiliary uses.
- combine sentences, with emphasis on the ability to recognize, contrast, and analyze subordination and coordination.
- recognize and generate sentences using conditional and subjunctive constructions.
- demonstrate mastery of passive voice and its uses.
- integrate noun clauses and adjective clauses into everyday conversation and written usage.
- employ adverb clauses when conversing and writing.
- construct adverb and adjective phrases from clauses.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- discriminate between a limited number of American English sounds
- produce a limited number of American English sounds
- express ideas and understand others during basic discussions about everyday topics with pronunciation comprehensible to a sensitive listener
- use language to help with miscommunications
- communicate by understanding and using the simple present and present progressive tenses
- demonstrate understanding of word order and pronoun use
- use and demonstrate question forms
- communicate by understanding and using basic vocabulary

ESLL 30 Novice-High Listening and Speaking

Units: 4
Hours: 72 hours LEC
Prerequisite: ESLL 20 with a grade of "C" or better, or placement through the assessment process.
Advisory: Concurrent enrollment in ESL Reading and Writing courses at the student's assessed levels are highly recommended.
Catalog Date: June 1, 2020

This is a course in listening comprehension and practical conversation for non-native English speakers who plan to take college courses. The sounds of American English, stress, rhythm, and intonation patterns are further developed.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify basic stress, rhythm, and intonation patterns of American English.
- demonstrate practical conversation skills in giving and receiving information, asking for repetition and clarification.
- recognize and produce practical speech on topics such as family, health, employment, recreational activities, culture, and geography.
- recognize some phonetic symbols and tell the differences in their sounds.
- implement and demonstrate increased vocabulary.
- implement and demonstrate simple present, present progressive, simple past, and simple future in both statement and question form.
- implement and demonstrate modals in the present tenses.

ESLL 31 Listening and Speaking for College Readiness

Units: 3
Hours: 54 hours LEC
Prerequisite: ESLL 20 with a grade of "C" or better, or placement through the assessment process.
Catalog Date: June 1, 2020

This course is part of the listening and speaking sequence that prepares ESL students to take college courses leading to a certificate, degree, and/or transfer. It focuses on learning vocabulary, participating in a variety of listening activities, and discussing a wide variety of topics. It helps students to recognize and produce the sounds, stress, rhythm, and intonation patterns of American English.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify basic stress, rhythm, and intonation patterns in English.
- demonstrate practical conversation skills in giving and receiving information, asking for repetition and clarification.
- recognize and produce sounds based on phonetic symbols.
• implement and demonstrate increased vocabulary on topics introduced in the classroom.

• implement and demonstrate grammar appropriate for this level, including simple and progressive verbs forms in both statement and question form, as well as modals in the present tense.

• demonstrate the ability to take simple notes.

ESLL 40 Intermediate-Low Listening and Speaking

Units: 4
Hours: 72 hours LEC
Prerequisite: ESLL 30 with a grade of "C" or better, or placement through the assessment process.
Advisory: Concurrent enrollment in ESL Reading and Writing courses at the student's assessed levels are highly recommended.
Catalog Date: June 1, 2020

This is a course for non-native speakers that develops the listening and speaking skills needed to succeed in college courses. It focuses on developing phrases and sentences to communicate ideas in familiar situations. It includes group and individual listening and speaking activities, as well as continued practice of American English sounds, stress, rhythm, and intonation patterns.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• use speaking skills, both practiced and not practiced, to talk about familiar topics using increased vocabulary and grammar.

• identify key information from listening to others, such as main idea and details.

• identify a number of phonetic symbols and describe the differences in their sounds.

• use different techniques for classroom interaction, including asking for repetition and clarification.

• produce syllables, stress, rhythm, and intonation patterns of English correctly.

• implement and demonstrate verbs in the simple past and past progressive tenses.

• implement and demonstrate modals in the present tense.

• implement and demonstrate modals in the future simple tense.

• implement and demonstrate verbs in the simple present and present progressive tenses.

• implement and demonstrate verbs in the future tense.

• communicate by understanding and using increased vocabulary.

ESLL 41 Listening, Speaking and Presentation Skills for College

Units: 3
Hours: 54 hours LEC
Prerequisite: ESLL 31 with a grade of "C" or better, or placement through the assessment process.
Catalog Date: June 1, 2020

This course is part of the listening and speaking sequence that prepares students to take college courses leading to a certificate, degree, and/or transfer. It covers developing tactics to communicate their ideas in academic situations, and practice in the pronunciation of English.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• employ a variety of listening strategies to understand main ideas and details in short academic spoken text.

• produce intelligible speech during conversations, discussions, and presentations.

• demonstrate knowledge of an increased vocabulary.

• use note-taking techniques to produce organized, accurate notes on information presented in class.

• organize and present information on academic topics, including academic expectations and resources, clearly and effectively.

• discuss US academic and cultural expectations.
demonstrate clearer pronunciation through discrete and suprasegmental pronunciation practice.

apply level-appropriate verb tense forms, such as present, past, and future simple and progressive tenses.

ESLL 50 Intermediate-Mid Listening and Speaking

Units: 4
Hours: 72 hours LEC
Prerequisite: ESLL 40 with a grade of "C" or better; or, for those not previously enrolled in an ESL listening course within the Los Rios district, placement through the assessment process.
Advisory: Concurrent enrollment in an ESL Reading and Writing course at the student's assessed level.
Catalog Date: June 1, 2020

This intermediate-mid level course, intended for non-native speakers of English, helps students understand and be understood in both familiar and unfamiliar situations. Class activities introduce academic listening and speaking activities and continue to work on pronunciation skills.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- speak with or without practice using appropriate vocabulary.
- initiate and respond to questions and conversations.
- combine a variety of techniques for classroom interaction, including clarification and polite interruption.
- paraphrase and summarize listening activities.
- accurately pronounce most English phonetic symbols.
- correctly respond to listening prompts.
- demonstrate correct pronunciation of the simple present and present progressive verb tenses in spoken English.
- demonstrate correct pronunciation of the simple past, past progressive, and present perfect verb tenses in spoken English.
- demonstrate understanding and correct pronunciation of the future verb tenses in spoken English.
- understand and correctly pronounce modals (can, may, etc.) and gerunds (-ing forms) in spoken English.

ESLL 51 Academic Communication, Notetaking, and College Success Skills

Units: 3
Hours: 54 hours LEC
Prerequisite: ESLL 41 with a grade of "C" or better, or placement through the assessment process.
Catalog Date: June 1, 2020

This intermediate mid-level course, intended for non-native speakers of English, helps students understand and be understood in both familiar and unfamiliar situations. Activities include academic listening and speaking activities and a continuation of pronunciation skills.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- take accurate notes and use outlining skills during academic presentations.
- paraphrase and summarize after listening to academic-level discourse and presentations.
- understand and use grammar appropriate to the level, including accurate question formation and verb tense usage.
- comprehend and use vocabulary appropriate to the level.
- combine a variety of techniques for classroom interaction, including clarification and polite interruption and disagreement.
- produce rehearsed and unrehearsed language comprehensible in an English-language classroom.
- participate effectively in a pluralistic academic setting.
- accurately hear and produce many phonetic symbols, with a focus on vowels.
ESLL 310 Intermediate-High Listening and Speaking

Units: 3
Hours: 54 hours LEC
Prerequisite: ESLL 50 or 51 with a grade of “C” or better; or, for those not previously enrolled in an ESL listening course within the Los Rios district, placement through the assessment process.
Advisory: Concurrent enrollment in an ESL Reading and Writing course, and/or Grammar course at the student’s assessed level(s).
Transferable: CSU
Catalog Date: June 1, 2020

This intermediate-high-level course, intended for non-native speakers of English, develops listening and speaking for academic purposes, including comprehension of lectures, note-taking, and classroom discussion. It includes a review of American English sounds with emphasis on understanding and producing stress, rhythm, and intonation patterns to communicate effectively.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- differentiate and reproduce most American English sounds in a controlled situation.
- accurately produce the sounds, stress, rhythm, and intonation of American English.
- demonstrate accurate notetaking.
- identify the central message and key supporting details of journalism-level language.
- choose appropriate responses in a variety of both formal and informal situations.
- convey meaning clearly in brief oral presentations.
- apply critical thinking skills to listening activities.
- develop and employ tactics to function in a pluralistic classroom, including demonstrating respect through language for respecting alternate viewpoints.

ESLL 320 Advanced-Low Listening and Speaking

Units: 3
Hours: 54 hours LEC
Prerequisite: ESLL 310 with a grade of “C” or better; or, for those not previously enrolled in an ESL listening course within the Los Rios district, placement through the assessment process.
Advisory: Concurrent enrollment in ESL Reading and Writing courses at the student’s assessed level.
Transferable: CSU
Catalog Date: June 1, 2020

This course provides intensive practice in listening and active participation strategies for U.S. college courses. Activities include listening to extended lectures from various subject areas, refining note-taking skills, participating in in-depth discussions, and giving oral presentations. Practice of pronunciation skills is also covered.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate competency in English oral communication skills, including giving presentations and communicating effectively both inside and outside of the classroom.
- demonstrate pronunciation competency to convey intended meaning, including accuracy in sound production, syllabification, and intonation.
- compose and present dialogues and reports with appropriate pronunciation, grammar, organization, and lexical choice.
- identify central meaning and supporting details in conceptually and linguistically complex discourse such as lectures, speeches, or reports.
- compile accurate notes while listening to lectures and presentations.
- formulate and use a variety of interactive strategies effectively such as clarification, polite interruption, and agreement/disagreement strategies.
- develop and employ tactics to function in a pluralistic classroom.

English as a Second Language - Pronunciation (ESLP)
ESLR 20 Novice Reading

Units: 4
Hours: 72 hours LEC
Prerequisite: Placement through the assessment process.
Advisory: One year of adult school and concurrent enrollment in ESL Writing and Listening/Speaking courses at the student's assessed levels are highly recommended.
Catalog Date: June 1, 2020

This course, intended for non-native speakers of English, focuses on literal understanding of basic vocabulary and readings at the Novice level. There is a focus on expanding basic vocabulary through readings, word parts, and word-form activities. The concepts of using context and giving personal reactions to readings are introduced.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- read simple words, sentences, and readings.
- respond correctly to basic comprehension questions.
- respond to and use basic vocabulary.
- identify and use appropriate word forms (nouns, verbs, and adjectives).
- identify the use of sentence word order, pronouns, and verb forms in the readings.
- write short responses to readings using learned expressions and format.

ESLR 30 Novice-High Reading

Units: 4
Hours: 72 hours LEC
Prerequisite: ESLR 20 with a grade of "C" or better; or, for those not previously enrolled in an ESL reading course within the Los Rios District, placement through the assessment process.
Advisory: Concurrent enrollment in ESL Listening and Speaking and Writing courses at the student's assessed level(s).
Catalog Date: June 1, 2020

This course focuses on literal comprehension of words, phrases, sentences, and paragraphs in short texts at the Novice-High level. Topics include core vocabulary, spelling rules, and grammar necessary to understand short readings.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- read at an increased speed.
- recognize and use a larger vocabulary.
- use an American English dictionary.
- use reading strategies in understanding text.
- apply written directions to task completion and identify points of confusion.
- recognize punctuation, emphasis, and paragraph markers.
- begin to identify main ideas in reading passages.
- use background information and schemata in understanding text.

ESLR 40 Intermediate-Low Reading

Units: 4
Hours: 72 hours LEC
Placement through the assessment process.
Prerequisite: ESLR 20 with a grade of "C" or better; or, for those not previously enrolled in an ESL reading course within the Los Rios District, placement through the assessment process.
Advisory: Concurrent enrollment in ESL Listening and Speaking and Writing courses at the student's assessed level(s).
Catalog Date: June 1, 2020

Student Learning Outcomes
This course, intended for non-native speakers of English, focuses on understanding vocabulary and readings at the Intermediate-Low level. It emphasizes developing reading skills, building vocabulary, and increasing fluency. Additional class activities include discussing and writing about readings.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- recognize main ideas in reading passages.
- increase receptive and productive vocabulary.
- identify vocabulary meaning based on context clues.
- write personal responses to ideas read and discussed.
- read clearly-organized, short, timed readings and answer comprehension and vocabulary-in-context questions.
- increase reading speed.
- use an American English dictionary effectively.
- locate topic sentences and major supporting details in simple readings.

ESLR 50 Intermediate-Mid Reading

Units: 4
Hours: 72 hours LEC
Prerequisite: ESLR 40 with a grade of "C" or better; or, for those not previously enrolled in an ESL reading course within the Los Rios District, placement through the assessment process.
Advisory: Concurrent enrollment in an ESL Listening/Speaking and an ESL Writing course at the student's assessed level.
Catalog Date: June 1, 2020

This course, intended for non-native speakers of English, focuses on the introduction of academic reading skills, with an emphasis on vocabulary development and literal comprehension. Course activities include reading, analyzing, discussing, and writing responses to ideas expressed in texts at the Intermediate-Mid level, as well as further practice with dictionary skills.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- show increased reading speed and comprehension.
- show increased vocabulary and comprehension of idiomatic American English.
- decide meanings of words based on context clues.
- find main ideas and supporting details.
- write personal responses that show understanding of readings.
- write simple summaries based on short readings.
- use a dictionary to divide, pronounce, and define words correctly.

ESLR 310 Intermediate-High Reading

Units: 4
Hours: 72 hours LEC
Prerequisite: ESLR 50, OR ESL 55 with a grade of "C" or better OR, for those not previously enrolled in an ESL reading course within the Los Rios District, placement through the assessment process.
Advisory: Concurrent enrollment in ESL Listening and Speaking and Writing courses at the student's assessed level(s).
Transferable: CSU
Catalog Date: June 1, 2020

This course, intended for non-native speakers of English, focuses on the introduction of academic reading skills at the Intermediate-High level with an emphasis on speed,
vocabulary expansion, and comprehension of ideas. It provides written and oral practice in understanding, paraphrasing, summarizing, and responding to ideas expressed in reading.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate increased reading speed and comprehension
- integrate context clues and word-attack skills in building vocabulary
- distinguish main ideas from supporting details
- differentiate fact from opinion
- infer author's intent from explicit statements
- analyze a text closely and recognize patterns of organization
- outline, paraphrase, and summarize basic concepts from readings
- demonstrate increased vocabulary by using new words in discussions and journal entries

ESLR 320 Advanced-Low Reading

Units: 4
Hours: 72 hours LEC
Prerequisite: ESLR 310 with a grade of "C" or better; or, for those not previously enrolled in an ESL reading course within the Los Rios District, placement through the assessment process.
Advisory: Concurrent enrollment in an ESL listening/speaking and an ESL writing course at the student's assessed level.
Transferable: CSU
Catalog Date: June 1, 2020

This course, intended for non-native speakers of English, focuses on refining academic reading skills with an emphasis on speed, vocabulary development, and analytical comprehension. It also includes practice in research and synthesizing skills and extensive writing based on critical analysis of readings at the Advanced-Low level.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- examine long, complex reading passages.
- appraise and critique reading passages for bias.
- make inferences.
- recognize a wide variety of academic and idiomatic vocabulary.
- outline, paraphrase, and summarize passages from a range of texts.
- adapt reading speed and style to material.
- apply basic research steps.
- synthesize research materials.

ESLR 340 Advanced Reading Skills Through Literature

Units: 4
Hours: 72 hours LEC
Prerequisite: ESLR 320 with a grade of "C" or better; or, for those not previously enrolled in an ESL reading course within the Los Rios District, placement through the assessment process.
Advisory: Concurrent enrollment in ESL Listening/Speaking and Writing courses at the student's assessed levels.
Transferable: CSU
Catalog Date: June 1, 2020

This course, intended for advanced non-native speakers of English, is designed to improve vocabulary and reading skills. Readings include various forms of literature from a variety of cultures, including essays, poetry, drama, short stories, and novels. This course focuses on further development of critical thinking and reading skills needed for academic performance: (1) analysis and comprehension skills, (2) research and synthesizing skills, (3) vocabulary development, and (4) flexibility of reading rate. It also emphasizes the comparison and contrast of universal and metaphorical themes, as applied in various cultures, and includes extensive writing based on critical analysis of
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- evaluate a variety of literary works by analyzing, critiquing, and responding to readings both in class and outside of class.
- distinguish theme, draw inferences, and recognize bias in complex texts.
- integrate context clues and apply appropriate strategies to build literary vocabulary and increase mastery of idiomatic American English.
- compose written responses to literary texts demonstrating advanced comprehension and critical thinking skills.
- evaluate research sources and literary texts.
- synthesize information by paraphrasing, quoting, and summarizing.
- integrate outside sources into written responses.
- use comprehension techniques and reading rate appropriate to material and purpose.

English as a Second Language - Writing (ESLW)

ESLW 20 Novice Writing

Units: 4
Hours: 72 hours LEC
Prerequisite: Placement through the assessment process
Advisory: One year of adult school and concurrent enrollment in ESL Reading and Listening/Speaking courses at the student’s assessed levels are highly recommended.
Catalog Date: June 1, 2020

This course for non-native speakers of English focuses on the structure of English sentences, including parts of speech and word order. Emphasis is on producing clear, basic written sentences at the novice level using everyday vocabulary. Question formation is also demonstrated and practiced.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- write simple sentences with correct capitalization and punctuation.
- use simple present and present progressive tenses of common verbs.
- write questions in correct word order.
- write sentences based on everyday topics and picture prompts in paragraph form.
- spell common words correctly.
- use clear handwriting placed correctly on the paper.

ESLW 30 Novice-High Writing

Units: 4
Hours: 72 hours LEC
Prerequisite: ESLW 20 with a grade of “C” or better; or, for those not previously enrolled in an ESL writing course within the Los Rios District, placement through the assessment process.
Advisory: Concurrent enrollment in other ESL skills and/or an ESL Center course at the student’s assessed level.
Catalog Date: June 1, 2020

This course covers novice-high-level writing in English for non-native speakers who plan to take college courses. It provides instruction and practice in writing simple sentences, paragraph structures, and a three-paragraph essay format within the context of topic assignments.

Student Learning Outcomes

Upon completion of this course, the student will be able to:
• use basic writing and formatting conventions such as punctuation, capitalization, margins, indentation, and clear handwriting.

• describe elements of simple and compound sentences.

• construct simple and compound sentences.

• use the editing process to discover and correct error patterns.

• apply critical thinking skills in the context of reading and writing a new language.

• compose basic essays of at least three paragraphs with introductions, body paragraphs, and conclusions.

• demonstrate knowledge of high frequency words on spelling list.

ESLW 40 Intermediate-Low Writing

Units: 4
Hours: 72 hours LEC
Prerequisite: ESLW 30 with a grade of "C" or better or, for those not previously enrolled in an ESL writing course within the Los Rios District, placement through the assessment process.
Advisory: Concurrent enrollment in other ESL skills and/or an ESL Center course at the student's assessed level.
Catalog Date: June 1, 2020

This intermediate-low course, intended for non-native speakers of English, provides brief practice in writing paragraphs with a clear beginning, middle, and end. It also introduces how to organize and focus paragraphs within basic essay structure. The writing processes introduced include multiple drafts of essays. In the process of writing multiple drafts, critical thinking skills and grammar and sentence structure in writing are also stressed.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• analyze example paragraphs and essays to identify main ideas, thesis statements, topic sentences, and supporting details.

• brainstorm ideas for writing paragraphs and short essays.

• produce academic paragraphs and five-paragraph essays on a variety of topics following instructions in prompts.

• compose thesis statements, topic sentences, and supporting sentences for paragraphs and essays.

• use basic paragraph and essay format, including titles and paragraph and margin indentations.

• write clear simple and compound sentences and basic complex sentences.

• use basic punctuation and capitalization rules.

• identify and use the basic parts of speech correctly.

• use verbs correctly in the present, past, and future simple tenses.

• use verbs correctly in the present and past progressive tenses.

• use present and future modals correctly.

• revise essay drafts for content.

• edit essay drafts to correct language and grammar.

• write timed in-class essays.

ESLW 50 Intermediate-Mid Writing

Units: 4
Hours: 72 hours LEC
Prerequisite: ESLW 40 with a grade of "C" or better or, for those not previously enrolled in an ESL writing course within the Los Rios District, placement through the assessment process.
Advisory: Concurrent enrollment in other ESL skills and/or an ESL Center course at the student's assessed level.
Catalog Date: June 1, 2020

This intermediate-mid course, intended for non-native speakers of English, covers techniques essential to essay writing in the process of teaching students to write standard five-paragraph academic essays. Verb tenses and other grammatical structures are revised, and control of sentence structure in longer pieces of writing is developed as language instruction focuses on strengthening individual proofreading and editing skills.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- brainstorm ideas for writing short essays.
- identify thesis, main ideas, topic sentences, supporting details, and concluding information in essays.
- use basic essay format, including titles and paragraph and margin indentations.
- use basic punctuation and capitalization rules.
- read and clearly understand writing prompts.
- write basic five-paragraph essays on a variety of topics following instructions in prompts.
- revise essay drafts for content.
- write using a variety of compound and complex sentences with connecting words and phrases.
- correctly use verbs in the present, past and future in simple, progressive, and perfect tenses.
- use modals and gerunds correctly.
- edit papers for verb tense consistency and errors in verb tense and form.
- write timed academic essays.

ESLW 310 Intermediate-High Writing

Units: 4  
Hours: 72 hours LEC  
Prerequisite: ESLW 50 OR ESL 55 with a grade of "C" or better OR, for those not previously enrolled in an ESL writing course within the Los Rios District, placement through the assessment process.  
Advisory: Concurrent enrollment in other ESL skills and/or an ESL Center course at the student's assessed level.  
Transferable: CSU; UC (maximum ESL & ESLW credit accepted - 8 units total)  
Catalog Date: June 1, 2020

This intermediate-high course for non-native speakers of English develops the ability to respond to a variety of essay assignments. The course focuses on writing for different purposes, sentence variety and control of a range of sentence structures.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- synthesize soundly structured, unified essays in response to prompts.
- revise and edit essays for greater focus and clarity.
- compose essays under time constraints.
- analyze and use phrases; clauses; and simple, compound, and complex sentences for clarity.
- identify strategies such as sentence combining and use them for variety and clarity.
- develop introductory, body, and concluding paragraphs in narrative, descriptive, cause-effect and argumentative essays.

ESLW 320 Advanced-Low Writing

Units: 4  
Hours: 72 hours LEC  
Prerequisite: ESLW 310 with a grade of "C" or better OR, for those not previously enrolled in an ESL writing course within the Los Rios District, placement through the ESL assessment process.  
Advisory: Concurrent enrollment in other ESL skills at the student's assessed levels and/or an ESL Center course at the student's assessed level.  
Transferable: CSU; UC (maximum ESL & ESLW credit accepted - 8 units total)  
Catalog Date: June 1, 2020

This advanced-low course for non-native speakers of English develops analytical and logical skills in the production of focused, developed and organized essays on a variety of topics. The course emphasizes the development of ideas in body paragraphs and the analysis and use of readings as a basis for ideas in argumentative essays. Sentence variety and the mechanics of English in the context of the essay are also covered in the course. Written final drafts totaling at least 6,000 words are required.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- compose clear, well-developed, and soundly structured essays on academic topics.
- evaluate a variety of reading selections by critically analyzing, critiquing, and responding to readings both in-class and out of class.
- develop effective persuasive essays under time constraints.
- synthesize information by summarizing, paraphrasing, and quoting readings to integrate outside sources into writing.
- demonstrate near-mastery of English writing style, grammar, vocabulary, and mechanics by revising, editing, and proofreading writing effectively.
- analyze sentence, paragraph, and essay structure and apply these concepts to writing.

ESLW 340 Advanced Composition

Units: 4
Hours: 72 hours LEC
Prerequisite: ESL 325 with a grade of "C" or better, or placement through the assessment process.
Transferable: CSU; UC ((maximum ESL & ESLW credit accepted - 8 units total))
General Education: AA/AS Area II(a); CSU Area A2
Catalog Date: June 1, 2020

This college composition course emphasizes writing, reading, critical thinking skills and research skills essential for completion of a college degree. It focuses on the needs of multilingual writers by addressing specific language and cultural content required for academic success at the college level. Writing assignments include expository and argumentative essays (6,500 words minimum in total) using MLA documentation and format. Writing assignments are based on reading of transfer-level texts that include diverse perspectives.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze and synthesize complex readings that represent a diversity of perspectives.
- compose organized and unified argumentative, interpretive, and analytical essays in response to collegiate-level readings.
- identify and employ genre-specific style and rhetorical choices across a variety of assignments, such as pathos in literacy narrative or logos in an analytical research paper.
- assess the credibility of online and print sources and integrate them in writing through effective paraphrase and quotation using MLA citation formatting standards.
- integrate research from multiple academic databases and assess bias in source material for a fully documented analytical research paper in MLA format.
- revise and edit writing for clarity of ideas and accuracy in grammar, punctuation, mechanics, and appropriate diction for the collegiate level.
Fashion | American River College

Division Dean  Angela Milano
Department Chairs  Dyanne Marte
 (916) 484-8433

Associate Degrees

A.A. in Fashion Design

This degree offers the skills necessary to coordinate original fashion design concepts with manufacturing, marketing, and merchandising practices. Course work includes basic apparel construction, pattern drafting, draping, textiles, historic and current fashion trends, hand and computer illustration, and entrepreneurial opportunities.

Catalog Date: June 1, 2020

Degree Requirements

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A minimum of 3 units from the following:

- FASHN 359  Knitwear Construction (1.5)
- FASHN 362  Tailoring Techniques (3)
- FASHN 363  Fashion Accessories and Embellishments (1.5)
- FASHN 380  Computer Patternmaking (3)
- FASHN 381  Couture Draping for Eveningwear (3)

Total Units: 42

The Fashion Design Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.
Student Learning Outcomes

Upon completion of this program, the student will be able to:

- identify and evaluate opportunities to start a design business in the fashion industry.
- analyze fashion fundamentals, fashion trends, fashion marketing, and global influences, as they relate to changes within the fashion industry.
- identify characteristics of various fibers, yarns, finishes, and fabrics as they relate to garments.
- communicate an idea or concept through a flat sketch or illustration utilizing free-hand and computer-generated techniques.
- utilize draping techniques to create original garment designs.
- construct patterns by computer generation and the flat pattern method.
- conceive designs, construct patterns, and sew garments to be shown in a fashion show.
- describe fashion and style features of historical and contemporary periods.
- create sample constructions utilizing basic apparel sewing skills.
- construct a garment with appropriate embellishment applications.
- research and identify apparel details, styles, and elements of design.

Career Information

This degree prepares students for entry-level jobs in apparel production companies, apparel manufacturing plants, designer workrooms, and custom sewing workrooms. It also prepares students for self-employment or entrepreneurship. Examples of careers in Fashion Design include Assistant Designer, CAD Technician, Computer Digitizer, Costing Engineer, Customer Services, Designer, Design Room Assistant, Fashion Illustrator, Fashion Stylist, First Pattern Maker, Grader, Manufacturer's Sales Representative, Marker Maker, Operation Manager, Piece Goods Buyer, Product Specialist, Production Manager, Production Pattern Maker, Quality Controller, Quick Response Manager, Sales Manager, Sample Maker, Sewing Room Supervisor, Showroom Assistant, Tailor, Textile Colorist, Textile Croquis Painter, Textile Designer, Textile Researcher, Textile Tester, and Trim Buyer.

A.A. in Fashion Merchandising

This degree offers the skills necessary for jobs in fashion coordinating, promotion, visual presentation, management, merchandising, retail buying, and entrepreneurial opportunities.

Catalog Date: June 1, 2020

Degree Requirements

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<td>Fashion Retail Buying</td>
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<td>ARTPH 370</td>
<td>Fashion, Wedding, and Portrait Photography (3)</td>
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<td>MGMT 362</td>
<td>Techniques of Management (3)</td>
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<td>MKT 310</td>
<td>Selling Professionally (3)</td>
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</table>
COURSE CODE | COURSE TITLE | UNITS
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MKT 312 | Retailing (3) | 
MKT 314 | Advertising (3) | 
Total Units: | 33 |

The Fashion Merchandising Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- compare and contrast historical garment design to contemporary dress.
- conceive and produce a fashion show.
- develop visual displays for a window presentation.
- draft a six-month retail buying plan.
- assess characteristics of various fibers and how they relate to the finished fabric.
- draw a flat working sketch and a fashion illustration.
- apply principles of time management, cost control, and decision-making to managerial responsibilities.
- develop a business plan for a fashion related business.
- create portfolios of fashion, wedding and portrait photographs.
- analyze and demonstrate the steps of professional selling, including approach, needs assessment, presentation, overcoming objections and negotiating, closing, and servicing of the sale.
- describe how the advertising industry operates and produces advertising through the work of advertisers, agencies, media, and suppliers.
- explain how retailers use merchandise management decisions to implement their retail strategy including planning, buying, pricing, branding, and promoting their merchandise.
- develop an awareness of image projection and the impact of silent communication.

Career Information

This degree prepares students for entry-level jobs in retail merchandising, such as department store buyers, small boutique buyers, visual merchandisers, sales associates, management trainees, product developers and wholesalers. It also prepares students for self-employment or entrepreneurship.

Certificates of Achievement

Fashion Design Certificate

This certificate provides the skills necessary to coordinate original design concepts with manufacturing, marketing, and merchandising practices. Course work concentrates on apparel construction techniques, pattern drafting, historic and current fashion trends, hand and computer illustration, textiles, and entrepreneurial opportunities as they relate to the fashion industry.

Catalog Date: June 1, 2020

Certificate Requirements

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<td><strong>Total Units:</strong></td>
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Student Learning Outcomes

Upon completion of this program, the student will be able to:

- identify and evaluate opportunities to start a design business in the fashion industry.
- analyze fashion fundamentals, fashion trends, fashion marketing, and global influences, as they relate to changes within the fashion industry.
- identify characteristics of various fibers, yarns, finishes, and fabrics as they relate to garments.
- communicate an idea or concept through a flat sketch or illustration utilizing free-hand and computer-generated techniques.
- utilize draping techniques to create original garment designs.
- construct patterns by computer generation and the flat pattern method.
- conceive designs, construct patterns, and sew garments to be shown in a fashion show.
- describe fashion and style features of historical and contemporary periods.
- create sample constructions utilizing basic apparel sewing skills.
- construct a garment with appropriate embellishment applications.
- research and identify apparel details, styles, and elements of design.

Career Information

This certificate prepares students for entry-level jobs in apparel production companies, apparel manufacturing plants, designer workrooms, and custom sewing workrooms. Examples of careers in Fashion Design include Assistant Designer, Customer Services, Designer, Design Room Assistant, Fashion Illustrator, Fashion Stylist, First Pattern Maker, Manufacturer's Sales Representative, Piece Goods Buyer, Product Specialist, Quality Controller, Sample Maker, Sewing Room Supervisor, Tailor, Textile Colorist, Textile Croquis Painter, Textile Designer, and Trim Buyer.

Fashion Merchandising Certificate

This certificate offers the skills necessary for jobs in the retail market. Course work concentrates on fashion coordination, promotion, visual presentation, management, merchandising, retail buying, and entrepreneurial opportunities.

Catalog Date: June 1, 2020
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**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- compare and contrast historical garment design to contemporary dress.
- conceive and produce a fashion show.
- develop visual displays for a window presentation.
- draft a six-month retail buying plan.
- assess characteristics of various fibers and how they relate to the finished fabric.
- draw a flat working sketch and a fashion illustration.
- apply principles of time management, cost control, and decision making to managerial responsibilities.
- develop a business plan for a fashion related business.
- create portfolios of fashion, wedding, and portrait photographs.
- analyze and demonstrate the steps of professional selling, including approach, needs assessment, presentation, overcoming objections and negotiating, closing, and servicing of the sale.
- describe how the advertising industry operates and produces advertising through the work of advertisers, agencies, media, and suppliers.
- explain how retailers use merchandise management decisions to implement their retail strategy, including planning, buying, pricing, branding, and promoting their merchandise.
- critique customer buying behavior and how it relates to fashion choices.

**Career Information**

This certificate prepares students for entry-level jobs in retail merchandising, such as department store buyers, boutique buyers, visual merchandisers, sales associates, management trainees, product developers and wholesalers. It also prepares students for self-employment or entrepreneurship.

**Certificates**
Apparel Construction Certificate

This certificate includes an introduction to the fashion industry and its job opportunities. It also provides the necessary background in fabrics, design elements, and sewing skills needed to enter the job market.

Catalog Date: June 1, 2020

Certificate Requirements

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</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- identify names and characteristics of various fibers and how they relate to the finished fabric.
- choose appropriate fabrics, notions, and tools for individual projects.
- create sample constructions utilizing basic and advanced sewing techniques.
- assemble and sew a garment using a commercial pattern.
- apply basic alterations to commercial patterns.
- utilize the elements and principles of design as they relate to fashion.

Career Information

This certificate prepares students for entry-level jobs in apparel production companies, designer workrooms, and custom sewing workrooms.

Fashion Entrepreneur Certificate

This certificate consists of four core fashion courses that explore entrepreneurial opportunities in the fashion industry. Topics include an introduction to the fashion industry, the creation of visual displays, retail buying, and development of a business plan. Students also choose 6 units from courses that include advertising, selling professionally, and fashion photography.

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COURSE CODE | COURSE TITLE | UNITS
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MKT 312 | Retailing (3) | 
MKT 314 | Advertising (3) | 
**Total Units:** | 15 |

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- research various entrepreneurial opportunities in the fashion industry.
- plan and coordinate promotional activities through a visual display.
- research current trends, formulate stock plans, and calculate market purchases.
- formulate a business plan that relates to a specific fashion business.
- compare and analyze the technical, economic, and global influences on fashion marketing.

**Career Information**

This certificate prepares students to become an entrepreneur in the fashion industry. It addresses the creation of a fashion-oriented business. Career opportunities exist in visual merchandising, retail buying, Internet-based businesses, and small boutiques.

**Fashion Illustration Certificate**

This certificate provides the skills to be a fashion illustrator. Utilizing the elements and principles of design, topics include the awareness of apparel details and styles, drawing flats and fashion illustrations, and the creation of a personal style. Both freehand and computer illustration techniques are utilized.

**Certificate Requirements**

| COURSE CODE | COURSE TITLE | UNITS |
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ART 300 | Drawing and Composition I | 3 |
ART 304 | Figure Drawing I | 3 |
FASHN 310 | Fashion Analysis/Clothing Selection | 3 |
FASHN 342 | Fashion Illustration | 3 |
FASHN 344 | Fashion Illustration II | 3 |
**Total Units:** | 15 |

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- analyze the elements and principles of design and apply them to drawing fashion figures.
- produce a fashion figure drawn with correct proportions and planar structure.
- examine apparel details, styles, and elements, and apply them to a flat or illustration.
- develop a flat sketch or illustration utilizing computer software.
- create an illustration using fashion trends and target customers as inspiration.

**Career Information**

This certificate prepares students for entry-level jobs in the following areas: Assistant Designer, Design Room Assistant, Fashion Illustrator, Textile Colorist, Textile Croquis.
Fashion Retailing Certificate Certificate

This certificate consists of three core fashion classes and a management class. Topics include an introduction to the fashion industry, product and apparel line development, retail management, and retail buying. Students choose an area of concentration that includes textile knowledge, fashion promotion, or retailing strategies.

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Student Learning Outcomes

Upon completion of this program, the student will be able to:

- research various career opportunities in fashion retail.
- assess the primary retail management functions, including time management, cost control, and decision making.
- evaluate the process of successful apparel product development.
- identify and define a target retail customer.
- describe the characteristics of various textile fabrications in relation to their use in textile items.
- assess the role of various advertising media as related to the fashion industry including newspaper, television, radio, and the internet.
- compare and contrast various retail locations, including shopping centers and malls, central business districts, and nontraditional locations, such as airports and hospitals.

Career Information

This certificate prepares students for entry level jobs in fashion retailing, including department store manager trainees, small boutique associate managers, sales associates, assistant buyers, and image consultants.

Patternmaking and Draping Certificate

This certificate is intended for students who have completed the Apparel Construction Certificate and need to obtain a higher skill level in the field. It explores draping and advanced apparel construction techniques, and develops beginning, advanced, and computer patternmaking skills. It offers students the necessary sewing and patternmaking skills to enter the job market.

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FASHN 294 Topics in Fashion

This course provides opportunities to study topics in fashion that are not included in current course offerings. Individualized topics may be developed in cooperation with the fashion industry to meet specialized training needs.

Upon completion of this course, the student will be able to:

- describe current subject matter as identified in cooperation with the fashion industry.
- apply skills to the level covered in the topical course outline.
- analyze and interpret data to complete written reports as designed for the topic.

FASHN 300 Introduction to the Fashion Industry

This course is a survey of the complex diversity of today’s fashion industry. It introduces the process of how the fashion business works in sequential order from the concept to the consumer. It also provides an overview of fashion design, production, distribution, and merchandising. Field trips may be required.

Upon completion of this course, the student will be able to:

- analyze and sketch style variations and interpret them in fabric.
- design and organize a fashion apparel line.
- recommend appropriate sewing equipment, supplies, and techniques for a given project.
- research entrepreneur opportunities and market segments in the fashion industry.
- create original patterns using flat pattern methods, draping techniques, or computer patternmaking software.
- construct a garment from an original pattern utilizing advanced sewing construction techniques.

Career Information

This certificate prepares students for entry level design-related jobs in apparel production companies, designer workrooms, and custom sewing workrooms. It also prepares students for self-employment or entrepreneurship. Examples of careers in Fashion Design include Assistant Designer, Designer, Design Room Assistant, Fashion Illustrator, Fashion Stylist, First Pattern Maker, Sample Maker, Sewing Room Supervisor, and Tailor.
Upon completion of this course, the student will be able to:

- identify how history and society changes fashion trends.
- analyze international and American fashion trends and explain how they relate to each other.
- describe how fashion progresses from the conception of a design to the final product.
- explain the globalization of fashion in today's market.
- explain fashion adoption theories in relation to consumer acceptance.
- analyze marketing techniques as they relate to the fashion industry.

FASHN 310 Fashion Analysis/Clothing Selection

Units: 3  
Hours: 54 hours LEC  
Prerequisite: None.  
Transferable: CSU  
Catalog Date: June 1, 2020  

This course explores how social, political, cultural, technological, and environmental influences are reflected in current fashion trends. Attitude of dress, aesthetics, image projection, and gender roles are explored as a form of silent communication. Consumer buying behavior and the response towards fashion trends are examined from varying generational viewpoints. Other aspects of fashion analysis include identifying apparel details, styles, and utilizing the elements and principles of design as they relate to fashion.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- examine current fashion trends and how they relate to cultural, social, political, technological, and environmental influences.
- analyze various consumer demographics and their impact on fashion trends.
- analyze image projection and its impact on silent communication.
- critique consumer buying behavior and how it relates to fashion choices.
- research and identify apparel details, styles, and elements of design.

FASHN 320 Textiles

Units: 3  
Hours: 36 hours LEC; 54 hours LAB  
Prerequisite: None.  
Transferable: CSU; UC  
Catalog Date: June 1, 2020  

This course is a study of natural and man-made fibers, methods of yarn and fabric production, methods of coloration, and finishes applied to yarns and fabrics. Topics include fiber chemistry; fiber, yarn, and textile production, properties, and performance; and textile specifications, regulations, testing, and innovations. It covers the selection, use, and care of fabrics as they relate to apparel, home furnishings, and sustainability.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- match names to characteristics of various natural and manufactured fibers.
- recognize different yarn structures and their relationship to textile properties and performance.
- interpret the characteristics of natural and manufactured fibers for their best use with apparel and home furnishings.
- identify fibers through lab tests.
- analyze the characteristics of woven, knit, and non-woven fabric with textile properties and performance.
- recognize differences in fabric dyeing, printing, and finishing processes.
- evaluate best uses of textiles based on fabrication characteristics, properties, performance, and sustainability.
build a collection of textiles for a specific purpose based and outcome based on textile characteristics, properties, performance, and sustainability.

FASHN 330 History of Western World Fashion

Units: 3
Hours: 54 hours LEC
Prerequisite: None
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGRW 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU
General Education: AA/AS Area I; CSU Area C1
Catalog Date: June 1, 2020

This course provides a comprehensive survey of how fashion has been influenced by major world historical events. Selected eras of history are viewed within a cultural, political, and economic context as expressed in dress. Emphasis includes cross-cultural influences on major fashion trends of the Western world from selected historical periods from the time of the Egyptians to the present. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- research and identify fashion and style features of selected historical periods from the time of the ancient Egyptians to the present day.
- identify how a garment changes from one period to another.
- analyze how politics, economics, technology, culture, and art have affected clothing styles in specific historical periods.
- compare historical clothing design to contemporary clothing design.
- use historical styles as inspiration for contemporary clothing designs.

FASHN 334 Vintage Costuming

Same As: TA 434
Units: 0.5 - 2
Hours: 4.5 - 18 hours LEC; 13.5 - 54 hours LAB
Prerequisite: None.
Advisory: FASHN 357 or TA 430; and eligible for ENGRD 310 or ENGRD 312 AND ENGRW 300, OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC
Catalog Date: June 1, 2020

This course covers the principles and techniques involved in developing and constructing period costumes and/or accessories through individual fabrication of costume pieces. The historical period or topic changes each semester. It is open to all skill levels, with basic knowledge of sewing recommended. This course is not open to students who have completed TA 434. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- research and identify historical costume pieces as covered in the specific semester's topic.
- compare and contrast the costume pieces of different historical periods.
- analyze the design and construction techniques necessary to create a period costume as specified in the specific semester's topic.
- construct period costume pieces as covered in the specific semester's topic.

FASHN 342 Fashion Illustration

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: ART 300 and 304
Transferable: CSU
Catalog Date: June 1, 2020

This course is an introduction to freehand and computer-generated fashion illustration. Illustration concepts unique to fashion are explored using various freehand drawing techniques.
techniques and computer design software. Design elements and principles including color, texture, line, balance, and apparel details are incorporated into the illustrations.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify the difference between a flat working sketch and a fashion illustration.
- draw freehand working sketches of fashion figures.
- communicate an idea or concept through a sketch generated by a freehand illustration.
- utilize basic computer skills in the development of a flat sketch.
- develop and revise hand-drawn sketches into more sophisticated illustrations using design illustration software.
- create storyboards that incorporate layouts supported by both freehand and computer-generated illustrations.

FASHN 344 Fashion Illustration II

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: FASHN 342 with a grade of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This course builds on the skills acquired in FASHN 342. Emphasis is placed on advanced design and illustration skills utilizing computer software. Topics include creating custom brushes and symbols, digital textile design and technical flats. The design process and layout techniques for fashion presentations are also introduced.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- design a fashion collection using computer design software.
- create a layout for a fashion presentation.
- create a digital textile design appropriate for a fashion collection.
- utilize custom brushes and symbols to draw fashion illustrations.
- create a technical flat that meets industry standards.

FASHN 357 Apparel Construction I

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

This course introduces basic apparel construction techniques. It emphasizes the development of sewing skills, the use and care of equipment, and selection of proper tools and fabric. No previous sewing experience is required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- recommend appropriate fabrics, notions, and tools for individual projects.
- distinguish garment constructions found in ready-to-wear clothing.
- create sample constructions utilizing basic sewing techniques.
- assemble and sew a garment using a commercial pattern.
FASHN 358 Apparel Construction II
This course focuses on the application and evaluation of apparel construction techniques, fit, and pattern alterations. Current fashion fabrics and shaping materials are introduced. Emphasis is on developing advanced skills in garment construction.

Upon completion of this course, the student will be able to:

- recommend appropriate sewing equipment, supplies, and techniques for a given project.
- construct a garment using advanced sewing construction techniques.
- create samples for a technique book using advanced sewing construction skills.
- make basic alterations to clothing patterns.

FASHN 359 Knitwear Construction
This course introduces basic knitwear apparel construction techniques. It emphasizes sewing equipment, supplies, and techniques specific to knits. Topics include knit fabric manipulation, knit pattern selection, and special knit construction techniques. A knit garment is created.

Upon completion of this course, the student will be able to:

- recommend appropriate sewing equipment, supplies, and techniques for a knit project.
- construct a garment using knitwear sewing techniques.
- create samples for a technique book using knitwear sewing techniques.
- analyze knit fabrics appropriate for various types of commercial patterns.

FASHN 362 Tailoring Techniques
This advanced apparel construction course introduces traditional and contemporary tailoring techniques. Topics include custom fitting, pattern work, fabric selection, and sewing methods specific to tailored garments. A lined tailored jacket or coat is created.

Upon completion of this course, the student will be able to:

- select appropriate fabrics and patterns to create a tailored garment.
- alter a pattern to create a custom fit.
- build a tailored jacket or coat from a commercial pattern.
FASHN 363 Fashion Accessories and Embellishments

Units: 1.5  
Hours: 18 hours LEC; 27 hours LAB  
Prerequisite: FASHN 357 with a grade of "C" or better  
Transferable: CSU  
Catalog Date: June 1, 2020

This course provides students with embellishment skills for trending fashion and couture level garments. Topics include embroidery, beading, fabric manipulation, applique, trims, and threadwork, with an emphasis on up-to-date interpretations of classic techniques.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- recommend embellishment applications for specific garment and accessory designs.
- compile examples of various types of embellishment fabrics, trims, and techniques.
- analyze past and present, and forecast future fashion and accessory embellishment trends.
- interpret various types of embellishments by constructing an accessory and enhance a garment with appropriate embellishment applications.
- identify proper tools and supplies for various embellishment techniques.
- state the elements of design and design principles that affect the overall appearance of the various embellishments.

FASHN 370 Pattern Adjustment and Clothing Alterations

Units: 3  
Hours: 36 hours LEC; 54 hours LAB  
Prerequisite: FASHN 310 and 358 with grades of "C" or better  
Transferable: CSU  
Catalog Date: June 1, 2020

This course develops skills needed to fully understand garment fit. Topics include the identification of different body types and silhouettes, and common fit problems. Also covered is how to alter ready-to-wear garments and adjust patterns to fit a variety of common fit problems. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- assess body types and associate the fitting issues related to those body types.
- compare how body types differ from industry standards.
- interpret body differences into an appropriate change on corresponding design pattern pieces.
- demonstrate pin and fit techniques for menswear and womenswear of different styles.
- incorporate basic to advanced garment alteration techniques to adjust clothing items to the pinned fittings.
- operate industrial equipment used in alterations shops.

FASHN 374 Pattern Making and Design

Units: 3  
Hours: 36 hours LEC; 54 hours LAB  
Prerequisite: FASHN 357 or TA 430 with a grade of "C" or better  
Advisory: MATH 25 or MATH 41 with a grade of "C" or better or placement through the placement process; AND eligible for ENGRD 116 and ENGWR 102 OR ESLR 320 and ESLW 320.  
Transferable: CSU  
Catalog Date: June 1, 2020

This course introduces the flat pattern method of apparel design. Pattern making techniques are perfected using half-scale patterns. Construction techniques are introduced...
for the completion of original designs. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- create various style lines in a pattern.
- create bodices, skirts, sleeves, and collars using the flat pattern method.
- draw simple sketches to represent designs.

FASHN 378 Advanced Pattern Making and Design

This course covers the creation of full-scale patterns, using advanced patternmaking techniques that include pattern drafting, flat patterning, duplicating ready-to-wear and grading. Full-scale garments are created from original designs, with an emphasis on fit and construction. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- draft basic pattern blocks.
- create a working sketch based on an original design.
- create a pattern using the principles of flat patterning.
- fit and alter a pattern.
- construct a garment in a logical, professional sequence.
- copy a design from ready-to-wear apparel.
- apply pattern grading formulas to basic garment patterns.
- formulate a cost sheet to track materials and time required for construction of a custom garment.

FASHN 379 Draping

This course applies the skills developed in FASHN 374 and introduces draping techniques using industry dress forms. Activities include developing an original design concept, draping several blocks and slopers which utilize a variety of techniques, and executing a final garment in fashion fabric.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze and sketch style variations and interpret them in fabric.
- create basic garment blocks through draping techniques.
- apply draping and design principles to create an original pattern.
- transfer fabric markings of a draped garment to a paper pattern.
- evaluate the fit of a draped garment.
FASHN 380 Computer Patternmaking

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: FASHN 374 with a grade of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This advanced pattern drafting course introduces industry computer software. It makes comprehensive use of patternmaking skills acquired in FASHN 374 Patternmaking. Working from a designer's sketch or photograph, patterns are drafted and completed using computer software.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- produce production patterns to industry standards.
- create patterns using computer software.
- prepare patterns for production.

FASHN 381 Couture Draping for Eveningwear

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: FASHN 379 with a grade of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This course introduces advanced draping skills for the creation of eveningwear. Topics include contouring techniques, foundation garments, advanced sewing skills, working with specialty fabrics, and custom fitting. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- select fabric and garment designs appropriate for eveningwear that complements the unique figure shape of an individual.
- utilize advanced draping techniques to create a couture gown.
- construct a corset foundation for eveningwear.
- incorporate a variety of advanced-level sewing construction skills into a finished garment.

FASHN 382 Collection Design and Production

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: FASHN 358, 378, and 379 with grades of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This course applies the skills obtained in previous design and patternmaking courses. Topics include designing a small collection, creating and modifying patterns, and constructing original garments. It explores the role of mood boards, costing, tech packs, and accessories. Finished collections are presented on the runway in a fashion show. One field trip may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- collect and record fashion trends and inspirations for a collection.
- choose appropriate fabric and trims for specific designs.
- design a coordinated group of garments.
- critique a garment design.
• develop a garment from an original pattern.
• summarize the differences between first and final fittings.
• select appropriate accessories to enhance the finished collection.
• calculate costing and assemble a tech pack.
• show a final collection on the runway in a fashion show.

FASHN 390 Alteration Shop

Units: 3
Hours: 18 hours LEC; 108 hours LAB
Prerequisite: FASHN 370 with a grade of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This course focuses on the operation and management of ready-to-wear garment alterations shop. It includes the study of starting an alterations business, local and government business rules and regulations, workroom supplies and equipment, workflow and scheduling, customer service, advertising and promotions, sales and costing, and performing garment alterations. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• evaluate basic types of alteration services and customer needs.
• identify potential target markets for an alteration business.
• design and develop alteration shop image, company profile, merchandising, and pricing strategy.
• prepare, manage, and critique accurate and efficient workflow schedules as well as client inflow, outflow, and quality control.
• generate purchase orders for workroom supplies using inventories, projected alterations, and cost-effective principles.
• apply basic pinning and alterations techniques to ready-to-wear garments.
• use formulas to construct and calculate profit and loss statements for the alterations shop.
• interpret labor laws, tax laws, licensing, and contract requirements as prescribed for small businesses by local and state government.

FASHN 393 Fashion Promotion

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

This course is a comprehensive study of the promotion and presentation techniques unique to the fashion industry, including fashion advertising, publicity, and marketing. It focuses on special events, such as fashion shows and trunk shows. It also covers the development of planning and technical skills through a fashion show production. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• assess the role of various advertising media as related to the fashion industry, including newspaper, television, radio, and digital media.
• construct a plan for the staging, seating, and setup of a fashion show.
• evaluate and select appropriate models for a runway presentation.
• produce a fashion show.
FASHN 395 Visual Merchandising

This course introduces current visual merchandising techniques, including equipment, lighting, and materials. The application of principles and practices in arranging and displaying fashion merchandise is covered. This practical experience with showcases, windows, and on-floor displays provides familiarity with professional fashion promotional presentations. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate proficiency in handling tools, materials, and props in creating successful visual displays.
- apply principles of design to arranging and displaying fashion merchandise.
- analyze and evaluate successful displays from single store and chain organizations.
- design and construct original visual displays.
- organize and employ original ideas for displays.

FASHN 397 Fashion Retail Buying

This course addresses the practical and business aspects of the fashion industry. Topics include defining the customer and researching current buying trends. Activities specific to fashion retail buying are explored, including developing a buying and stock plan and planning market purchases. Career opportunities in retail buying and merchandising are also explored. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze industry statistics and research current trends in fashion.
- create worksheets with embedded formulas to create a six-month buying plan.
- plan market purchases and formulate a stock assortment for a six-month buying plan.
- define a target customer.
- calculate mark-ups and mark-downs.

FASHN 398 Fashion Entrepreneur

This course provides the necessary skills to become an entrepreneur in the fashion industry. It addresses the creation of a small business specific to fashion retail or apparel design and manufacturing. Topics include recognizing and creating business opportunities, as well as marketing and selling techniques. A model business plan is developed by exploring resources necessary to be successful in a fashion business.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- evaluate opportunities to start a business in the fashion industry.
- draft a mission statement for a chosen fashion related business.
- analyze how to use the principles of selling to make effective sales.
- create a business plan that relates to a specific fashion business.

FASHN 495 Independent Studies in Fashion

Units: 1 - 3  
Hours: 54 - 162 hours LAB  
Prerequisite: None.  
Transferable: CSU  
Catalog Date: June 1, 2020

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

FASHN 498 Work Experience in Fashion

Units: 1 - 4  
Hours: 60 - 300 hours LAB  
Prerequisite: Students must be in a paid or unpaid internship, volunteer position, or job related to fashion with a cooperating site supervisor. Students are advised to consult with the Fashion Department faculty to review specific certificate and degree work experience requirements.  
Transferable: CSU  
General Education: AA/AS Area III(b)  
Catalog Date: June 1, 2020

This course provides students with opportunities to develop marketable skills in preparation for employment or advancement within the field of fashion. It is designed for students interested in work experience and/or internships in transfer-level degree occupational programs. Course content includes understanding the application of education to the workforce, completion of Title 5 required forms which document the student’s progress and hours spent at the work site, and developing workplace skills and competencies. During the semester, the student is required to complete 75 hours of related paid work experience, or 60 hours of related unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. All students are required to attend the first class meeting, a mid-semester meeting, and a final meeting. Additionally, students who have not already successfully completed a Work Experience course will be required to attend weekly orientations while returning participants may meet individually with the instructor as needed. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate application of industry knowledge and theoretical concepts in the field of fashion related to a transfer degree level career as written in the minimum three (3) learning objectives created by the student and his/her employer or work site supervisor at the start of the course
- make effective decisions, use workforce information, and manage his/her personal career plans.
- behave professionally, ethically, and legally at work, consistent with applicable laws, regulations, and organizational norms.
- behave responsibly at work, exhibiting initiative and self-management in situations where it is needed.
- apply effective leadership styles at work, with consideration to group dynamics, team and individual decision making, and workforce diversity.
- communicate in oral, written, and other formats, as needed, in a variety of contexts at work.
- locate, organize, evaluate, and reference information at work.
- demonstrate originality and inventiveness at work by combining ideas or information in new ways, making connections between seemingly unrelated ideas, and reshaping goals in ways that reveal new possibilities using critical and creative thinking skills such as logical reasoning, analytical thinking, and problem-solving.
The fire technology program is dedicated to providing high quality training and educational programs for entry level and advanced level in-service instructional courses for those in paid and volunteer fire agencies. Our courses are categorized under the designations FT, FIRE, and FFS.

The FT courses, see page 286, are primarily degree/certificate applicable and include transferrable coursework to four-year colleges. These courses meet most fire agencies’ minimum qualifications for employment in our region and throughout California.

The FIRE courses, see page 287, and FFS courses, see page 296, are typically offered off-campus through an affiliate agency and have special enrollment limitations, prerequisites, require a different registration process, and may not be routinely offered. These courses include California State Fire Training certificate courses managed by the California State Fire Marshal.

Division Dean
Bryon G. Gustafson, Ph.D.

Department Chairs
TBD

(916) 570-5000

Associate Degree

A.A. in Fire Technology

This program focuses on preparing for a career in the fire service. It includes educational opportunities for those currently employed within the fire service and those within volunteer fire agencies. Courses include those required for transfer to four-year colleges, those required to meet eligibility requirements for employment, and those required for incentive salary increases.

Catalog Date: June 1, 2020

Degree Requirements

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<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
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<tbody>
<tr>
<td>FT 300</td>
<td>Fire Protection Organization</td>
<td>3</td>
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<tr>
<td>FT 301</td>
<td>Fire Prevention Technology</td>
<td>3</td>
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<tr>
<td>FT 302</td>
<td>Fire Protection Equipment and Systems</td>
<td>3</td>
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<tr>
<td>FT 303</td>
<td>Building Construction for Fire Protection</td>
<td>3</td>
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<tr>
<td>FT 304</td>
<td>Fire Behavior and Combustion</td>
<td>3</td>
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<tr>
<td>FT 305</td>
<td>Firefighter Safety and Survival</td>
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A minimum of 12 units from the following: 12

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<tr>
<th>COURSE CODE</th>
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<tbody>
<tr>
<td>FT 110</td>
<td>Fire Apparatus (3)</td>
<td></td>
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<tr>
<td>FT 130</td>
<td>Fire Company Organization and Management (3)</td>
<td></td>
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<tr>
<td>FT 170</td>
<td>Fire Investigation (3)</td>
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<tr>
<td>FT 180</td>
<td>Rescue Practices (3)</td>
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<tr>
<td>FT 190</td>
<td>Fire Tactics and Strategy (3)</td>
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<tr>
<td>FT 192</td>
<td>Wildland Fire Control (3)</td>
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<tr>
<td>FT 310</td>
<td>Fire Service Hydraulics (3)</td>
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<tr>
<td>FT 320</td>
<td>Hazardous Materials (3)</td>
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</table>

Total Units: 30
The Fire Technology Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- complete the duties of an entry level firefighter
- identify the fundamentals of the incident command system (ICS)
- compare and contrast the makeup of a moderate size fire department with a large fire department
- describe the components of firefighting personnel protective equipment (PPE)
- compare and contrast modern PPE with antiquated PPE
- analyze simulated fire situations for indicators of flashover versus backdraft potential and prescribe mitigation measures to prevent them from occurring
- assess the fundamentals of physical science as they relate to the fire services: measurements, energy and work theories, power and transfer of heat principles, the laws of matter and the conservation of energy, and the exothermic chemical reaction called combustion
- classify and compare various types of municipal water systems
- describe the fundamentals of building construction and apply this knowledge to fire situations where forcible entry and overhaul evolutions may weaken the already fire-weakened structure
- compare and contrast fire prevention versus fire suppression efforts
- draft a pre-fire plan
- evaluate and analyze the rate of fire spread in a structure fire
- explain the physical and chemical properties of fire
- describe how ICS is used by fire departments at emergencies
- compare and contrast the makeup of a fully paid department with a volunteer fire department

Career Information

Employment opportunities may be found in areas such as building inspection, fire investigation, fire prevention, hazardous materials specialist, public education, and firefighting.

Certificates of Achievement

Fire Technology Certificate

This program focuses on preparing for a career in the fire service. It includes educational opportunities for those currently employed within the fire service and those within volunteer fire agencies. Courses include those required for transfer to four-year colleges, those required to meet eligibility requirements for employment, and those required for incentive salary increases.

Catalog Date: June 1, 2020

Certificate Requirements

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<td>Hazardous Materials (3)</td>
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<td><strong>Total Units:</strong></td>
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</table>

### Student Learning Outcomes

Upon completion of this program, the student will be able to:

- complete the duties of an entry level firefighter
- identify the fundamentals of the incident command system (ICS)
- compare and contrast the makeup of a moderate size fire department with a large fire department
- describe the components of firefighting personnel protective equipment (PPE)
- compare and contrast modern PPE with antiquated PPE
- analyze simulated fire situations for indicators of flashover versus backdraft potential and prescribe mitigation measures to prevent them from occurring
- assess the fundamentals of physical science as they relate to the fire services: measurements, energy and work theories, power and transfer of heat principles, the laws of matter and the conservation of energy, and the exothermic chemical reaction called combustion
- classify and compare various types of municipal water systems
- describe the fundamentals of building construction and apply this knowledge to fire situations where forcible entry and overhaul evolutions may weaken the already fire-weakened structure
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- evaluate and analyze the rate of fire spread in a structure fire
- explain the physical and chemical properties of fire
- describe how ICS is used by fire departments at emergencies
- compare and contrast the makeup of a fully paid department with a volunteer fire department

### Career Information

Employment opportunities may be found in areas such as building inspection, fire investigation, fire prevention, hazardous materials specialist, public education, and firefighting.

### Firefighter Recruit Academy Certificate

This program provides the knowledge necessary to assume the role of firefighter with the ability to work effectively and safely with the fire environment as well as within a company in the fire department in all functions of that company. Topics include indoctrination into the fire service, general maintenance, apparatus and equipment operations, fire control, wildland firefighting, emergency vehicle operations, salvage, fire prevention and public education, fire and arson investigation, rapid intervention crew tactics, vehicle extrication, physical fitness/wellness, emergency care, and forcible entry.

**Catalog Date:** June 1, 2020

### Certificate Requirements
Student Learning Outcomes

Upon completion of this program, the student will be able to:

- identify and describe the history, development, structure, organization and responsibility of the Fire Service
- define, identify and apply the components and principles of the Incident Command System
- explain the core values of the fire service and its duty of providing service delivery to the public
- perform preventative maintenance to fire station, apparatus and equipment
- demonstrate the use of fire department apparatus and tools within the scope of assignment
- explain and apply the basic concept of fire control, fire and arson investigation and fire communication systems
- identify and demonstrate basic skills in public education procedures and instruction
- interpret work place rules and laws regarding harassment/discrimination policies and mandated reporting procedures
- relate to wellness programs, stress management and approved academy physical fitness programs
- identify and demonstrate first responder responsibilities for handling medical emergencies
- identify first responder responsibilities for mitigation of hazardous material incidents
- choose safe driving procedures for emergency response vehicles
- apply principles of vehicle extraction
- apply fire suppression tactics and strategies
- interpret wild land fire behavior, suppression techniques and safety measures
- demonstrate firefighter rescue and survival skills

Certificates

Fire Investigation 1A Certificate

This program provides participants with an introduction and basic overview of fire scene investigation. The focus of this course is to provide information in determining the area of fire origin in fires involving vehicles, structures, and wildland. Accidental and criminal fire causes are discussed in detail.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
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<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>FIRE 1670</td>
<td>Fire Investigation 1A, Fire Cause and Origin Determination (2)</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Total Units:</td>
<td>2</td>
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</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- distinguish the four different methods of heat transfer and compare their effects during a fire's progression
- choose the correct California Arson Law section when applying it to a factual situation
- recognize the elements necessary for the ignition and the sustained combustion of fuel and heat
- explain the elements required for an electrically caused fire to occur
- identify common scene indicators of arson and apply it to a factual situation
- describe the methodology required for a proper and thorough investigation of a structure, vehicle, and wildland fire
- differentiate between the different types of explosions and their unique effects

**Fire Investigation 1B Certificate**

This program expands on specific topics encountered by the fire investigator. These topics include detailed information on motives of fire setters; conducting a post blast scene; the investigation of a fire death; the recognition, collection, and preservation of evidence; interviewing and interrogation of witnesses and suspects; and the effect of a building's construction on the spread of fire.

Catalog Date: June 1, 2020

**Certificate Requirements**

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<tbody>
<tr>
<td>FIRE 1671</td>
<td>Fire Investigation 1B, Techniques of Fire Investigation</td>
<td>2</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>2</td>
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</table>

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- differentiate between the six common motives associated with fire setters
- examine a fire scene appraising the different safety hazardous associated with an investigation
- compare a fire scene investigation versus a post blast scene investigation
- examine a fire scene to determine the appropriate evidence to support a fire cause
- compare facts associated with an interview and an interrogation
- appraise a fire death scene to determine if a criminal act has occurred
- organize their case investigations utilizing proper case reports, resources, and insurance information

**Fire Investigation 2A Certificate**

This program provides information on how to investigate, apprehend, and convict arsonists. It focuses heavily on legal case preparation. Topics include interviewing and interrogating suspects, search and seizure, warrants, courtroom demeanor, and working with the district attorney's office.

Catalog Date: June 1, 2020

**Certificate Requirements**

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<tr>
<th>COURSE CODE</th>
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<th>UNITS</th>
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<tbody>
<tr>
<td>FIRE 1672</td>
<td>Fire Investigation 2A</td>
<td>2</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>2</td>
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</tbody>
</table>

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- differentiate among the three effects of an explosion
- validate an arson corpus after examining a practical fire scene
- appraise an explosion scene to determine if a criminal act has occurred
- organize a fire investigation utilizing case reports, court exhibits, and testimony
- differentiate between the U.S. Supreme Court's finding and California's Supreme Court's requirements in preparing a search warrant
- recognize the elements necessary for the ignition and the sustained combustion of fuel and heat in a practical situation
- describe the methodology and procedure required for a proper surveillance operation

Fire Investigation 2B Certificate

This program provides advanced instruction in fire scene investigation, case preparation, and courtroom presentation. Topics include reviewing fire scene photography, sketching, evidence collection, interviewing and interrogation, and extensive use of simulations for developing and presenting an arson case in court.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
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<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>FIRE 1673</td>
<td>Fire Investigation 2B</td>
<td>2</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>2</td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- demonstrate the proper procedure of qualifying as an expert witness in fire origin and cause
- structure interview questions with witnesses and suspects in accordance with federal and state law requirements
- identify common scene indicators of arson and apply it to a practical situation
- examine a fire scene to determine the appropriate evidence needed to support a criminal fire cause
- verify an arson corpus after examining a criminal fire scene

USDA Advanced Academy Certificate

This program is designed to provide the skills and knowledge necessary to perform as a team leader. Topics include leadership, fuels management, fire behavior, basic air operations, firing equipment and techniques, and fireline fatalities. This course is presented in a formal academy setting.

Catalog Date: June 1, 2020

Certificate Requirements

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- formulate a course of action based upon a hazard assessment of the fire environment
- evaluate for additional personnel at a fire scene
- identify and apply stress control techniques
- compare the roles and responsibilities of Firing-Boss and Ignition Specialist
- recognize ignition devices
- distinguish aircraft types and their capabilities
- compare the tactical and logistical missions of an aircraft
- explain basic smoke management
- construct a fire management plan
USDA Basic Academy Certificate

This course is designed to provide the skills and knowledge necessary to perform as a skilled Wildland Firefighter. Topics include physical fitness, wellness, nutrition, first responder medical, fire prevention, maps, compass, fire line construction, hand tool use, communications, leadership, and firefighter skills. The academy is presented in a formal setting.

Catalog Date: June 1, 2020

Certificate Requirements

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- construct a handline using various tools
- operate a belt weather kit
- document and analyze weather observations
- demonstrate two-rescuer cardiopulmonary resuscitation (CPR)
- evaluate types and extent of injuries
- formulate a course of immediate care after evaluating injuries
- compare and contrast media awareness related to fire safety and prevention
- inspect camp sites for fire violations and safety
- employ the four facets of physical fitness
- explain styles of leadership required in different settings

Fire Technology (FT)

FT 110 Fire Apparatus

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Catalog Date: June 1, 2020

This course covers various aspects of fire apparatus. Topics include design, typing, specifications, construction, performance capabilities, and maintenance. It also includes warning devices and the utilization of apparatus in fire service emergencies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- discuss fire apparatus history, typing, design, specifications, and construction
- describe the operation of various fire apparatus and specialized equipment
- analyze the difficulties of maintaining fire apparatus

FT 130 Fire Company Organization and Management

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
This course explores the organization and management of a fire department and the relationship of government agencies to the fire service. It emphasizes fire service leadership from the perspective of the company officer. Topics include ethical conduct, challenges of supervision, organizational structure, communication, human resource management functions, and administrative functions.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- compare and contrast leadership versus management within a fire organization
- discuss the leader’s role and responsibilities within a fire organization
- explain the different types of fire department organizations
- identify and describe the general functions of management within a fire organization
- describe the use of the incident management system for responses involving one or more units
- describe the need for research and development at the company level

FT 170 Fire Investigation

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Catalog Date: June 1, 2020

This course introduces the general practices involved in fire investigation. Topics include determining the cause of fires (accidental, suspicious, and incendiary); types of fires; related laws; introduction to incendiary fires; motives for starting fires; recognizing and preserving evidence; interviewing witnesses and suspects; and arrest, detention, and court procedures.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- describe how to recognize, protect, and preserve evidence of fire cause
- explain the techniques relating to court procedures
- explain the techniques for interviewing witnesses and suspects
- diagnose the point of origin at a fire scene
- describe the scientific method of fire investigation

FT 180 Rescue Practices

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Catalog Date: June 1, 2020

This course focuses on the identification and management of rescue situations, such as proper utilization and awareness of equipment, tools, and techniques to handle various rescue situations. Topics include vehicle extrication, water rescue, vertical rescue, building collapse, radiation hazards, hazardous materials rescue, fire situations including rapid intervention awareness, and other emergency situations.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- describe techniques for dealing with various rescue situations
- set up emergency rescue equipment
• describe confined space rescue operations
• improvise treatments for common medical injuries, using minimal equipment

FT 190 Fire Tactics and Strategy

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Catalog Date: June 1, 2020

This course is a basic requirement for all fire suppression personnel. Topics include the principles of fire control, utilization of staffing, equipment and placement, extinguishing agents, and fire control methods on the fireground.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• discuss the historical changes in fire service tactics and strategy
• assess the differences in fire extinguishing agents and apply the most effective methods to the situation
• estimate the staffing structure and equipment needs at an emergency utilizing the Incident Command System (ICS)
• calculate the best method for extinguishing the fire on the fireground
• recognize the divisions of fire tactics and strategy
• explain the role of each fire tactics and strategy division
• apply salvage and overhaul procedures at an emergency
• categorize fireground tactics and strategies used in urban and wildland emergency situations

FT 192 Wildland Fire Control

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Catalog Date: June 1, 2020

This course covers all aspects of wildland fire fighting and introduces advances in technology for wildland fire suppression. Topics include fire behavior, weather conditions, topography factors, safety, prevention, extinguishing methods, initial attack, Incident Command System (ICS), communications, aircraft assistances, hand crews, and bulldozer operation.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• assess wildland fire behavior as it relates to weather, fuel, and topography
• illustrate the wildland fire threat in California
• describe firefighters’ safety as it relates to wildland fire fighting
• demonstrate the methods used to bring wildland fires under control

FT 295 Independent Studies in Fire Technology

Units: 1 - 3
Prerequisite: None.
Catalog Date: June 1, 2020
FT 298 Work Experience in Fire Technology

This course provides students the opportunity to work in the Wildland Firefighter Apprenticeship Program (W.F.A.P.) for the purpose of developing specific skills to meet the goals and objectives of the National Interagency Joint Apprenticeship Committee (N.I.J.A.C.). Students complete work experience hours at approved training sites. Students may take up to 16 units total across all Work Experience course offerings. This course may be repeated when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester. One unit of credit is earned for each 60 hours of unpaid, or 75 hours of paid work.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate competencies for effective and competitive workforce performance in the Wildland Firefighter Apprenticeship Program (W.F.A.P.)
- demonstrate mastery of specific job skills as written in learning objectives under the supervision of the National Interagency Joint Apprenticeship Committee (N.I.J.A.C.)

FT 300 Fire Protection Organization

This course provides an introduction to fire protection, its career opportunities, and related fire service fields. Topics include philosophy and history of fire protection, fire loss analysis, organization and function of public and private fire protection services, fire departments as part of local government, as well as laws and regulations affecting the fire service. Additionally, fire service nomenclature, specific fire protection functions, basic fire chemistry and physics, introduction to fire protection systems, and introduction to fire strategy and tactics, are covered.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- illustrate and explain the history and culture of the fire service
- analyze the basic components of fire as a chemical chain reaction and the major phases of fire
- differentiate between fire service training and education, and explain the value of higher education to the professionalization of the fire service
- list and describe the major organizations that provide emergency response service and illustrate how they interrelate
- discuss and describe the scope, purpose, and organizational structure of fire and emergency services
- describe the common types of fire and emergency service facilities, equipment, and apparatus
- compare and contrast effective management concepts for various emergency situations
- identify the primary responsibilities of fire prevention personnel including: code enforcement, public information, and public and private protection systems
- describe the importance of wellness and fitness as it relates to emergency services
- examine the main factors that influence fire spread and fire behavior

FT 301 Fire Prevention Technology

This course provides students the opportunity to work in the Wildland Firefighter Apprenticeship Program (W.F.A.P.) for the purpose of developing specific skills to meet the goals and objectives of the National Interagency Joint Apprenticeship Committee (N.I.J.A.C.). Students complete work experience hours at approved training sites. Students may take up to 16 units total across all Work Experience course offerings. This course may be repeated when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester. One unit of credit is earned for each 60 hours of unpaid, or 75 hours of paid work.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate competencies for effective and competitive workforce performance in the Wildland Firefighter Apprenticeship Program (W.F.A.P.)
- demonstrate mastery of specific job skills as written in learning objectives under the supervision of the National Interagency Joint Apprenticeship Committee (N.I.J.A.C.)

FT 300 Fire Protection Organization

This course provides an introduction to fire protection, its career opportunities, and related fire service fields. Topics include philosophy and history of fire protection, fire loss analysis, organization and function of public and private fire protection services, fire departments as part of local government, as well as laws and regulations affecting the fire service. Additionally, fire service nomenclature, specific fire protection functions, basic fire chemistry and physics, introduction to fire protection systems, and introduction to fire strategy and tactics, are covered.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- illustrate and explain the history and culture of the fire service
- analyze the basic components of fire as a chemical chain reaction and the major phases of fire
- differentiate between fire service training and education, and explain the value of higher education to the professionalization of the fire service
- list and describe the major organizations that provide emergency response service and illustrate how they interrelate
- discuss and describe the scope, purpose, and organizational structure of fire and emergency services
- describe the common types of fire and emergency service facilities, equipment, and apparatus
- compare and contrast effective management concepts for various emergency situations
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FT 301 Fire Prevention Technology

This course provides students the opportunity to work in the Wildland Firefighter Apprenticeship Program (W.F.A.P.) for the purpose of developing specific skills to meet the goals and objectives of the National Interagency Joint Apprenticeship Committee (N.I.J.A.C.). Students complete work experience hours at approved training sites. Students may take up to 16 units total across all Work Experience course offerings. This course may be repeated when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester. One unit of credit is earned for each 60 hours of unpaid, or 75 hours of paid work.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate competencies for effective and competitive workforce performance in the Wildland Firefighter Apprenticeship Program (W.F.A.P.)
- demonstrate mastery of specific job skills as written in learning objectives under the supervision of the National Interagency Joint Apprenticeship Committee (N.I.J.A.C.)
This course provides fundamental knowledge relating to the field of fire prevention. Topics include history and philosophy of fire prevention, organization and operation of a fire prevention bureau, use and application of codes and standards, plans review, fire inspections, fire and life safety education, and fire investigation.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- define the national fire problem and the role of fire prevention.
- identify and describe fire prevention organizations and associations.
- define laws, authority having jurisdiction (AHJ), regulations, and fire codes.
- define the functions of a fire prevention bureau.
- describe inspection practices and procedures.
- identify and describe the standards for professional qualification for fire marshal, plans examiner, fire inspector, fire and life safety educator, and fire investigator.
- list opportunities in professional development for fire prevention personnel.
- describe the history and philosophy of fire prevention.

FT 302 Fire Protection Equipment and Systems

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU
Catalog Date: June 1, 2020

This course provides information relating to sprinkler design and the operation of fire detection and alarm systems. Topics include fire cause and effect, heat and smoke control systems, sprinkler systems, water supply for fire protection, standpipe systems, and portable fire extinguishers.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- compare smoke and fire movement in various types of construction and the relationship to systems and equipment
- identify organizations that provide information or service to fire protection systems
- compare types, classifications, and effectiveness ratings of fire extinguishers
- classify distribution, installation, and test requirements for fire extinguishers
- define types, components, and operation of fire protection systems and equipment for special hazards
- identify water supply requirements, distribution systems, and testing for public and private fire protection
- classify types, components, and operation of automatic and special sprinkler systems
- choose types of standpipe systems and water supply requirements
- compare detection, alarm, and supervisory devices and systems
- compare heat and smoke control devices and hardware

FT 303 Building Construction for Fire Protection

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU
Catalog Date: June 1, 2020
This course covers the components of building construction that relate to fire safety. Specific focus is on elements of construction and the design of structures that are shown to be key factors regarding inspecting of buildings, pre-planning fire operations, and emergency operations at fires. Topics include principles of fire and smoke growth, fire resistance construction, as well as wood, ordinary, steel, and concrete construction.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- classify safety concerns presented by the following loads: wind, snow, dead, live, fire, and impact
- evaluate fire stability for the following structural members: column, wall, arch, beam, and truss
- describe the key factors in the fire performance of three common floors and four ceilings found in wood and ordinary construction
- choose the key features of a wood frame building and their implications for fire stability
- analyze ordinary construction and cite factors in fire stability and fire spread
- list indicators of collapse in ordinary construction
- cite the possible fire hazards in various types of construction
- choose key factors that may be expected to lessen or increase the resistance of steel to stress and fire
- choose key factors that increase or lessen concrete’s resistance to stress and fire
- evaluate the probable impact of the following factors on smoke spread within buildings: buoyancy, expansion, stack effect, wind, Heating Ventilating Air Conditioning (HVAC), smoke control systems, fire protection systems, and detection systems
- define features that may adversely affect the safety of emergency operations in buildings under construction
- describe the history of fire resistance construction and its changes through the years

FT 304 Fire Behavior and Combustion

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU
General Education: AA/AS Area IV
Catalog Date: June 1, 2020

This course covers the theories and fundamentals of how and why fires start and spread, and how they are controlled. Topics include an in-depth study of fire chemistry and physics, fire characteristics of materials, extinguishing agents, and fire control techniques.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- classify the basic laws differentiating matter and energy
- compile basic terminology, definitions, and terms associated with basic fire chemistry
- compose some of the basic chemical symbols used in chemical formula writing
- identify physical properties in the three states of matter
- describe the Department of Transportation (DOT) warning placards and labeling systems
- identify the components of fire
- describe the various methods and techniques of fire extinguishing
- list the physical and chemical properties of fire
- differentiate and explain the phenomena of fire chemistry and behavior
FT 305 Firefighter Safety and Survival

This course introduces the principles and history related to the national firefighter life safety initiatives, focusing on the need for cultural and behavioral changes throughout the emergency services profession. It emphasizes occupational health and safety of firefighters as well as their personal and organizational accountability. Topics include safety, risk management, medical and fitness standards, industry standards relating to vehicle operation and road scene safety, as well as firefighter fatality case studies and analysis. This course emphasizes best safety practices before, during, and after the emergency incident.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the risk management process and the operational influence of “after action reviews” on safety
- explain the need for annual medical evaluations and the establishment of physical fitness criteria for emergency services personnel throughout their careers
- analyze case studies of emergency scene firefighter fatalities to determine, through examination of cause and effect, how to prevent such incidents in the future
- explain how technological advancements, training standards, and investigation of accidents and “near misses” can produce a higher level of firefighter safety and survival

FT 310 Fire Service Hydraulics

This course covers the theory of water hydraulics, hydraulic distribution systems, hydraulic practices, and extinguishing agents used with fire service hydraulics. Topics include the properties of water at rest and in motion, water velocity and discharge, distribution systems, fire service pumps, friction loss calculations, engine and nozzle pressures, and fire streams. This course also focuses on standpipe systems, automatic sprinkler systems, and foam systems.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- summarize the components related to water supply in fire service hydraulics.
- explain the properties of water at rest and in motion, velocity, and discharge.
- describe how water is discharged from a fire apparatus.
- explain the operational procedures of fire service pumps and their control devices.
- calculate the friction loss of water within a hydraulic system.

FT 320 Hazardous Materials

This course is an introduction to hazardous materials, including physical properties, uses in industry, and characteristics when involved in spills, fires, and accidents. It covers emergency procedures, legal requirements, and compliance with regulations. Topics include flammable and combustible liquids, flammable and non-flammable compressed gases, flammable solids and combustible metals, oxidizing agents, poison gases and liquids, radioactive substances, and corrosive materials.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- describe the various Department of Transportation (DOT) hazard classes
- describe the Department of Transportation's placarding and labeling system
- identify the basic physical properties and burning characteristics of the various classes of hazardous materials
- explain the need for scene isolation, scene stabilization, and incident control
- identify various acceptable methods of incident control measures depending upon the dangers of the chemicals
- analyze the health dangers and symptoms of chemical classes
- compare the safety considerations encumbered by the fire department to ensure compliance with state and federal guidelines

FT 495 Independent Studies in Fire Technology

Units: 1 - 3
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020
American River College offers courses in foreign languages designed to help students develop a command of a variety of languages necessary to pursue career, transfer and degree goals.

Division Dean
Diana Hicks

Department Chairs
Corinne Arrieta
Ines Garcia

(916) 484-8653

Associate Degree for Transfer

A.A.-T. in Spanish

This degree provides students with a major that fulfills the general requirements of the California State University for transfer. Students with this degree will receive priority admission with junior status to the California State University system. The Associate in Arts degree in Spanish for Transfer (AA-T) may be obtained by the completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program outlined below (earning a C or better in these courses) and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education Breadth Requirements.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>SPAN 401</td>
<td>Elementary Spanish</td>
<td>4</td>
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<tr>
<td>SPAN 402</td>
<td>Elementary Spanish</td>
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<tr>
<td>SPAN 411</td>
<td>Intermediate Spanish</td>
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<tr>
<td>SPAN 412</td>
<td>Intermediate Spanish</td>
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A minimum of 3 units from the following:

- FREN 411: Intermediate French (4)
- FREN 412: Intermediate French (4)
- HIST 327: History of the Chicano/Mexican American (3)
- HIST 373: History of Mexico (3)
- ITAL 411: Intermediate Italian (4)
- ITAL 412: Intermediate Italian (4)
- SOC 325: Chicano Culture (3)
- SPAN 361: Conversational Spanish, Intermediate (3)

Total Units: 19

The Associate in Arts in Spanish for Transfer (AA-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education Breadth Requirements.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- demonstrate proficiency in the five skills as mandated by the competency guidelines of the American Council of the Teaching of Foreign Languages (ACTFL): comprehension, speaking, reading, writing, and understanding the people and culture of the Spanish-speaking countries.

- utilize correct grammatical structures of standard Spanish.

- read Spanish proficiently as found, for example, in Spanish language newspapers, magazines, short stories, essays, and selections of poetry written by Spanish, Spanish-American, and Chicano authors.

- demonstrate appropriate writing and composition skills in Spanish.

- critique and discuss Latin American and Peninsular literature in a historical context.

- analyze and discuss major historical events and periods in the history of Spanish-speaking countries.

- compare and contrast aspects of the Spanish-speaking culture that are different or similar to one's own culture.

- compare and contrast aspects of Spanish to another modern language.

Career Information

This degree is designed to facilitate students' successful transfer to four-year colleges that prepare them for a variety of career opportunities, such as airlines/travel, banking, bilingual education, bilingual telecommunications, emergency services, foreign service, Foreign Language Teacher, imports and exports, international business, intelligence/military services, IRS/State Franchise Tax Board, law enforcement/correctional officer, social services, translating/interpreting, and tourism. Some careers may require additional training specific to the trade.

French (FREN)

FREN 401 Elementary French

Units: 4
Hours: 72 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: AA/AS Area I; CSU Area C2; IGETC Area 6
Catalog Date: June 1, 2020

This course introduces the language and culture of the French-speaking world. It includes the development of listening, speaking, reading, and writing French with emphasis on the communicative skills, as well as the fundamentals of French pronunciation and grammar.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- communicate basic information, concepts, and ideas in written and spoken French.

- respond appropriately to written and spoken French on a variety of topics, such as discussing plans for the future, making comparisons, and talking about past events.

- compare and contrast the nuances of French-speaking cultures with those of the English-speaking in the United States and their own culture.

- analyze and apply the grammatical rules of French and compare them with their own language.

- describe everyday aspects of French life such as gestures, expressions, daily life, family life, cuisine, fashion, film, art, literature, and music.

- become familiar with a variety of aspects of the Francophone world.

- discuss, in a limited way, the film, art, literature, and music of France and the Francophone world.

FREN 402 Elementary French

Units: 4
Hours: 72 hours LEC
Prerequisite: FREN 401 with a grade of "C" or better or 2 years of high school French.
Transferable: CSU; UC
General Education: AA/AS Area I; CSU Area C2; IGETC Area 6
This course follows FREN 401 and provides continued development of all language skills (listening, speaking, writing, and reading), with emphasis on communicative skills. Language acquisition is approached through a historical and cultural perspective.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- communicate basic information, concepts, and ideas in written and spoken French at a second semester level, such as discussing habitual past actions, hypothetical situations, future plans, giving commands, offering opinions, and expressing doubts.
- demonstrate a broader use of French vocabulary for practical, everyday use on a variety of topics, such as the home, city, holidays, vacation, and social and environmental issues.
- analyze and apply additional grammatical rules of French and compare them with one's own language.
- compare and contrast the nuances of French-speaking cultures with those of English-speaking culture in the United States and their own cultural experiences. Explore topics such the variety of housing options, the French educational system, customary celebrations, Paris and other major French cities, West Africa, the history of immigration in France, and social and environmental issues.
- discuss more broadly the film, art, music, and literature of France and the Francophone world.

FREN 411 Intermediate French

Units: 4
Hours: 72 hours LEC
Prerequisite: FREN 402 with a grade of "C" or better or 3 years of high school French.
Transferable: CSU; UC
General Education: AA/AS Area I; CSU Area C2; IGETC Area 3B; IGETC Area 6
Catalog Date: June 1, 2020

This is the first course in a two-course sequence designed for intermediate students of French. It builds on the skills acquired in beginning level French in order to increase students' active vocabulary, reinforce their mastery of basic grammar, and develop their ability to deal with more complex structures (ex. verbal phrases, subordinate clauses). Films, phonetic exercises, and other auditory materials, as well as a variety of readings (literary classics, non-fiction, contemporary journalism, etc.) are used to increase students' proficiency in French, increase historical and cultural awareness, and also to develop critical thinking skills. It provides opportunities for students to use more language, with greater flexibility and proficiency, on a wider range of topics, and to speak and write at greater lengths. Additionally, it includes additional exploration of French and Francophone cultures. This course prepares students for FREN 412.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- communicate information, concepts, and ideas in written and spoken French.
- apply/recognize similarities and differences between French and their own language.
- interpret written and spoken French on a variety of topics, such as films, adolescence, identity, student experiences, exile, and colonization.
- recall and consistently apply grammatical rules, such as the use of present and past tenses, the imperative, relative pronouns, demonstrative pronouns, and personal pronouns.
- recognize prominent examples of film, art, music, history, and literature from French and Francophone cultures, and relate them to their own cultures.
- make connections to other courses through a variety of learning strategies and critical-thinking skills that are useful across the curriculum.

FREN 412 Intermediate French

Units: 4
Hours: 72 hours LEC
Prerequisite: FREN 411 with a grade of "C" or better or 4 years of high school French.
Transferable: CSU; UC
General Education: AA/AS Area I; CSU Area C2; IGETC Area 3B; IGETC Area 6
Catalog Date: June 1, 2020

This course is the second course in a two-course sequence designed for intermediate students of French. This course advances students' vocabulary and solidifies their command of grammar, including more complex components. It also enables increased comprehension of and proficiency in French. Lastly, it expands their historical and cultural knowledge of the French and Francophone worlds, furthering greater cross-cultural awareness.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- use French to discuss and comprehend a variety of topics, such as canonical French literary texts, historical events and their significance, socio-cultural diversity, and contemporary politics.

- apply and analyze more complex grammatical structures, such as all uses of the subjunctive, pluperfect, future perfect, past conditional, the passé simple and its literary uses, and indefinite words and expressions.

- produce paragraphs and compositions in French to communicate, to demonstrate comprehension, to express information, to compare and contrast ideas, or to construct arguments.

- use a range of strategies to maintain communication: request clarification, repeat, restate, rephrase, and circumlocute.

- identify, analyze, and discuss classic and contemporary works of literature, art, music, and film, such as works by Cyrano de Bergerac, Jules Verne, and Eric-Emmanuel Schmitt.

- understand and discuss key moments and their lasting significance in French and Francophone history, such as French colonization in the Maghreb, the independence of former colonies, immigration, and French conceptions of national identity.

- make connections to other courses through a variety of learning strategies and critical-thinking skills that are useful across the curriculum.

FREN 495 Independent Studies in French

Units: 1 - 3  
Prerequisite: None.  
Transferable: CSU  
Catalog Date: June 1, 2020

German (GERM)

GERM 351 Conversational German, Elementary

Units: 3  
Hours: 54 hours LEC  
Prerequisite: None.  
Transferable: CSU  
Catalog Date: June 1, 2020

This course is designed for students at the first-semester level in German. Conversations and discussions, both controlled and spontaneous, are used to develop basic skills in German. Emphasis includes oral proficiency and development of German culture awareness.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- use basic conversational skills in everyday German.

- apply critical thinking language skills to cultural and social situations.

- collect, analyze, evaluate, and apply information about the cultures and peoples of the German world.

GERM 352 Conversational German, Elementary

Units: 3  
Hours: 54 hours LEC  
Prerequisite: GERM 351 with a grade of “C” or better or two years of high school German  
Transferable: CSU  
Catalog Date: June 1, 2020

This course is designed for students at the second-semester level in German. It continues the development of oral-aural skills in German through conversations and discussions, both controlled and spontaneous. Emphasis includes oral proficiency and development of German cultural awareness.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- improve basic conversational skills in everyday German.
- apply critical thinking language skills to cultural and social situations.
- collect, analyze, evaluate, and apply information about the cultures and peoples of the German world.
- demonstrate conversational fluency in practical situations.

**GERM 401 Elementary German I**

**Units:** 4  
**Hours:** 72 hours LEC  
**Prerequisite:** None  
**Transferable:** CSU; UC  
**General Education:** AA/AS Area I; CSU Area C2; IGETC Area 3B; IGETC Area 6  
**Catalog Date:** June 1, 2020

This course is an introduction to the language of the German-speaking people. It includes the fundamentals of German pronunciation and grammar, as well as the development of listening, reading, and writing with emphasis on the communicative skills.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- produce language that communicates information, concepts, and ideas about and in German to an audience of listeners and readers.
- engage in conversations and written correspondence in German to provide and obtain information, express feelings and emotions, and exchange opinions.
- interpret written and spoken German on a variety of topics such as personal data, families, weather, classes, schedules, daily routine, activities, and emotions.
- apply the grammatical rules of German and compare them to those of another language.
- connect German language and culture to other disciplines.
- define and examine some cultural differences.
- integrate German language and cultural knowledge within and beyond the classroom setting.

**GERM 402 Elementary German II**

**Units:** 4  
**Hours:** 72 hours LEC  
**Prerequisite:** GERM 401 with a grade of "C" or better or two years of high school German  
**Transferable:** CSU; UC  
**General Education:** AA/AS Area I; CSU Area C2; IGETC Area 3B; IGETC Area 6  
**Catalog Date:** June 1, 2020

This course continues to develop proficiency in speaking, reading, and writing German. It also explores the German culture and affords opportunities to make cross-linguistic and cross-cultural comparisons.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- demonstrate the four major skills of understanding, speaking, writing, and reading German.
- analyze patterns of the German language and compare German with another language.
- collect and evaluate information about the country, culture, and people of Germany.
- respond appropriately to written and spoken German on a variety of topics, such as food and cooking, workplace and household, daily life at home, and transportation and travel.
- compare various aspects of the German-speaking cultures with those of another culture.
- connect German language and culture to other disciplines.
- integrate German language and cultural knowledge within and beyond the classroom setting.
GERM 411 Intermediate German

Units: 4
Hours: 72 hours LEC
Prerequisite: GERM 402 with a grade of "C" or better or three years of high school German
Transferable: CSU; UC
General Education: AA/AS Area I; CSU Area C2; IGETC Area 3B; IGETC Area 6
Catalog Date: June 1, 2020

This course, which is the third in a series of four German courses, continues to develop proficiency in speaking, listening, reading, and writing German. It reviews German grammar and offers readings of varied texts, which further explore study of historical and cultural background of German-speaking countries and afford opportunities to make cross-linguistic and cross-cultural comparisons.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate the ability to speak and write German by means of discussions, oral reports, recitations, summaries, and compositions.
- interpret written and spoken German on a variety of topics such as childhood, youth, vacations, health and illnesses, and multicultural society.
- apply rules of the German language and recognize similarities and differences between German and another language.
- describe some everyday aspects of German culture, such as vacations, family traditions, fashion, health issues, and social responsibility.
- identify prominent examples of art, music, history, and literature from German culture.
- compare German culture to other cultures.
- connect German language and culture to other disciplines.
- integrate German language and cultural knowledge within and beyond the classroom setting.

GERM 412 Intermediate German

Units: 4
Hours: 72 hours LEC
Prerequisite: GERM 411 with a grade of "C" or better or four years of high school German.
Transferable: CSU; UC
General Education: AA/AS Area I; CSU Area C2; IGETC Area 3B; IGETC Area 6
Catalog Date: June 1, 2020

This course continues development of listening, speaking, reading, and writing skills through reading, discussing, and interpreting various works of German literature; writing summaries, reports and short compositions; and studying the historical, artistic, and cultural background of the German-speaking world.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- speak German at an intermediate level in discussions and oral reports.
- write compositions and critical analyses in German.
- synthesize grammatical, cultural, and thematic material to expand communicative abilities.
- collect, analyze, evaluate, and apply information about German-speaking countries and cultures.
- compare new information about the German language and culture with familiar concepts and ideas.
- recognize distinctive viewpoints, cultural practices, and perspectives of German speakers.

GERM 495 Independent Studies in German

Units: 1 - 3
Prerequisite: None.
Transferable: CSU
ITAL 351 Conversational Italian, Elementary I

Upon completion of this course, the student will be able to:

- use basic conversational skills in everyday Italian.
- apply critical thinking language skills to cultural and social situations.
- collect, analyze, evaluate, and apply information about the cultures and peoples of the Italian world.

ITAL 352 Conversational Italian, Elementary II

Upon completion of this course, the student will be able to:

- demonstrate improved basic conversational skills in everyday Italian.
- apply critical thinking language skills to cultural and social situations.
- collect, analyze, evaluate, and apply information about the cultures and peoples of the Italian-speaking world.
- demonstrate conversational fluency in practical situations.

ITAL 401 Elementary Italian

Upon completion of this course, the student will be able to:

- demonstrate the development of listening, speaking, reading, and writing Italian with emphasis on the communicative skills, as well as the fundamentals of Italian pronunciation and grammar.
• communicate basic information, concepts, and ideas in written and spoken Italian.
• respond appropriately to written and spoken Italian on a variety of topics, such as discussing plans for the future, making comparisons, and talking about past events.
• compare and contrast the nuances of Italian culture with those of the English speaking in the United States.
• analyze and apply the grammatical rules of Italian and compare them with their own language.
• describe everyday aspects of life in Italian culture such as typical eating habits, celebrations of family gatherings, and the use of natural remedies.

ITAL 402 Elementary Italian

Units: 4
Hours: 72 hours LEC
Prerequisite: ITAL 401 with a grade of "C" or better; or 2 years of high school Italian.
Transferable: CSU; UC
General Education: AA/AS Area I; CSU Area C2; IGETC Area 6
Catalog Date: June 1, 2020

This course provides continued development of the language and explores history and culture of Italian society. It includes further development of listening, speaking, reading, and writing Italian and emphasizes communicative skills, as well as the fundamentals of Italian pronunciation and grammar. Language acquisition is approached through a historical and cultural perspective.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• communicate basic information, concepts, and ideas in written and spoken Italian.
• respond appropriately to written and spoken Italian on a variety of topics, such as discussing plans for the future, making comparisons, and talking about past events.
• compare and contrast the nuances of Italian culture with those of the English speaking in the United States.
• analyze and apply the grammatical rules of Italian and compare them with their own language.
• describe everyday aspects of life in Italian culture such as typical eating habits, celebrations of family gatherings, and the use of natural remedies.

ITAL 411 Intermediate Italian

Units: 4
Hours: 72 hours LEC
Prerequisite: ITAL 402 with a grade of "C" or better; or 3 years of high school Italian.
Transferable: CSU; UC
General Education: AA/AS Area I; CSU Area C2; IGETC Area 3B; IGETC Area 6
Catalog Date: June 1, 2020

This is the third course in a series of four Italian courses. It continues to develop proficiency in speaking, listening, reading and writing Italian. It reviews Italian grammar and offers readings of varied texts, many of which explore the historic, artistic and cultural backgrounds of Italy. It also explores the culture of Italy and affords opportunities to make cross-linguistic and cross-cultural comparisons.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• communicate information, concepts, and ideas in written and spoken Italian.
• apply/recognize similarities and differences between Italian and one's native language.
• interpret written and spoken Italian on a variety of topics, such as discussing plans for the future, making comparisons, and talking about past events.
• describe some everyday aspects of Italian culture, such as travel, family traditions, fashion, health issues and social responsibility.
• recognize prominent examples of art, music, history, and literature from Italian culture.
• evaluate the Italian culture as it compares to one's own culture.
• incorporate Italian for personal enjoyment and enrichment beyond the school setting in one's community.
ITAL 412 Intermediate Italian

Units: 4  
Hours: 72 hours LEC  
Prerequisite: ITAL 411 with a grade of "C" or better; or 4 years of high school Italian.  
Transferable: CSU; UC  
General Education: AA/AS Area I; CSU Area C2; IGETC Area 3B; IGETC Area 6  
Catalog Date: June 1, 2020

This course continues the development of the four basic skills: reading, writing, speaking and listening through reading and discussion of major types of Italian literature (short story, drama, poetry). Writing of paragraphs and short compositions is included. The course discusses the historical and cultural background of the Italian-speaking world.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify the major literary types of Italian.
- demonstrate the ability to use Italian in discussions and oral reports.
- write paragraphs and compositions in Italian.
- identify the people and culture of the Italian-speaking world.
- recognize famous stanzas of Dante's Divine Comedy.
- recognize important historic individuals and events of the Renaissance period.
- identify archeological sights from the Etruscan era.
- recognize major art works from the Renaissance period.
- conjugate and apply the present and past subjunctive mood and the preterite.
- apply possessive and relative pronouns in sentence construction.
- use cardinal numbers in conversation and writing.
- apply infinitive verbs in sentence construction.
- identify key musical periods in Italian history.

ITAL 495 Independent Studies in Italian

Units: 1 - 3  
Prerequisite: None.  
Transferable: CSU  
Catalog Date: June 1, 2020

Japanese (JAPAN)

JAPAN 495 Independent Studies in Japanese

Units: 1 - 3  
Prerequisite: None.  
Transferable: CSU  
Catalog Date: June 1, 2020

Mandarin (MAND)

MAND 495 Independent Studies in Mandarin
This course is an introduction to the Russian language and culture of Russia. It includes the development of listening, speaking, reading, and writing skills in Russian with emphasis on the communicative skills, as well as the fundamentals of Russian pronunciation and grammar.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- communicate basic information, concepts, and ideas in written and spoken Russian.
- engage in short conversations and written correspondence in Russian to provide and obtain information, discuss daily activities, describe one's family, politely agree and disagree with somebody's opinion, and apologize for a mistake.
- interpret written and spoken Russian on a variety of topics, such as personal data, locations, daily schedules, activities, and emotions.
- compare presented aspects of the Russian-speaking culture to his/her own culture.
- analyze and apply the grammatical rules of Russian and compare them with his/her native language.
- describe some everyday aspects of the Russian-speaking world.
- incorporate Russian language for personal enjoyment and enrichment in becoming part of the global community.

This course provides continued development of the Russian language and culture. It includes further development of listening, speaking, reading, and writing skills in Russian with emphasis on communicative skills, as well as the fundamentals of Russian pronunciation and grammar. Cross-linguistic and cross-cultural comparisons are emphasized.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- produce language that communicates basic information, concepts, and ideas in Russian to an audience of listeners and readers.
- engage in basic conversations and written correspondence in Russian to provide and obtain information, express feelings and emotions, and exchange opinions.
- respond appropriately to written and spoken Russian on a variety of topics, such as discussing his/her tastes, ordering food in restaurants, describing his/her habits, and expressing ability or intention to do something.
- analyze and apply the grammatical rules of Russian and compare them with his/her own language.
- compare various aspects of the Russian-speaking cultures to his/her own culture.
- describe some everyday aspects of the Russian-speaking world.
- incorporate Russian language for personal enjoyment and enrichment in becoming part of the global community.
RUSS 411 Intermediate Russian

Units: 4
Hours: 72 hours LEC
Prerequisite: RUSS 402 with a grade of "C" or better, or three years of high school Russian.
Transferable: CSU; UC
General Education: AA/AS Area I; CSU Area C2; IGETC Area 3B; IGETC Area 6
Catalog Date: June 1, 2020

This intermediate-level Russian course provides continued development of the language and culture of the Russian-speaking world. It includes further development of listening, speaking, reading, and writing skills in Russian with emphasis on communicative skills.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- communicate information, concepts, and ideas in written and spoken Russian at the intermediate level.
- apply and recognize similarities and differences between Russian and his/her own language.
- interpret written and spoken Russian on a variety of topics, such as talking about past and future events, expressing feelings and emotions, and agreeing and disagreeing with others.
- describe some everyday aspects of Russian-speaking cultures, such as weather, travel, telephone conversations, making hotel arrangements, and dealing with common travel problems.
- recognize presented examples of literature, art, and music from Russian-speaking cultures.
- compare and contrast Russian-speaking cultures as they relate to his/her own culture.

RUSS 413 Russian for Heritage Speakers I

Units: 4
Hours: 72 hours LEC
Prerequisite: RUSS 411 or Russian heritage speaker proficiency as assessed by an oral interview with the instructor in Russian.
Transferable: CSU; UC
General Education: AA/AS Area I; CSU Area C2; IGETC Area 3B; IGETC Area 6
Catalog Date: June 1, 2020

This course offers the fundamentals of spoken and written Russian for heritage speakers with different levels of Russian who want to gain literacy and improve their Russian skills. It covers the structure of the language, oral communication, spelling, and fundamentals of grammar and composition. In addition, the course introduces the student to the geography and culture of the Russian-speaking world.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate proficiency in the five skills as mandated by the competency guidelines of the American Council on the Teaching of Foreign Languages (ACTFL): comprehension, speaking, reading, writing, and an understanding of the people and culture of Russian-speaking countries
- demonstrate critical thinking through contrastive and inductive analysis and techniques to develop logical and coherent thought and expression in written and oral language
- read Russian proficiently as found, for example, in Russian language newspapers, magazines, short stories, essays, and selections of poetry written by Russian authors
- speak Russian with precision using varied grammatical patterns of enriched vocabulary
- compose sentences and paragraphs in Russian using correct spelling, punctuation, and capitalization
- analyze and critique, from a student's own experience and knowledge, aspects of the Russian-speaking culture that differ significantly from contemporary United States culture
- research and identify names of some major landmarks and regions in Russian-speaking nations, and names of persons and events of historical and cultural importance
Spanish (SPAN)

SPAN 131 Elementary Spanish Lab I

This laboratory course enables Spanish language learners to develop, expand, and reinforce multiple Spanish language skills while working independently and/or in small groups. Coursework includes integrated study topics related to vocabulary, grammar, reading, writing, listening, and oral skills covered in first semester Spanish courses. Students may register until the sixth week of the semester. This course may be taken up to 2 times, for a total of 1.0 unit, using different topics. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze basic grammatical structures at the sentence and paragraph level.
- demonstrate comprehension of basic reading passages and aural communication.
- synthesize vocabulary, grammar, and syntax in basic written and oral production.
- compare various aspects of the Spanish-speaking cultures to his/her own culture.
- practice basic vocabulary and grammar in Spanish on a variety of topics, such as personal data; likes and dislikes; classes, schedules, and plans for the future; daily routine; shopping and activities; and emotions.
- describe some everyday aspects of Spanish-speaking cultures, such as greetings, the common use of two last names, typical family customs, and typical eating habits.

SPAN 132 Elementary Spanish Lab II

This laboratory course enables Spanish language learners to continue developing, expanding, and reinforcing multiple Spanish language skills while working independently and/or in small groups. Coursework includes integrated study topics related to vocabulary, grammar, reading, writing, listening, and oral skills covered in second semester Spanish courses. Students may register until the sixth week of the semester. This course may be taken up to two times for a total of 1.0 unit, using different topics. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze elementary grammatical structures at the sentence and paragraph level.
- demonstrate comprehension of elementary reading passages and aural communication.
- synthesize vocabulary, grammar, and syntax in elementary written and oral production.
- compare various aspects of Spanish-speaking cultures to his/her own culture.
- practice vocabulary and grammar in Spanish on a variety of topics, such as daily routine, past activities, and family gatherings.
- describe aspects of Spanish-speaking cultures such as foods, typical shopping habits, and celebrations.
SPAN 133 Intermediate Spanish Lab I

Units: 0.5 - 1
Hours: 27 - 54 hours LAB
Prerequisite: None.
Advisory: SPAN 132 or concurrent enrollment in SPAN 411.
Catalog Date: June 1, 2020

This laboratory course enables Spanish learners to develop, expand, and reinforce multiple Spanish language skills while working independently and/or in small groups. Coursework includes integrated study topics related to vocabulary, grammar, reading, writing, listening, and oral skills covered in third semester Spanish courses. Students may register until the sixth week of the semester. This course may be taken up to 2 times, for a total of 1.0 unit, using different topics. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze intermediate grammatical structures at the sentence and paragraph level.
- demonstrate comprehension of intermediate reading passages and aural communication.
- practice intermediate vocabulary and grammar in Spanish on a variety of topics, such as telling stories, giving formal and informal commands, predicting the future, giving advice, and influencing the decisions of others.

SPAN 351 Conversational Spanish, Elementary

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

This course is an introduction to the language and culture of the Spanish-speaking world. It includes the development of listening, speaking, reading, and writing Spanish with emphasis on communicative skills. Class discussions and group interaction, both controlled and spontaneous, are used to develop basic conversational skills in Spanish.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- use basic conversational skills in everyday Spanish.
- apply critical thinking language skills to cultural and social situations.
- produce language that communicates information, concepts, and ideas about and in Spanish to an audience of listeners and readers.
- engage in conversations in Spanish to provide and obtain information, express feelings and emotions, and exchange opinions.
- collect, analyze, evaluate, and apply information about the cultures and peoples of the Spanish-speaking world.

SPAN 352 Conversational Spanish, Elementary

Units: 3
Hours: 54 hours LEC
Prerequisite: SPAN 351 OR SPAN 401 with a grade of "C" or better or two years of high school Spanish.
Transferable: CSU
Catalog Date: June 1, 2020

This course is for students at the second-semester level in Spanish. It includes the development of listening, speaking, reading, and writing Spanish with emphasis on communicative skills. Class discussions and group interaction, both controlled and spontaneous, are used to develop basic conversational skills in Spanish. Emphasis includes oral proficiency and development of Hispanic cultural awareness.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- use basic conversational skills in everyday Spanish.
• apply critical thinking language skills to cultural and social situations.
• produce language that communicates information, concepts, and ideas about and in Spanish to an audience of listeners and readers.
• engage in conversations in Spanish to provide and obtain information on a variety of topics such as professions and professional plans; dates and weather; past activities; residence, chores, and leisure activities; likes, dislikes, and interests; and special occasions.
• collect, analyze, evaluate, and apply information about the cultures and peoples of the Spanish-speaking world.

SPAN 361 Conversational Spanish, Intermediate

Units: 3
Hours: 54 hours LEC
Prerequisite: SPAN 352 OR SPAN 402 with a grade of "C" or better, or three years of high school Spanish.
Transferable: CSU
Catalog Date: June 1, 2020

This course is designed for students at the third-semester level in Spanish. It includes the development of listening, speaking, reading, and writing Spanish with emphasis on communicative skills. Discussions and group interaction, both controlled and spontaneous, are used to develop basic conversational skills in Spanish. Emphasis includes oral proficiency and development of Hispanic cultural awareness.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• use intermediate conversational skills in everyday Spanish.
• apply critical thinking language skills to cultural and social situations.
• produce language that communicates information, concepts, and ideas about and in Spanish to an audience of listeners and readers.
• engage in conversations in Spanish to provide and obtain information on a variety of topics such as body parts and health, road-related vocabulary, childhood memories and activities, and future plans.
• compare various aspects of the Spanish-speaking cultures as they compare to his/her own culture.
• collect, analyze, evaluate, and apply information about cultures and peoples of the Spanish-speaking world.

SPAN 362 Conversational Spanish, Intermediate

Units: 3
Hours: 54 hours LEC
Prerequisite: SPAN 361 OR Spanish 411 with a grade of "C" or better or 4 years high school Spanish
Transferable: CSU
Catalog Date: June 1, 2020

This fourth-semester course covers language and culture of the Spanish-speaking world. It continues the development of listening, speaking, reading, and writing Spanish with emphasis on communicative skills. Class discussions and group interaction, both controlled and spontaneous, are used to develop conversational skills in Spanish.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• demonstrate conversational skills in everyday Spanish.
• demonstrate awareness of linguistic differences and similarities.
• engage in conversations in Spanish to provide and obtain information on a variety of topics such as travel, accidents, hospitals, important decisions, and controversial issues.
• apply critical thinking language skills to cultural and social situations.
• produce language that communicates information, concepts, and ideas about and in Spanish to an audience of listeners and readers.

SPAN 401 Elementary Spanish
This course introduces the language and culture of the Spanish-speaking world. It includes the development of listening, speaking, reading, and writing Spanish with emphasis on the communicative skills, as well as the fundamentals of Spanish pronunciation and grammar.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- communicate basic information, concepts, and ideas in written and spoken Spanish.
- respond appropriately to written and spoken Spanish on a variety of topics, such as personal data; likes and dislikes; classes, schedules, and plans for the future; and activities and emotions.
- compare various aspects of the Spanish-speaking cultures to their own culture.
- analyze and apply the grammatical rules of Spanish and compare them to their own language.
- describe some everyday aspects of Spanish-speaking cultures, such as greetings, the common use of two family names (surnames), and typical family customs.

SPAN 402 Elementary Spanish

This course provides continued development of the language and explores history and culture of the Spanish-speaking world. It includes further development of listening, speaking, reading, and writing Spanish with emphasis on communicative skills, as well as the fundamentals of Spanish pronunciation and grammar. Language acquisition is approached through a historical and cultural perspective.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- communicate basic information, concepts, and ideas in written and spoken Spanish.
- respond appropriately to written and spoken Spanish on a variety of topics, such as discussing plans for the future, making comparisons, and talking about past events.
- compare and contrast the nuances of Spanish speaking cultures with those of the English speaking in the United States.
- analyze and apply the grammatical rules of Spanish and compare them with his/her own language.
- describe everyday aspects of life in Spanish-speaking cultures such as typical eating habits, celebrations and family gatherings, and the use of natural remedies.

SPAN 411 Intermediate Spanish

This intermediate-level Spanish course provides continued development of the language and culture of the Spanish-speaking world. It includes further development of listening, speaking, reading, and writing skills in Spanish with emphasis on communicative skills. Additionally, it covers more complex grammar topics and provides further study of the cultural and historical background of Spanish-speaking countries.
Upon completion of this course, the student will be able to:

- communicate information, concepts, and ideas in written and spoken Spanish.
- apply/recognize similarities and differences between Spanish and his/her own language.
- interpret written and spoken Spanish on a variety of topics, such as talking about past events, predicting the future, giving advice, and influencing the decisions of others.
- describe some everyday aspects of Spanish-speaking cultures, such as travel, family traditions, fashion, health issues, and social responsibility.
- recognize prominent examples of art, music, history, and literature from Spanish-speaking cultures.
- compare and contrast Spanish-speaking cultures as they relate to his/her own culture.

SPAN 412 Intermediate Spanish

Units: 4
Hours: 72 hours LEC
Prerequisite: SPAN 411 with a grade of "C" or better or 4 years of high school Spanish
Transferable: CSU; UC
General Education: AA/AS Area I; CSU Area C2; IGETC Area 3B; IGETC Area 6
C-ID: C-ID SPAN 210
Catalog Date: June 1, 2020

This intermediate-level Spanish course provides continued development of the language and culture of the Spanish-speaking world. It includes further development of listening, speaking, reading, and writing skills in Spanish with emphasis on communicative skills. Additionally, it reviews and provides further study and complex grammar topics of the cultural and historical background of Spanish-speaking countries as well as their major literary types and works.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- use Spanish in discussing various topics such as current events, politics, eco-tourism, traditions, technology, and pop-culture related to the Spanish-speaking world.
- apply and analyze grammatical structures at an intermediate level, such as present, preterit, and imperfect tenses; present and past subjunctive; object pronouns; commands; reflexive verbs; the future and conditional forms; relative pronouns; and comparatives and superlatives.
- produce paragraphs and compositions in Spanish.
- identify, analyze, and discuss the major literary types and works of famous authors in Spanish such as Pablo Neruda, José Emilio Pacheco, and Augusto Monterroso.
- discuss and review current short films in Spanish from Argentina, Mexico, Spain, and Venezuela.
- recognize major art works from famous artists such as Frida Kahlo, Diego Rivera, and Mauricio Puente.

SPAN 413 Spanish for Native Speakers I

Units: 4
Hours: 72 hours LEC
Prerequisite: Spanish native speaker proficiency or the equivalent intermediate level as assessed by the Foreign Language Department Assessment Process at American River College.
Catalog Date: June 1, 2020

This course offers the fundamentals of spoken and written Spanish for the native speaker of Spanish. It covers the structure of the language, oral communication, fundamentals of grammar and composition. It focuses primarily on tenses in the indicative mode. This course also covers diacritical marks, like the accent mark, and their uses. In addition, it introduces the student to the geography and culture of the Spanish speaking world. This course is conducted entirely in Spanish.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate proficiency in the skills as mandated by the competency guidelines of the American Council on the Teaching of Foreign Languages (ACTFL): comprehension, speaking, reading, and writing.
- utilize correct grammatical structures of standard Spanish, including verb tenses, direct object, indirect object, and reflexive pronouns.
write sentences in Spanish using correct punctuation, capitalization, and diacritical marks.

demonstrate critical thinking in written and oral language in Spanish.

read Spanish proficiently as found, for example, in Spanish language newspapers, magazines, short stories, essays, and selections of poetry written by Spanish, Spanish-American, and Chicano authors.

demonstrate an awareness of cultural events, traditions, geography, and history in Spanish speaking nations and among the Spanish speaking population of the United States.

identify which verb forms and vocabulary words belong to standard Spanish, colloquial Spanish, and local colloquial Spanish, influenced in lexicon and syntax by the English language and common to heritage Spanish learners.

demonstrate proficiency in the understanding of the people and culture of the Spanish-speaking countries as mandated by the American Council on the Teaching of Foreign Languages (ACTFL).

SPAN 427 Introduction to Spanish American Literature

Units: 3
Hours: 54 hours LEC
Prerequisite: SPAN 411 with a grade of "C" or better, or placement through the assessment process.
Transferable: CSU; UC
General Education: AA/AS Area I; CSU Area C2; IGETC Area 3B
Catalog Date: June 1, 2020

This course introduces students to Spanish and Latin American Literature. It covers the analysis of a variety of literary formats that include short stories, poems, plays, and novel excerpts from the established literary canon. Films are integrated to develop auditory skills and to engage students in discussions. It emphasizes critical thinking, interpretation, speaking, and writing skills, and is conducted entirely in Spanish.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify and analyze a variety of literary genres through the writings of representative Spanish and Latin American authors such as Pablo Neruda, Julio Cortázar, Benito Pérez Galdós, and Federico García Lorca.

- write analytically and critically about assigned readings in poetry, drama, and narrative and essay, demonstrating level-appropriate writing and composition skills.

- review and debate a variety of films based on different literary works, and discuss their relationship to Spanish and Latin American culture and society.

- use Spanish to discuss and critique 1) literary works within their historical context 2) the relationship between society and Spanish and Latin American literature.

- demonstrate knowledge and understanding of the culture, geography, literature, and history of Spanish-speaking countries.

- utilize a complex and varied vocabulary appropriate for an intermediate Spanish course to participate in full conversations on general topics.

SPAN 495 Independent Studies in Spanish

Units: 1 - 3
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020
**Funeral Service Education | American River College**

**Division Dean**
Jan DeLapp

**Department Chairs**
Valarie Rose

(916) 484-8902

## Associate Degree

### A.S. in Funeral Service Education

This degree prepares students for entry-level positions in funeral service. It is designed to meet the prerequisites for licensure and employment in the field of funeral service as funeral directors or embalmers.

The central objective of an ABFSE-accredited program must be to educate students in every phase of funeral service so that program graduates are prepared for entry-level employment in funeral service. In support of this objective, a program must adopt at least the following Program Learning Outcomes:

1. Explain the importance of funeral service professionals in developing relationships with the families and communities they serve.
2. Identify standards of ethical conduct in funeral service practice.
3. Interpret how federal, state, and local laws apply to funeral service in order to ensure compliance.
4. Apply principles of public health and safety in the handling and preparation of human remains.
5. Demonstrate technical skills in embalming and restorative art that are necessary for the preparation and handling of human remains.
6. Demonstrate skills required for conducting arrangement conferences, visitations, services, and ceremonies.
7. Describe the requirements and procedures for burial, cremation, and other accepted forms of final disposition of human remains.
8. Describe methods to address the grief-related needs of the bereaved.
9. Explain management skills associated with operating a funeral establishment.
10. Demonstrate verbal and written communication skills and research skills needed for funeral service practice.

The Funeral Service Education Program at American River College is accredited by the American Board of Funeral Service Education (ABFSE) 992 Mantua Pike, Suite 108, Woodbury Heights, NJ 08097 (816) 233-3747. Web: www.abfse.org

**NOTE:** All courses, including general education, require a grade of "C" or better, and the National Board Examination must be completed before graduation.

The annual passage rate of first-time takers on the National Board Examination (NBE) for the most recent three-year period for this institution and all ABFSE accredited funeral service education programs is posted on the ABFSE web site (www.abfse.org).

National Board Examination scores, graduation rates, and employment rates for this and other ABFSE-accredited programs are available at www.abfse.org. To request a printed copy of this program’s scores and rates, go to Health and Education 770 or by email at rosev@arc.losrios.edu or by telephone at (916) 484-8145.

Catalog Date: June 1, 2020

## Degree Requirements

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<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>ACCT 101</td>
<td>Fundamentals of College Accounting</td>
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<tr>
<td>BIOL 102</td>
<td>Essentials of Human Anatomy and Physiology (4)</td>
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<tr>
<td>or BIOL 103</td>
<td>Human Anatomy for Funeral Services (4)</td>
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<td>BIOL 130</td>
<td>Microbiology for Funeral Service</td>
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<td>BUS 340</td>
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<td>CHEM 130</td>
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<td>ENGWR 300</td>
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<tr>
<td>or ENGWR 480</td>
<td>Honors College Composition (3)</td>
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</table>
The Funeral Service Education Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

### Enrollment Eligibility

To be eligible for enrollment in the program, the student must meet the following criteria:

- Graduation from an accredited high school (graduates from outside the United States must have transcripts evaluated by an approved independent agency), or successful completion of General Educational Development (GED) Test or California High School Proficiency Examination (CHSPE).
- BIOL 102 or BIOL 103, BUS 310 or ENGWR 300 or ENGWR 480 or ESLW 340, FSE 300, MATH 110 or 120 or higher with a grade of "C" or better.
- Minimum cumulative college GPA of 2.0.
- A Curriculum Planning Summary Sheet completed by an ARC counselor and dated within the semester the enrollment packet is submitted.
- A completed pre-enrollment application.

### Enrollment Process

Eligible students are selected for the program according to the following steps:

- Pre-enrollment applications to the program may be obtained from the Health and Education Division Office, the Coordinator of the Funeral Service Education program, or at www.arc.losrios.edu/fse. The Funeral Service Education program currently accepts students once per year for the Spring semester which begins in January. Deadline to submit the application is by the second Friday in November.
- Only students who meet the pre-enrollment requirements and follow the pre-enrollment procedures will be considered for the program.
- Selection is based on a random selection process among eligible applicants should the number of applicants exceed available space in the program.
- Students admitted to the Funeral Service Education program are required to have a physical examination, laboratory and licensing agencies inoculations, drug screen, and background check by the completion of the first semester of the program. Students are responsible for any costs incurred related to meeting the health requirements.
- If a minimum number of qualified applicants are not received, enrollment will be delayed until the following semester, at which time applicants will be required to reapply.
Funeral Service Education (FSE)

FSE 295 Independent Studies in Funeral Service Education

Units: 1 - 3
Prerequisite: None.
Catalog Date: June 1, 2020

FSE 297 Internship in Funeral Service Education

Units: 5
Hours: 18 hours LEC; 216 hours LAB
Prerequisite: BUS 340, FSE 350, and FSE 360 with grades of "C" or better
Corequisite: FSE 365 and 370
Enrollment Limitation: Students must show proof they have completed all general education and competency requirements for graduation.
Catalog Date: June 1, 2020

This course provides an opportunity to apply classroom instruction in funeral service education to real-world practice in the community. Interns participate in an off-site lab experience program and approved off-campus preceptor sites. A portion of this course may be offered in a TBA component of 27-54 hours which may include embalming, preparation, or documentation.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- correctly embalm a dead human body
- arrange and direct funeral services
- properly perform transfer of remains
- prepare pertinent documents including death certificates, disposition permits, newspaper notices, government benefits forms
- demonstrate health and safety measures in the preparation room
- identify and wear business attire relevant for the funeral home setting
- demonstrate professionalism in a funeral home setting

Career Information

The student is eligible to take the National Board Exam and state board examination to become a licensed funeral director in California. The student also meets the criteria to take the state embalmers' examination. As an accredited mortuary college, our program goals and objectives are as follows:· To prepare students to be members of a human services profession · To prepare students to be members of the community in which they serve · To be participants in the relationship between bereaved families and those engaged in the funeral service profession · To offer professional knowledge of and compliance with federal, state, provincial/territorial, and local regulatory guidelines · To be sensitive to the responsibility for public health, safety, and welfare in caring for human remains

Funeral Service Education (FSE)
FSE 300 Introduction to Funeral Service

This course is a survey of the history of the funeral service industry and a comprehensive overview of the field of funeral service. It emphasizes the role and skills of the funeral service practitioner. This course provides insight into the funeral service industry and the career opportunities available. Field trips or phone interviews may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- differentiate between historical funeral practices and contemporary funeral service
- explain the development of the funeral service profession
- describe inter-professional relationships and responsibilities in funeral service
- evaluate the basic role of the funeral service practitioner in society
- compose a list of various career opportunities related to funeral service

FSE 310 Funeral Directing I

This course introduces the general practices of funeral directing. It focuses on the sociological phenomena that affect all the elements of funeral service including cultural differences, family structures, and factors of change that relate to funeralization. It also includes notification of death, transfer and disposition of bodies, arrangement conferences, pre-planned funerals, and post-arrangement follow-up. Field trips may be required. A portion of this course may be offered in a TBA component of 27-54 hours which may include embalming, preparation, or documentation.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the application and purpose of sociology in funeral service
- explain the role of the funeral director in adapting funeral services to a culturally diverse population
- recognize the family governing systems found in American society
- compare the different types of family structure
- investigate the changing social factors that affect American funeral rites and the families that are being served
- prioritize the responsibilities of the funeral director
- calculate the time frames in which the services of a funeral director are typically provided (i.e. pre-need, at-need, and post arrangement follow-up)
- demonstrate proper telephone etiquette and protocol
- appraise and demonstrate the correct procedures and equipment needed for human body transportation in home, institutional, and field locations
- apply communication skills necessary to meet with a family in the arrangement conference
- collect the data necessary to complete a death certificate, disposition permit, social security forms and veterans benefit forms
- distinguish between pre-planned and pre-funded funerals
- identify federal, state, and local regulations used for disposition of human bodies and specific forms
- integrate vocabulary associated with funeral service into day-to-day practices in the funeral home
FSE 312 Funeral Directing II

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: FSE 310 and 320 with grades of "C" or better
Corequisite: BIOL 130 and FSE 330
Enrollment Limitation: Student must be enrolled in the Funeral Service Education program to enroll in this course
Transferable: CSU
Catalog Date: June 1, 2020

This course introduces the basic philosophies of a cross-section of religious and ethnic funeral practices and the role of the funeral practitioner in directing each type. It also includes procedures for fraternal, military, and celebrity funerals. A portion of this course may be offered in a TBA component of 27-54 hours which may include embalming, preparation, or documentation.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- compare and contrast a cross-section of American religious customs
- identify characteristics of adaptive and humanistic ceremonies
- distinguish characteristics of funeral preferences of different ethnic groups
- arrange fraternal and military funeral services
- describe procedures for celebrity funerals
- apply vocabulary used in funeral service
- set up and conduct various funeral services
- compare and contrast the disposition options of human remains

FSE 320 Funeral Service Law and Ethics

Units: 3
Hours: 54 hours LEC
Prerequisite: None
Corequisite: CHEM 130 and FSE 310
Enrollment Limitation: Acceptance into the Funeral Service Education Program.
Transferable: CSU
Catalog Date: June 1, 2020

This course introduces law and the judicial system as they pertain to the funeral industry. Topics include sources of law, the legal status of a dead human body, the duty of burial, rights to control funeral arrangements and final disposition, liability for funeral expenses, torts involving the dead human body and the funeral director, wills, estates, probate, cemeteries, crematories, and state and federal laws and regulations. Personal and professional ethics that guide decisions and actions in the proper treatment of the dead are also included.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- distinguish among a tort, crime, and breach of contract pertaining to the funeral business
- confirm the characteristics of a valid and enforceable funeral contract, negotiable instruments, bailment, and agency relationships
- explain the Uniform Commercial Code (UCC) regarding the sale of goods (i.e. caskets, outer burial containers)
- compare the basic forms of funeral business organizations
- evaluate the legal relationships, rights, duties, and liabilities among the funeral director, the dead body, and the consumer
- explain laws and regulations pertaining to funeral service
- assess legal issues in funeral service in order to avoid liability
- complete the documents that are required in the funeral service process
- predict situations when professional services are required for death planning and estate administration
• critique ethics relating to funeral service
• explain the difference between legal and ethical issues within the funeral business
• recommend a standard of ethical behavior with examples of personal and professional conduct
• integrate vocabulary terms associated with ethical issues and practices in the funeral service industry

FSE 330 Merchandising in the Funeral Service Industry

Units: 3
Hours: 54 hours LEC
Prerequisite: FSE 310 and 320 with grades of "C" or better
Corequisite: BIOL 130 and FSE 312
Enrollment Limitation: Acceptance into the Funeral Service Education Program.
Transferable: CSU
Catalog Date: June 1, 2020

This course introduces merchandising as it applies to the funeral service profession. The curriculum is divided into two main sections. The first covers construction and features of caskets, outer burial containers, and other funeral-related products. The second section examines methods of pricing, display, presentation, and control of funeral merchandise. Field trips in person or via video may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• apply knowledge of merchandising to communicate with colleagues, sales representatives, and the public
• describe the component parts of funeral merchandise, including materials used, styles, finishes, dimension, and functions of products
• assess new products and potential innovations for their appropriateness for actual practice
• compare and contrast historical pricing methods
• calculate prices for professional service and merchandise
• evaluate the services and merchandise provided by the funeral director
• prepare to plan and present product information to the public
• assess the various methods of merchandise display
• identify the components of funeral merchandise

FSE 335 Funeral Service Management

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Enrollment Limitation: Acceptance into the Funeral Service Education Program.
Transferable: CSU
Catalog Date: June 1, 2020

This course introduces the basic principles of management as they apply to the practice of the funeral profession. It explores the role and function of an effective manager, emphasizing the functions of planning, organizing, motivating, directing, and controlling. Specific areas of funeral service practice and managerial guidelines for those areas are covered. Topics also include management theory as it relates to funeral service practice. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• identify the goals and objectives of funeral service management
• describe management functions as they relate to funeral service practice
• recommend contemporary concepts of funeral service management as they relate to client families and community, staff members, and professional associates
• differentiate the five areas of management and discuss the significant aspects of each
• prepare a set of operational procedures specific to funeral service
- create a set of procedures related to disaster management
- analyze future trends in the funeral service business and in funeral service practice
- define and discuss the role of funeral service businesses in the economy
- assess the risks involved with operating a small funeral service business
- identify ways in which odds for success in small funeral service businesses can be improved
- evaluate human resource requirements for success in funeral service businesses
- explain the factors involved in buying a funeral service business
- explain how credit and collections programs are managed in funeral service businesses
- assess methods of estimating capital needs and types of financing available for funeral service businesses
- describe areas of risk management areas in funeral service and types of insurance
- design a set of marketing tools for a funeral service business
- identify and use the components of computer hardware and software
- use and assess funeral management software

FSE 340 Pathology for Funeral Service

Units: 2
Hours: 36 hours LEC
Prerequisite: CHEM 130 with a grade of “C” or better
Enrollment Limitation: Acceptance into the Funeral Service Education program.
Transferable: CSU
Catalog Date: June 1, 2020

This course offers a study of pathological disease conditions and how they affect various parts of the body. It emphasizes particular conditions that relate to or affect the embalming or restorative art process.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify and prioritize pathological conditions that require special procedures in the transfer, handling, preparation, and disposition of dead human bodies
- identify and prioritize etiological factors that require special procedures in the transfer, handling, preparation, and disposition of dead human bodies
- describe diseases and related terminology and how they affect systems of the human body
- choose the correct terminology when communicating with members of the medical community, allied professionals, and survivors
- explain the benefits derived from postmortem examination

FSE 350 Restorative Art

Units: 3.5
Hours: 54 hours LEC; 27 hours LAB
Prerequisite: None.
Corequisite: FSE 360
Enrollment Limitation: Acceptance into the Funeral Service Education program.
Transferable: CSU
Catalog Date: June 1, 2020

This course introduces the techniques of creating an acceptable physical appearance of the deceased for the benefit of the survivors. Topics include the study of facial features, cosmetics, and restorative treatment for a variety of situations faced by the practitioner.

Student Learning Outcomes

Upon completion of this course, the student will be able to:
describe procedures to obtain written permission to perform any restorative procedure
relate specified types of restoration to the correct embalming procedure
name and locate the major bony structures of the skull and the major muscles of the face
explain how bone structures and muscles influence surface form and expression
compare and contrast the different forms of the head and face from direct and profile views
describe and explain facial proportions and relate them to natural form of the facial features and facial restoration
identify and describe the various cosmetic, restorative treatments, materials, and equipment
select the correct colorants to achieve a natural appearance under various conditions
demonstrate basic hair styling
classify and explain the principles of color theory to natural appearance
classify and explain the principles of pigmentary mixtures, and relate the principles of pigmentary mixtures to cosmetic compounds
demonstrate cosmetic application on a model
identify and describe the natural and acquired facial markings on the face and neck
demonstrate wax or clay modeling of facial features

FSE 360 Embalming I
Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: CHEM 130 with a grade of "C" or better
Corequisite: FSE 350
Enrollment Limitation: Acceptance into the Funeral Service Education program.
Transferable: CSU
Catalog Date: June 1, 2020

This course introduces the phenomenon of death in the human body. It includes the processes of preservation, restoration, and sanitation in treating the dead human body. Field trips may be required. A portion of this course may be offered in a TBA component of 27-54 hours which may include embalming, preparation, or documentation.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

• define the concepts of sanitation, disinfection, temporary preservation, and restoration pertaining to embalming
• identify personal and environmental protective measures used in embalming
• explain the proper disposal of blood, body fluids, and contaminated materials
• compare the use of embalming instruments, equipment, and sundries
• describe embalming techniques and procedures
• list those conditions whereby notification of death to public officials is required
• demonstrate the handling, treatment, and disposition of the dead human body
• explain how the disposition of the dead human body meets the needs of the survivors

FSE 365 Embalming II
Units: 2
Hours: 36 hours LEC
Prerequisite: FSE 350 and 360 with grades of "C" or better
Corequisite: FSE 297 and 370
Transferable: CSU
Catalog Date: June 1, 2020

This course is a continuation of FSE 360. It is the study of vascular anatomy, case analysis, the selection and injection of embalming fluids, and treatment of specific conditions requiring special attention.
Upon completion of this course, the student will be able to:

- compare the different embalming processes related to different causes of death
- use funeral service terminology to communicate with members of the allied health professions and the public
- describe the correct procedures for raising and incising vessels
- identify and demonstrate with a suture kit, the various sutures used in closing incisions
- analyze and document embalming techniques and procedures with written reports
- compare embalming treatments cases involving infectious disease, trauma, and pathological conditions
- relate embalming procedures to disaster situations
- choose the proper chemicals for use in creating an embalming solution
- describe the proper procedures for embalming an autopsied case

FSE 370 Funeral Service Counseling

Units: 3
Hours: 54 hours LEC
Prerequisite: FSE 335, 350, and 360 with grades of "C" or better
Corequisite: FSE 297 and 365
Enrollment Limitation: Student must be enrolled in the Funeral Service Education program to enroll in this course.
Transferable: CSU
Catalog Date: June 1, 2020

This course examines communication skills and the role of the funeral director as facilitator, counselor, and caregiver. Topics include specific communication and counseling techniques as they are applied in funeral service practice as well as normal and abnormal grief reactions, children and death, crisis intervention counseling, and dealing with stress and burnout. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- list the elements of verbal and non-verbal communication used in funeral service
- demonstrate the importance of listening skills within the funeral profession
- explain the significance of group dynamics in the funeral process
- discuss the values and purposes of the funeral rite for survivors
- describe the typical reaction and responses during the emotion of grief
- compare the theories of grief
- explain issues relating to children and death
- analyze how grief affects the functioning of the family
- distinguish the difference between grief counseling and grief therapy
- manage the limitations of the funeral director in grief counseling and grief therapy
- describe the types and styles of counseling
- prioritize the major goals of counseling as well as the functions of the counselor
- practice the basic skills and techniques utilized in counseling and their application to funeral service
- compose a list of the pre-need, at-need, and post-funeral counseling opportunities in the community
- appraise resources for coping with loss
- analyze how grief affects the funeral director
- choose when to make referrals to the appropriate community resources
Associate Degrees for Transfer

A.A.-T. in Geography

The Associate in Arts in Geography for Transfer degree provides students with a major that fulfills the general requirements of the California State University for transfer. Students with this degree will receive priority admission with junior status to the California State University system. The Associate in Arts in Geography for Transfer (AA-T) degree may be obtained by the completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program outlined below (earning a C or better in these courses) and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education Breadth Requirements.

In addition to fulfilling transfer requirements, this degree exposes students to the core principles and practices of Geography. Students interested in transferring to a CSU campus to pursue a bachelor’s degree in geography should meet with a counselor to confirm the courses required for lower division preparation in the major. Although additional preparatory courses are not required for this degree, a careful review of the requirements at your chosen CSU will increase the likelihood that your transfer experience is smooth and successful.

Catalog Date: June 1, 2020

Degree Requirements

<table>
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<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tr>
<td>GEOG 300</td>
<td>Physical Geography: Exploring Earth’s Environmental Systems</td>
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<td>GEOG 301</td>
<td>Physical Geography Laboratory</td>
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<tr>
<td>GEOG 310</td>
<td>Human Geography: Exploring Earth’s Cultural Landscapes</td>
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<td>GEOG 306</td>
<td>Weather and Climate (3)</td>
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<td>GEOG 320</td>
<td>World Regional Geography (3)</td>
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<td>GEOG 322</td>
<td>Geography of California (3)</td>
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<td>GEOG 331</td>
<td>Exploring Maps and Geographic Technologies (3)</td>
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<td>GEOG 391</td>
<td>Field Studies in Geography: Mountain Landscapes (1 - 4)</td>
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<td>A minimum of 6 units from the following:</td>
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<tr>
<td>ANTH 310</td>
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<td>GEOG 305</td>
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<tr>
<td>GEOG 330</td>
<td>Introduction to Geographic Information Systems (3)</td>
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</table>
Students may also substitute any course from the previous list not already taken to fulfill degree requirements.

The Associate in Arts in Geography for Transfer (AA-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- describe the general content and scope of baccalaureate-level geography studies.
- compare and contrast the general biophysical and sociocultural differences and similarities among world regions.
- interpret maps and mapped data utilizing basic map elements, including scales, common coordinate systems, and map symbols.
- compare and contrast common geospatial technologies such as Geographic Information Systems (GIS), Global Positioning System (GPS), and remote sensing.
- evaluate and analyze common geographic problems and their solutions.
- list and describe at least three career options for geographers.

Career Information

The opportunities for geographers are as varied as the scope of geography itself. Geographers are found throughout the public and private sector, though rarely in positions with the title of Geographer. When combined with appropriate internships and/or other work experience, a baccalaureate degree in geography is excellent preparation for careers in natural resource management, environmental consulting, urban and regional planning, and elementary and secondary teaching. Geographic skills and knowledge are also quite valuable in diverse fields such as real estate, marketing, and demography.

Associate Degrees

A.S. in General Science

This program provides a broad study in the fields of biological and physical sciences in preparation for transfer to a four-year program and continuation of studies in upper division science courses.

Catalog Date: June 1, 2020

Degree Requirements

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<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
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<td><strong>Physical Science Courses</strong></td>
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<td>ASTR 300</td>
<td>Introduction to Astronomy (3)</td>
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<td>ASTR 310</td>
<td>The Solar System (3)</td>
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<td>CHEM 306</td>
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<td>GEOG 308</td>
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**Biological Science Courses**

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<td>ANTH 495</td>
<td>Independent Studies in Anthropology (1 - 3)</td>
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<td>ANTH 499</td>
<td>Experimental Offering in Anthropology (0.5 - 4)</td>
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<tr>
<td>BIOL 300</td>
<td>The Foundations of Biology (3)</td>
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<td>BIOL 301</td>
<td>Evolution (3)</td>
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<td>BIOL 303</td>
<td>Survey of Biology (4)</td>
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<tr>
<td>BIOL 305</td>
<td>Natural History (4)</td>
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<td>BIOL 310</td>
<td>General Biology (4)</td>
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<td>BIOL 322</td>
<td>Ethnobotany (3)</td>
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<tr>
<td>BIOL 332</td>
<td>Introduction to Ornithology (4)</td>
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<tr>
<td>BIOL 342</td>
<td>The New Plagues: New and Ancient Infectious Diseases Threatening World Health (3)</td>
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<td>BIOL 352</td>
<td>Conservation Biology (3)</td>
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<td>BIOL 370</td>
<td>Marine Biology (4)</td>
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<td>BIOL 375</td>
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<td>BIOL 390</td>
<td>Natural History Field Study (0.5 - 4)</td>
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<td>BIOL 400</td>
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<tr>
<td>BIOL 415</td>
<td>Introduction to Biology: Biodiversity, Evolution, and Ecology (5)</td>
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<td>BIOL 420</td>
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<td>Anatomy and Physiology (5)</td>
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<td>BIOL 440</td>
<td>General Microbiology (4)</td>
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<td>BIOL 442</td>
<td>General Microbiology and Public Health (5)</td>
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<td>BIOL 482</td>
<td>Honors Marine Biology (4)</td>
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<td>BIOL 499</td>
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<td>BIOT 301</td>
<td>Biotechnology and Human Health (3)</td>
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<tr>
<td>BIOT 305</td>
<td>Introduction to Bioinformatics (1)</td>
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<td>BIOT 307</td>
<td>Biotechnology and Society (2)</td>
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<td>BIOT 311</td>
<td>Biotechnology Laboratory Methods - Molecular Techniques (2)</td>
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<td>BIOT 312</td>
<td>Biotechnology Laboratory Methods - Microbial and Cell Culture Techniques (2)</td>
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<td>NATR 300</td>
<td>Introduction to Natural Resource Conservation and Policy (4)</td>
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<td>NATR 302</td>
<td>Introduction to Wildlife Biology (4)</td>
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<td>NATR 303</td>
<td>Energy and Sustainability (3)</td>
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<td>NATR 304</td>
<td>The Forest Environment (3)</td>
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<td>NATR 305</td>
<td>Fisheries Ecology and Management (4)</td>
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<td>NATR 306</td>
<td>Introduction to Rangeland Ecology and Management (3)</td>
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<td>NATR 307</td>
<td>Principles of Sustainability (4)</td>
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<td>NATR 310</td>
<td>Study Design and Field Methods (4)</td>
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<td>NATR 320</td>
<td>Principles of Ecology (4)</td>
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<td>NATR 322</td>
<td>Environmental Restoration (2)</td>
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<tr>
<td>NATR 324</td>
<td>Field Studies: Birds and Plants of the High Sierra (1.5)</td>
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<td>NATR 330</td>
<td>Native Trees and Shrubs of California (4)</td>
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<td>NATR 332</td>
<td>Wildflowers of California (3)</td>
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<td>NATR 346</td>
<td>Water Resources and Conservation (3)</td>
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<td>NATR 495</td>
<td>Independent Studies in Natural Resources (1 - 3)</td>
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<td>NATR 499</td>
<td>Experimental Offering in Natural Resources (0.5 - 4)</td>
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<tr>
<td>PSYC 310</td>
<td>Biological Psychology (3)</td>
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<td>Biological Psychology Laboratory (1)</td>
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<td>PSYC 499</td>
<td>Experimental Offering in Psychology (0.5 - 4)</td>
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</tbody>
</table>

Total Units: 18

1 must be transfer-level and must include one laboratory course in a physical science and one laboratory course in a biological science

The General Science Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

### Student Learning Outcomes

Upon completion of this program, the student will be able to:

- evaluate new and accepted ideas about the natural universe using scientific methods.
- analyze a wide variety of natural phenomena using basic definitions and fundamental theories of biological or physical sciences.
- apply appropriate quantitative and qualitative methods to interpret and analyze pertinent data.
- outline the basic concepts and fundamental theories of a natural science.
- articulate orally and/or in writing the importance of continuous examination and modification of accepted ideas as a fundamental element in the progress of science.
- discuss ethical components of scientific decision making and apply personal and social values within the process of decision making in scientific endeavors.

### A.S. in Geographic Information Systems (GIS)

Geographic Information Systems (GIS) are collections of computers, software applications, and personnel used to capture, store, transform, manage, analyze, and display spatial information. This powerful technology has a wide range of applications in planning and management by government agencies, business, and industry. The A.S. Degree provides a solid technical background in GIS concepts and applications including database design, the Global Positioning System (GPS), cartography, GIS programming, spatial analysis, and interdisciplinary applications of the technology. The degree also includes ARC General Education and elective courses, which are required for graduation. Completion of the degree requires practical work experience in GIS.

Catalog Date: June 1, 2020
### Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>GEOG 330</td>
<td>Introduction to Geographic Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 334</td>
<td>Introduction to GIS Software Applications</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 340</td>
<td>Cartographic Design for GIS</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 342</td>
<td>Introduction to Remote Sensing and Digital Image Processing</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 344</td>
<td>Spatial Analysis and Modeling in GIS</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 350</td>
<td>Data Acquisition in GIS</td>
<td>3</td>
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<tr>
<td>GEOG 360</td>
<td>Database Design and Management in GIS</td>
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<tr>
<td>GEOG 362</td>
<td>Advanced Database Design and Management in GIS</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 375</td>
<td>Introduction to GIS Programming</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 385</td>
<td>Introduction to Web Based GIS Application Development</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 498</td>
<td>Work Experience in Geography</td>
<td>1-4</td>
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<tr>
<td><strong>Total Units:</strong></td>
<td></td>
<td><strong>31 - 34</strong></td>
</tr>
</tbody>
</table>

The Geographic Information Systems (GIS) Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

### Student Learning Outcomes

Upon completion of this program, the student will be able to:

- assess and describe fundamental aspects of geographic information and scale, with specific reference to raster and vector digital spatial data models used to represent such information.
- evaluate and compile various types of spatial data, with specific attention to geospatial metadata, data quality, and identification of the most appropriate data type for use in a specific GIS application.
- compare and contrast the variety of available coordinate systems, map projections, and datums, and choose the appropriate variety for a specific GIS application.
- originate, classify, edit, and manage digital spatial data using various techniques (e.g., manual, scan, and on-screen digitizing, computer-assisted drafting, GPS, etc.).
- design, synthesize, validate, optimize, and manage spatial attribute tables and databases.
- apply appropriate data normalization and classification schemes to attribute data.
- formulate geoprocessing and analysis functions that are appropriate for specific applications, and be able to perform and evaluate the results of such processes (such as buffering, overlay, reclassification, address matching, and statistical analysis).
- compare and contrast the effectiveness of various GIS output products, including maps, tables, charts, and other digital output for specific applications.
- describe, assess, and compare common map elements and the cartographic design process.
- synthesize, design, apply, and manage a GIS project, including estimates of time and labor requirements.
- propose at least three examples of GIS applications that document spatial distributions or solve spatial problems.
- list and describe at least three career options for GIS professionals.
- design, create, and disseminate high-quality maps in both hard-copy (paper) and digital (on-screen) forms.
- compare and contrast the effectiveness of hard-copy and digital maps.
- analyze problems encountered in the study of other disciplines, and formulate appropriate GIS solutions.

### Career Information

According to an Environmental Systems Research Institute survey, over 80 percent of the data used for decision-making in government and industry has a spatial component. New areas of rapid growth are in criminal justice, homeland security, marketing, retail site location, resource allocation, banking, health-care planning, disease control, insurance, real estate, and disaster preparedness, management, and response. Most local, state, and federal government agencies use GIS and maintain a staff of GIS technicians, analysts, and professionals. GIS is also commonly used in the private sector by businesses, planners, architects, foresters, geologists, environmental scientists, archaeologists, real estate professionals, marketers, sociologists, and bankers. The growth in application areas of GIS and of GIS as a specialized discipline
represents a new way for individuals, agencies, and businesses to view the world. The expansion of jobs in GIS is anticipated to continue for many years to come. It is likely that all students, regardless of their particular field of interest, will at least be exposed to and probably use a GIS in some capacity in the years ahead. The purpose of American River College's GIS program is to prepare students for careers in this expanding technological field.

A.S. in Geography

This degree provides students with a solid foundation in Geography as well as the standard prerequisites for upper-division coursework leading to a baccalaureate degree. The required and elective coursework covers a broad spectrum of Physical Geography, Human Geography, and GIS.

This is not an official transfer degree, such as the Geography AA-T, which guarantees admission to any California State University. However, this degree has been designed with an emphasis on University of California (UC) transferability. With two exceptions, all courses satisfy the Intersegmental General Education Transfer Curriculum (IGETC) that meets freshman/sophomore level general education requirements at a UC. This degree can also be used to prepare students for transfer to geography programs at private institutions, but in all cases students are strongly encouraged to research the lower division requirements at all programs they might be interested in.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
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<tbody>
<tr>
<td>GEOG 300</td>
<td>Physical Geography: Exploring Earth’s Environmental Systems</td>
<td>3</td>
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<td>GEOG 301</td>
<td>Physical Geography Laboratory</td>
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<tr>
<td>GEOG 310</td>
<td>Human Geography: Exploring Earth’s Cultural Landscapes</td>
<td>3</td>
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<tr>
<td>GEOG 330</td>
<td>Introduction to Geographic Information Systems (3)</td>
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<tr>
<td>or GEOG 331</td>
<td>Exploring Maps and Geographic Technologies (3)</td>
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<tr>
<td>or GEOG 334</td>
<td>Introduction to GIS Software Applications (3)</td>
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<tr>
<td>GEOG 391</td>
<td>Field Studies in Geography: Mountain Landscapes (1 -4)</td>
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<tr>
<td>or GEOG 392</td>
<td>Field Studies in Geography: Coastal Landscapes (1 -4)</td>
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<td>or GEOG 393</td>
<td>Field Studies in Geography: Arid Landscapes (1 -4)</td>
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<td>or GEOG 394</td>
<td>Field Studies in Geography: Volcanic Landscapes (1 -4)</td>
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<tr>
<td>PSYC 330</td>
<td>Introductory Statistics for the Behavioral Sciences (3)</td>
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<td>or STAT 300</td>
<td>Introduction to Probability and Statistics (4)</td>
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<td>or STAT 305</td>
<td>Statway, Part II (6)</td>
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<td>A minimum of 6 units from the following:</td>
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<tr>
<td>GEOL 320</td>
<td>Global Climate Change (3)</td>
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<tr>
<td>or GEOG 305</td>
<td>Global Climate Change (3)</td>
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<tr>
<td>GEOG 306</td>
<td>Weather and Climate (3)</td>
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<tr>
<td>GEOG 307</td>
<td>Environmental Hazards and Natural Disasters (3)</td>
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<td>or GEOL 325</td>
<td>Environmental Hazards and Natural Disasters (3)</td>
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<tr>
<td>GEOL 330</td>
<td>Introduction to Oceanography (3)</td>
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<td>or GEOG 308</td>
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<td>or GEOL 331</td>
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<td>GEOG 320</td>
<td>World Regional Geography (3)</td>
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<td>GEOG 322</td>
<td>Geography of California (3)</td>
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<td>Total Units:</td>
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1GEOG 331 is recommended for students who plan to transfer to a California State University.

The Geography Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.
Student Learning Outcomes

Upon completion of this program, the student will be able to:

- describe the general content and scope of collegiate level geography studies.
- compare and contrast the general biophysical and sociocultural differences and similarities among world regions.
- interpret maps and mapped data utilizing basic map elements including scales, coordinate systems, and symbols.
- compare and contrast common geographic information technologies such as Geographic Information Systems (GIS), Global Positioning System (GPS), and Remote Sensing.
- evaluate and analyze geographic problems and their solutions.
- list and describe at least three career options for geographers.

Career Information

The opportunities for geographers are as varied as the scope of geography itself. Geographers are found throughout the public and private sector, though rarely in positions with the title of Geographer. When combined with appropriate internships and/or other work experience, a baccalaureate degree in geography is excellent preparation for careers in natural resource management, environmental consulting, urban and regional planning, and elementary and secondary teaching. Geographic skills and knowledge are also quite valuable in diverse fields such as real estate, marketing, and demography.

Certificate of Achievement

Geographic Information Systems (GIS) Certificate

Geographic Information Systems (GIS) are collections of computers, software applications, and personnel used to capture, store, transform, manage, analyze, and display spatial information. This powerful technology has a wide range of applications in planning and management by government agencies, business, and industry. The certificate provides a solid technical background in GIS concepts and applications including database design, the Global Positioning System (GPS), cartography, GIS programming, spatial analysis, and interdisciplinary applications of the technology. Completion of the certificate requires practical work experience in GIS.

Catalog Date: June 1, 2020

Certificate Requirements

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<tr>
<th>COURSE CODE</th>
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<td>GEOG 330</td>
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<td>GEOG 340</td>
<td>Cartographic Design for GIS</td>
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<td>Spatial Analysis and Modeling in GIS</td>
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<td>GEOG 360</td>
<td>Database Design and Management in GIS</td>
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<tr>
<td>GEOG 498</td>
<td>Work Experience in Geography</td>
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A minimum of 6 units from the following:

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<td>GEOG 362</td>
<td>Advanced Database Design and Management in GIS (3)</td>
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<td>GEOG 375</td>
<td>Introduction to GIS Programming (3)</td>
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<tr>
<td>GEOG 385</td>
<td>Introduction to Web Based GIS Application Development (3)</td>
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</table>

Total Units: 28 - 31

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- assess and describe fundamental aspects of geographic information and scale, with specific reference to raster and vector digital spatial data models used to represent such information.
Geography (GEOG)

GEOG 300 Physical Geography: Exploring Earth's Environmental Systems

This course explores the processes and interrelationships which shape Earth's natural landscapes. Key topics include solar energy balance, weather and climate, water resources, landforms, natural hazards, soil, and vegetation. Relevant application of these concepts is used to explain the evolving relationship between humans and Earth's natural systems. Field trips may be required to relate course content to the real world.

Upon completion of this course, the student will be able to:

- list the basic components and describe the structure of each of Earth's major environmental systems: the atmosphere, hydrosphere, lithosphere, and biosphere.
- describe the basic processes and interrelationships occurring within and between the atmosphere, hydrosphere, lithosphere, and biosphere.
- identify and assess the impacts that the atmosphere, hydrosphere, lithosphere, and biosphere have on human environments.
- identify and assess the impact that human populations have on the atmosphere, hydrosphere, lithosphere, and biosphere.

Career Information

According to an Environmental Systems Research Institute survey, over 80 percent of the data used for decision-making in government and industry has a spatial component. New areas of rapid growth are in criminal justice, homeland security, marketing, retail site location, resource allocation, banking, health-care planning, disease control, insurance, real estate, and disaster preparedness, management, and response. Most local, state, and federal government agencies use GIS and maintain a staff of GIS technicians, analysts, and professionals. GIS is also commonly used in the private sector by businesses, planners, architects, foresters, geologists, environmental scientists, archaeologists, real estate professionals, marketers, sociologists, and bankers. The growth in application areas of GIS and of GIS as a specialized discipline represents a new way for individuals, agencies, and businesses to view the world. The expansion of jobs in GIS is anticipated to continue for many years to come. It is likely that all students, regardless of their particular field of interest, will at least be exposed to and probably use a GIS in some capacity in the years ahead. The purpose of American River College's GIS program is to prepare students for careers in this expanding technological field.

Geography (GEOG)

GEOG 300 Physical Geography: Exploring Earth's Environmental Systems

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: MATH 32 or MATH 42, AND eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC
General Education: AA/AS Area IV; CSU Area B1; IGETC Area 5A
C-ID: C-ID GEOG 110
Catalog Date: June 1, 2020

This course explores the processes and interrelationships which shape Earth's natural landscapes. Key topics include solar energy balance, weather and climate, water resources, landforms, natural hazards, soil, and vegetation. Relevant application of these concepts is used to explain the evolving relationship between humans and Earth's natural systems. Field trips may be required to relate course content to the real world.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- list the basic components and describe the structure of each of Earth's major environmental systems: the atmosphere, hydrosphere, lithosphere, and biosphere.
- describe the basic processes and interrelationships occurring within and between the atmosphere, hydrosphere, lithosphere, and biosphere.
- identify and assess the impacts that the atmosphere, hydrosphere, lithosphere, and biosphere have on human environments.
- identify and assess the impact that human populations have on the atmosphere, hydrosphere, lithosphere, and biosphere.
• identify the basic natural processes which have shaped Earth over time, using local Sacramento Region examples.

• utilize maps, charts, and graphs to understand the core concepts, patterns, and processes covered in this course.

GEOG 301 Physical Geography Laboratory

Units: 1
Hours: 54 hours LAB
Prerequisite: None.
Corequisite: GEOG 300
Advisory: MATH 32 or 42 with a grade of "C" or better; and eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300, OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC
General Education: CSU Area B3; IGETC Area 5C
C-ID: C-ID GEOG 111
Catalog Date: June 1, 2020

This course is a laboratory study of basic principles and concepts involved in understanding Earth's environmental systems. Labs feature observation, collection, analysis, and display of data related to the study of energy, weather and climate, vegetation, soils, landforms, and environmental hazards. Additionally, units feature geographic methods and technology, including interpretation of maps and other geographic imagery, weather instrumentation, the global positioning system (GPS), and relevant computer and Internet applications. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• read, analyze, and interpret topographic maps and other geographic imagery.

• collect and analyze basic geographic data using common instruments.

• analyze and interpret tabular and graphic data related to basic geographic phenomena.

• compare and contrast local geographic data with other locations, both regional and global.

• apply basic physical geographic principles to contemporary environmental situations.

GEOG 305 Global Climate Change

Same As: GEOL 320
Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: MATH 100 with a grade of "C" or better; and eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC
General Education: AA/AS Area IV; CSU Area B1; IGETC Area 5A
Catalog Date: June 1, 2020

This course explores the history and mechanisms of climate change in Earth’s past, as well as the methods that scientists use to investigate climate change. It also focuses on climate change in Earth’s recent history (the past few million years) and the role that humans have had in climate change, especially since the industrial revolution. Additionally, it investigates the effects of climate change in today’s world and discusses possible technological and political solutions to this vast and increasingly important problem, and how societies may adapt to the changes. Field trips may be required. This course is not open to students who have completed GEOL 320.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• describe the scientific tools used to study global climate change in the past and present.

• explain the components, processes, and dynamics of the global heat budget, as they pertain to the ocean/atmosphere system.

• describe the various lines of evidence that scientists use to investigate climate change in Earth’s deep past.

• explain the conditions that led to extensive climate change over the past 2.5 million years.

• evaluate the human causes of climate change, the evidence surrounding that, and the possible consequences of anthropogenically driven climate change.

• discriminate between and evaluate mechanisms of climate mitigation and adaptation at international, national, state, and local levels.
GEOG 306 Weather and Climate

This course introduces atmospheric processes including energy and moisture exchanges; atmospheric pressure; global circulation; precipitation processes; weather systems; severe weather; and world, regional, and local climate systems. It also includes observation and analysis of atmospheric data using charts, weather maps, and radar and satellite imagery from the Internet and other sources. Field trips may be required to reinforce course content.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- interpret, analyze, display, and map atmospheric and climate data.
- detail the processes of energy exchange involving the Earth/atmosphere system.
- describe the primary forces that influence global, regional, and local wind circulation.
- compare the dynamics of severe weather systems; including thunderstorms, tornadoes, and tropical cyclones.
- examine atmospheric and climate data to categorize and interpret variations in climate over Earth's surface.
- discuss and evaluate the mechanisms of climate change (both natural and anthropogenic), the impacts of climate change, and the efforts to adapt to and/or mitigate the challenges posed by the impacts.

GEOG 307 Environmental Hazards and Natural Disasters

Same As: GEOL 325
Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: MATH 100, 104, or 132; AND eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300, OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC
General Education: AA/AS Area IV; CSU Area B1; IGETC Area 5A
Catalog Date: June 1, 2020

This course covers the environmental effects and applications of Earth-related processes. It focuses on earthquakes, volcanic eruptions, landslides, flooding, hurricanes, as well as covering related current events. Topics also include the availability and exploitation of natural resources, waste disposal, and global climate change. Humans as a force in environmental change are emphasized. This course addresses geology, engineering, environmental studies, natural resources, geography, and science education. One field trip is required. This course is not open to students who have completed GEOL 325.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify and describe potential environmental hazards associated with different geomorphologic settings.
- describe short- and long-term consequences of environmental hazards on human activities.
- compare and contrast renewable and non-renewable natural resources.
- analyze the impact of human activity on natural resources.
- distinguish between short- and long-term global climate trends.
- evaluate current environmental issues that involve Earth system processes.

GEOG 308 Introduction to Oceanography

Same As: GEOL 330
Units: 3
Hours: 54 hours LEC
This course is an integrated study of the world's oceans, including the physical, chemical, biological and human-made processes that affect the oceans. Topics include plate tectonics, ocean basins and sediments, water chemistry, waves, tides, shoreline processes, ocean currents and its biosystems. Humans have impacted nearly all aspects of the oceans, which are critical to our species. Regional oceanographic features are emphasized and a field trip to gain familiarity with regional physical shoreline features is required. This course is not open to students who have completed GEOL 330.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe and evaluate the relationships between marine processes and plate tectonics
- assess the impact of human activities on ocean chemistry, biosystems and global climate
- examine common coastal features and processes
- evaluate the impacts of shoreline processes on human activities and structures
- analyze the relationships between weather patterns and oceanic circulation
- assess and interpret the gross chemical composition of the ocean
- evaluate and measure the impacts of resource extraction on marine environmental concerns
- describe the distribution of sediment in the oceans and the processes that move sediment

GEOG 309 Introduction to Oceanography Lab

Same As: GEOL 331
Units: 1
Hours: 54 hours LAB
Prerequisite: None.
Corequisite: GEOG 308 or GEOL 330
Advisory: GEOG 301 and GEOL 301
Transferable: CSU; UC
General Education: CSU Area B3; IGETC Area 5C
Catalog Date: June 1, 2020

This course is a laboratory investigation of Earth's oceans, emphasizing coastal processes of California. Most laboratory exercises are incorporated into field studies of California's coast, which involves visiting and comparing several distinct coastal environments. Camping is required, and a small fee is to be paid by the student. This course is not open to students who have completed GEOL 331.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- assess the physical and chemical similarities and differences of distinct coastal environments
- analyze the changing physical and chemical conditions on biological patterns
- analyze the relationships between sea floor morphology and plate tectonics

GEOG 310 Human Geography: Exploring Earth's Cultural Landscapes

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: MATH 32 or 42 with a grade of "C" or better or placement through the assessment process; AND eligible for ENGRD 310 or ENGRD 312 AND ENGRW 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC
General Education: AA/AS Area V(b); AA/AS Area VI; CSU Area D5; IGETC Area 4E
C-ID: C-ID GEOG 120
Catalog Date: June 1, 2020

This course investigates the diverse patterns of human settlement, development, and movement on earth, which evolved as a result of cultural and environmental factors.
Emphasis is placed on understanding global population and migration patterns, language, religion, ethnicity, political and economic systems, development issues, agriculture, and urbanization.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze humans' role in transforming Earth's surface into a series of distinctive cultural landscapes.
- evaluate explanations for the geographic origin and global diffusion of key aspects of culture (e.g. ethnocentrism, racism, language, religion, ethnicity, development, agriculture, urbanization).
- describe patterns of cultural diversity in California, the U.S., and the world.
- create maps from various types of socioeconomic data (e.g. ethnicity, religion, AIDS incidence, etc.).
- describe broad historical and modern global socioeconomic processes such as migration, colonization, and globalization.
- explain the spatial patterns of key geographic concepts, such as distribution of population, religion, and language.

GEOG 320 World Regional Geography

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: MATH 32 or 42; and eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300, OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC
General Education: AA/AS Area V(b); AA/AS Area VI; CSU Area D5; IGETC Area 4E
C-ID: C-ID GEOG 125
Catalog Date: June 1, 2020

This course is a global survey of the world's major geographic regions. Basic geographic concepts and ideas are used to study and compare cultures, resources, landscapes, economies, and political structures across all geographic regions. The interaction of countries and regions, their global roles, and the conflicting pressures of cultural diversity and globalization are presented. The widening gap between more developed and less developed countries and regions is integrated throughout the course, with a particular focus on comparing and contrasting conditions in North America and the United States with those in the rest of the world.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- generalize and describe the unique combination of cultural, physical, historical, economical, and organizational qualities that characterize each of Earth's major geographic regions.
- identify and discuss the major socioeconomic, political, and/or environmental issues currently affecting each of Earth's major geographic regions.
- define and investigate major geographic concepts such as region, migration, diffusion, globalization, demography, race, ethnicity, nationalism, and development.
- compare and contrast the factors which make North America and the United States particularly unique among Earth's major geographic regions.
- recognize and identify Earth's major geographic regions, as well as all countries located within them, on a blank outline map.

GEOG 322 Geography of California

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: MATH 32 or 42 with a grade of "C" or better; and eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300, OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC
General Education: AA/AS Area V(b); AA/AS Area VI; CSU Area D5; IGETC Area 4E
C-ID: C-ID GEOG 140
Catalog Date: June 1, 2020

This course is a study of the various natural and cultural environments of California, with special emphasis on the interaction of people with landforms, climate, natural vegetation, soils and resources. Historical, political, and economic development within this diverse environment is presented. The diversity of cultures which make up the state's expanding population is studied and compared. Analysis of current relevant issues, including those based on ethnic and cultural differences, forms an integral part of this course.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- analyze the physical and cultural environments existing within the state of California
- examine and analyze people-people and people-land interrelationships that have contributed to the historical, political, and economic development of the state
- compare and contrast the contributions made by the various ethnic and cultural groups which comprise the state’s population
- evaluate patterns of social problems within the state which are based on economic inequalities and ethnic and cultural differences

GEOG 330 Introduction to Geographic Information Systems

Units: 3  
Hours: 54 hours LEC  
Prerequisite: None.  
Advisory: CISC 300  
Transferable: CSU; UC  
General Education: AA/AS Area II(b)  
Catalog Date: June 1, 2020

This course provides an introduction to the concepts, methods, and applications of Geographic Information Systems (GIS). It emphasizes the techniques used to capture, store, query, analyze, and display spatial data. Specific topics include applications of GIS, geographic information and scale, coordinate systems, geospatial data models, data classification and symbolization, query and selection, cartographic design, data acquisition, data quality, geoprocessing, relational databases, metadata, spatial analysis, and GIS software.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- define GIS and provide examples of how it can be applied to solve real-world problems.
- describe coordinate systems.
- assess various geospatial data models.
- classify, query, and symbolize spatial data.
- apply geoprocessing tools.
- produce maps using GIS.

GEOG 331 Exploring Maps and Geographic Technologies

Units: 3  
Hours: 50 hours LEC; 12 hours LAB  
Prerequisite: None.  
Advisory: CISC 300 and GEOG 300  
Transferable: CSU; UC  
General Education: AA/AS Area IV  
C-ID: C-ID GEOG 150  
Catalog Date: June 1, 2020

This course introduces students to the world of maps (both hard-copy and digital) and the geographic techniques and technologies that are utilized in the creation of modern cartographic documents. Examination of cartographic design, basic statistics, the Global Positioning System (GPS), Internet mapping, remote sensing, and Geographic Information Systems (GIS) are covered.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- determine basic geographic information (e.g. location, distance, and direction) using various map scales, coordinate systems, and map projections.
- create, analyze, critique, and interpret data using maps, aerial photographs, and satellite imagery.
- demonstrate basic proficiency in traditional and modern cartography.
- collect, import, and display geospatial data within a GIS.
- evaluate common mapping applications and technologies.
organize, manipulate, analyze, and display tabular data.

use a GPS unit for basic navigation and data collection purposes.

GEOG 334 Introduction to GIS Software Applications

Units: 3
Hours: 50 hours LEC; 12 hours LAB
Prerequisite: None.
Advisory: CISC 300 and GEOG 330
Transferable: CSU
C-ID: C-ID GEOG 155
Catalog Date: June 1, 2020

This course provides the conceptual and practical foundations for using Geographic Information Systems (GIS) software. It emphasizes basic GIS software functionality including map display, attribute and spatial query, address geocoding, spatial database management, spatial analysis, cartographic presentation, and spatial data management.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify the components of the GIS graphical user interface
- perform attribute and spatial queries
- create and modify spatial databases
- analyze spatial relationships between map features
- design and produce maps
- choose between "join," "relate," and "spatial join" methods to associate values in separate tables
- utilize basic geoprocessing tools

GEOG 340 Cartographic Design for GIS

Units: 3
Hours: 54 hours LEC
Prerequisite: GEOG 330 with a grade of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This course provides an introduction to map design and production in the context of Geographic Information Systems (GIS). It emphasizes the concepts and methods associated with designing and producing thematic maps. Specific topics include data standardization and classification, symbolization, map projections, map elements, typography, cartographic design, thematic mapping techniques (choropleth, proportional symbol, dot, isarithmic, and multivariate), color in cartography, history of cartography, and map reproduction. Map critique sessions are also held.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- enumerate and describe the components of a map (map elements).
- perform the cartographic design process using GIS.
- produce professional quality maps using GIS.
- categorize and describe various thematic map types.
- identify and compare various map projections.
- evaluate and systematically critique thematic maps.

GEOG 342 Introduction to Remote Sensing and Digital Image Processing

3
Units: 50 hours LEC; 12 hours LAB
Hours: None.
Prerequisite: CISC 300 and GEOG 330
Advisory: CSU
Transferable: CSU GEOG 155
C-ID: June 1, 2020
Catalog Date: June 1, 2020

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- organize, manipulate, analyze, and display tabular data.
- use a GPS unit for basic navigation and data collection purposes.
This course introduces the principles and concepts of remote sensing and digital image processing as they relate to Geographic Information Systems (GIS). Topics include the fundamentals of remote sensing, aerial photography, satellite imagery, and unmanned aerial vehicle (UAV) imaging systems. It covers a variety of digital image processing techniques to analyze data from various remote sensing platforms.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- synthesize the fundamentals and principles of remote sensing and digital image processing.
- analyze a variety of digital image processing techniques as they are applied to remotely sensed imagery.
- apply image processing software, remote sensing principles, and digital image processing techniques to a variety of remotely sensed imagery.
- analyze, evaluate, and interpret a number of different remote sensing platforms (that may include aerial photography, satellite imagery, LIDAR, and unmanned aerial vehicles (UAV)).
- evaluate a number of different remote sensing principles and digital image processing techniques for a variety of real-world scenarios.

**GEOG 344 Spatial Analysis and Modeling in GIS**

This course provides a survey of the various concepts, approaches, and tools involved in the analysis and modeling of spatial data using Geographic Information Systems (GIS). It emphasizes the use of spatial and statistical analysis, geoprocessing, and spatial modeling in order to investigate spatial distributions and relationships, answer spatial questions, and solve spatial problems. Specific topics include distance and density surfaces, cluster analysis, network analysis, map algebra, surface interpolation and resampling, hydrologic analysis, 3D display/animation, and regression analysis.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- identify various spatial analysis techniques.
- apply statistical measures to characterize geospatial data.
- analyze geospatial distributions and relationships.
- assess various approaches to spatial modeling.
- build spatial models.

**GEOG 350 Data Acquisition in GIS**

This course introduces the techniques, theory, and practical experience necessary to acquire, convert, and create digital spatial data. Topics include acquisition of existing Geographic Information Systems (GIS) data, metadata, formatting and conversion of GIS data, creation of data utilizing digital cameras and scanners, utilization of remotely sensed data, and use of the Global Positioning System (GPS). Field trips may be required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- identify sources of existing spatial data.
evaluate the quality and reliability of existing data sets.

distinguish between various geospatial data models and assess their suitabilities for specific applications.

acquire primary data using GPS.

convert digital data from one format to another.

assemble GIS data sets into logical groups appropriate for specific applications.

utilize the Internet as a tool in data acquisition.

compile and categorize remote sensing data.

prioritize the importance of data sets required for a particular project in order to streamline the acquisition process.

GEOG 360 Database Design and Management in GIS

Units: 3
Hours: 54 hours LEC
Prerequisite: GEOG 330 with a grade of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This course examines principles of Geographic Information Systems (GIS) database management and design including conversion fundamentals, modeling techniques, and strategic planning. Topics include the needs, alternatives, and pitfalls of spatial database development and conversion. It examines various types of spatial and tabular data applicable to GIS, as well as relevant issues such as hardware and software requirements. Particular attention is paid to determining an appropriate methodology, conversion plan, and data quality assurance procedure.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the components of a spatial database system.
- critique the various types of geospatial input data.
- apply skills in building a spatial database for vector, raster, and tabular data.
- analyze the structure of existing spatial databases.
- compare the advantages of alternative spatial database structures.

GEOG 362 Advanced Database Design and Management in GIS

Units: 3
Hours: 54 hours LEC
Prerequisite: GEOG 360 with a grade of "C" or better
Advisory: CISA 320 and CISC 300
Transferable: CSU
Catalog Date: June 1, 2020

This course extends the concepts presented in GEOG 360, Database Design and Management in GIS. Topics include the advanced applications of organizing, inputting, and editing spatial data, including spatial data engine service management, spatial functions, multi-user editing, replication, and data organization. It involves the rigorous examination of traditional spatial database topics in a GIS context including data integration, warehousing, complex Structured Query Language (SQL) spatial coding, and system integration.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- design simple data models.
- use SQL to analyze and summarize database objects.
- design and evaluate the efficiency of a complex spatial database system suitable for use in a GIS application.
- categorize spatial, tabular, imagery, and document data for inclusion in a GIS database.
- produce an enterprise-oriented spatial database system.
synthesize edits from a multiple-user GIS spatial database.
revise an existing spatial database system designed for single or multiple GIS users.
formulate an ongoing GIS database management strategy.
determine the applicability of concepts learned to the independent design, creation, and use of a spatial database system.
critique spatial database designs presented for evaluation.

GEOG 375 Introduction to GIS Programming

Units: 3
Hours: 45 hours LEC; 27 hours LAB
Prerequisite: GEOG 330 with a grade of "C" or better
Advisory: GEOG 334
Transferable: CSU
General Education: AA/AS Area II(b)
Catalog Date: June 1, 2020

This course provides the concepts and skills necessary to become a proficient Geographic Information Systems (GIS) applications developer using the Python scripting language to develop commonly used GIS procedures and functions. Topics include GIS methods for querying and selecting geographic features, working with selection sets, editing tables, creating automated map sets, and performing geoprocessing operations.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- develop solutions to computer geoprocessing problems using a variety of research methods and by investigating data and programming sources.
- develop solutions to automate geoprocessing functions using a variety of programming methods, structures, and data sources.
- evaluate how the Python scripting language fits into the ArcGIS geoprocessing framework.
- apply GIS concepts, operations, and data sources to the process of conceiving common applications of GIS programming.
- assemble computer code in a logical, well-structured, and easy-to-read manner, including concise commenting.
- analyze, diagnose, and resolve "bugs" and typical problems in computer code through the combined processes of analysis and testing.
- compile Python and ArcGIS functions to create geoprocessing scripts.
- solve geospatial problems and streamline GIS workflows through the design and development of custom GIS applications.

GEOG 385 Introduction to Web Based GIS Application Development

Units: 3
Hours: 50 hours LEC; 12 hours LAB
Prerequisite: GEOG 330 with a grade of "C" or better
Advisory: CISW 300
Transferable: CSU
Catalog Date: June 1, 2020

This course introduces the development of Web-based Geographic Information Systems (GIS) solutions. Map authoring and Web service management tools are used to teach the techniques of creating, managing, maintaining, and deploying Web map services. It also introduces several options for using published Web map services for Web-based and mobile mapping applications.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- create maps for use on the Web.
- design, configure, optimize, and maintain Web map services.
- publish geospatial resources to a Web service.
- create and modify a basic interactive Web-based geospatial user interface.
• build a basic Web-based geospatial application.
• assess and critique appropriate map data for Web-based GIS.
• evaluate, create, test, troubleshoot, and problem solve geoprocessing functionality for Web map services.

GEOG 391 Field Studies in Geography: Mountain Landscapes

Units: 1 - 4
Hours: 6 - 24 hours LEC; 36 - 144 hours LAB
Prerequisite: None.
Transferable: CSU; UC
C-ID: C-ID GEOG 160
Catalog Date: June 1, 2020

This course covers geographic principles and processes in mountain environments. Course content varies by destination and may include topics in physical geography (e.g., plant and animal communities, climate and weather, geology and geomorphology, natural hazards, environmental impacts) and human geography (e.g., cultural landscapes, economic activities, transportation issues, land use patterns). It also introduces tools and techniques used for geographic field research (e.g., map and compass use, the Global Positioning System (GPS), Geographic Information Systems (GIS)). Field trips are required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• apply concepts and processes discussed in lecture to experiences in the field.
• compose field notes and collect and analyze field data.
• explain and describe physical and/or cultural phenomena of a specific region.
• integrate geographic information from various disciplines (geology, biology, ecology, urban studies, anthropology, history, economics, cultural studies, and others) in order to explain landscape patterns and processes.

GEOG 392 Field Studies in Geography: Coastal Landscapes

Units: 1 - 4
Hours: 6 - 24 hours LEC; 36 - 144 hours LAB
Prerequisite: None.
Transferable: CSU; UC
C-ID: C-ID GEOG 160
Catalog Date: June 1, 2020

This course involves the study of geographic principles and processes in coastal environments. Course content varies by destination and may include topics in physical geography (e.g., plant and animal communities, climate and weather, geology and geomorphology, natural hazards, environmental impacts) and human geography (e.g., cultural landscapes, economic activities, transportation issues, land use patterns). It also introduces tools and techniques used for geographic field research (e.g., map and compass use, the Global Positioning System (GPS), Geographic Information Systems (GIS)). Field trips are required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• apply concepts and processes discussed in lecture to experiences in the field.
• compose field notes and collect and analyze field data.
• describe and explain geographic phenomena related to the particular physical and/or human environments under study.
• integrate geographic information from various disciplines (geology, biology, ecology, urban studies, anthropology, history, economics, cultural studies, and others) in order to explain landscape patterns and processes.

GEOG 393 Field Studies in Geography: Arid Landscapes

Units: 1 - 4
Hours: 6 - 24 hours LEC; 36 - 144 hours LAB
Prerequisite: None.
Transferable: CSU; UC
C-ID: C-ID GEOG 160
This course involves the study of geographic principles and processes in arid environments. Course content varies by destination and may include topics in physical geography (e.g., plant and animal communities, climate and weather, geology and geomorphology, natural hazards, environmental impacts) and human geography (e.g., cultural landscapes, economic activities, transportation issues, land use patterns). It also introduces tools and techniques used for geographic field research (e.g., map and compass use, the Global Positioning System (GPS), Geographic Information Systems (GIS)). Field trips are required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply concepts and processes discussed in lecture to experiences in the field.
- compose field notes and collect and analyze field data.
- describe and explain geographic phenomena related to the particular physical and/or human environments under study.
- integrate geographic information from various disciplines (geology, biology, ecology, urban studies, anthropology, history, economics, cultural studies, and others) in order to explain landscape patterns and processes.

GEOG 394 Field Studies in Geography: Volcanic Landscapes

Units: 1 - 4
Hours: 6 - 24 hours LEC; 36 - 144 hours LAB
Prerequisite: None.
Transferable: CSU; UC
C-ID: C-ID GEOG 160
Catalog Date: June 1, 2020

This course involves the study of geographic principles and processes in volcanic environments. Course content varies by destination and may include topics in physical geography (e.g., plant and animal communities, climate and weather, geology and geomorphology, natural hazards, environmental impacts) and human geography (e.g., cultural landscapes, economic activities, transportation issues, land use patterns). It also introduces tools and techniques used for geographic field research (e.g., map and compass use, the Global Positioning System (GPS), Geographic Information Systems (GIS)). Field trips are required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply concepts and processes discussed in lecture to experiences in the field.
- compose field notes and collect and analyze field data.
- describe and explain geographic phenomena related to the particular physical and/or human environments under study.
- integrate geographic information from various disciplines (geology, biology, ecology, urban studies, anthropology, history, economics, cultural studies, and others) in order to explain landscape patterns and processes.

GEOG 495 Independent Studies in Geography

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

GEOG 498 Work Experience in Geography

Units: 1 - 4
Hours: 60 - 300 hours LAB
Prerequisite: None.
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position, or job related to geography or geographic information systems (GIS) with a cooperating site supervisor. Students are advised to consult with the Geography Department faculty to review specific certificate and degree
This course provides students with opportunities to develop marketable skills in preparation for employment or advancement within the field of geography or geographic information systems (GIS). It is designed for students interested in work experience and/or internships in transfer-level degree occupational programs. Course content includes understanding the application of education to the workforce, completion of Title 5 required forms which document the student's progress and hours spent at the work site, and developing workplace skills and competencies.

During the semester, the student is required to complete 75 hours of related paid work experience, or 60 hours of related unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. All students are required to attend the first class meeting, a mid-semester meeting, and a final meeting. Additionally, students who have not already successfully completed a Work Experience course will be required to attend weekly orientations while returning participants may meet individually with the instructor as needed. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate application of industry knowledge and theoretical concepts in the field of geography or geographic information systems (GIS) related to a transfer degree level career as written in the minimum three (3) learning objectives created by the student and his/her employer or work site supervisor at the start of the course
- make effective decisions, use workforce information, and manage his/her personal career plans.
- behave professionally, ethically, and legally at work, consistent with applicable laws, regulations, and organizational norms.
- behave responsibly at work, exhibiting initiative and self-management in situations where it is needed.
- apply effective leadership styles at work, with consideration to group dynamics, team and individual decision making, and workforce diversity.
- communicate in oral, written, and other formats, as needed, in a variety of contexts at work.
- locate, organize, evaluate, and reference information at work.
- demonstrate originality and inventiveness at work by combining ideas or information in new ways, making connections between seemingly unrelated ideas, and reshaping goals in ways that reveal new possibilities using critical and creative thinking skills such as logical reasoning, analytical thinking, and problem-solving.
Geology is the study of the origin and evolution of the Earth, using the principles of mathematics, chemistry, physics, and biology. Geologists study rocks, minerals, and fossils in an effort to draw conclusions about the Earth's observable surface processes, as well as those processes taking place inside the Earth. They attempt to determine how the Earth was formed and how it is being changed by natural and man-made activities. Geologists are often involved in remediating environmental problems caused by mining, construction, and manufacturing.

Division Dean | Dr. Rina Roy
Department Chairs | Hugh Howard

(916) 484-8107

Associate Degrees for Transfer

A.S.-T. in Geology

Geology is an interdisciplinary science that combines geological observations and concepts with those of biology, chemistry, physics, and mathematics. Its goals are to study rocks, minerals, fossils, energy and water resources, and to understand geologic principles and processes that shape Earth and its environments.

The Associate in Science in Geology for Transfer provides students with a major that fulfills the general requirements of the California State University for transfer. Students with this degree will receive priority admission with junior status to the California State University system.

The Associate in Science in Geology for Transfer (A.S.-T.) may be obtained by the completion of 60 transferable, semester units with a minimum of a 2.0 GPA, including (a) the major or area of emphasis described in the Required Program outlined below (earning a C or better in these courses), and (b) the Intersegmental General Education Transfer Curriculum (IGETC).

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 400</td>
<td>General Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 401</td>
<td>General Chemistry II</td>
<td>5</td>
</tr>
<tr>
<td>GEOL 300</td>
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The Associate in Science in Geology for Transfer (AS-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) the Intersegmental General Education Transfer Curriculum (IGETC).

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- evaluate new and accepted ideas about the natural universe using testable methodology.
articulate orally and/or in writing the importance of continuous examination and modification of accepted ideas as a fundamental element in the progress of science.

sort, arrange, and quantify objects using the international system of measurement (metric) as the standard.

analyze a wide variety of natural phenomena using basic definitions and fundamental theories of natural science.

compare the scales at which geologic processes work.

apply knowledge of current geologic processes to the understanding of Earth's past geologic history.

Career Information
The Geology transfer degree is designed to facilitate students' successful transfer to four-year colleges that prepare them for advanced study in a variety of graduate programs as well as a variety of career opportunities in the fields of environmental monitoring, protection and remediation, energy and mineral exploration, paleontology, vulcanology, seismology, climatology, teaching, and research.

Associate Degrees

A.S. in General Science
This program provides a broad study in the fields of biological and physical sciences in preparation for transfer to a four-year program and continuation of studies in upper division science courses.

Catalog Date: June 1, 2020

Degree Requirements

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**Biological Science Courses**

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Total Units: 18

\[^1\]must be transfer-level and must include one laboratory course in a physical science and one laboratory course in a biological science

*The General Science Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.*

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- evaluate new and accepted ideas about the natural universe using scientific methods.
- analyze a wide variety of natural phenomena using basic definitions and fundamental theories of biological or physical sciences.
- apply appropriate quantitative and qualitative methods to interpret and analyze pertinent data.
- outline the basic concepts and fundamental theories of a natural science.
- articulate orally and/or in writing the importance of continuous examination and modification of accepted ideas as a fundamental element in the progress of science.
- discuss ethical components of scientific decision making and apply personal and social values within the process of decision making in scientific endeavors.

**Geology (GEOL)**

**GEOL 300 Physical Geology**

- **Units:** 3
- **Hours:** 54 hours LEC
- **Prerequisite:** None.
- **Advisory:** MATH 100, 104 or 132; and eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300, OR ESLR 340 AND ESLW 340.
- **Transferable:** CSU; UC
- **General Education:** AA/AS Area IV; CSU Area B1; IGETC Area 5A
- **C-ID:** C-ID GEOL 100
- **Catalog Date:** June 1, 2020

This course provides an understanding of the dynamic nature of the Earth through the study of Earth processes. Topics include global plate tectonics and related processes such as seismic and volcanic activity. It also covers mineral and rock formation, and those processes related to the development of fluvial, glacial, desert, and coastal environments. The occurrence, use, and abuse of renewable and non-renewable resources such as air, ground and surface water, and fossil fuels are also covered. Field trips may be required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- explain the origins and characteristics of igneous, sedimentary, and metamorphic rock types.
- compare divergent, convergent, and transform plate tectonic boundaries in terms of the geologic processes and landforms found at each.
- recognize the dynamic nature of geologic processes and their rates as they relate to Earth's great age.
- analyze problems affecting daily life such as earthquake risks, volcanic hazards, mass wasting problems, rising sea levels, global warming, and use/abuse of natural resources.
GEOL 301 Physical Geology Laboratory

This course is a laboratory study of the basic principles of geology and their applications to everyday life. It encompasses the study and identification of common rocks and minerals, the interpretation and recognition of geologic structures and landforms, interpretation of maps, aerial photographs, remote sensing images, seismic information, and analysis of geologic hazards. Field trips may be required.

Upon completion of this course, the student will be able to:

- identify and classify minerals by their physical properties.
- evaluate rock samples and differentiate between igneous, sedimentary, and metamorphic rocks.
- appraise major types of aerial photographs, remote sensing imagery, and topographic and geologic maps and interpret geologic information from them.
- interpret ancient geologic, geographic, and environmental settings by using sedimentary rocks.
- formulate views of Earth’s interior based on analyzing seismic information.
- explain major Earth features to demonstrate understanding of plate tectonic processes.

GEOL 305 Earth Science

This is an introductory science course covering major topics in geology, oceanography, meteorology, and astronomy. It focuses on Earth as a dynamic and continually evolving planet and emphasizes the relationships between human-Earth interactions. Field trips may be required.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the Big Bang origin theory of the universe and explain the importance of stellar fusion to the formation of elements that make up the known universe.
- classify the planets in our solar system as terrestrial and Jovian and list the characteristics of each category.
- outline the processes and features associated with running water, groundwater, glaciers, wind, and waves that impact Earth's surface.
- cite the factors/processes that are responsible for producing Earth's seasons, weather, and climate.
- describe divergent, convergent, and transform plate tectonic boundaries in terms of the geologic processes (seismic activity, subduction, volcanism) and landforms found at each.
- illustrate, with real world examples, issues affecting daily life, such as earthquake risks, volcanic hazards, mass wasting, rising sea levels, climate change, and use-abuse of natural resources.
- classify rocks by their visible characteristics as igneous, sedimentary, and metamorphic rock types.

GEOL 306 Earth Science Laboratory

Units: 1
Hours: 54 hours LAB
Prerequisite: None
Corequisite: GEOL 305
Advisory: MATH 32 and 42; Eligible for ENGRD 310 or ENGRD 312 AND ENGRWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC (UC credit limitation: No credit if taken after GEOL 300 or 301)
General Education: CSU Area B3; IGETC Area 5C
C-ID: C-ID GEOL 120L
Catalog Date: June 1, 2020

This course emphasizes scientific methods, critical thinking skills, and systematic Earth science laboratory procedures. Topics include weather analysis, rock and mineral identification, study of topographic and geologic maps, and exercises in astronomy and oceanography.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply the scientific method to evaluate Earth science processes.
- distinguish between specimens of rocks and minerals and their modes of formation.
- differentiate between various geological processes that work to shape the topography of Earth.
- analyze atmospheric observations (temperature, pressure, humidity, cloud cover) to make basic weather forecasts.
- examine astronomical patterns and phenomena including planetary motion, solar and lunar eclipses, lunar phases, sun angle, and constellations.
- survey Earth's basic marine processes and describe seafloor topography.
- interpret and analyze various types of maps and satellite imagery used in the Earth sciences.

GEOL 310 Historical Geology

Units: 3
Hours: 54 hours LEC
Prerequisite: None
Advisory: GEOL 300, GEOL 305, MATH 100, or MATH 132; AND eligible for ENGRD 310 or ENGRD 312 AND ENGRWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC
General Education: AA/AS Area IV; CSU Area B1; IGETC Area 5A
C-ID: C-ID GEOL 110
Catalog Date: June 1, 2020

This course covers geologic history of the Earth as shown by the rock record and by the succession of fauna and flora through the processes of evolution and extinction. Plate tectonics and its driving mechanisms are used to understand the assembly and breakup of supercontinents, growth and erosion of mountains and changing sea levels. The evolution of species, ecosystems, climates, and landscapes is placed in a plate tectonics context. Stratigraphic, mineralogic, geochemical, and petrographical techniques for interpreting the sequence of past geological events are studied. Field trips may be required.
Upon completion of this course, the student will be able to:

- evaluate the history of the Earth in its 4.6 billion-year history in the context of the geological timescale, and the relative and numerical methods used to construct the timescale.
- describe the mechanisms of evolution and extinction and how they have shaped the history of life and affected geological processes in the past.
- describe how the rock cycle has changed over geological time in terms of minerals, igneous, metamorphic and sedimentary rocks.
- explain the mechanisms and features of plate tectonics and geological change and how they have shaped the Earth’s history.
- analyze the assembly, movement, and growth of the continents, and formation and breakup of supercontinents, with special regard for the North American continent.
- analyze the factors that have determined the state of Earth’s climate system in the past.

GEOL 311 Historical Geology Laboratory

Units: 1
Hours: 54 hours LAB
Prerequisite: None.
Corequisite: GEOL 310
Advisory: GEOL 300 and 301
Transferable: CSU; UC
General Education: CSU Area B3; IGETC Area 5C
C-ID: C-ID GEO 110 L
Catalog Date: June 1, 2020

This course is a laboratory study in historical geology. It applies principles of physical geology and paleontology in the reconstruction of the history of the earth. Exercises in stratigraphy, paleontology, and interpretation of geologic maps are utilized. Field trips are required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- compare the evolution of major fossil phyla.
- analyze examples of stratigraphic sequences to determine depositional environments.
- analyze rock specimens to infer the processes involved in their origins.
- analyze fossil assemblages to infer geologic ages.

GEOL 320 Global Climate Change

Same As: GEOG 305
Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: MATH 100 with a grade of "C" or better; and eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC
General Education: AA/AS Area IV; CSU Area B1; IGETC Area 5A
Catalog Date: June 1, 2020

This course explores the history and mechanisms of climate change in Earth’s past, as well as the methods that scientists use to investigate climate change. It also focuses on climate change in Earth’s recent history (the past few million years) and the role that humans have had in climate change, especially since the industrial revolution. Additionally, it investigates the effects of climate change in today’s world and discusses possible technological and political solutions to this vast and increasingly important problem, and how societies may adapt to the changes. Field trips may be required. This course is not open to students who have completed GEOG 305.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the scientific tools used to study global climate change in the past and present.
- explain the components, processes, and dynamics of the global heat budget, as they pertain to the ocean/atmosphere system.
- describe the various lines of evidence that scientists use to investigate climate change in Earth’s deep past.
explain the conditions that led to extensive climate change over the past 2.5 million years.

evaluate the human causes of climate change, the evidence surrounding that, and the possible consequences of anthropogenically driven climate change.

discriminate between and evaluate mechanisms of climate mitigation and adaptation at international, national, state, and local levels.

GEOL 325 Environmental Hazards and Natural Disasters

Same As: GEOG 307
Units: 3
Hours: 54 hours LEC
Prerequisite: None
Advisory: MATH 100, 104, or 132; AND eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300, OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC
General Education: AA/AS Area IV; CSU Area B1; IGETC Area 5A
Catalog Date: June 1, 2020

This course covers the environmental effects and applications of Earth-related processes. It focuses on earthquakes, volcanic eruptions, landslides, flooding, hurricanes, as well as covering related current events. Topics also include the availability and exploitation of natural resources, waste disposal, and global climate change. Humans as a force in environmental change are emphasized. This course addresses geology, engineering, environmental studies, natural resources, geography, and science education. One field trip is required. This course is not open to students who have completed GEOG 307.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify and describe potential environmental hazards associated with different geomorphologic settings.
- describe short- and long-term consequences of environmental hazards on human activities.
- compare and contrast renewable and non-renewable natural resources.
- analyze the impact of human activity on natural resources.
- distinguish between short- and long-term global climate trends.
- evaluate current environmental issues that involve Earth system processes.

GEOL 330 Introduction to Oceanography

Same As: GEOG 308
Units: 3
Hours: 54 hours LEC
Prerequisite: None
Advisory: GEOG 300 or GEOL 300
Transferable: CSU; UC
General Education: AA/AS Area IV; CSU Area B1; IGETC Area 5A
Catalog Date: June 1, 2020

This course is an integrated study of the world’s oceans, including the physical, chemical, biological and human-made processes that affect the oceans. Topics include plate tectonics, ocean basins and sediments, water chemistry, waves, tides, shoreline processes, ocean currents and its biosystems. Humans have impacted nearly all aspects of the oceans, which are critical to our species. Regional oceanographic features are emphasized and a field trip to gain familiarity with regional physical shoreline features is required. This course is not open to students who have completed GEOG 308.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe and evaluate the relationships between marine processes and plate tectonics
- assess the impact of human activities on ocean chemistry, biosystems and global climate
- examine common coastal features and processes
- evaluate the impacts of shoreline processes on human activities and structures
- analyze the relationships between weather patterns and oceanic circulation
- assess and interpret the gross chemical composition of the ocean
• evaluate and measure the impacts of resource extraction on marine environmental concerns
• describe the distribution of sediment in the oceans and the processes that move sediment

**GEOL 331 Introduction to Oceanography Lab**

<table>
<thead>
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<th>GEOG 309</th>
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<tbody>
<tr>
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<tr>
<td>Hours:</td>
<td>54 hours LAB</td>
</tr>
<tr>
<td>Prerequisite:</td>
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<td>Corequisite:</td>
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<td>General Education:</td>
<td>CSU Area B3; IGETC Area 5C</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
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</tbody>
</table>

This course is a laboratory investigation of Earth’s oceans, emphasizing coastal processes of California. Most laboratory exercises are incorporated into field studies of California's coast, which involves visiting and comparing several distinct coastal environments. Camping is required, and a small fee is to be paid by the student. This course is not open to students who have completed GEOG 309.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

• assess the physical and chemical similarities and differences of distinct coastal environments
• analyze the changing physical and chemical conditions on biological patterns
• analyze the relationships between sea floor morphology and plate tectonics

**GEOL 345 Geology of California**

<table>
<thead>
<tr>
<th>Units:</th>
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<tbody>
<tr>
<td>Hours:</td>
<td>54 hours LEC</td>
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<tr>
<td>Prerequisite:</td>
<td>None.</td>
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<td>Advisory:</td>
<td>MATH 32 or MATH 42, AND eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.</td>
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<td>Transferable:</td>
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<td>C-ID GEOL 200</td>
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<td>Catalog Date:</td>
<td>June 1, 2020</td>
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</table>

This course provides a survey of the physical and historical aspects of California geology, emphasizing the linkage of geology and people through economic and social impacts. It is recommended for non-majors and majors in geology and is of particular value to science, engineering, environmental studies, education, and economics majors. Field trips may be required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

• interpret the formation of California’s geologic provinces within the framework of plate tectonics.
• describe California's geologic resources, their distribution, use, and conservation.
• analyze California's geologic hazards and assess their prediction, prevention, and mitigation.
• evaluate the continuing interaction between geology and humans in California.
• locate California’s geologic provinces on a map.

**GEOL 390 Field Studies in Geology**

<table>
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<tr>
<th>Units:</th>
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<tbody>
<tr>
<td>Hours:</td>
<td>6 - 24 hours LEC; 36 - 144 hours LAB</td>
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<td>Prerequisite:</td>
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<td>CSU; UC</td>
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<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>
This course involves field study of selected locations of geologic interest. Course content varies according to field trip destination but may include topics in physical geology, environmental geology, economic geology, and/or introduction to tools and techniques used for geosciences field research (e.g. map and compass, the Global Positioning System (GPS), Geographic Information Systems (GIS), etc.). Field excursions are required and field trip expense fees may be required. A portion of this course may be offered in a TBA component of 18-144 hours which may include composing field notes, making field sketches, collecting various forms of field data, analysis of field data, and use of maps, compass, and/or the Global Positioning System.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- relate geologic concepts and processes to actual locations and situations.
- compose field notes.
- describe and explain geologic phenomena related to the specific examples under study.
- integrate student-observed geologic information to interpret and explain patterns and processes.
- analyze collected field data.

GEOL 495 Independent Studies in Geology

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<tr>
<th>Units:</th>
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<tbody>
<tr>
<td>Hours:</td>
<td>54 - 162 hours LAB</td>
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<tr>
<td>Prerequisite:</td>
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<td>CSU</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
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</table>

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.
Gerontology | American River College

Gerontology is the study of human growth and development during adulthood. It includes the psychological and physiological changes that touch each individual, as well as, the social implications that flow from these changes.

The Gerontology program at American River College offers continuing education credit for specific courses for RNs, LVNs, CNAs, RCFE Administrators, LMFTs, LCSWs, and Nursing Home Administrators.

ARC has gained a reputation as a leader in gerontology studies and has been awarded National Program of Merit Status by the Association for Gerontology in Higher Education. The program co-sponsors events with AARP and California Council on Gerontology and Geriatrics. This leadership has enriched its offerings and enhanced the career value of an ARC gerontology degree or certificate.

Division Dean
Kathy Sorensen (Interim)

Department Chairs
Laurinda Reynolds

(916) 484-8512
gerontology@arc.losrios.edu

Associate Degrees

A.A. in Gerontology: Business

This degree provides a broad overview of the biological, psychological, and social aspects of aging along with introductory business courses emphasizing the impact of an aging population on business. It focuses on preparation for entry-level positions with private industry, government, and non-profit agencies providing goods and services to senior adults and/or preparation for further gerontology/business study at a four-year college or university.

Catalog Date: June 1, 2020

Degree Requirements

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<td>GERON 300</td>
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<td>or SOC 335</td>
<td>Sociology of Aging (3)</td>
<td>3</td>
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<td>GERON 302</td>
<td>Psychology of Aging: Adult Development and Aging (3)</td>
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<tr>
<td>or PSYC 374</td>
<td>Psychology of Aging: Adult Development and Aging (3)</td>
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<td>GERON 311</td>
<td>Social Services Designee: Legal Issues and End-of-Life Decisions</td>
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<tr>
<td>GERON 330</td>
<td>Communicating with and Validating Older Adults</td>
<td>3</td>
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<td>GERON 334</td>
<td>Reminiscence Therapy (3)</td>
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<tr>
<td>or PSYC 379</td>
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<td>GERON 335</td>
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<td>3</td>
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<tr>
<td>GERON 360</td>
<td>Ethnic Diversity and Aging</td>
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<td>GERON 362</td>
<td>Biology of Aging</td>
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<td>GERON 366</td>
<td>Coping with Death and Related Bereavement</td>
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<td>GERON 368</td>
<td>Mental Health and Aging</td>
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<td>GERON 490</td>
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<td>HSER 340</td>
<td>Introduction to Chemical Dependency (3)</td>
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</table>
The Gerontology: Business Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- assess social and cultural attitudes on aging and how they impact social policy regarding the senior population
- evaluate the biological, psychological, and social aging changes in terms of optimal aging and the impact of lifestyle choices
- analyze legal and ethical issues relating to aging and end-of-life decisions
- demonstrate skill, ease, confidence, rapport, and listening skills when interacting with seniors at different cognitive levels
- evaluate cognitive levels of seniors and utilize appropriate interactional activities and techniques for communication
- examine the physiological effects of chemical dependency and substance abuse on the elderly population
- evaluate care for the dying in different environments
- assess common mental health issues of aging and evaluate interventions and resources
- survey services for seniors available within a community and define eligibility requirements
- apply knowledge of gerontology to real-life business situations

Career Information

Entry-level positions with private industry, government, and non-profit agencies providing goods and services to senior adults

A.A. in Gerontology: Case Management/Social Services

This degree provides a broad overview of the biological, psychological, and social aspects of aging, along with introductory human services and psychology courses emphasizing the diverse needs of an aging population. It focuses on preparation for entry-level positions with private industry, government, and non-profit agencies providing
Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
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<td>GERON 362</td>
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<td>GERON 366</td>
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<td>HSER 340</td>
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<td>GERON 312</td>
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The Gerontology: Case Management/Social Services Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- assess social and cultural attitudes on aging and how they impact social policy regarding senior population
- evaluate the biological, psychological and social aging changes in terms of optimal aging and the impact of lifestyle choices
• analyze legal and ethical issues relating to aging and end-of-life decisions
• demonstrate skill, ease, confidence, rapport, and listening skills when interacting with seniors at different cognitive levels
• evaluate cognitive levels of seniors and utilize appropriate interactional activities and techniques for communication
• examine the physiological effects of chemical dependency and substance abuse on the elderly population
• evaluate care for the dying in different environments
• assess common mental health issues of aging and evaluate interventions and resources
• survey services for seniors available within a community and define eligibility requirements
• apply knowledge of gerontology to real-life case management and social services situations

Career Information
Entry-level positions with private industry, government, and non-profit agencies providing case management and/or social services to senior adults

A.A. in Gerontology: Environmental Design
This degree provides a broad overview of the biological, psychological, and social aspects of aging, along with introductory art and interior design courses emphasizing the environmental needs of an aging population. It focuses on preparation for entry-level positions with private industry, government, and non-profit agencies providing design services to senior adults and/or preparation for further gerontology/design study at a four-year college or university.

Catalog Date: June 1, 2020

Degree Requirements

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<td>GERON 334</td>
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<td>HSER 340</td>
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The Gerontology: Environmental Design Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- assess social and cultural attitudes on aging and how they impact social policy regarding the senior population
- evaluate the biological, psychological and social aging changes in terms of optimal aging and the impact of lifestyle choices
- analyze legal and ethical issues relating to aging and end-of-life decisions
- demonstrate skill, ease, confidence, rapport, and listening skills when interacting with seniors at different cognitive levels
- evaluate cognitive levels of seniors and utilize appropriate interactional activities and techniques for communication
- examine the physiological effects of chemical dependency and substance abuse on the elderly population
- evaluate care for the dying in different environments
- assess common mental health issues of aging and evaluate interventions and resources
- survey services for seniors available within a community and define eligibility requirements
- apply knowledge of gerontology and environmental design to real-life situations in working in environmental design situations

**Career Information**

Entry-level positions with private industry, government, and non-profit agencies providing design services to senior adults

**A.A. in Gerontology: Health Care**

This degree provides a broad overview of the biological, psychological, and social aspects of aging, along with introductory course work emphasizing the health needs of an aging population. It focuses on preparation for entry-level positions with private industry, government, and non-profit agencies providing health services to senior adults and/or preparation for further gerontology/health care study at a four-year college or university.

**Degree Requirements**
<table>
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<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
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<td>GERON 335</td>
<td>Wellness for Older Adults</td>
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<tr>
<td>GERON 360</td>
<td>Ethnic Diversity and Aging</td>
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<td>GERON 362</td>
<td>Biology of Aging</td>
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<td>Work Experience in Gerontology (1 - 4)</td>
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Health Care Concentration Requirements:
A minimum of 9 units from the following:

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<td>AH 110</td>
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<tr>
<td>BIOL 102</td>
<td>Essentials of Human Anatomy and Physiology (4)</td>
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<tr>
<td>HSER 310</td>
<td>Ethical Issues and Client's Rights (3)</td>
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<td>or GERON 304</td>
<td>Ethical Issues and Client's Rights (3)</td>
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<td>NURSE 100</td>
<td>Nurse Assistant (7)</td>
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<td>Home Health Aide (2)</td>
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<tr>
<td>SLPA 300</td>
<td>Introduction to Communication Disorders (3)</td>
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Total Units: 36

1Prerequisite required for NURSE 101.

The Gerontology: Health Care Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- assess social and cultural attitudes on aging and how they impact social policy regarding the senior population
- evaluate the biological, psychological and social aging changes in terms of optimal aging and the impact of lifestyle choices
- analyze legal and ethical issues relating to aging and end-of-life decisions
- demonstrate skill, ease, confidence, rapport, and listening skills when interacting with seniors at different cognitive levels
- evaluate cognitive levels of seniors and utilize appropriate interactional activities and techniques for communication
- examine the physiological effects of chemical dependency and substance abuse on the elderly population
- evaluate care for the dying in different environments
- assess common mental health issues of aging and evaluate interventions and resources
- survey services for seniors available within a community and define eligibility requirements
- apply knowledge of gerontology to real-life health care situations

Career Information

Entry-level positions with private industry, government, and non-profit agencies providing health services to senior adults
A.A. in Gerontology: Recreation

This degree provides a broad overview of the biological, psychological, and social aspects of aging, along with introductory recreation and physical education courses emphasizing the recreational needs of an aging population. It focuses on preparation for entry-level positions with private industry, government, and non-profit agencies providing recreational services to senior adults and/or preparation for further gerontology/recreation study at a four-year college or university.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
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<td>GERON 311</td>
<td>Social Services Designee: Legal Issues and End-of-Life Decisions</td>
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<td>GERON 330</td>
<td>Communicating with and Validating Older Adults</td>
<td>3</td>
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<td>GERON 334</td>
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<td>GERON 335</td>
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<td>GERON 360</td>
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<td>Biology of Aging</td>
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<td>GERON 366</td>
<td>Coping with Death and Related Bereavement</td>
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<td>Mental Health and Aging</td>
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<td>GERON 490</td>
<td>Aging Policy and Practice</td>
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<tr>
<td>HSER 340</td>
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The Gerontology: Recreation Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- assess social and cultural attitudes on aging and how they impact social policy regarding the senior population
- evaluate the biological, psychological and social aging changes in terms of optimal aging and the impact of lifestyle choices
- analyze legal and ethical issues relating to aging and end-of-life decisions
- demonstrate skill, ease, confidence, rapport, and listening skills when interacting with seniors at different cognitive levels
• evaluate cognitive levels of seniors and utilize appropriate interactional activities and techniques for communication
• examine the physiological effects of chemical dependency and substance abuse on the elderly population
• evaluate care for the dying in different environments
• assess common mental health issues of aging and evaluate interventions and resources
• survey services for seniors available within a community and define eligibility requirements
• apply knowledge of gerontology to real-life recreation situations

Career Information
Entry-level positions with private industry, government, and non-profit agencies providing recreational services to senior adults

A.A. in Gerontology: Social Policy/Advocacy
This degree provides a broad overview of the biological, psychological, and social aspects of aging, along with introductory human services, speech, management, and political science courses emphasizing the social policy and advocacy needs of an aging population. It focuses on preparation for entry-level positions with private industry, government, and non-profit agencies providing input to social policy and advocacy for senior adults and/or preparation for further gerontology/social policy/advocacy study at a four-year college or university.

Catalog Date: June 1, 2020

Degree Requirements

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Advocacy Concentration

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Advocacy Concentration Units: 9

Total Units: 36

Social Policy Concentration

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<td>POLS 301</td>
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<td>SPEECH 301</td>
<td>Public Speaking (3)</td>
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Social Policy Concentration Units: 9

Total Units: 36

The Gerontology: Social Policy/Advocacy Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- assess social and cultural attitudes on aging and how they impact social policy regarding the senior population
- evaluate the biological, psychological and social aging changes in terms of optimal aging and the impact of lifestyle choices
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- examine the physiological effects of chemical dependency and substance abuse on the elderly population
- evaluate care for the dying in different environments
- assess common mental health issues of aging and evaluate interventions and resources
- survey services for seniors available within a community and define eligibility requirements
- apply knowledge of gerontology to real-life social policy/advocacy situations

Career Information

Entry-level positions with private industry, government, and non-profit agencies providing input to social policy and advocacy for senior adults
Certificates of Achievement

Gerontology: Business Certificate

This certificate provides a broad overview of the biological, psychological, and social aspects of aging, along with introductory business courses emphasizing the impact of an aging population on business. It focuses on preparation for entry-level positions with private industry, government, and non-profit agencies providing goods and services to senior adults.

Catalog Date: June 1, 2020

Certificate Requirements

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</table>
Student Learning Outcomes

Upon completion of this program, the student will be able to:

- assess social and cultural attitudes on aging and how they impact social policy regarding the senior population
- evaluate the biological, psychological and social aging changes in terms of optimal aging and the impact of lifestyle choices
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- examine the physiological effects of chemical dependency and substance abuse on the elderly population
- evaluate care for the dying in different environments
- assess common mental health issues of aging and evaluate interventions and resources
- survey services for seniors available within a community and define eligibility requirements
- apply knowledge of gerontology to real-life business situations

Career Information

Entry-level positions with private industry, government, and non-profit agencies providing goods and services to senior adults

Gerontology: Case Management/Social Services Certificate

This certificate provides a broad overview of the biological, psychological, and social aspects of aging, along with introductory human services and psychology courses emphasizing the diverse needs of an aging population. It focuses on preparation for entry-level positions with private industry, government, and non-profit agencies providing case management and/or social services to senior adults.

Catalog Date: June 1, 2020

Certificate Requirements

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<th>COURSE CODE</th>
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A minimum of 3 units from the following:
Upon completion of this program, the student will be able to:

- assess social and cultural attitudes on aging and how they impact social policy regarding the senior population
- evaluate the biological, psychological and social aging changes in terms of optimal aging and the impact of lifestyle choices
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- examine the physiological effects of chemical dependency and substance abuse on the elderly population
- evaluate care for the dying in different environments
- assess common mental health issues of aging and evaluate interventions and resources
- survey services for seniors available within a community and define eligibility requirements
- apply knowledge of gerontology to real-life case management and social services situations

Career Information
Entry-level positions with private industry, government, and non-profit agencies providing case management and/or social services to senior adults

Gerontology: Environmental Design Certificate
This certificate provides a broad overview of the biological, psychological, and social aspects of aging, along with introductory art and interior design courses emphasizing the environmental needs of an aging population. It focuses on preparation for entry-level positions with private industry, government, and non-profit agencies providing design services to senior adults.

Certificate Requirements

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\(^1\) Prerequisite required for IDES 334

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- assess social and cultural attitudes on aging and how they impact social policy regarding the senior population
- evaluate the biological, psychological and social aging changes in terms of optimal aging and the impact of lifestyle choices
- analyze legal and ethical issues relating to aging and end-of-life decisions
- demonstrate skill, ease, confidence, rapport, and listening skills when interacting with seniors at different cognitive levels
- evaluate cognitive levels of seniors and utilize appropriate interactional activities and techniques for communication
- examine the physiological effects of chemical dependency and substance abuse on the elderly population
- evaluate care for the dying in different environments
- assess common mental health issues of aging and evaluate interventions and resources
- survey services for seniors available within a community and define eligibility requirements
- apply knowledge of gerontology and environmental design to real-life design situations

**Career Information**

Entry-level positions with private industry, government, and non-profit agencies providing environmental design services to senior adults

**Gerontology: Health Care Certificate**

This certificate provides a broad overview of the biological, psychological, and social aspects of aging, along with introductory course work emphasizing the health needs of
an aging population. It focuses on preparation for entry-level positions with private industry, government, and non-profit agencies providing health services to senior adults.

Catalog Date: June 1, 2020

Certificate Requirements

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<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<td>or PSYC 374</td>
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<tr>
<td>or PSYC 379</td>
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<td>HSER 340</td>
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<td>or PSYC 400</td>
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<td>Essentials of Human Anatomy and Physiology (4)</td>
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<td>Ethical Issues and Client's Rights (3)</td>
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<td>or GERON 304</td>
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<td>NURSE 100</td>
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<td>SLPA 300</td>
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\(^1\)Prerequisite required for NURSE 101

Total Units: 36

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- assess social and cultural attitudes on aging and how they impact social policy regarding the senior population
- evaluate the biological, psychological and social aging changes in terms of optimal aging and the impact of lifestyle choices
- analyze legal and ethical issues relating to aging and end-of-life decisions
- demonstrate skill, ease, confidence, rapport, and listening skills when interacting with seniors at different cognitive levels
- evaluate cognitive levels of seniors and utilize appropriate interactional activities and techniques for communication
• examine the physiological effects of chemical dependency and substance abuse on the elderly population
• evaluate care for the dying in different environments
• assess common mental health issues of aging and evaluate interventions and resources
• survey services for seniors available within a community and define eligibility requirements
• apply knowledge of gerontology to real-life health care situations

Career Information
Entry-level positions with private industry, government, and non-profit agencies providing health services to senior adults

Gerontology: Recreation Certificate
This certificate provides a broad overview of the biological, psychological, and social aspects of aging, along with introductory recreation and physical education courses emphasizing the recreational needs of an aging population. It focuses on preparation for entry-level positions with private industry, government, and non-profit agencies providing recreational services to senior adults.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tr>
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<td>or SOC 335</td>
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<td>GERON 302</td>
<td>Psychology of Aging: Adult Development and Aging (3)</td>
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<tr>
<td>or PSYC 374</td>
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<tr>
<td>GERON 311</td>
<td>Social Services Designee: Legal Issues and End-of-Life Decisions</td>
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<td>GERON 330</td>
<td>Communicating with and Validating Older Adults</td>
<td>3</td>
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<tr>
<td>GERON 334</td>
<td>Reminiscence Therapy (3)</td>
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<tr>
<td>or PSYC 379</td>
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<td>GERON 362</td>
<td>Biology of Aging</td>
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<td>GERON 366</td>
<td>Coping with Death and Related Bereavement</td>
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<td>Mental Health and Aging</td>
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Student Learning Outcomes

Upon completion of this program, the student will be able to:

- assess social and cultural attitudes on aging and how they impact social policy regarding the senior population
- evaluate the biological, psychological and social aging changes in terms of optimal aging and the impact of lifestyle choices
- analyze legal and ethical issues relating to aging and end-of-life decisions
- demonstrate skill, ease, confidence, rapport, and listening skills when interacting with seniors at different cognitive levels
- evaluate cognitive levels of seniors and utilize appropriate interactional activities and techniques for communication
- examine the physiological effects of chemical dependency and substance abuse on the elderly population
- evaluate care for the dying in different environments
- assess common mental health issues of aging and evaluate interventions and resources
- survey services for seniors available within a community and define eligibility requirements
- apply knowledge of gerontology to real-life recreation situations

Career Information

Entry-level positions with private industry, government, and non-profit agencies providing recreational services to senior adults

Gerontology: Social Policy/Advocacy Certificate

This certificate provides a broad overview of the biological, psychological, and social aspects of aging, along with introductory human services, speech, management, and political science courses emphasizing the social policy and advocacy needs of an aging population. It focuses on preparation for entry-level positions with private industry, government, and non-profit agencies providing input to social policy and advocacy for senior adults.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<td>or SOC 335</td>
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<td>GERON 302</td>
<td>Psychology of Aging: Adult Development and Aging (3)</td>
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<td>or PSYC 374</td>
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<td>Social Services Designee: Legal Issues and End-of-Life Decisions</td>
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Advocacy Concentration

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Advocacy Concentration Units: 9

Total Units: 36

Social Policy Concentration

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Social Policy Concentration Units: 9

Total Units: 36

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- assess social and cultural attitudes on aging and how they impact social policy regarding the senior population
- evaluate the biological, psychological and social aging changes in terms of optimal aging and the impact of lifestyle choices
- analyze legal and ethical issues relating to aging and end-of-life decisions
- demonstrate skill, ease, confidence, rapport, and listening skills when interacting with seniors at different cognitive levels
- evaluate cognitive levels of seniors and utilize appropriate interactional activities and techniques for communication
- examine the physiological effects of chemical dependency and substance abuse on the elderly population
- evaluate care for the dying in different environments
- assess common mental health issues of aging and evaluate interventions and resources
- survey services for seniors available within a community and define eligibility requirements
Career Information

Entry-level positions with private industry, government, and non-profit agencies providing input to social policy and advocacy for senior adults

Senior Fitness Specialist Certificate

The Senior Fitness Specialist program prepares students for employment as a fitness leader in settings where people ages 50+ exercise with other age groups and in settings that cater to older adults. The program provides students with the knowledge and hands-on experience necessary to begin a career in this growing field of fitness.

Catalog Date: June 1, 2020

Certificate Requirements

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<td>Validation: Theory and Practice</td>
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<td>Motivating Older Adults to Stay Active</td>
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<td>Body Mechanics and Safety</td>
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<td>GERON 380</td>
<td>Nutrition and Aging</td>
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<td>Community CPR and Adult AED</td>
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<td>Effects of Exercise on Special Populations</td>
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<td>Techniques of Strength Training Instruction</td>
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¹One unit of work experience is required in one of the following environments: recreation center, senior center, senior community, assisted living facility, or another site for seniors.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- recommend beneficial exercises for seniors and individuals with disabilities or medical conditions.
- behave responsibly at work, exhibiting initiative and self-management in situations where it is needed.
- create an individualized fitness plan to promote functional independence throughout the remainder of life.
- analyze how nutrition plays a part in overall health and aging.
- compare and contrast different self and group motivational techniques for staying active.
- identify and respond to life-threatening conditions (including breathing emergencies, cardiac emergencies, and severe bleeding).
- evaluate physical activities relative to risk factors.
- design and lead a group exercise activity, and provide modifications and variations to exercises when necessary.
- identify basic principles of body mechanics and posture.
- design an individualized exercise prescription program that includes muscular strength and muscular endurance development.
- explain normal aging-related changes and analyze how lifestyle choices influence the aging process.
• demonstrate techniques for validating and encouraging older adults during fitness activities.

Career Information
The Senior Fitness Specialist program is ideal for anyone seeking an entry-level position as a fitness leader in community, recreation, and senior centers, health clubs, retirement and assisted living communities, and other sites that cater to seniors.

Certificates

Activity Leader Certificate
This program prepares students for the duties, roles, and responsibilities of an activity leader, a person who plans and leads activities for residents in a skilled nursing facility as described in and required by California Title 22 Division 5. This program also meets or exceeds training requirements for similar positions as described in Title 22 Division 6 for non-medical residential care facilities for the elderly and adult day programs, as well as similar positions in senior centers, recreation, and community centers serving older people.
The course offered through this program is reviewed by the California Department of Public Health (CDPH) for approval each semester to confirm it includes all the required curriculum and to confirm it includes all the current state and federal laws and regulations. Upon successful completion of this course, students receive a certificate of completion from the Gerontology department that confirms the course was reviewed and approved by the CDPH. To maintain compliance with the Centers for Medicare & Medicaid Services, State Operations Manual (Appendix PP) skilled nursing facilities are required to keep a copy of their activity leader’s certificate of completion from a CDHP approved course on file.

Catalog Date: June 1, 2020

Certificate Requirements

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<th>COURSE CODE</th>
<th>COURSE TITLE</th>
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Student Learning Outcomes

Upon completion of this program, the student will be able to:

• articulate the role and responsibilities of the activity leader in a long-term care facility
• demonstrate effective communication skills in interviewing long-term care residents
• analyze normal and disease process changes in hearing and speech and develop strategies for effective communication
• generate required documentation to comply with State and Federal regulations
• create activities which meet physical and emotional needs of residents in long-term care
• assess effects of institutionalization and possible impact on mental health and family relationships
• identify types of dementia and appropriate communication and behavior management strategies
• demonstrate effective problem solving, motivation, and communication skills involved in leadership of an activity program
• compare and contrast community services available and their relevance to an activity program
• develop appropriate activities and a monthly activity calendar to meet the needs of individual residents in long-term care

Career Information
This program is specifically designed to meet the rigorous state requirements for preparing activity leaders to work in a skilled nursing facility, as described in and required by California Title 22 Division 5. It also meets or exceeds training requirements for similar positions as described in Title 22 Division 6 for non-medical residential care facilities for the elderly and adult day programs. The program enhances qualifications for other unregulated positions planning and leading activities for older adults with titles such as activity leader activity director, and activity leader. These positions are becoming more common in senior centers, community and recreation centers, and health clubs. See the program description for details about the course approval by the California Department of Public Health.

Dementia Care Certificate
This certificate provides a comprehensive overview of dementias, behavior management, and communication. It expands the knowledge of students to enter the workforce.
where they will be dealing with seniors diagnosed with a form of dementia.

Certificate Requirements

<table>
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<th>UNITS</th>
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<td>Dementia: Behavior Management</td>
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<td>Total Units</td>
<td></td>
<td>2</td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- differentiate between reversible and irreversible dementias
- develop strategies for care for those with dementia
- create a safe environment for those with dementia
- evaluate a specific problem to decide if the problem is the patient's or the caregiver's
- assess specific dementia behavior problems and select appropriate responses
- demonstrate appropriate responses to dementia behaviors
- analyze various types of dementia and their characteristics
- identify communication strategies for enhanced understanding by the dementia patient
- identify principles of behavior management
- define caregiver issues
- assess elements of communication that relate to Validation theory
- analyze the theory behind Validation and describe the benefits of using Validation techniques
- demonstrate Validation techniques
- analyze dementia stages and select appropriate Validation techniques

Career Information

Direct care of dementia patients. Supervision and inservice for dementia patients' caregivers

Elder Care Certificate

This Certificate provides a comprehensive overview of the caregiving experience. It expands the knowledge of students to enter the workforce where they will be dealing with seniors and their caregivers.

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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</thead>
<tbody>
<tr>
<td>GERON 205</td>
<td>Validation: Theory and Practice</td>
<td>0.5</td>
</tr>
<tr>
<td>GERON 207</td>
<td>Elder Abuse</td>
<td>0.5</td>
</tr>
<tr>
<td>GERON 208</td>
<td>Stress Management: New Approaches</td>
<td>0.5</td>
</tr>
</tbody>
</table>
### Student Learning Outcomes

Upon completion of this program, the student will be able to:

- design caregiving strategies based on the elders' needs and available resources
- explain the concept of "Caring for the Caregiver"
- describe effective procedures for caring for elderly people with memory impairments
- analyze role reversal and sources of guilt within families
- define what constitutes elder abuse, including different types of abuse
- assess causes of elder abuse
- evaluate prevention approaches and resources to intervene before abuse occurs
- identify elder abuse reporting steps and forms
- evaluate the different causes of stress in caregiving situations
- analyze aspects of belief systems which enhance stress in caregiving
- apply new talking and listening skills for reducing stress in self and others
- assess elements of communication that relate to Validation theory
- analyze theory of Validation
- demonstrate Validation techniques
- analyze dementia stages and select appropriate Validation techniques

### Career Information

Direct care or seniors. Supervision and inservice for caregivers

### Ethnicity and Aging Certificate

This Certificate provides a comprehensive overview of how ethnicity affects the aging experience. It expands the knowledge of students to enter the workforce where they will be dealing with seniors from different cultures and ethnic groups.

**Catalog Date:** June 1, 2020

### Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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</thead>
<tbody>
<tr>
<td>GERON 210</td>
<td>Aging Experience in Asian Families</td>
<td>0.5</td>
</tr>
<tr>
<td>GERON 211</td>
<td>Aging Experience in Hispanic Families</td>
<td>0.5</td>
</tr>
<tr>
<td>GERON 212</td>
<td>Aging Experience in African-American Families</td>
<td>0.5</td>
</tr>
<tr>
<td>GERON 360</td>
<td>Ethnic Diversity and Aging</td>
<td>0.5</td>
</tr>
<tr>
<td><strong>Total Units:</strong></td>
<td></td>
<td><strong>2</strong></td>
</tr>
</tbody>
</table>

### Student Learning Outcomes

Upon completion of this program, the student will be able to:
- synthesize and discuss the importance of cultural sensitivity as it relates to working with older people
- evaluate and discuss differences among ethnic groups in life expectancy, mortality, mobility, family dynamics, work/retirements, mental health, views on death, and use of senior services
- define and discuss ways of overcoming barriers to understanding and using senior services
- evaluate the impact of culture and society on the aging process
- compare and contrast values and beliefs of Asian, Hispanic, African-American cultures and the dominant Western culture
- develop strategies for assessing and assisting aging Asians, Hispanics, and African-Americans and their families
- describe historical events or institutions that have influenced African-American elderly
- describe the economic, educational, and social groups found among the African-American elderly
- discuss the health conditions found most frequently among the Asian, Hispanic, and African-American elderly

Career Information

Direct care of seniors from diverse backgrounds. Supervision and inservice for caregivers.

Leadership in Assisted Living Communities Certificate

This certificate provides a comprehensive overview of leadership, communication, and professionalism and ethics required for effective leadership and supervision in assisted living communities.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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</thead>
<tbody>
<tr>
<td>GERON 201</td>
<td>Leadership and Team Building in Long-term Care Facilities</td>
<td>0.5</td>
</tr>
<tr>
<td>GERON 202</td>
<td>Professionalism and Ethics in Long-term Care</td>
<td>0.5</td>
</tr>
<tr>
<td>GERON 203</td>
<td>Communication for Supervision in Long-term Care</td>
<td>0.5</td>
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<tr>
<td></td>
<td><strong>Total Units:</strong></td>
<td><strong>1.5</strong></td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- analyze three categories of leadership
- compare and apply four facets of problem solving in regards to long-term care facilities
- analyze the essential elements in team building and being a part of the team in long-term care facilities
- identify and exhibit effective communication techniques
- demonstrate effective motivational practices
- differentiate between ethics and morals as related to working with seniors
- evaluate professional conduct in long-term care facilities
- demonstrate listening skills when working with the elderly
- describe the parameters of confidentiality
- describe professional boundaries
- analyze patterns of communication
- demonstrate validation of feelings and viewpoints
- evaluate adaptive behaviors in long-term care settings
Gerontology (GERON)

GERON 201 Leadership and Team Building in Long-term Care Facilities

This course is an overview of the fundamentals of leadership, focusing on team building, communication, motivation, and problem solving in long-term care facilities.

Pass/No Pass only.

Upon completion of this course, the student will be able to:

- analyze three categories of leadership
- compare different types of staff support systems

Administrative positions in long-term care communities, such as staff coordinator, marketing specialist, resident coordinator, facility administrator.

Social Service Designee Certificate

The Social Services Designee certificate provides a comprehensive overview of the role and duties of a social services designee in a long-term care facility.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>GERON 310</td>
<td>Social Service Designee: Role and Responsibility</td>
<td>2.5</td>
</tr>
<tr>
<td>GERON 311</td>
<td>Social Services Designee: Legal Issues and End-of-Life Decisions</td>
<td>1</td>
</tr>
<tr>
<td>GERON 312</td>
<td>Social Services Designee: Fieldwork</td>
<td>1</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>4.5</td>
</tr>
</tbody>
</table>

Upon completion of this program, the student will be able to:

- Articulate the role and responsibilities of the social services designee in a long-term care facility
- Analyze normal age changes and their impact on residents
- Incorporate resident rights and responsibilities into daily practice
- Apply Omnibus Budget Reconciliation Act (OBRA)/Title 22 (State of California Department of Social Services) regulations to work environment
- Evaluate legal and ethical issues relating to powers of attorney, long-term care financing, and end-of-life decisions
- Evaluate long-term care facility environments
- Interview and assess long-term care residents to assure needs are being met

Career Information

Social Services Designee in long-term care, assisted living, and retirement facilities

Gerontology (GERON)

GERON 201 Leadership and Team Building in Long-term Care Facilities

Units: 0.5
Hours: 9 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020

This course is an overview of the fundamentals of leadership, focusing on team building, communication, motivation, and problem solving in long-term care facilities. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze three categories of leadership
• compare and apply four facets of problem solving in regards to long-term care facilities
• analyze the essential elements in team building and being a part of the team in long-term care facilities
• identify and exhibit effective communication techniques
• demonstrate effective motivational practices

GERON 202 Professionalism and Ethics in Long-term Care

Units: 0.5
Hours: 9 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020

This course explores professionalism and ethical conduct for those working with seniors in long-term care facilities. Topics include ethics, morals, professional conduct, confidentiality, boundaries, and listening skills. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• differentiate between ethics and morals as related to working with seniors.
• evaluate professional conduct in long-term care facilities.
• demonstrate listening skills.
• describe the parameters of confidentiality.
• describe professional boundaries.

GERON 203 Communication for Supervision in Long-term Care

Units: 0.5
Hours: 9 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020

This course explores effective communication skills for supervisors in long-term care facilities. Topics include emotions, validation of staff and residents, adaptive behavior, and staff support systems. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• demonstrate the art of listening
• analyze patterns of communication
• demonstrate validation of feelings and viewpoints
• evaluate adaptive behaviors in long-term care settings
• compare different types of staff support systems

GERON 204 Alzheimer's Disease and Other Dementias

Units: 0.5
Hours: 9 hours LEC
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

This course is an introduction to dementia, including Alzheimer's Disease. Topics include types of dementia, patient care, environmental issues, and strategies for understanding and responding to associated behaviors. Pass/No Pass only.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- differentiate between reversible and irreversible dementias
- develop strategies for care for those with dementia
- create a safe environment for those with dementia
- evaluate appropriate Validation techniques for communicating with those with dementia

GERON 205 Validation: Theory and Practice

Units: 0.5
Hours: 9 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020

This course presents Validation theory as a communication technique used with individuals with differing levels of cognitive ability. Criteria for evaluating stages of dementia and the selection of appropriate techniques are covered. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- assess elements of communication that relate to Validation theory
- analyze theory of Validation
- demonstrate Validation techniques
- analyze dementia stages and select appropriate Validation techniques

GERON 206 Dementia: Behavior Management

Units: 0.5
Hours: 9 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020

This course explores the many facets of behavior management as they apply to those diagnosed with a form of dementia. Topics include defining the problem, determining whose problem it is, problem-solving principles, environmental triggers, caregiver response, and techniques (such as timing, validation, noise regulation) for specific problem behaviors. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- evaluate a specific problem to decide if the problem is the patient's or the caregiver's
- assess specific dementia behavior problems and select appropriate responses
- demonstrate appropriate responses to dementia behaviors

GERON 207 Elder Abuse

Units: 0.5
Hours: 9 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020

This course is an overview of elder abuse. It focuses on occurrence, prevention strategies, and resources to prevent elder abuse. Pass/No Pass only.
Upon completion of this course, the student will be able to:

- define what constitutes elder abuse, including different types of abuse
- assess causes of elder abuse
- evaluate prevention approaches and resources to intervene before abuse occurs
- identify elder abuse reporting steps and forms

**GERON 208 Stress Management: New Approaches**

Units: 0.5  
Hours: 9 hours LEC  
Prerequisite: None.  
Catalog Date: June 1, 2020

This course examines stress from a communication perspective, focusing specifically on caregivers. The concept of high-risk messages is introduced focusing on how stress reactions affect behavior and morale in residential care facilities and other systems of care for the elderly. Emphasis is on how a message is translated and how this translation affects stress, overload, and spill-over effects. Stress management skills are demonstrated. Pass/No Pass only.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- evaluate the different causes of stress in caregiving situations
- analyze aspects of belief systems which enhance stress in caregiving
- apply new talking and listening skills for reducing stress in self and others

**GERON 209 Strategies for Caregivers: Effectively Caring for the Elderly in the Community**

Units: 0.5  
Hours: 9 hours LEC  
Prerequisite: None.  
Catalog Date: June 1, 2020

This course covers strategies for providing effective care for the elderly, including how it is complicated by dementia, role reversal, and guilt. Common sense strategies for caregiving that not only meet the needs of the elderly but also lessen the caregiving burden are explained. Pass/No Pass only.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- design caregiving strategies based on the elders' needs and available resources
- explain the concept of "Caring for the Caregiver"
- describe effective procedures for caring for elderly people with memory impairments
- analyze role reversal and sources of guilt within families

**GERON 210 Aging Experience in Asian Families**

Units: 0.5  
Hours: 9 hours LEC  
Prerequisite: None.  
Catalog Date: June 1, 2020

This course examines the aging experience characteristic to Asian families. The impact of culture, societal expectations and their effect on family roles, values and beliefs and how these affect caregiving on that aging experience are discussed. Focus is on strategies for dealing with stress and social support services for Asian families. Pass/No Pass only.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- evaluate impact of culture and society on aging process
- compare and contrast values and beliefs of Asian cultures and the dominant Western culture
- develop strategies for assessing and assisting aging Asians and their families

GERON 211 Aging Experience in Hispanic Families

Units: 0.5
Hours: 9 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020

This course examines the aging experience characteristics to Hispanics and the impact of culture, societal expectations, family roles, values, beliefs, and caregiving on that aging experience. Focus is on social support systems and strategies for assisting aging Hispanics and their families. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- evaluate impact of culture and society on the aging process
- compare and contrast values and beliefs of Hispanic cultures and the dominant Western culture
- develop strategies for assessing and assisting aging Hispanics and their families

GERON 212 Aging Experience in African-American Families

Units: 0.5
Hours: 9 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020

This course examines the economic, social, and health status of elderly African-Americans. It focuses on their unique relationship to the dominant American culture, their vulnerability to specific diseases, and their history with the health care system. It also covers family structures in the African-American community and their implications for family relationships and caregiving. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe historical events or institutions that have influenced African-American elderly
- describe the economic, educational, and social groups found among the African-American elderly
- discuss the health conditions found most frequently among the African-American elderly
- evaluate dietary patterns among African-American in terms of their implications for health and well being
- evaluate the types of household arrangements found most frequently among African-American elders
- develop strategies for assessing and assisting African-American elders and their families

GERON 213 Aging Experience in Native American Families

Units: 0.5
Hours: 9 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020

This course examines the economic, social, and health status of elderly Native Americans. It focuses on their unique relationship to the dominant American culture, being
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the "Sovereign Nation" status of America's tribes
- evaluate the social status of elders in traditional culture
- analyze a local Native American population in terms of its tribal affiliations and history
- evaluate dietary patterns among Native Americans in terms of their implications for health and well being
- describe the health care delivery system unique to Native Americans, such as the Indian Health Service and the services provided by tribal governments
- compare the long-term care arrangements most frequently found among local Native American elders with those used by the dominant culture
- develop strategies for assessing and assisting Native American elders and their families

GERON 220 RCFE Administrator Training

Units: 4.5
Hours: 81 hours LEC
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

This course meets the educational requirements necessary to take for state licensure as an administrator of a residential care facility for the elderly (RCFE). Topics include philosophy, mission, and operations of a RCFE; regulations, rights and responsibilities of licensees; fingerprinting and criminal record clearances; psychosocial needs of residents; physical plant requirements; resident assessment, retention, and eviction; resident records and services; food service regulations; admission agreement; special diets; medications; abuse reporting; residents' rights; and community resources. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain residential care and mission of licensing
- analyze the function of a RCFE facility license from three perspectives
- discuss the rights and responsibilities of a licensee
- explain the need and process for fingerprinting and criminal record clearance
- compare licensing requirements and deficiencies in a RCFE
- evaluate medical conditions and diseases associated with aging and relate to residents' requirements
- evaluate the need for waivers to cover residents with special needs
- evaluate a facility plan to meet California requirements for fire, safety, storage, and emergency preparedness
- evaluate a resident for functional capacities and appropriateness of RCFE placement
- document in-patient records, changes in condition, medication record, and physician orders
- evaluate menus and preparation of food to meet California requirements
- define regulatory requirements covering RCFE personal accommodations and services
- explain health conditions that are prohibited in a RCFE
- evaluate resident records for compliance with regulations
- evaluate RCFE menus for compliance with dietary regulations and special diets
- explain the regulations covering centrally stored resident medications
- assess under what conditions and by whom elder abuse must be reported
- compare advance directives and "do not resuscitate" orders
- describe the requirements for safeguarding resident resources in a RCFE
• compare community resources for applicability to RCFE residents

GERON 230 Motivating Older Adults to Stay Active

Units: 0.5
Hours: 9 hours LEC
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

This course focuses on how to motivate healthy older adults to stay independent, active, and mobile. Topics include wellness, aerobic fitness, nutrition, stress, self- and group-motivation techniques, and cognition as they affect seniors. Credit/No Credit only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• assess normal aging and effects of unhealthy lifestyle choices
• describe healthful lifestyle choices and their effects on aging
• evaluate factors in cognitive wellness as people age
• compare and contrast different self- and group-motivational techniques for staying active

GERON 271 Dementia: Behaviors and Activity

Units: 0.5
Hours: 9 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020

This course is an overview of dementia and memory loss. Topics focus on types, characteristics, communications, behavior management, and caregiving of dementia patients. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• analyze various types of dementia and their characteristics
• identify communication strategies for enhanced understanding by the dementia patient
• identify principles of behavior management
• define caregiver issues

GERON 280 Home Adaptations for Safety and Independence

Units: 0.5
Hours: 9 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020

This course explores adaptations to the home environment to promote safety and independence for those with disabilities. Topics include assessment, durable equipment, home modifications and resources. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• assess the functional ability of a home resident
• evaluate safety issues within the home
• evaluate durable equipment to facilitate safety in the home

GERON 300 Sociology of Aging

Same As: SOC 335
Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGWR 102 and ENGRD 116 with a grade of “C” or better; OR ESLR 320 and ESLW 320 with a grade of “C” or better.
Transferable: CSU; UC (UC credit limitation: GERON 300, 302, PSYC 374, & SOC 335 combined: maximum credit, one course)
General Education: AA/AS Area III(b); CSU Area E1
Catalog Date: June 1, 2020

This course examines the aged and aging process with emphasis on social factors affecting and affected by an aging population. It includes an analysis of demographics, history of aging in America, social conditions, resources and support systems, employment, retirement, and social class/cultural differences. This course is not open to students who have completed SOC 335.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• chart the demographic shift in America as it relates to older adults and evaluate the concept of generational equity

• explain at least five of the major implications and challenges of increased longevity as they relate to end-of-life issues, advocacy, adult abuse, filial responsibility, generational equity, and entitlements

• compare the major biological theories with the major social theories of aging

• explain the major social issues as related to aging in America and their possible solutions

• analyze the overall economic position of older Americans, including retirement plans, health care, job outlook, and entitlements

• calculate the cost of the average funeral and construct cost-saving measures

GERON 302 Psychology of Aging: Adult Development and Aging

Same As: PSYC 374
Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340
Transferable: CSU; UC (UC credit limitation: GERON 300, 302, PSYC 374, & SOC 335 combined: maximum credit, one course)
General Education: AA/AS Area V(b); CSU Area D; CSU Area E1; IGETC Area 4
Catalog Date: June 1, 2020

This course covers the physical, psychological, and social aspects of the aging process including the interactions between the elderly and the rest of society. Topics include an analysis of stereotypes, social bonds, environmental factors, sexuality, physical health, mental health, death, and bereavement. This course is not open to students who have completed PSYC 374.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• identify and explain the differences between gerontology and geriatrics and explain the changing age demographics both in the United States and globally.

• describe at least four commonly held myths, stereotypes, or ageist attitudes regarding older adults and explain the impact these attitudes have on the image of aging.

• analyze and predict three ways race, gender, and ethnicity might influence the aging process.

• analyze the concepts of successful aging and optimal aging and recognize the differences between at least three normal and three abnormal age changes.

• describe at least three biological and three social theories used to predict how an individual might respond to the aging process or to old age.

• discuss and incorporate the concept of family and intimate relationships in later life and the importance of convoys or networks in the individual process of aging.

• explain at least three of the financial costs associated with aging.

• describe the concept of "aging in place" using at least three local and national resources, two entitlements, and three healthcare options.

• identify an elder who is aging optimally and describe at least three lifestyle choices, based on gerontological theory, that the student feels altered his/her aging
GERON 303 Introduction to Social Gerontology: Aging in Contemporary Society

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 and ENGWR 300; OR ESLR 340 AND ESLW 340.
Catalog Date: June 1, 2020

This course is an introduction to older people and the aging process in the context of contemporary society through the perspective of social gerontology. It focuses the biopsychosocial lens on the social forces that contribute to the development of individuality across the lifespan and lead to differences in how people age. Using this lens, students gain perspective on how opportunities, choices, and experiences throughout life are driven by gender, race, and class, and how they culminate during aging and impact aging outcomes. The aging experience in the United States is also compared to aging in other countries. Gerontology majors are encouraged to take this course in their first semester of study.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- assess the influence of historical events, technological advancements, and cultural shifts on aging cohorts based on decade of birth.
- deconstruct how social factors such as gender, race, and class contribute to opportunities and experiences throughout life and during aging.
- examine the ability of federal and state agencies to respond to the challenges of population aging.
- utilize the theories of aging to explain current societal beliefs about aging in the United States.
- explain the importance of family, friends, and other informal supports during aging.

GERON 304 Ethical Issues and Client's Rights

Same As: HSER 310
Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Corequisite: HSER 300
Advisory: ENGWR 102 or 103, and ENGRD 116 with a grade of "C" or better; OR ESLR 320 and ESLW 320 with a grade of "C" or better; OR placement through assessment process.
Transferable: CSU
Catalog Date: June 1, 2020

This course is a comprehensive exploration of the basic ethical issues involving human services delivery. Topics include professional ethics, confidentiality, counselor and clients' rights, and other areas involving ethical controversies. This course is not open to students who have completed HSER 310.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- evaluate the state and federal laws most often violated in human services delivery
- analyze existing California Professional Codes of Ethics
- describe the application of clients' rights in human services agencies and institutions
- describe appropriate professional behavior in human services agencies and institutions
- examine one's own values and attitudes as they apply to ethical decision making

GERON 310 Social Service Designee: Role and Responsibility

Units: 2.5
Hours: 45 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU
This course covers the role of the Social Services Designee in long-term care. The focus is on family, patient adjustment, and dementia. It also covers documentation for the Social Services Designee working in long-term care.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- evaluate the role of a social service designee
- explain Omnibus Budget Reconciliation Act (OBRA)/Title 22 regulations
- analyze normal aging changes and how these affect the resident
- identify resident rights and responsibilities

GERON 311 Social Services Designee: Legal Issues and End-of-Life Decisions

Units: 1  
Hours: 18 hours LEC  
Prerequisite: None  
Advisory: ENGWR 102 and ENGRD 116 with a grade of "C" or better; OR ESLR 320 and ESLW 320 with a grade of "C" or better.  
Transferable: CSU  
Catalog Date: June 1, 2020

This course covers legal issues involved with long-term care. The focus is on probate, conservatorships, wills, trusts, power of attorney for financial management, and the California Advanced Health Care Directives, and right-to-die issues.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- define and discuss probate, wills, trusts, powers of attorney, advanced health care directives, long-term care and the financing of long-term care
- define and discuss informed consent and conservatorships
- define and discuss right-to-die issues
- analyze ethical end-of-life decisions

GERON 312 Social Services Designee: Fieldwork

Units: 1  
Hours: 18 hours LEC  
Prerequisite: GERON 310 and 311 with grades of "C" or better  
Advisory: ENGWR 102 or 103, and ENGRD 116 with a grade of "C" or better; OR ESLR 320 and ESLW 320 with a grade of "C" or better.  
Transferable: CSU  
Catalog Date: June 1, 2020

This course provides an opportunity to explore the social services designee role in a long-term care facility and to apply knowledge gained to long-term care experience in the area of social services.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the role of a social services designee
- analyze and evaluate long-term care facility environments
- interview and assess residents in long-term care facilities

GERON 330 Communicating with and Validating Older Adults
This course introduces the basic theory, techniques, and experiences for communication with, validation of, and stimulation of the elderly at different cognitive levels in long-term care. After the first class session, this course is held off campus in a long-term care setting. Supervision by a professor in a long-term care setting is required. This course is not open to students who have completed PSYC 378.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- evaluate basic communication needs of seniors and utilize appropriate level of validation theory and techniques
- demonstrate skill, ease, confidence, rapport, and listening skills when communicating with the elderly at different cognitive levels
- assemble and use a kit of materials to facilitate sensory stimulation, validation, and reminiscence therapies

GERON 334 Reminiscence Therapy

This course introduces the basic theory and techniques of reminiscence therapy and provides experience in planning, facilitating, and evaluating reminiscence groups with the elderly in an institutional setting. After the first class session, this course is held off campus in a long-term care setting. This course is not open to students who have completed PSYC 379.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze basic group counseling theories and apply to reminiscence techniques used with the elderly
- analyze the effects of reminiscence therapy on the aging process
- evaluate participants' cognitive levels and interests and choose the appropriate subject for reminiscence
- detect and respond to individual needs within the group
- demonstrate skill, ease, confidence, rapport, and listening skills in facilitating reminiscence groups
- explain the basic process of memory construction
- analyze the staff-development benefits from engaging in reminiscence with older adults
- demonstrate social inclusion using reminiscence therapy
- demonstrate techniques used to encourage reminiscence with people who have dementia and live in a facility
- examine his/her individual boundaries and explain why they are important to maintain in reminiscence groups

GERON 335 Wellness for Older Adults

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
This course explores positive lifestyle choices throughout life which have a positive effect on health and well-being. Topics include exercise, nutrition, stress management, chronic disease, and adaptations for disability.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze exercise programs and their effect on aging
- assess individual diets and make adjustments to maximize health and optimal aging
- identify how stress management can improve health
- evaluate exercise programs to meet individual needs
- examine chronic conditions of aging in relation to stress

GERON 340 Nutrition for Healthy Aging

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<td>Units:</td>
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<tr>
<td>Hours:</td>
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This course focuses on the nutrition of older adults. Topics include the effects of nutrition on health and well-being and the physiologic changes in aging, the effects of smell and taste on nutritional status, age-related changes in the gastrointestinal tract, risk factors for cardiovascular disease, and cancer and nutrition. This course is not open to students who have completed NUTRI 324.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain the role of nutrition in the health and well-being of older adults.
- discuss strategies for the prevention of disease and chronic conditions in older adults.
- describe the physiological changes to the body that may occur as a result of the aging process.
- list and describe the major food-assistance programs for older adults.
- discuss the purpose and objectives of nutrition screening methods.
- outline the benefits, list the necessary components, and list the nutritional considerations of an exercise regimen for an older adult.
- illustrate how cultural values influence food choices made by older adults.
- discuss the nutrient needs of older adults as a result of physiological changes.

GERON 360 Ethnic Diversity and Aging

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<td>Hours:</td>
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<td>Prerequisite:</td>
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This course is an overview of ethnicity and culture as factors in the aging process. It focuses on values, beliefs, and culture, and their impact on the design and delivery of senior services with an emphasis on health and residential care services. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:
• synthesize and discuss the role of cultural sensitivity as it relates to working with older people
• evaluate and discuss differences among ethnic groups in terms of their beliefs about health, mental health, death, family obligations and the use of senior services
• define and discuss ways of overcoming barriers to understanding and using senior services

GERON 362 Biology of Aging

Units: 0.5  
Hours: 9 hours LEC  
Prerequisite: None.  
Transferable: CSU  
Catalog Date: June 1, 2020

This course is an overview of the biology of aging and health of the older adult. The focus is on chronic and acute illnesses, normal aging changes, sexuality, nutrition, and strategies for good health. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• define normal and abnormal aging processes and their relationships to lifestyles
• evaluate health status and problems of older adults and relate them to lifestyles and environments
• evaluate health care strategies appropriate for older adults and community resources and programs to promote wellness

GERON 366 Coping with Death and Related Bereavement

Units: 0.5  
Hours: 9 hours LEC  
Prerequisite: None.  
Transferable: CSU  
Catalog Date: June 1, 2020

This course explores our societal/cultural and personal views of death, dying, and bereavement. Topics include the processes of dying and grieving from the perspectives of the patient, family, friends, and caregivers; the dynamics of loss, grief, and bereavement; and the needs of the bereaved. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• identify several theories of dying as well as ego coping mechanisms
• analyze some of the common differences between dying in an institutional setting and dying with hospice care
• describe the range of healthy grief responses
• identify support needs and community resources for support
• assess personal feelings, attitudes, and values about dying and how they are influenced by society

GERON 368 Mental Health and Aging

Units: 0.5  
Hours: 9 hours LEC  
Prerequisite: None.  
Transferable: CSU  
Catalog Date: June 1, 2020

This course is an overview of mental health as it is impacted by the aging process. Emphasis is on correlates of mental health, incidence of mental illness, depression, dementia, substance abuse, intervention, and mental health resources for seniors. Pass/No Pass only.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- apply the concept of mental health to the aging process
- describe common mental health issues of depression, dementia, substance abuse, intervention, and resources as they affect the aging population
- evaluate interventions and resources available to seniors

**GERON 378 Body Mechanics and Safety**

**Units:** 0.5  
**Hours:** 9 hours LEC  
**Prerequisite:** None  
**Transferable:** CSU  
**Catalog Date:** June 1, 2020

This course is an overview of body mechanics, emphasizing a problem-solving approach. The focus is on basic methods and techniques of positioning, transfer, and ambulation, as well as personal safety, adaptive exercise, and assistive devices. Pass/No Pass only.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- describe the basic anatomy of the spine
- describe the diagnosis, detection, and treatment of back injuries
- identify basic principles of body mechanics and posture
- demonstrate proper transfer techniques
- cite three consequences of immobility and weight gain
- list three fall prevention strategies for the elderly
- demonstrate strengthening and stretching exercises for the back

**GERON 380 Nutrition and Aging**

**Units:** 0.5  
**Hours:** 9 hours LEC  
**Prerequisite:** None.  
**Transferable:** CSU  
**Catalog Date:** June 1, 2020

This course concentrates on the practical aspects of nutrition and aging. Cost-effective directions for meeting nutritional needs are included. Information regarding environmental factors implicated in the aging process is discussed. Pass/No Pass only.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- analyze how nutrition plays a part in overall health and aging
- explain how cultural attitudes toward lifestyle, stress and environmental factors influence nutrition
- evaluate information in residential care, assisted living, and skilled nursing facilities to design meals that are cost effective and nutritionally sound
- name the sources and functions of the essential nutrients
- analyze the interactions between nutrition and medications
- evaluate the relationship between nutrition and chronic illness

**GERON 430 Activity Leader**

**Units:** 6.5
This course covers the roles and responsibilities of an Activity Leader in long-term care facilities. Topics include interviewing and counseling techniques, hearing and speech changes, social and psychological forces of aging, effective leadership skills, dementia behaviors, etiology of illness, community agencies and resources, needs-based programming, documentation at state and federal levels, and creating an activity program.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- evaluate the role of the Activity Leader as it relates to the needs of the resident
- compare and contrast two therapeutic outcomes of using reminiscence therapy
- develop strategies for effective communications with seniors with speech and/or hearing deficits
- complete the required Title XXII documentation
- prepare paperwork required for the Omnibus Budget Reconciliation Act (OBRA) compliance
- assess activities which meet physical and emotional needs of long-term care residents
- identify at least five symptoms of depression and evaluate appropriate intervention
- identify principles of behavior management when working with residents with dementia
- compare and illustrate how to apply four facets of problem solving in senior programs
- compare and contrast the variety of community services available for the aging population
- develop an appropriate activity to meet a specific need of a long-term care resident
- compare and contrast the development of activities for different cultural groups in long-term care
- analyze various aspects of activity coordination

**GERON 490 Aging Policy and Practice**

| Units: | 3 |
| Hours: | 54 hours LEC |
| Prerequisite: | None |
| Advisory: | Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340. |
| Transferable: | CSU |
| Catalog Date: | June 1, 2020 |

This course provides an overview of the social issues faced by Older Americans and the social policies and programs provided to address those issues, including the Older Americans Act, Social Security, Medicare, and the Elder Justice Act. It investigates how social policies and programs are put into practice by exploring career options in the agencies, businesses, and organizations that provide services and support to older adults living in California.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- generate an Internet resource list with URLs and brief descriptions of the government websites for major programs and services for Older Americans.
- outline the flow of funding for services to Older Americans from its legislative origins to the local providers in the Aging Network, including local organizations/businesses.
- summarize theories of help-seeking behavior.
- differentiate between 1) Social Security and Entitlement Programs; 2) Medicare Options (Part A, B, etc.) and 3) Medicare and MediCal Benefits.
- identify social issues that impact cultural/ethnic subgroups of older adults.
- deconstruct social issues that impact cultural/ethnic subgroups of Older Americans.
- determine the relevance of federal and state Elder Justice regulations to real/hypothetical case studies of elder abuse, exploitation, and neglect.
- utilize a public resource provided to enrich/improve quality of life during aging.
• assess the obstacles Older Americans may have to overcome when accessing government programs and services during aging.

• reflect on policies that contribute to ageism and their impact on the previous, current, and future generations of your family.

GERON 495 Independent Studies in Gerontology

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

GERON 498 Work Experience in Gerontology

Units: 1 - 4
Hours: 60 - 300 hours LAB
Prerequisite: None.
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position, or job related to gerontology with a cooperating site supervisor. Students are advised to consult with the Gerontology Department faculty to review specific certificate and degree work experience requirements.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU
General Education: AA/AS Area III(b)
Catalog Date: June 1, 2020

This course provides students with opportunities to develop marketable skills in preparation for employment or advancement within the field of gerontology. It is designed for students interested in work experience and/or internships in transfer-level degree occupational programs. Course content includes understanding the application of education to the workforce, completion of Title 5 required forms which document the student’s progress and hours spent at the work site, and developing workplace skills and competencies.

During the semester, the student is required to complete 75 hours of related paid work experience, or 60 hours of related unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. All students are required to attend the first class meeting, a mid-semester meeting, and a final meeting. Additionally, students who have not already successfully completed a Work Experience course will be required to attend weekly orientations while returning participants may meet individually with the instructor as needed. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• demonstrate application of industry knowledge and theoretical concepts in the field of gerontology related to a transfer degree level career as written in the minimum three (3) learning objectives created by the student and his/her employer or work site supervisor at the start of the course

• make effective decisions, use workforce information, and manage his/her personal career plans.

• behave professionally, ethically, and legally at work, consistent with applicable laws, regulations, and organizational norms.

• behave responsibly at work, exhibiting initiative and self-management in situations where it is needed.

• apply effective leadership styles at work, with consideration to group dynamics, team and individual decision making, and workforce diversity.

• communicate in oral, written, and other formats, as needed, in a variety of contexts at work.

• locate, organize, evaluate, and reference information at work.

• demonstrate originality and inventiveness at work by combining ideas or information in new ways, making connections between seemingly unrelated ideas, and reshaping goals in ways that reveal new possibilities using critical and creative thinking skills such as logical reasoning, analytical thinking, and problem-solving.

GERON 1065 Movement Matters

Units: 0.5
Hours: 9 hours LEC
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020
This course introduces the importance of movement for seniors and provides examples adapted to specific chronic conditions. Topics include movement related to Parkinson’s, multiple sclerosis, osteoarthritis, osteoporosis, and Alzheimer’s and other dementias. Credit/No Credit only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify causes, signs, and symptoms of common chronic conditions of age
- explain the effects of various medications on movement
- evaluate different movement programs offered in long-term care facilities for appropriateness
Health Education | American River College

The college program in health education is designed to provide students the essential information for the evaluation and maintenance of individual health.

Division Dean (Interim)  Kathy "Kat" Sullivan-Torrez  (916) 484-8201

Health Education (HEED)

HEED 300 Health Science

- **Units:** 3
- **Hours:** 54 hours LEC
- **Prerequisite:** None.
- **Advisory:** Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
- **Transferable:** CSU; UC
- **General Education:** AA/AS Area III(b); CSU Area E1
- **Catalog Date:** June 1, 2020

This course focuses on factors which influence the health status of both the individual and the community. Topics include personal fitness, nutrition, sexuality, sexually transmitted disease, drug dependence including alcohol and tobacco, as well as diseases related to lifestyle.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain the principles of healthy living.
- analyze the relationship between lifestyle and a variety of diseases.
- describe the process of making healthy lifestyle changes.
- distinguish between myths and facts related to health and wellness.
- evaluate personal health behaviors.

HEED 308 Environmental Health Science

- **Units:** 3
- **Hours:** 54 hours LEC
- **Prerequisite:** None.
- **Advisory:** Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340
- **Transferable:** CSU; UC
- **General Education:** AA/AS Area IV; CSU Area B2; IGETC Area 5B
- **Catalog Date:** June 1, 2020

This course covers society's interaction with the environment, current environmental factors, and the influence of these on human health. Topics include the scientific method, ecology, population dynamics, poverty, atmospheric pollution including climate change, the water cycle, water resources, water pollution, toxic substances, and environmental disease. It covers sustainable solutions to current environmental issues and environmentally related disease. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe and explain the scientific method and apply the scientific method to research involving human health and environmental factors.
• examine and discuss various environmental issues and related environmental diseases.
• analyze and integrate solutions to current environmental issues and environmental health problems.
• evaluate and critique current solutions for creating a sustainable society and formulate new possible solutions.

HEED 310 Community CPR and Adult AED

Units: 1
Hours: 18 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC (UC credit limitation: HEED 310, 311, 316 & ECE 414 combined: maximum credit - one course)
Catalog Date: June 1, 2020

This course provides knowledge and skills for emergency life-saving techniques involving infants, children, and adults. Respiratory and cardiovascular distress, non-breathing, unconsciousness, choking, and cardiac arrest are addressed. The infant and child and the adult cardiopulmonary resuscitation (CPR)/Automatic External Defibrillator (AED) certification examinations are included.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• identify and respond to life-threatening conditions (including breathing emergencies, cardiac emergencies, and severe bleeding)
• implement triage techniques
• demonstrate infant, child, and adult CPR skills
• appraise disease transmission prevention techniques as they relate to CPR and first aid procedures
• demonstrate the use of an AED on children and adult patients
• demonstrate conscious and unconscious choke rescue techniques on infants, children, and adult patients

HEED 311 CPR and Pediatric First Aid

Same As: ECE 414
Units: 1.5
Hours: 27 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC (UC credit limitation: HEED 310, 311, 316 & ECE 414 combined: maximum credit - one course)
Catalog Date: June 1, 2020

This course meets the requirements for American Red Cross certification in California Child Care Health & Safety Training which includes adult, child, and infant CPR and pediatric first aid. It also includes legal considerations, avoiding disease transmission, responding to sudden illnesses and injuries, and recognition of common childhood diseases. This course is not open to students who have completed ECE 414.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• analyze and implement triage techniques
• assess the emergency care of life-threatening conditions
• evaluate and formulate emergency first aid techniques for common childhood injuries and illnesses
• demonstrate infant, child, and adult CPR skills
• appraise disease transmission prevention techniques as they relate to CPR and first aid procedures
• plan and design a functional first aid kit

HEED 315 First Aid
This course provides guidelines that enable the citizen responder to give appropriate care to a victim who is injured or becomes suddenly ill. Topics include controlling bleeding, splinting, and treating seizures and heart attacks.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- recognize that an emergency has occurred
- analyze and prioritize the injury, implementing triage techniques
- evaluate and apply emergency procedures for sudden illness
- evaluate and formulate emergency first aid techniques for injuries
- appraise disease transmission prevention techniques as they relate to first aid procedures

HEED 323 Cardio Pulmonary Resuscitation (CPR)/Automated External Defibrillators (AED) for the Professional Rescuer

This course meets the requirements for Red Cross certification as a professional rescuer. It includes legal considerations, avoiding disease transmission, controlling severe bleeding, and moving victims, as well as professional rescuer situation practice sessions.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze and plan care for life-threatening conditions
- assess scenarios regarding legal considerations
- properly use Automated External Defibrillators (AED) and Bag Valve Mask (BVM) resuscitators
- appraise disease transmission prevention techniques for the professional rescuer
- evaluate and demonstrate proper technique of two-person CPR and jaw thrust
- assess an emergency scenario utilizing techniques of triage

HEED 494 Topics in Health Education

This course provides opportunities to study contemporary topics in health which are not included in current offerings or which require emphasis beyond existing courses.

Student Learning Outcomes

Upon completion of this course, the student will be able to:
• Explain basic health concepts pertaining to contemporary issues in health
• Apply basic health concepts to examine and analyze contemporary issues in health
• Examine, compare, and contrast various philosophies related to health
• Discriminate between scientific fact and myth pertaining to various issues in health
• Analyze health issues from various perspectives
• Propose solutions to current issues in contemporary health

HEED 495 Independent Studies in Health Education

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.
Healthcare Interpreting | American River College

The Healthcare Interpreter certificate program is designed to prepare bilingual individuals for effective language interpretation and cultural brokering in the healthcare setting. It emphasizes roles and responsibilities of the healthcare interpreter; the development of cultural competence in the community and workplace; insight into language and cultural nuances for specific communities; standards and legal requirements for culturally and linguistically appropriate services; ethical decision-making, advocacy and power dynamics in healthcare settings; and career preparation to become an integral member of the health care team. Coursework covers modes and models of interpretation; development of the technical aspects of interpretation; techniques for facilitating and managing the flow of communication; medical terminology and related vocabulary development in language of service; and common medical conditions and associated treatments/procedures in both basic and specialized health care service areas. Language coaches are provided to facilitate skills acquisition, and precepted fieldwork experiences are required.

Certificate of Achievement

Healthcare Interpreting Certificate

The Healthcare Interpreter certificate program is designed to prepare bilingual individuals for effective language interpretation and cultural brokering in the healthcare setting. It emphasizes roles and responsibilities of the healthcare interpreter; the development of cultural competence in the community and workplace; insight into language and cultural nuances for specific communities; standards and legal requirements for culturally and linguistically appropriate services; ethical decision-making, advocacy and power dynamics in healthcare settings; and career preparation to become an integral member of the health care team. Coursework covers modes and models of interpretation; development of the technical aspects of interpretation; techniques for facilitating and managing the flow of communication; medical terminology and related vocabulary development in language of service; and common medical conditions and associated treatments/procedures in both basic and specialized health care service areas. Language coaches are provided to facilitate skills acquisition, and precepted fieldwork experiences are required.

Catalog Date: June 1, 2020

Certificate Requirements

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<th>COURSE TITLE</th>
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<td>Introduction to Healthcare Interpreting</td>
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<td>AH 110</td>
<td>Medical Language for Health-Care Providers</td>
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<td>Essentials of Human Anatomy and Physiology (4)</td>
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<td>and BIOL 431</td>
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<td>HCI 310</td>
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Healthcare Interpreting (HCI)

HCI 300 Introduction to Healthcare Interpreting

This course is designed for bilingual/bicultural individuals interested in exploring the career choice of healthcare interpreter by developing an awareness of the roles and responsibilities of the interpreter in healthcare settings. It addresses required skills related to both language interpretation and cultural brokering and allows consideration of personal interests and aptitudes.

Upon completion of this course, the student will be able to:

- identify barriers that may limit access to healthcare services for clients with limited English-language proficiency.
- examine the healthcare interpreter's role, responsibilities, and required skills related to both language access and cultural brokering.
- discuss professionalism, standards and ethics, and the complexities of the working environment for healthcare interpreters.
- explain the coursework outline, prerequisites, student responsibilities, costs, and requirements of the healthcare interpreter program.

Enrollment Eligibility

To be eligible for enrollment in the program, the student must meet the following criteria:

- Complete required introductory course, HCI 300, with grade of C or better.
- Demonstrate bilingual proficiency or competence in English and language of service (hearing/speaking and reading/writing) as certified by accepted state or proprietary bilingual exam, or as documented by a standardized interview/essay rubric with program staff, as designated in current application materials.

Enrollment Process

Eligible students are selected for the program according to the following steps:

- Receive application materials through participation in HCI 300.
- Submit completed application by deadline, including HCI 300 transcript or proof of completion and documentation of language competency as designated.
- Applicant selection in any given semester is contingent upon a minimum number of students in the cohort for a given language, and community need for the given language, as well as individual applicant qualifications.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- manage all facets of the interpreter role including the flow of the session, cross-cultural communication, conflict management, and the technical aspects of interpretation while conducting patient-provider encounters and pre and post sessions.
- incorporate and apply the profession’s codified ethical behaviors related to confidentiality and privacy, completeness and accuracy, professional integrity and professional distance, professional development and cultural competence, and the role of advocacy when patient wellbeing or dignity is at risk.
- integrate culturally sensitive strategies and approaches in working with diverse cultures, subcultures, and special populations.
- analyze career opportunities in health care interpreting, the interpreter’s role and scope of practice relative to other healthcare professionals, and the value of ongoing professional development

Career Information

Healthcare interpreting job opportunities are available through in-house hospital interpreter services, private vendors who contract with healthcare agencies, or small-business entrepreneurialism and self-employment, both full time or per diem. Venues may include face-to-face, video conferencing, or language phone services with local or at-a-distance connection and contracts.

Healthcare Interpreting (HCI)

HCl 300 Introduction to Healthcare Interpreting

Units: 0.5
Hours: 9 hours LEC
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

This course is designed for bilingual/bicultural individuals interested in exploring the career choice of healthcare interpreter by developing an awareness of the roles and responsibilities of the interpreter in healthcare settings. It addresses required skills related to both language interpretation and cultural brokering and allows consideration of personal interests and aptitudes.

Upon completion of this course, the student will be able to:

- identify barriers that may limit access to healthcare services for clients with limited English-language proficiency.
- examine the healthcare interpreter's role, responsibilities, and required skills related to both language access and cultural brokering.
- discuss professionalism, standards and ethics, and the complexities of the working environment for healthcare interpreters.
- explain the coursework outline, prerequisites, student responsibilities, costs, and requirements of the healthcare interpreter program.
survey personal skills, interests, and aptitudes in relation to the activities and demands of the healthcare interpreter program and profession.

HCI 310 Healthcare Interpreting I

Units: 3
Hours: 48 hours LEC; 18 hours LAB
Prerequisite: HCI 300 with a grade of "C" or better
Corequisite: AH 110 and BIOL 102; or BIOL 115 & 116 or BIOL 430 & 431
Advisory: SPEECH 301
Transferable: CSU
Catalog Date: June 1, 2020

This course is designed for bilingual individuals interested in developing the awareness, knowledge, and skills necessary for effective language interpretation in healthcare settings. It emphasizes the roles and responsibilities of a healthcare interpreter and basic knowledge of common medical conditions, treatments, and procedures in the areas of diagnostics, cardiovascular, renal, ophthalmic, and gastrointestinal specialties. It focuses on insight into language and cultural nuances for specific communities necessary in the art of interpretation.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- compare the different ways interpreter services are delivered in healthcare settings.
- differentiate various ways that providers and interpreters can work together to enhance communication with patients.
- explain the interpreter's role in ensuring the patient's rights to confidentiality and informed consent.
- demonstrate beginning skills in modes of interpretation including consecutive, simultaneous, summarization, and sight translation.
- examine how differences in cultural beliefs, cultural practices, or culturally defined roles may arise in the triadic relationship.
- employ appropriate healthcare terminology in English and language of service within clinical scenarios and situations.

HCI 320 Healthcare Interpreting II

Units: 3
Hours: 48 hours LEC; 18 hours LAB
Prerequisite: HCI 310 with a grade of "C" or better
Advisory: SPEECH 301
Transferable: CSU
Catalog Date: June 1, 2020

This course is designed for bilingual individuals. It further develops the awareness, knowledge, and skills necessary for effective language interpretation in healthcare settings covered in HCI 310. It emphasizes the roles and responsibilities of a healthcare interpreter and basic knowledge of common medical conditions, treatments, and procedures in musculoskeletal, respiratory, immunologic, and obstetric specialties. It focuses on insight into language and cultural nuances for specific communities necessary in the art of interpretation.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate increasing skills in modes of interpretation including consecutive, sight translation, simultaneous, and summarization.
- apply skills for managing the flow of the interpreting session.
- correlate action and response strategies with at least three difficult problem types that can arise in interpretation.
- identify effective ways that differences in communication style may be handled in the triadic relationship.
- examine in growing depth how differences in cultural beliefs, cultural practices, or culturally defined roles may arise in the triadic relationship.
- generate an expanding vocabulary of appropriate health care terminology in English and language of service for use within clinical scenarios and situations.
- analyze and compare the different healthcare systems in the United States and in other countries.
This course is designed for bilingual individuals preparing to become an integral member of the health care team, bridging the language and cultural gap between clients and providers. It further develops interpreting skills covered in HCI 320. Topics include specialized health care service areas, such as genetics, pediatrics, and endocrinology. It also emphasizes the development of cultural competency in the community and workplace.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- exhibit progressive skills in the technical aspects of interpretation.
- demonstrate the ability to manage the flow of the interpreting session.
- employ the ethical decision-making method.
- examine traditional health systems, practices, beliefs, and key health issues of specific ethnic communities.
- incorporate culturally sensitive strategies and approaches in working with diverse cultures.
- employ knowledge and skills of effective communication with special emphasis on cross-cultural communication.
- build an increasingly complex vocabulary of health care related concepts and terminology specific to the different health care service areas.
- discover basic referral resources available in the community.

**HCI 340 Healthcare Interpreting IV**

This course is designed for bilingual individuals completing their preparation to become an integral member of the healthcare team, bridging the language and cultural gap between clients and providers. It further enhances interpreting skills covered in HCI 330. Topics include specialized health care service areas such as men's and women's health, mental health, neonatal intensive care, and death and dying. The course also focuses on careers in interpreting and career preparation.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- incorporate advancing skills in the technical aspects of interpretation.
- demonstrate proficiency in skills for managing the flow of the interpreting session.
- integrate culturally sensitive strategies and approaches in working with diverse cultures, subcultures, and special populations.
- build an increasingly complex vocabulary of health care related concepts and terminology specific to the different health care service areas.
- compile resources available in the community for specialized needs and groups.
- practice self care management strategies to avoid burnout with reference to the range of psychological, social, and emotional issues that may arise for interpreters in the health care setting.
- examine career opportunities in health care interpreting including community, public health, and acute care settings, and assess personal career goals.
- create an effective professional resume.

**HCI 350 Healthcare Interpreting Fieldwork**

This course is designed for bilingual individuals preparing to become an integral member of the health care team, bridging the language and cultural gap between clients and providers. It further develops interpreting skills covered in HCI 320. Topics include specialized health care service areas, such as genetics, pediatrics, and endocrinology. It also emphasizes the development of cultural competency in the community and workplace.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- exhibit progressive skills in the technical aspects of interpretation.
- demonstrate the ability to manage the flow of the interpreting session.
- employ the ethical decision-making method.
- examine traditional health systems, practices, beliefs, and key health issues of specific ethnic communities.
- incorporate culturally sensitive strategies and approaches in working with diverse cultures.
- employ knowledge and skills of effective communication with special emphasis on cross-cultural communication.
- build an increasingly complex vocabulary of health care related concepts and terminology specific to the different health care service areas.
- discover basic referral resources available in the community.
This course is designed for interpreters-in-training to facilitate linguistic and cultural communication between healthcare clients and providers. It provides fieldwork experience applying technical interpreting skills covered in HCI 310, 320, 330, and 340. A portion of this course may be offered in a TBA component of 50 - 60 hours which may include directed practice in precepted clinical settings and fieldwork or workplace experience.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze the interpreter’s role and scope of practice relative to other healthcare professionals in the assigned agency and describe the role and scope of practice of these other health team members.
- demonstrate competence in elements of workplace culture and professionalism including work attitude, time management, reporting and documentation, accountability, and maintaining personal and professional boundaries.
- demonstrate basic public speaking abilities in healthcare settings.
- incorporate into practice the profession’s codified ethical behaviors related to confidentiality and privacy, completeness and accuracy, professional integrity and professional distance, professional development and cultural competence, and role of advocacy when patient wellbeing or dignity is at risk.
- manage all facets of the interpreter role in the fieldwork setting including cross-cultural communication, conflict management, and the technical aspects of interpretation while conducting patient-provider encounters and the pre and post sessions.
- evaluate and address specific areas of improvement needed for competent interpreting in healthcare settings through application of reflective practice based on professional standards.
History | American River College

The study of history equips the student with cultural literacy and promotes critical thinking and well-informed perspectives on today’s world. ([academics/arc-program-read-maps](academics/arc-program-read-maps))

Dean
Kathy Sorensen (Interim)

Department Chairs
Camille Leonhardt

(916) 484-8283

Associate Degree for Transfer

A.A.-T. in History

The Associate in Arts degree in History for Transfer provides a clearly articulated curricular track for students who wish to transfer to a CSU campus, while also serving the diverse needs of students interested in the breadth and depth of the field of history. Additionally, this degree exposes students to the core principles and practices of the study of history in order to build a foundation for their future personal, academic, and professional paths.

The degree is designed to facilitate students’ successful transfer to certain CSU four-year programs that prepare them for advanced study in graduate and professional programs, as well as a variety of careers including teaching, archival research, public history, government service, journalism, business, and the law. History graduates are well suited to many fields of endeavor that require effective reading, writing, and critical thinking skills, as well historically informed perspectives on today’s global societies.

The Associate in Arts degree in History for Transfer provides students with a major that fulfills the general requirements of the California State University for transfer. Students with this degree will receive priority admission with junior status to the California State University system.

The Associate in Arts degree in History for Transfer (A.A.-T) may be obtained by the completion of 60 transferable, semester units with a minimum of a 2.0 GPA, including (a) the major or area of emphasis described in the Required Program outlined below (earning a C or better in these courses), and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

Catalog Date: June 1, 2020

Degree Requirements

<table>
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<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
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<tr>
<td>HIST 310</td>
<td>History of the United States (3)</td>
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<td>or HIST 483</td>
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<td>HIST 300</td>
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<td>or HIST 480</td>
<td>History of Western Civilization - Honors (3)</td>
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<td>or HIST 307</td>
<td>History of World Civilizations to 1500 (3)</td>
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<tr>
<td>HIST 302</td>
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<td>or HIST 481</td>
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<tr>
<td>or HIST 308</td>
<td>History of World Civilizations, 1500 to Present (3)</td>
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A minimum of 3 units from the following: 3

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<th>COURSE CODE</th>
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<td>HIST 320</td>
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<td>HIST 325</td>
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<td>HIST 327</td>
<td>History of the Chicano/Mexican American (3)</td>
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<td>HIST 330</td>
<td>Women in American History (3)</td>
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<td>HIST 365</td>
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<td>HIST 373</td>
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<td>HIST 307</td>
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<td>HIST 318</td>
<td>American Intellectual and Cultural History (3)</td>
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<td>History of the United States: African-American Emphasis (3)</td>
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<td>HIST 323</td>
<td>History of the United States: The American Indian Experience (3)</td>
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<td>HIST 325</td>
<td>History of Asian/Pacific Americans (3)</td>
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<td>HIST 330</td>
<td>Women in American History (3)</td>
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<td>HIST 340</td>
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<td>HIST 341</td>
<td>History of California: 1879 to Present (3)</td>
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<tr>
<td>HIST 364</td>
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<td>HIST 373</td>
<td>History of Mexico (3)</td>
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<tr>
<td>HIST 374</td>
<td>History of Latin America to 1830 (3)</td>
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<tr>
<td>HIST 375</td>
<td>The History of Modern Latin America and Caribbean (3)</td>
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1Student may choose any course from this last list if not previously used.

The Associate in Arts in History for Transfer (AA-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- identify and correctly use basic historical terminology, and distinguish between primary and secondary sources as historical evidence.
- analyze multiple causes for an historical event, and properly evaluate why that event happened.
- identify various interpretations used by historians to explain history.
- identify the major time periods and relevant geography of history.
- analyze and evaluate the major economic, social, political, and cultural developments in history.
- analyze and evaluate the experiences and conflicts of diverse groups of people, including "common people" in history.
- make historical generalizations based on a study and understanding of historical evidence.
History (HIST)

HIST 300 History of Western Civilization

This survey course reviews western civilization from its origins in the Ancient Middle East until the Renaissance. It emphasizes the social, political, economic, cultural, and intellectual forces that have served to define western civilization. The focus is on the cultural legacies and contributions of the Ancient Middle East, Greece, Rome, and Medieval Europe to the development of western civilization.

Upon completion of this course, the student will be able to:

- identify and correctly use basic historical terminology.
- distinguish between primary and secondary sources as historical evidence.
- identify various interpretations used by historians to explain the development of western civilization prior to the Renaissance.
- explain why there may be multiple causes of a historical event.
- identify the major eras and relevant geography of western civilization prior to the Renaissance.
- identify and evaluate major economic, social, political, and cultural developments in western civilization prior to the Renaissance.
- identify and evaluate the experiences, conflicts, and connections of diverse groups of people in western civilization prior to the Renaissance.
- make historical generalizations about western civilization prior to the Renaissance based on personal understanding of the historical evidence.
- identify and describe the cultural legacies and contributions of the Ancient Middle East, Greece, Rome, and Medieval Europe to the development of western civilization.

HIST 302 History of Western Civilization

This course is a survey of western civilization from the Renaissance to the present, emphasizing the interplay of social, political, economic, cultural, and intellectual forces in creating and shaping the modern world. The focus is on the process of modernization, stressing the secularization of western society and examining how war and revolution have served to create our world. This course is not open to students who have completed HIST 481.

Upon completion of this course, the student will be able to:

- identify and correctly use basic historical terminology, and distinguish between primary and secondary sources as historical evidence.
- compare and evaluate various interpretations used by historians to explain the development of western civilization since the Renaissance.
- evaluate multiple causes and analyze why a historical event happened
- identify the major eras and relevant geography of western civilization since the Renaissance
- evaluate major economic, social, political, and cultural developments in western civilization since the Renaissance
- evaluate the experiences, conflicts, and connections of diverse groups of people in western civilization since the Renaissance
- draw historical generalizations about western civilization since the Renaissance based on understanding of the historical evidence
- describe and evaluate the major movements and historical forces that have contributed to the development of western civilization

HIST 305 Women in Western Civilization

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340
Transferable: CSU; UC
General Education: AA/AS Area V(b); AA/AS Area I; CSU Area C2; CSU Area D6; IGETC Area 3B; IGETC Area 4F
Catalog Date: June 1, 2020

This course is a survey of women’s contributions to the major ideas, institutions, and events of Western Civilization. It emphasizes women’s diversified roles from antiquity to the present. This course focuses on the interaction between men and women within a socially and culturally constructed framework. It also examines the effects of the patriarchal family structure on society and the pervasive impact of patriarchy on all institutions of western culture.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- examine the contributions of women in the evolution of western social, cultural, political, and economic institutions within the context of socially- and culturally-imposed limits inherent in the patriarchal system of domination.
- analyze and evaluate the impact of western social, religious, economic, political, and cultural institutions on women’s lives and experiences.
- discuss the role of patriarchy, social stratification, and social construction of gender as historically- and socially-constructed systems of male dominance.
- utilize basic historical and gender-studies concepts and terminology to examine and analyze patriarchy as a system of domination that has defined the nature of gender relations in western society and institutions.
- evaluate the symbiotic relationship between private property, religious ideology, and the creation of the legal system that legitimized the preservation of male dominance in western society.
- comprehend how, to this date, gender relations are strongly influenced by a long history of patriarchal institutions and structures.

HIST 307 History of World Civilizations to 1500

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGRD 116 with a grade of “C” or better. OR ESLR 320 and ESLW 320 with a grade of “C” or better.
Transferable: CSU; UC
General Education: AA/AS Area V(b); AA/AS Area I; AA/AS Area VI; CSU Area C2; CSU Area D6; IGETC Area 3B; IGETC Area 4F
C-ID: C-ID HIST 150
Catalog Date: June 1, 2020

This course surveys world civilizations from antiquity to the 1500s, with a particular emphasis on the dynamic interaction and comparison of diverse peoples, ethnicities, and cultures. Special attention is given to the social, political, economic, cultural, and religious influences that shaped major world civilizations.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- correctly use basic historical terminology.
- distinguish between primary and secondary sources as historical evidence.
- identify various interpretations used by historians to explain world history to 1500 C.E.
- analyze multiple causes for and properly evaluate why a historical event happened.
describe the major eras of world history to 1500 C.E.

evaluate major economic, social, political, and cultural developments in world history to 1500 C.E.

assess the experiences, conflicts, and connections of diverse ethnicities and cultures in world history to 1500 C.E.

use historical evidence to formulate historical generalizations about world history to 1500 C.E.

identify the relevant geography of world history to 1500 C.E.

HIST 308 History of World Civilizations, 1500 to Present

Units: 3
Hours: 54 hours LEC
Prerequisite: None
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ETSW 340.
Transferable: CSU; UC
General Education: AA/AS Area V(b); AA/AS Area I; AA/AS Area VI; CSU Area C2; CSU Area D6; IGETC Area 3B; IGETC Area 4F
C-ID: C-ID HIST 160
Catalog Date: June 1, 2020

This course is a survey of world history from the 16th century to the present, with particular emphasis on the increased integration of peoples and cultures as the result of the continuing process of globalization. The focus is on the revolutionary transformations of human society and human social relations caused by such new ideas as scientific racism, nationalism, imperialism, and constitutional government. It also covers important trends of the past five-hundred years including the increasing prevalence of migration, the changing nature of warfare, the harnessing of fossil fuels, the growing integration of global economies, and the scientific and technological breakthroughs that are continuing to revolutionize humanity’s understanding of and relationship with the natural world. Through this focus it is possible to better understand the forces that have shaped world society over the past five-hundred years and that continue to shape the world today. These analyses are set within the context of such historical concepts as cause and effect, multiple causation, multiple frames of reference, and historical interpretation from evidence.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- use basic historical terminology.
- distinguish between primary and secondary sources as historical evidence.
- identify various interpretations used by historians to explain world history since 1500 C.E.
- investigate multiple causes for and properly evaluate why a historical event happened and to discuss past events through multiple frames of reference.
- describe the major eras and relevant geography of world history since 1500 C.E.
- evaluate major economic, social, political, cultural, intellectual, and religious developments in world history since 1500 C.E.
- assess the experiences, conflicts, and connections of diverse groups of people in world history since 1500 C.E.
- use historical evidence to formulate generalizations about world history since 1500 C.E.

HIST 310 History of the United States

Units: 3
Hours: 54 hours LEC
Prerequisite: None
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ETSW 340.
Transferable: CSU; UC (Credit Limitation: HIST 310 & 483: maximum credit one course)
General Education: AA/AS Area V(a); CSU Area D6; CSU Area F1; IGETC Area 4F
C-ID: C-ID HIST 130
Catalog Date: June 1, 2020

This course is a survey of United States history from its European, African, and Native American backgrounds to 1865. It examines the origin and development of many of this nation's political, social, economic, and intellectual institutions including their influences upon contemporary American life. It also emphasizes such historical concepts as cause and effect, multiple causation, historical context, and historical interpretation. This course is not open to students who have completed HIST 483.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify and correctly use basic historical terminology, and distinguish between primary and secondary sources as historical evidence.
• analyze multiple causes for an historical event, and properly evaluate why that event happened.
• identify various interpretations used by historians to explain United States history up to the Civil War.
• identify the major time periods and relevant geography of United States history up to the Civil War.
• analyze and evaluate the major economic, social, political, and cultural developments in United States history up to the Civil War.
• analyze and evaluate the experiences and conflicts of diverse groups of people, including "common people," in United States history up to the Civil War.
• analyze, describe, and explain the motives, settlement, and organization of European colonies in North America, and the impact on the Native American environment and cultures.
• trace the development of racial slavery in America, explain the reasons for its institutionalization, and analyze the influence of Africans and African culture on American society and institutions.
• analyze the events of the American Revolution and the creation of the United States, including state and national Constitutions, and explain the rationale behind these developments.
• analyze the philosophical, intellectual, and cultural influences on the development of American political and social institutions.

HIST 311 History of the United States

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGWR 102 and ENGRD 116 with a grade of "C" or better; OR ESLR 320 and ESLW 320 with a grade of "C" or better.
Transferable: CSU; UC (Credit Limitation: HIST 311 & 484: maximum credit one course)
General Education: AA/AS Area V(a); CSU Area D6; CSU Area F1; IGETC Area 4F
C-ID: C-ID HIST 140
Catalog Date: June 1, 2020

This course is a survey of United States History from 1865 to the present. It also analyzes many of America's political, social, economic, and intellectual institutions, including their influences upon contemporary life. This course also examines this nation's increasing involvement in world affairs. These analyses are set within the context of such historical concepts as cause and effect, multiple causation, and historical interpretation.

This course is not open to students who have completed Hist 484.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• identify and correctly use basic historical terminology, and distinguish between primary and secondary sources as historical evidence.
• identify various interpretations used by historians to explain United States History since the Civil War.
• analyze multiple causes for and properly evaluate why a historical event happened.
• identify the major time periods and relevant geography of United States history since the Civil War.
• analyze and evaluate the major economic, social, political, and cultural developments in United States history since the Civil War.
• analyze and evaluate the experiences and conflicts of diverse groups of people, including "common people," in United States history since the Civil War.
• make historical generalizations about United States history since the Civil War based on historical evidence.
• analyze and evaluate the increasing role of the United States in a global context since the Civil War.

HIST 318 American Intellectual and Cultural History

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGWR 102 or 103, and ENGRD 116; OR ESLR 320 and ESLW 320
Transferable: CSU; UC
General Education: AA/AS Area V(a); CSU Area D6; CSU Area F1; IGETC Area 4F
Catalog Date: June 1, 2020

This course is a survey of major themes and developments in American culture and ideas from the colonial to the contemporary period. Special emphasis is given to religious, scientific, literary, artistic, philosophical, and political thought to explore the sources, expressions, and transformation of cultural and intellectual values in the history of the United States.
Upon completion of this course, the student will be able to:

- identify and correctly use basic historical terminology, and distinguish between primary and secondary sources as historical evidence.
- identify and apply various interpretations used by historians to explain intellectual and cultural developments in the history of the United States.
- analyze the intellectual sources and expressions of core American values such as individualism, liberty, democracy, citizenship, and equality.
- identify, evaluate, and analyze the contributions of specific individuals to public and private discussions of American values.
- analyze the impact of religion, politics, science, philosophy, literature, and art on the formation of American cultural and intellectual values.
- analyze how the definitions of social categories such as race, ethnicity, gender, sexuality, and class have changed in cultural and intellectual expression through time.
- evaluate how social categories such as race, ethnicity, gender, sexuality, and class have influenced the formation of political, economic, cultural, and social ideas in the United States.

**HIST 320 History of the United States: African-American Emphasis**

**Units:** 3  
**Hours:** 54 hours LEC  
**Prerequisite:** None.  
**Advisory:** Eligible for ENGRD 310 or ENGRD 312 and ENGWR 300; OR ESLR 340 AND ESLW 340.  
**Transferable:** CSU; UC  
**General Education:** AA/AS Area V(a); AA/AS Area VI; CSU Area D6; CSU Area F1; IGETC Area 4F  
**Catalog Date:** June 1, 2020

This course covers U.S. history from the founding of Jamestown in 1607 through the Civil War. This course begins with a brief overview of the Black American's African heritage. It continues with the role played by African-Americans, their relationships to other groups, and their specific contributions in the growth and development of the nation.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- evaluate the early history of the United States from an African American perspective  
- identify the origin and significance of American institutions such as slavery, U.S. Constitution, and role of the Federal Government  
- relate to the African American experience from African origins through the Civil War  
- identify the historical geography of the world and the United States including changes in the environment and migrations of populations to and within the territory of the United States  
- examine the contributions of African Americans to U.S. History  
- debate the effect of slavery, stereotyping, and prejudice on African Americans  
- evaluate African American relationships with other ethnic groups

**HIST 321 History of the United States: African-American Emphasis**

**Units:** 3  
**Hours:** 54 hours LEC  
**Prerequisite:** None.  
**Advisory:** Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.  
**Transferable:** CSU; UC  
**General Education:** AA/AS Area V(a); AA/AS Area VI; CSU Area D6; CSU Area F1; IGETC Area 4F  
**Catalog Date:** June 1, 2020

This course covers U.S. history from 1865 to present, including coverage of state and local government with an emphasis on the role of African Americans, their relationships to other groups, and their specific contributions in the growth and development of the nation.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:
• examine U.S. history since the Civil War from an African American perspective
• evaluate the function and continued development of U.S. institutions
• assess the contributions of African Americans to U.S. history
• evaluate African American relationships with other ethnic groups
• analyze the struggle for civil rights from Reconstruction to the present
• debate the effect of segregation, stereotyping, and prejudice on African Americans

HIST 323 History of the United States: The American Indian Experience

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC
General Education: AA/AS Area V(a); AA/AS Area VI; CSU Area D6; CSU Area F1; IGETC Area 4F
Catalog Date: June 1, 2020

This course is a survey of the North American Indian Nations. It covers the effects of European contact, trade, and colonization. Topics include the effects of United States political, economic, and social policies on Indians throughout U.S. history. Also, it emphasizes American Indian people's attempts to protect their sovereignty and revitalize their societies across time.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• identify and correctly use basic historical terminology.
• distinguish between primary and secondary sources as historical evidence.
• identify and discuss various interpretations used by historians to explain the history of the American Indian experiences in the United States.
• analyze multiple causes for and properly evaluate why specific historical events happened.
• analyze the economic, political, and social systems of a wide variety of Nations which inhabited the North American continent prior to European Contact.
• identify major eras of U.S. history.
• describe and analyze the effect of European colonization and trade upon the original inhabitants of North America.
• analyze the consequences of European wars in North America.
• trace the migration of Europeans and Americans across the continent and explain the rationale for and consequences of these movements.
• evaluate the effect of stereotyping and racism on American Indian Nations during specific periods in U.S. history.
• analyze the effect of U.S. government policies on American Indians, including American Indian attempts to protect sovereignty and cultural traditions.

HIST 325 History of Asian/Pacific Americans

Units: 3
Hours: 54 hours LEC
Prerequisite: ENGWR 102 or 103, and ENGRD 116 with a grade of "C" or better; OR ESLR 320 and ESLW 320 with a grade of "C" or better
Advisory: CSU; UC
Transferable: AA/AS Area V(a); AA/AS Area VI; CSU Area D3; CSU Area D6; CSU Area F1; IGETC Area 4F
Catalog Date: June 1, 2020

This is a survey lecture course that examines the history of Asian immigrants and Asian Americans in the United States from 1850 to the present. It includes the process of migration and settlement in the United States by people from East Asia, Southeast Asia, South Asia, and the Pacific islands. It examines the historical experience of these groups from a social, political, economic, and cultural perspective, with an emphasis on the following themes: work, family, community formation, government policies, race relations, and ethnic identities. It also addresses the contributions of Asian Americans to the multicultural development of contemporary American society, including the interaction of Asian Americans with people of European, African, Hispanic, and Native descent.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- identify and correctly use basic historical terminology, such as causality, chronology, and change over time.
- distinguish between primary and secondary sources as historical evidence.
- apply various interpretations used by historians to explain the history of Asian/Pacific Americans.
- identify the origins and sources of global Asian migration in the nineteenth and twentieth centuries, including persons from East Asia, Southeast Asia, South Asia, and the Pacific islands.
- explain the historical context of United States government policies toward Asian immigrants, including immigration restrictions and exclusion from citizenship.
- analyze the historical patterns of gender roles and family formation among Asian Americans.
- analyze the effect of racial and ethnic prejudice on Asian populations throughout American history, using appropriate terminology.
- compare and contrast the historical relationships of Asian American to other racial and ethnic groups in American society.
- analyze the efforts by Asians and Asian Americans to incorporate themselves into the social, political, economic, and cultural structure of the United States.

HIST 327 History of the Chicano/Mexican American

Units: 3  
Hours: 54 hours LEC  
Prerequisite: None.  
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.  
Transferable: CSU; UC  
Catalog Date: June 1, 2020

This course is a study of the relationship between the development of American and Mexican civilization in the Western Hemisphere. This course focuses on the role of the Mexican American experience in the U.S. as it was affected by social, political, and economic events. Emphasis is placed on socio-cultural contributions of Mexican Americans to American institutions. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify and correctly use basic historical terminology, as well as distinguish between primary and secondary sources as historical evidence
- describe multiple perspectives about an event in American/Chicano history
- analyze multiple causes for and properly evaluate why a historical event happened
- analyze and evaluate the major economic, social, political, and cultural developments in U.S. history since the Mexican American War
- analyze and explain the influence of Mexican Americans on U.S. history
- explain how the history of the U.S. from a Mexican American perspective enhances the overall understanding of U.S. history
- identify the major historical periods and relevant geography of the U.S. since the Mexican American War
- describe the complexity of relationships that Mexican Americans have with other ethnic groups within the U.S.

HIST 330 Women in American History

Units: 3  
Hours: 54 hours LEC  
Prerequisite: ENGWR 102 and ENGRD 116 with a "C" or better; OR ESLR 320 and ESLW 320, with a grade of "C" or better.  
Advisory: None.  
Transferable: CSU; UC  
Catalog Date: June 1, 2020

This course offers a survey of U.S. women's history, including the origin and development of the nation's political, social, economic, and intellectual institutions, from pre-contact indigenous societies to the modern era. The diverse roles and contributions of European American, Native American, African American, Mexican American, and Asian American women are emphasized throughout the course.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- identify and use basic historical terminology.
- distinguish between primary and secondary sources as historical evidence.
- provide multiple causes to explain why a historical event occurred.
- describe an event or controversy in U.S. women’s history from several historical perspectives including race, ethnicity, or social class.
- identify the major eras of U.S. women’s history.
- analyze the contributions of various groups of women to America’s political and economic systems.
- define racism and sexism.
- explain how women’s point of view fits into the overall narrative of U.S. History.

**HIST 340 History of California through 1879**

**Units:** 3  
**Hours:** 54 hours LEC  
**Prerequisite:** None.  
**Advisory:** ENGWR 102 and ENGRD 116 with a "C" or better; OR ESLR 320 and ESLW 320, with a grade of "C" or better.  
**Transferable:** CSU; UC  
**General Education:** AA/AS Area V(b); CSU Area C2; CSU Area D6; IGETC Area 3B; IGETC Area 4F  
**Catalog Date:** June 1, 2020

This course is a survey of the early history of California, starting with the original people of California, the discovery and settlement of California by the Spanish, the Mexican period, American conquest and occupation, the Gold Rush, and ending with events through the Constitution of 1879.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- use basic historical terminology.
- identify and distinguish between primary and secondary sources as historical evidence.
- critically evaluate various historical interpretations and perspectives of early California history.
- analyze and properly evaluate the multiple causes of an historical event that happened in California.
- organize California historical events into chronological order and analyze cause-and-effect relationships.
- analyze and describe the consequences of California’s mission, rancho, gold rush, and railroad eras.
- evaluate the place of California’s economy, politics, culture, and controversies within the context of U.S. and world history.
- evaluate the role of California’s geography and climate in shaping human institutions and experiences.

**HIST 341 History of California: 1879 to Present**

**Units:** 3  
**Hours:** 54 hours LEC  
**Prerequisite:** None.  
**Advisory:** ENGWR 102 and ENGRD 116 with a "C" or better; OR ESLR 320 and ESLW 320, with a grade of "C" or better.  
**Transferable:** CSU; UC  
**General Education:** AA/AS Area V(b); CSU Area C2; CSU Area D6; IGETC Area 3B; IGETC Area 4F  
**Catalog Date:** June 1, 2020

This course is a survey of California history from 1879 to the present. Topics include the economic, social, cultural, and political developments, including the impact of the Constitution of 1879, consequences of railroad expansion, and early twentieth-century urbanization. It also includes the impact of the Great Depression and World War II, water projects, protest and reform movements of the 1960s, the rise of conservatism, and recent political trends.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- correctly use basic historical terminology.
identify and distinguish between primary and secondary sources as historical evidence.
analyse and properly evaluate the multiple causes of an historical event that happened in California.
identify various interpretations used by historians to explain the history of California from 1879 to present.
identify and evaluate significant political, economic, social, and ethnic developments from this period of California history.
analyse California ideas, controversies, and events by placing them into a national and international context.
analyse the role of geography and climate in California in shaping human institutions and experiences.
evaluate various interpretations and analyses of California history from 1879 to the present.
critique political ideas, controversies, and institutions necessary for effective citizenship, especially for residents of California.
analyse primary sources from California history, 1879 to present.
support analytical conclusions with examples drawn from California history.

HIST 343 The California Mother Lode

Units: 0.5 - 3
Hours: 9 - 54 hours LEC
Prerequisite: None.
Advisory: ENGRD 116 with a grade of "C" or better. OR ESLR 320 and ESLW 320 with a grade of "C" or better.
Transferable: CSU
General Education: AA/AS Area V(b); CSU Area D6
Catalog Date: June 1, 2020

This course is a history of the Mother Lode with emphasis on the Gold Rush Era and its effects on the natural environment, human population of the region, and cultural and economic development of California within an international context. Lecture and guided visitations at selected locations in the Mother Lode region complement the classroom instruction. Each combination of classroom and on-site instruction constitutes one half unit of credit. Field trips are required and field trip expense fees may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify and correctly use historical terminology related to the California Gold Rush.
- critically evaluate various historical interpretations and perspectives of the California Gold Rush.
- analyze and describe the economic, political, and social consequences of the California Gold Rush.
- describe various gold mining techniques and evaluate the long-term environmental consequences of those techniques.
- visit a museum, exhibition, or remnant of a Gold Rush town, evaluate the historical interpretations provided, and make recommendations about ways to improve public interpretive materials.
- organize Gold Rush era events in chronological order and analyze cause-and-effect relationships.
- identify and distinguish between primary and secondary sources as historical evidence.

HIST 364 Asian Civilization

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGRD 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC
General Education: AA/AS Area V(b); AA/AS Area I; CSU Area C2; CSU Area D6; IGETC Area 3B; IGETC Area 4F
Catalog Date: June 1, 2020

This course covers the history of Asian Civilizations from the emergence of agriculture and complex societies to 1800 C.E., with particular focus on India, China, and Japan. Topics include the rise of complex societies across Asia; the relationship between agrarian civilizations and the herders of Inner Asia; state-building and imperial expansion; the emergence of the major Asian philosophies and religious faiths, including that of Islam; Asian technology and innovation; the Mongol conquests; and the entrance of Europeans into the Asian world beginning in the 15th century.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- use basic historical terminology.
- distinguish between primary and secondary sources as historical evidence.
- explain the complexity of defining Asia as a region and the diversity of climates, peoples, geography, and historical experiences encompassed by the term Asia.
- identify various interpretations used by historians to explain Asian History to 1800 C.E.
- investigate multiple causes for and properly evaluate why a historical event happened and to discuss past events through multiple frames of reference.
- describe the major eras and relevant geography of Asian History to 1800 C.E.
- evaluate major economic, social, political, cultural, intellectual, and religious developments in Asian History to 1800 C.E.
- assess the experiences, conflicts, and connections of diverse groups of people in Asian History to 1800 C.E.
- use historical evidence to formulate generalizations about Asian History to 1800 C.E.

HIST 365 Asian Civilization

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGW 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC
General Education: AA/AS Area V(b); AA/AS Area I; CSU Area C2; CSU Area D6; IGETC Area 3B; IGETC Area 4
Catalog Date: June 1, 2020

This course is a survey of the political, social, economic, and cultural transformation of India, China, and Japan since 1800. It emphasizes how these countries responded to the challenges of modernity and western imperialism by embracing new ideas, new approaches to statecraft, and new social and cultural norms. Topics include the emergence of western dominance in Asia, the breakdown of states and empires in conjunction with, and partly as a result of, western imperialism, the development of Asian nationalisms and nationalist movements, and the growth of Japanese imperialism and the effects that this had on the rest of Asia.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- use basic historical terminology.
- distinguish between primary and secondary sources as historical evidence.
- explain the complexity of defining Asia as a region and the diversity of climates, peoples, geography, and historical experiences encompassed by the term Asia.
- identify various interpretations used by historians to explain Asian History since 1800 C.E.
- investigate multiple causes for and properly evaluate why a historical event happened and to discuss past events through multiple frames of reference.
- identify the relevant geography of Asian History since 1800 C.E.
- evaluate major economic, social, political, cultural, intellectual, and religious developments in Asian History since 1800 C.E.
- assess the experiences, conflicts, and connections of diverse groups of people in Asian History since 1800 C.E.
- use historical evidence to formulate generalizations about Asian History since 1800 C.E.
- analyze the effects of and responses to colonialism, imperialism, nationalism, and modernity in a variety of Asian societies.
- describe the major eras of Asian History since 1800 C.E.

HIST 367 History of Russia

Units: 3
Hours: 54 hours LEC
Prerequisite: ENGWR 102 or 103, and ENGRD 116
Advisory: CSU; UC
Transferable: AA/AS Area V(b); CSU Area C2; CSU Area D6; IGETC Area 3B; IGETC Area 4F
General Education: June 1, 2020

Catalog Date:
This course is a survey of Russian history from 1861 to the present. It examines the major social, political, and economic developments that have shaped Russian society and culture. Special attention is given to Russian culture, politics, and protest during the 19th century, the revolutions of 1917 and the Bolshevik rise to power, the creation and expansion of the Soviet state under Stalin, and the decline and collapse of Soviet power.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify and correctly use basic historical terminology, and distinguish between primary and secondary sources as historical evidence
- evaluate various interpretations used by historians to explain Russian history
- evaluate multiple causes and analyze why a historical event happened
- identify the major eras and relevant geography of Russian history
- evaluate major economic, social, political, and cultural developments in Russian history
- evaluate the experiences, conflicts, and connections of diverse groups of people in Russian history
- draw historical generalizations about Russian history based on the historical evidence
- evaluate the major causes and impact of the Revolutions of 1917
- evaluate the major features of the transformation of the Soviet Union under Stalin
- evaluate Gorbachev’s reforms and the causes of the collapse of the Soviet Union

HIST 373 History of Mexico

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC
General Education: AA/AS Area V(b); CSU Area C2; CSU Area D6; IGETC Area 3B; IGETC Area 4F
Catalog Date: June 1, 2020

This course is a survey of the history of Mexico from the pre-classical period to the present. It examines the origins and development of Mexico’s political, economic, religious, and intellectual institutions, their influence on Mexican society and culture, and the resultant legacy that is modern Mexico.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify and correctly use basic historical terminology.
- distinguish between primary and secondary sources as historical evidence.
- analyze the major time periods and relevant geography of the history of Mexico from its earliest civilizations to the present.
- prioritize among multiple causes for an historical event and properly evaluate why that event happened.
- assess and interpret Mexican history and contemporary Mexican issues by analyzing relevant historical evidence in appropriate contexts.
- construct and support historical narratives about the experiences and conflicts of indigenous, European, African, and multiracial populations in the development of Mexico.
- critique narratives about the history of Mexico based on appropriate understanding of relevant historical evidence found in primary and secondary source materials.

HIST 374 History of Latin America to 1830

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340
Transferable: CSU; UC
General Education: AA/AS Area V(b); AA/AS Area VI; CSU Area D6; IGETC Area 4F
Catalog Date: June 1, 2020
This course is a general historical survey of Latin American history from the pre-contact indigenous civilizations to the 19th-century nationalist movements in the region. The focus is on the influence of political, economic, cultural, and demographic factors that shaped Latin America.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- correctly use basic historical terminology.
- distinguish between primary and secondary sources as historical evidence.
- recognize Latin America as a complex region of enormous diversity in climates, peoples, geography, and historical experiences.
- identify various interpretations used by historians to explain Latin American history to 1830 C.E.
- investigate multiple causes for and properly evaluate why a historical event happened.
- describe the relevant geography of Latin American history to 1830 C.E.
- evaluate major economic, social, political, and cultural developments in Latin American history to 1830.
- assess the experiences, conflicts, and connections of diverse groups of people in Latin American history to 1830.
- use historical evidence to formulate historical generalizations about Latin American history to 1830.

HIST 375 The History of Modern Latin America and Caribbean

This course offers a general survey of Latin American history from the 19th century to the present, with focus on social, political, economic, and cultural developments. Issues include Latin America and the Caribbean in the global economy, dictators and democracy, African and indigenous cultures, feminism and gender, cultural politics, social movements and revolution, and relations with the United States and the world.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- correctly use basic historical terminology.
- distinguish between primary and secondary sources as historical evidence.
- recognize Latin America as a complex region of enormous diversity in climates, peoples, geography, and historical experiences.
- identify various interpretations used by historians to explain Latin American history since 1830 CE.
- investigate multiple causes for and properly evaluate why a historical event happened.
- describe the relevant geography of Latin American history since 1830 CE.
- evaluate major economic, social, political, and cultural developments in Latin American history since 1830 CE.
- assess the experiences, conflicts, and connections of diverse groups of people in Latin American history since 1830 CE.
- use historical evidence to formulate historical generalizations about Latin American history since 1830 CE.

HIST 399 Studying in Italy: Italian History and Culture

This course offers an study of Italy and its historical development in the setting of the country's rich cultural heritage. The course covers the ancient civilizations of Etruscan and Roman to the age of the Risorgimento and the unification of Italy. The course explores the Italian cultural renaissance and the growth of modern Italy in the late 19th and early 20th centuries. The course is designed to provide students with a comprehensive understanding of Italy's cultural, historical, and political development.
This course, offered as a study abroad course in Italy, surveys Italian history to provide a background for exploring and appreciating Italian life and culture. The focus is on examining the historical context of Italian cultural and artistic expression, thereby informing and enriching our understanding and enjoyment of Italian art and culture. In Rome, this course focuses on the ancient and religious sources of Italian culture. In Florence, it explores and examines how human expression in art, literature, and philosophy served to create a new sense of the possible during the Renaissance. This course also studies how culture reflects human values and how those values can be transformed and at times ennobled by creative genius. A portion of this course may be offered in a TBA component of 25-35 hours which may include museum visits, historical monument and building visits, and Italian cultural and historical site visits.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- examine the subject matter and methodology of history
- understand such historical concepts as cause and effect and multiple causation as a means of developing appropriate historical generalizations
- explore and analyze the causes and impact of the Italian Renaissance
- analyze and evaluate the interrelatedness of art, culture, politics, society, economics, and history
- critically analyze and evaluate primary sources as evidence reflecting Italian culture and history
- evaluate and analyze historical documents and interpretations
- evaluate the historical context of the Italian Renaissance and assess various schools of historical interpretation
- analyze and describe how Renaissance artistic expression relates to Renaissance thought and writings

**HIST 480 History of Western Civilization - Honors**

| Units:   | 3 |
| Hours:   | 54 hours LEC |
| Prerequisite: | Placement into ENGWR 480 through the assessment process. |
| Transferable: | CSU; UC (Credit Limitation: HIST 300 & 480: maximum credit one course) |

This course is a survey of western civilization from its origins in the Ancient Middle East until the Renaissance. This seminar-style course confronts the major historical issues through class discussion. The class challenges students to interpret the past by critically analyzing both primary sources and relevant works by leading historians. Emphasis is on the social, political, economic, cultural and intellectual forces that have served to shape the modern world. This course is not open to students who have completed HIST 300.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- identify and correctly use basic historical terminology, and distinguish between primary and secondary sources as historical evidence
- analyze various interpretations used by historians to explain the development of western civilization prior to the Renaissance
- evaluate multiple causes and analyze why a historical event happened
- identify the major eras and relevant geography of western civilization prior to the Renaissance
- analyze major economic, social, political, and cultural developments in western civilization prior to the Renaissance.
- evaluate the experiences, conflicts, and connections of diverse groups of people in western civilization prior to the Renaissance.
- draw historical generalizations about western civilization prior to the Renaissance based on the historical evidence.
- evaluate the cultural legacies and contributions of the Ancient Middle East, Greece, Rome and Medieval Europe to the development of western civilization.
- critically analyze primary sources and use them to support historical interpretations.

**HIST 481 History of Western Civilization - Honors**

| Units:   | 3 |
| Hours:   | 54 hours LEC |
| Prerequisite: | Placement into ENGWR 480 through the assessment process. |
| Transferable: | CSU; UC (Credit Limitation: HIST 302 & 481: maximum credit one course) |

This course is a survey of western civilization from its origins in the Ancient Middle East until the Renaissance. This seminar-style course confronts the major historical issues through class discussion. The class challenges students to interpret the past by critically analyzing both primary sources and relevant works by leading historians. Emphasis is on the social, political, economic, cultural and intellectual forces that have served to shape the modern world. This course is not open to students who have completed HIST 302.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- identify and correctly use basic historical terminology, and distinguish between primary and secondary sources as historical evidence
- analyze various interpretations used by historians to explain the development of western civilization prior to the Renaissance
- evaluate multiple causes and analyze why a historical event happened
- identify the major eras and relevant geography of western civilization prior to the Renaissance
- analyze major economic, social, political, and cultural developments in western civilization prior to the Renaissance.
- evaluate the experiences, conflicts, and connections of diverse groups of people in western civilization prior to the Renaissance.
- draw historical generalizations about western civilization prior to the Renaissance based on the historical evidence.
- evaluate the cultural legacies and contributions of the Ancient Middle East, Greece, Rome and Medieval Europe to the development of western civilization.
- critically analyze primary sources and use them to support historical interpretations.
This course is a survey of western civilization from the Renaissance to the present. This seminar-style course confronts the major historical issues through class discussion. The class challenges students to interpret the past by critically analyzing both primary sources and relevant works by leading historians. Emphasis is on the social, political, economic, cultural and intellectual forces that have served to shape the modern world. This course is not open to students who have completed HIST 302.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- identify and correctly use basic historical terminology, and distinguish between primary and secondary sources as historical evidence
- analyze various interpretations used by historians to explain the development of western civilization since the Renaissance
- evaluate multiple causes and analyze why a historical event happened
- identify the major eras and relevant geography of western civilization since the Renaissance
- evaluate the experiences, conflicts, and connections of diverse groups of people in western civilization since the Renaissance
- draw historical generalizations about western civilization since the Renaissance based on the historical evidence
- critically analyze primary sources and use them to support historical interpretations

### HIST 483 History of the United States - Honors

**Units:** 3  
**Hours:** 54 hours LEC  
**Prerequisite:** Placement into ENGWR 480 through the assessment process.  
**Transferable:** CSU; UC (Credit Limitation: HIST 310 & 483: maximum credit one course)  
**General Education:** AA/AS Area V(a); CSU Area D6; CSU Area F1; IGETC Area 4F  
**C-ID:** C-ID HIST 130  
**Catalog Date:** June 1, 2020

This course is an in-depth study of American history from the Colonial through the American Civil War eras. This seminar-style honors course utilizes class discussion based on the reading of selected monographs and primary documents. Particular emphasis is placed on the interrelationships of the developing American political, economic, social, and cultural institutions. Critical thinking skills are emphasized in responding to these issues. This course is not open to students who have completed HIST 310.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- identify the major time periods, geographical settings, and human experiences of United States history from the colonial period to the Civil War
- differentiate between primary source material and secondary source material and their uses in historical study
- investigate and analyze multiple causes of historical events by applying relevant factual details from primary and secondary source materials
- synthesize multiple interpretations about historical change in the United States from its colonial origins to the Civil War period, with a focus on the diversity of racial, cultural, gender, and class identities that foster multiple interpretations
- evaluate the varieties of indigenous American historical experience before and after the arrival of European and African settlers in the American continents
- assess the motives, settlement, and organization of European colonies in North America, and evaluate their impact on existing environments and indigenous cultural practices
- analyze the development and institutionalization of racial slavery in North America and appraise the influence of African cultures and experiences on the development of American society and institutions, including the impact of racial slavery on family structure and gender roles
- assess the economic, scientific, technological, and ecological interactions on the human populations of the American continents from before the colonial period to the middle of the nineteenth century
- analyze the major events and experiences of the revolutionary and early national periods in United States history, including the history and function of the political institutions of the United States, the creation of state and national constitutions, and the participation of individuals from multiple racial, gender, cultural, and social backgrounds in these events
- formulate independent historical interpretations by applying valid and relevant factual information from source material
- integrate knowledge of historical research and interpretation to review critically publications and documents relating to the history of the United States from the colonial period to the Civil War
demonstrate an understanding of America's growth in a global context

HIST 484 History of the United States - Honors

Units: 3
Hours: 54 hours LEC
Prerequisite: Placement into ENGWR 480 through the assessment process.
Transferable: CSU, UC (Credit Limitation: HIST 311 & 484: maximum credit one course)
General Education: AA/AS Area V(a); CSU Area D6; CSU Area F1; IGETC Area 4F
C-ID: C-ID HIST 140
Catalog Date: June 1, 2020

This course is an introduction to the study of American history from 1865 to the present day. This seminar-style honors course utilizes class discussion based on the reading of selected monographs and primary documents. Particular emphasis will be placed on the interrelationships of American political, economic, social, and cultural developments. Critical thinking skills are emphasized in responding to these issues. This course is not open to students who have completed HIST 311.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- discern and explain the implications of the interrelationships of major social, ethnic, cultural, political, and economic institutions
- analyze specific historic events and major historic trends by recognizing and evaluating options, making distinctions, recognizing implications, and applying prevailing data
- examine the basic elements of historical research and scholarship: evidence, historiography, and critical reviews of existing books and articles
- construct historical analysis from a combination of theory and applied knowledge
- differentiate between primary source material and secondary source material and their uses in historical study
- synthesize multiple interpretations about historical change in the United States from the Civil War through the modern Civil Rights era with a focus on the diversity of racial, cultural, and class identities that foster multiple interpretations
- integrate knowledge of historical research and interpretation to review important publications and documents relating to the history of the United States from the Civil War to the present

HIST 494 Topics in History

Units: 0.5 - 4
Hours: 9 - 72 hours LEC
Prerequisite: None.
Advisory: HIST 302
Transferable: CSU
General Education: AA/AS Area V(b)
Catalog Date: June 1, 2020

This course provides the opportunity for concentrated study on specialized topics in History. It covers topics from a wide range of academic disciplines including anthropology, economics, engineering, fine arts, history, law, life science, literature, mathematics, philosophy, political science, sociology, psychology and varies in content and scope with the interests and expertise of both the instructors and the students. This course may be taken four times on different topics.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe how history is broad, multi-faceted, controversial, relevant for all disciplines, and is not necessarily restricted to the one discipline commonly referred to as "history"
- examine the discipline of history itself - its subject matter and methodology
- employ such historical concepts as cause and effect and multiple causation as a means of developing appropriate historical generalizations
- identify and critically analyze the interrelatedness of art, culture, politics, society, economics and history
- critically analyze and critique primary sources as evidence reflecting a culture and an era
- write essays and other writings that responds to, evaluates, and analyzes historical documents and interpretations
- assess various schools of historical interpretation
**HIST 495 Independent Studies in History**

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<tr>
<th>Units:</th>
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<tbody>
<tr>
<td>Hours:</td>
<td>54 - 162 hours LAB</td>
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<tr>
<td>Prerequisite:</td>
<td>None.</td>
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<tr>
<td>Transferable:</td>
<td>CSU</td>
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<td>Catalog Date:</td>
<td>June 1, 2020</td>
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Independent Study is an opportunity for the student to extend classroom experience in the subject of history, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.
Humanities is the study of painting, sculpture, literature, music, theater, and philosophy with the goal of discovering important ideas about our human condition. Humanities courses examine key arts and ideas as found in ancient through modern Europe, Asia, the Middle East, and the Americas. The Humanities department also offers courses in the Hebrew Bible (Old Testament), the New Testament, world religions, and atheism.

Humanities is an interdisciplinary program committed to learning, reflection, and action predicated upon engagements between and across academic disciplines including religion, philosophy, literature, music, theater, painting, architecture, and sculpture. Our courses recognize and explore the dynamics of differences throughout human history, thought, experience, and expression by examining individual thinkers, artists, works, and ideas in their particular cultural and historical contexts. To pursue Humanities is to become a caring and critical co-investigator of how human beings encounter culture, community, place, time, consciousness, faith, meaning, representation, and change in a complex and globally interconnected world.

Humanities (HUM)

### HUM 300 Classical Humanities

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>54 hours LEC</td>
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<tr>
<td>Prerequisite:</td>
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</tr>
<tr>
<td>Advisory:</td>
<td>Eligible for ENGRD 310 or 312, AND ENGW 300; OR ESLR 340 or ESLW 340</td>
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<tr>
<td>Transferable:</td>
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<td>General Education:</td>
<td>AA/AS Area I; CSU Area C2; IGETC Area 3B</td>
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<td>Catalog Date:</td>
<td>June 1, 2020</td>
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</tbody>
</table>

This course is a survey of Western culture that focuses on the human values expressed through painting, sculpture, architecture, music, literature, and philosophy. Emphasis is on the civilizations of Greece, Rome, and the Middle Ages. Field trips may be required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- describe the role of the arts in society.
- analyze major works of visual arts, music, and literature from each of the periods presented.
- evaluate and logically discuss in written and oral form key philosophical concepts developed in western culture from ancient times through the Middle Ages.
- compare thematic similarities across a broad range of artistic media, including oral and written literature, music, theatre, visual arts, and architecture.

### HUM 301 Introduction to the Humanities

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<td>Prerequisite:</td>
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This is a non-chronological course that introduces the humanities, primarily architecture, music, painting, poetry, sculpture, theatre, and film. Emphasis is on identifying, appreciating, analyzing, interpreting, and understanding various masterworks, primarily from Europe and America. Field trips may be required.
Upon completion of this course, the student will be able to:

- identify the key components of various genres of art (painting, sculpture, architecture, music, drama etc.)
- analyze a work of art, including its components, structure, message, meaning, and function
- compare and contrast two or more works of art of the same genre
- examine two or more works of art from different genres in order to understand their commonalities and differences of historical context, form, message, and meaning
- identify historically significant works of art (i.e. “great works” of Michelangelo, Beethoven, Frank Lloyd Wright, and others)

HUM 302 Global Humanities: Atheism in Creativity, Thought, and Inspiration Traditions

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate cultural literacy by interpreting the place and significance of humanities materials within a particular cultural context.
- contrast different approaches (personal, historical, contextual, formal, thematic) to evaluating a work (e.g. musical selection, poem, essay, painting, building, garden, constructed landscape, website).
- identify significant arts, artists, ideas, and religious and cultural perceptions of atheism as they have evolved over the course of the human cultural record globally.
- compare similarities and differences between atheism and ideas conflated inaccurately with atheism across different artistic media, including oral and written literature, music, theater, visual arts, and architecture.

HUM 310 Modern Humanities

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the role of the arts in society.
- analyze major works of visual arts, music, and literature from each of the periods presented.
- evaluate and logically discuss in written form key philosophical concepts developed in Western Culture from the Renaissance to the Modern Age.
- compare thematic similarities across a broad range of artistic media, including oral and written literature, music, theatre, visual arts, and architecture.
- identify significant arts, artists, ideas, and religious and cultural concepts as they have evolved in European and American cultures since the sixteenth century.
identify connections between earlier and later arts and ideas as they have developed in response to cultural and political changes in Europe and America.

HUM 320 Asian Humanities

Units: 3  
Hours: 54 hours LEC  
Prerequisite: None  
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.  
Transferable: CSU; UC  
General Education: AA/AS Area I; AA/AS Area VI; CSU Area C2; IGETC Area 3B  
Catalog Date: June 1, 2020

This course surveys traditions, cultures, literatures, art, music, and film of India, China, and Japan from ancient times to the present. Emphasis is on the inter-relationships of the arts, literatures, and philosophies in their historical contexts within each geographical area. Topics may include arts and cultures of other Asian countries such as Vietnam, Laos, Cambodia, Thailand, and Korea.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify significant arts, ideas, and personalities past and present from Indian, Chinese, and Japanese cultures
- compare and contrast major similarities and differences between Indian, Chinese, and Japanese cultural values
- analyze the core ideas and values in the religions and of Hinduism, Buddhism, Taoism, Confucianism, and Shintoism

HUM 324 Global Islam: Culture and Civilization

Units: 3  
Hours: 54 hours LEC  
Prerequisite: None  
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.  
Transferable: CSU; UC  
General Education: AA/AS Area I; AA/AS Area VI; CSU Area C2; IGETC Area 3B  
Catalog Date: June 1, 2020

This course is a comprehensive introduction to Islamic cultures in a variety of geographic settings from the 7th century to the present, with emphasis on religious/philosophic concepts, and their expression in literature and the arts. It focuses on Arab, Persian, African, Asian, and American contributions. Topics include the origins and development of the religion in its formative period (the prophetic career of the Prophet Muhammad, the Qur’an, Islamic belief and ritual, Islamic law, early artistic expressions, and popular spirituality) as well as debates surrounding Islam in the contemporary world.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify the various social, political, and religious structures in place at the birth of Muhammad in the Pre-Islamic Middle East.
- identify and comprehend how Prophet Muhammad’s responses to the personal, social, political, and religious challenges of his time differed from pre-Islamic responses and became distinctly Islamic.
- comprehend the significance of the life and death of the Prophet Muhammad as it informs the life of Muslims both past and present in a variety of geographic locations.
- identify the origin, development, collection, and transmission of the Qur’an in Islam.
- identify and comprehend the role of the Qur’an as it informs the arts, architecture, literature, music, cultural, and personal lives of Muslims.
- identify and differentiate between the multiple and distinct Islamic voices arising as a result of Prophet Muhammad’s death and the subsequent struggle for succession and the construction of Islamic authority in the Muslim world including the including Sunni, Shi’a, Sufi, and Wahhabi paths.
- identify, examine, and explain the multiple and distinct Islamic methods and means by which the Qur’an is interpreted in both historical and contemporary contexts.
- assess and deconstruct popular misconceptions and mischaracterizations of Islam.
- identify, contextualize, and discern multiple and distinct Islamic responses to contemporary social issues including gender discourses, politics, power, peace, violence, global religious pluralism, and love.
- identify, examine, and explain the impacts of European colonialism on the Muslim world.
- identify, examine, and recognize the contributions of artists, poets, musicians, and writers from differing genders and cultures within the Islamic tradition.
develop the critical thinking skills necessary for formulating an analytical framework relevant to the study of global cultures, contemporary American religious pluralism, and the history of Islam.

HUM 326 Middle Eastern Humanities

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- examine the roots of Middle Eastern societies as found in ancient texts and arts from Mesopotamia, Arabia, Israel, and Egypt
- compare and contrast the basic principles, texts, and social developments of major religions of the Middle East, including Judaism, Christianity, and Islam
- identify significant artforms of Persian, Ottoman, Jewish, and Arabic cultures
- analyze concepts and conflicts of the major culture groups in the region, such as the Sunni Muslims, Shi’ite Muslims, Wahhabis, Persians, Jews, and Palestinians
- analyze the current events in the Middle East as they relate to this region's cultural values and historic roots

HUM 330 Humanities of the Americas

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze major works of literature, music, and the visual arts from each of the periods, regions, and cultures presented
- compare thematic similarities across a broad range of artistic media, including oral and written literature, music, theater, visual arts, and architecture
- compare the arts and ideas of earlier and later cultures as they have developed in response to changing ethnic, racial, historical, and social forces in the Americas
- analyze the uniquely American characteristics of the arts of the various cultural traditions of the Western Hemisphere
- identify significant arts, artists, ideas, and cultural concepts as they have evolved in American culture
- appraise the role of the arts in American society

HUM 355 Introduction to World Religions
This course surveys selected major world religions. Emphasis is on the origins, development, beliefs, practices, social ethics, and ethnic/cultural issues of indigenous tribal religions, Hinduism, Sikhism, Jainism, Buddhism, Confucianism, Taoism, Shintoism, Judaism, Christianity, and Islam. This course focuses on the central beliefs and practices of these religions using selected material from each religion’s sacred texts and arts.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- define basic terms and concepts of the religions studied.
- explain the effects of key religious beliefs, practices, and cultural conflicts on the families and societies of regions studied.
- describe the historical developments of the religions studied.
- compare and contrast key beliefs and worldviews of the religions studied.
- evaluate the contributions of and tensions between several culturally diverse religious traditions in selected regions of the world.
- identify the influences of earlier religious traditions on later developing religions.

HUM 360 Introduction to the Old Testament (The Hebrew Bible)

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340
Transferable: CSU; UC
General Education: AA/AS Area I; CSU Area C2; IGETC Area 3B
Catalog Date: June 1, 2020

This academic and non-sectarian course provides a literary, theological, and historical approach to the Hebrew Bible (also called the Old Testament). Ancient Israelite society and beliefs prior to the Common Era are explored primarily through a study of this biblical text, supported by the study of Middle Eastern cultural artifacts, non-biblical texts, and scholarly theories and archaeological studies related to the Hebrew Bible.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify key Bible figures and their roles.
- describe the evolving beliefs and assumptions about the land and people of Israel, their God, and neighboring cultures.
- examine major academic theories about the Hebrew Bible’s structure, message, and audience.
- evaluate central themes developed by Hebrew Bible writers.
- compare differing points of view of several major Hebrew Bible book authors.
- summarize key attributes of God and the Israelites (Hebrews) as found in the Hebrew Bible.

HUM 365 Introduction to the New Testament

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC
General Education: AA/AS Area I; CSU Area C2; IGETC Area 3B
Catalog Date: June 1, 2020

This academic and non-sectarian course provides a literary, theological, and historical approach to the New Testament. These canonical texts of the early Christian community are analyzed in relation to both Judaism and the Greco-Roman world. Topics include contemporaneous religious ideas about the Messiah, the afterlife, the origin of the gospels, the nature of inspiration, transmission of documents and ideas, important Jewish groups, the politics of Palestine under the Romans, and the role of Paul.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze dating and authorship of New Testament (NT) documents using internal and external sources.
- analyze theories of origins such as the "Q" source and transmission of NT texts.
- identify Christian theological ideas as connected to and different from Judaism and other Greco-Roman religious influences.
- define and analyze ideas, symbols, and images in apocalyptic texts.
- compare and contrast the four gospels in terms of the authors' goals, themes, audiences, and kerygma (proclamations about Jesus).
- describe the early Christian community's experience and challenges as found in the gospels and Paul's epistles.
- identify the NT sources of ideas and images that have influenced subsequent Christian worship practices, arts, and music.

HUM 494 Topics in Humanities

Units: 0.5 - 4
Hours: 9 - 72 hours LEC
Prerequisite: None.
Advisory: ESLW 320, or placement through the assessment process.
Transferable: CSU
Catalog Date: June 1, 2020

This course provides the opportunity for concentrated study on specialized topics in the Humanities. Each offering focuses on the integration of arts and ideas in the works of a particular time and place and/or illuminates a selected theme. Refer to class schedule for current topic. Individual field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze the inter-relationship between specific works of art and the ideas that they express.
- analyze the role that a particular temporal and/ or geographic context or selected artistic or philosophical theme has/ had in forming and given body of visual and performance arts.
- compare and contrast key works from the time, place, or theme covered in the course.
- evaluate the contribution of the arts and ideas of the course selected time, place, or theme, to contemporary global culture.
- interpret the constraints and enhancements that the time, place or theme imposes/d on the human achievements studied.

HUM 495 Independent Studies in Humanities

Units: 1 - 3
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020
Horticulture | American River College

Associate Degrees

A.S. in Horticulture

This degree represents several areas of study in Horticulture: arboriculture, floriculture, landscape horticulture and landscape design, olericulture, pomology, and viticulture. Horticulture is the science, art and skill of plant cultivation and the focus of the program is to prepare horticulturalists to work and do research in the many disciplines the industry has to offer. The degree program concentrates on plant identification, landscape design, construction and maintenance, soils and plant nutrition, plant production and marketing, irrigation and water conservation, integrated pest management, and sustainable horticultural practices. Work experience is required.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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</thead>
<tbody>
<tr>
<td>HORT 100</td>
<td>Integrated Pest Management in the Landscape</td>
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<tr>
<td>HORT 143</td>
<td>Horticulture Skills Development</td>
<td>1</td>
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<tr>
<td>HORT 298</td>
<td>Work Experience in Horticulture</td>
<td>1-4</td>
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<tr>
<td>HORT 300</td>
<td>Introduction to Horticulture</td>
<td>3</td>
</tr>
<tr>
<td>HORT 302</td>
<td>Soils, Soil Management, and Plant Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>HORT 305</td>
<td>Plant Identification-Fall Selections</td>
<td>3</td>
</tr>
<tr>
<td>HORT 306</td>
<td>Plant Identification-Spring Selections</td>
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<td>HORT 312</td>
<td>Plant Propagation</td>
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<tr>
<td>HORT 316</td>
<td>Plant Production, Facilities and Sales</td>
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<tr>
<td>BUS 212</td>
<td>Marketing for Small Businesses (1)</td>
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</tr>
<tr>
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<td>Essential Records for the Small Business (1)</td>
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<td>Viticulture - Sustainable Vineyard Management (1)</td>
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</table>
COURSE CODE | COURSE TITLE | UNITS
---|---|---
HORT 321 | Sustainable and EcoLandscape Practices (3) |  
HORT 326 | Landscape Design (3) |  
HORT 327 | Advanced Landscape Design (3) |  
HORT 330 | Small Gas Engines, Outdoor Power Equipment (4) |  
NATR 330 | Native Trees and Shrubs of California (4) |  
NATR 332 | Wildflowers of California (3) |  
Total Units: | | 38 - 41

The Horticulture Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- identify and select plant materials that are used for landscapes in the northern California regions.
- analyze a landscape site and create a complete and appropriate landscape design for that site.
- analyze a landscape design and apply the sustainable installation procedures necessary to implement the design.
- assess a landscape and apply the sustainable landscape maintenance operation techniques required.
- assess a soil analysis and apply the appropriate steps to provide for plant health and soil sustainability.
- apply the plant production options to produce landscape nursery stock by sexual and asexual methods.
- diagnose plant pest signs and symptoms.
- formulate a pest management plan using the principles of integrated pest management and recognizing the requirements for licensing or certification.
- formulate a marketing plan for a retail nursery and apply the techniques for selling plants and related products.
- utilize the sustainable methods of plant growth and production for ornamental and edible plant materials.
- identify and then apply safe operating procedures and practices to all horticultural operations.
- safely and efficiently operate pesticide application equipment.

Career Information

Horticulturists find careers in landscape horticulture, which includes the production, marketing and maintenance of landscape plants, as well as the landscape design/build industry, which includes design, construction, and maintenance of outdoor and interior landscapes. Graduates can find careers in the nursery industry, which includes plant production and retail garden centers, and the landscape construction and maintenance industry. Opportunities are with industry, government, education and research, and self employment.

A.S. in Landscape Design Technology

This degree is a bi-disciplinary study of horticulture resources and design fundamentals. It includes an in-depth study of plant materials, irrigation, landscape design, and site planning. Topics such as landscape computer-aided design, surveying, and construction measurement techniques, are also covered.

Catalog Date: June 1, 2020

Degree Requirements

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<thead>
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<th>COURSE CODE</th>
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<tr>
<td>HORT 110</td>
<td>Irrigation Design</td>
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<tr>
<td>HORT 300</td>
<td>Introduction to Horticulture</td>
<td>3</td>
</tr>
<tr>
<td>HORT 305</td>
<td>Plant Identification-Fall Selections (3)</td>
<td>3</td>
</tr>
</tbody>
</table>
The Landscape Design Technology Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- select plant materials that are used for landscapes.
- solve landscape design problems.
- analyze typical landscape design projects using the design process.
- communicate landscape design solutions effectively.

Career Information

Landscape architects and landscape architect technicians are responsible for the overall design and detailed drawings of a wide range of projects in outdoor spaces including commercial and residential developments, parks and recreation areas, as well as master plans for the management of forested lands. Employment of landscape architects and landscape architect technicians is expected to increase as a result of the increasing emphasis on sustainability land development and design.

Certificates of Achievement

Horticulture Certificate

This certificate represents several areas of study in Horticulture: arboriculture, floriculture, landscape horticulture and landscape design, olericulture, pomology, and viticulture. Horticulture is the science, art and skill of plant cultivation and the focus of the program is to prepare horticulturalists to work and do research in the many disciplines the industry has to offer. The certificate program concentrates on plant identification, landscape design, construction and maintenance, soils and plant nutrition, plant production and marketing, irrigation and water conservation, integrated pest management, and sustainable horticultural practices.

Catalog Date: June 1, 2020

Certificate Requirements

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<td>Total Units:</td>
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</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- identify and select plant materials that are used for landscapes in northern California regions.
- analyze a landscape site and create a complete landscape design for that site.
- analyze a landscape design and apply the sustainable installation procedures necessary to implement the design.
- assess a landscape and apply the sustainable maintenance operation techniques required.
- assess a soil analysis and apply the appropriate procedures for plant health and soil sustainability.
- apply the plant production options to produce landscape nursery stock by sexual and asexual methods.
- diagnose plant pest signs and symptoms.
- formulate a pest management plan using the principles of integrated pest management and recognizing the requirements for licensing or certification.
- utilize the sustainable methods of plant growth and production for ornamental and edible plant materials.
- identify and then apply safe operating procedures and practices to all horticultural operations.
- safely and efficiently operate pesticide application equipment.

Career Information

Horticulturalists find careers in landscape horticulture, which includes the production, marketing and maintenance of landscape plants, as well as the landscape design/build industry, which includes design, construction, and maintenance of outdoor and interior landscapes. Graduates can find careers in the nursery industry, which includes plant production and retail garden centers, and the landscape construction and maintenance industry. Opportunities are with industry, government, education and research, and self employment.
Landscape Design Technology Certificate

This certificate is a bi-disciplinary study of horticulture resources and design fundamentals. It includes an in-depth study of plant materials, irrigation, landscape design, and site planning. Topics such as landscape computer-aided design, surveying, and construction measurement techniques, are also covered.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
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<tbody>
<tr>
<td>HORT 110</td>
<td>Irrigation Design</td>
<td>2</td>
</tr>
<tr>
<td>HORT 300</td>
<td>Introduction to Horticulture</td>
<td>3</td>
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<tr>
<td>HORT 305</td>
<td>Plant Identification-Fall Selections (3)</td>
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<tr>
<td>or HORT 306</td>
<td>Plant Identification-Spring Selections (3)</td>
<td>3</td>
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<tr>
<td>HORT 320</td>
<td>Sustainable Landscape Construction</td>
<td>3</td>
</tr>
<tr>
<td>HORT 322</td>
<td>Landscape and Irrigation Graphics and Design</td>
<td>3</td>
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<tr>
<td>HORT 326</td>
<td>Landscape Design</td>
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<td>HORT 329</td>
<td>Landscape CAD Design</td>
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<tr>
<td>DESGN 301</td>
<td>Introduction to Computer Aided Drafting and Design (CADD)</td>
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<td>DESGN 302</td>
<td>Technical Documentation with CADD</td>
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<tr>
<td>DESGN 300</td>
<td>Introduction to Design Resources</td>
<td>3</td>
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<td>DESGN 350</td>
<td>Surveying and Land Planning</td>
<td>5</td>
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<td>34</td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- select plant materials that are used for landscapes.
- solve landscape design problems.
- analyze typical landscape design projects using the design process.
- communicate landscape design solutions effectively.

Career Information

Landscape architects and landscape architect technicians are responsible for the overall design and detailed drawings of a wide range of projects in outdoor spaces including commercial and residential developments, parks and recreation areas, as well as master plans for the management of forested lands. Employment of landscape architects and landscape architect technicians is expected to increase as a result of the increasing emphasis on sustainability land development and design.

Certificates

Floristry Certificate

The Floristry certificate provides well-balanced training in the fundamentals of floral design, the identification of flowers and foliage, the care of fresh cut product and the sources of floral materials. Courses cover special event floral design such as weddings, funerals and holidays, and prepare students to participate in the varied floral enterprises.

Catalog Date: June 1, 2020

Certificate Requirements

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<th>COURSE CODE</th>
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<tbody>
<tr>
<td>HORT 200</td>
<td>Introduction to Retail Floristry</td>
<td>2</td>
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</table>
### Horticulture Skills Certificate

This certificate provides individuals with a basic horticulture background and specific experience in landscape installation and plant production. Integrated Pest Management (IPM) skills can be adapted to the needs of each of these horticulture industries.

Catalog Date: June 1, 2020

### Certificate Requirements

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<tr>
<th>COURSE CODE</th>
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<tbody>
<tr>
<td>HORT 100</td>
<td>Integrated Pest Management in the Landscape</td>
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<tr>
<td>HORT 143</td>
<td>Horticulture Skills Development</td>
<td>1</td>
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<td>HORT 300</td>
<td>Introduction to Horticulture</td>
<td>3</td>
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<tr>
<td>HORT 312</td>
<td>Plant Propagation</td>
<td>3</td>
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<tr>
<td>HORT 320</td>
<td>Sustainable Landscape Construction</td>
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<tr>
<td>HORT 330</td>
<td>Small Gas Engines, Outdoor Power Equipment</td>
<td>4</td>
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<td><strong>Total Units:</strong></td>
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<td><strong>17</strong></td>
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</table>

### Student Learning Outcomes

Upon completion of this program, the student will be able to:

- diagnose plant pest signs and symptoms
- formulate a pest management plan using the principles of Integrated Pest Management (IPM)
- recognize basic botanical structure and functions and how plants relate to the environment
- demonstrate the hands-on skills used in plant propagation including seed and vegetative techniques
- assess and implement hands-on skills of construction operations, such as using wood, pavers, irrigation components, and sustainable soil preparation and grading
- recognize and comply with the state water regulations that affect landscaping
Career Information

This certificate helps individuals, new to or already in the field, market themselves to both landscape and plant production horticulture fields.

Landscape Design Certificate

This certificate provides individuals with a basic horticulture background and a broad experience in landscape design, including landscape CADD.

Catalog Date: June 1, 2020

Certificate Requirements

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<td>HORT 329</td>
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<tr>
<td>Total Units:</td>
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<td>12</td>
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</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- recognize basic botanical structure and functions and how plants relate to the environment.
- develop construction drawings using the components included in a set of landscape plans.
- assess and apply the use of drafting equipment and techniques as they relate to landscape design and landscape architecture.
- assess, evaluate, and utilize supportive design techniques such as plant materials, space management, energy conservation, and elevation change and grading.
- demonstrate the various formats for design presentations.
- create a new landscape design project using the CADD software program.

Career Information

Career opportunities exist with design firms and landscape contractors.

Plant Production Certificate

This certificate provides individuals with a basic horticulture background and specific experience in landscape plant production, marketing and sales, facilities, Integrated Pest Management (IPM) skills, and license or certificates requirements.

Catalog Date: June 1, 2020

Certificate Requirements

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<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
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<tbody>
<tr>
<td>HORT 105</td>
<td>Pest Control Licensing or Certification</td>
<td>2</td>
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<tr>
<td>HORT 300</td>
<td>Introduction to Horticulture</td>
<td>3</td>
</tr>
<tr>
<td>HORT 312</td>
<td>Plant Propagation</td>
<td>3</td>
</tr>
</tbody>
</table>
### Student Learning Outcomes

Upon completion of this program, the student will be able to:

- recognize basic botanical structure and functions and how plants relate to the environment
- propagate plants, including seed and vegetative techniques
- diagnose plant pest signs and symptoms
- apply the basic practices involved in commercial nursery operations
- identify the different display techniques and advertising practices used in the nursery industry
- recognize the basic principles of pest control and the requirements for licensing and/or certification

### Career Information

Career opportunities exist with plant researchers, wholesale nurseries, and retail nurseries.

### Sustainable Landscaping Certificate

This certificate provides students with a basic horticulture background and specific experience in sustainable landscape installation and maintenance, including the use of sustainable principles and practices.

**Catalog Date:** June 1, 2020

### Certificate Requirements

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<tr>
<td>HORT 308</td>
<td>Viticulture-Vineyard Establishment</td>
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<td>HORT 309</td>
<td>Viticulture - Sustainable Vineyard Management</td>
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<td>HORT 320</td>
<td>Sustainable Landscape Construction</td>
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<tr>
<td>HORT 324</td>
<td>Sustainable Landscape Maintenance</td>
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<tr>
<td>Total Units:</td>
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<td>17</td>
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</tbody>
</table>

### Student Learning Outcomes

Upon completion of this program, the student will be able to:

- recognize basic botanical structure and functions and how plants relate to the environment
- assess and implement hands-on skills of construction operations, such as using wood, pavers, irrigation components, and sustainable soil preparation and grading
- recognize and comply with the state water regulations that affect landscaping
- assess and implement the hands-on skills of sustainable landscape management and their techniques
- utilize irrigation water auditing techniques and select equipment to correctly irrigate, schedule, and conserve water in the landscape
- compare and contrast conventional and sustainable landscape methods
- evaluate existing landscapes to enable maintenance with ecologically sustainable practices
- evaluate sustainable products and methods for use in the landscape
- demonstrate proper pruning of a plant
- demonstrate proper techniques of planting and transplanting
- select a proper plant for a given situation
- recognize and identify 150 plant species and/or varieties utilizing taxonomic plant key techniques
- employ the basic principles of irrigation design

Career Information
Career opportunities include positions with landscape construction and maintenance firms, municipalities, and the state.

Horticulture (HORT)

HORT 100 Integrated Pest Management in the Landscape

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None
Corequisite: HORT 300
Catalog Date: June 1, 2020

This course is a study of local plant pests including weeds, diseases, invertebrates, and vertebrates. It includes recognition of symptoms and causes, life cycle of the pests, host and habitat relationships, and methods of control. Field trips may be required.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- evaluate the economic significance of plant pest problems in horticulture
- identify conventional pest control options and explain why they are no longer desirable
- diagnose plant pest signs and symptoms
- identify plant pests and beneficial organisms as evident from existing signs and symptoms
- formulate a pest management plan using the principles of integrated pest management
- calculate the accurate quantity of pest control substance to be used on a given area
- outline basic laws, regulations, and public agencies governing the use of pesticides
- explain the proper use of Personal Protective Equipment for pesticide application
- safely and efficiently operate pesticide application equipment

HORT 105 Pest Control Licensing or Certification

Units: 2
Hours: 36 hours LEC
Prerequisite: HORT 300 with a grade of "C" or better
Advisory: HORT 100
Catalog Date: June 1, 2020

This course introduces the safe and proper use of horticultural chemicals, laws and regulations, and the Integrated Pest Management (IPM) principles involved. It covers the laws and regulations for operators, applicators, and advisors, including the study of weeds, diseases, insects, and accepted standards for control.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- recognize the basic principles of pest control and the requirements for licensing and/or certification.
- identify horticultural pests.
- safely use pest management equipment, materials, and supplies.
- demonstrate the skills required to pass California Department of Pesticide Regulation licensing exams.

HORT 110 Irrigation Design

Units: 2
Hours: 36 hours LEC
Prerequisite: HORT 300 with a grade of “C” or better
Catalog Date: June 1, 2020

This course is a study of water hydraulics and irrigation equipment including drip lines, heads, pipes, pumps, clocks, and valves. Irrigation design, which includes preparing plans, dealing with measurement, head layout, pipe sizing and specifications, is covered. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain and analyze California’s water storage and delivery system.
- assemble landscape irrigation piping and heads to effectively distribute irrigation water.
- employ the basic principles of irrigation design.
- demonstrate skills in the design and preparation of irrigation plans.
- assess the correct identification and application of irrigation system components.
- diagnose and correct issues affecting irrigation system efficiency.

HORT 140 Advanced Student Projects

Units: 2
Hours: 108 hours LAB
Prerequisite: HORT 300 with a grade of “C” or better
Catalog Date: June 1, 2020

This course provides the student with an opportunity to pursue advanced projects which are selected by the department.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Apply horticulture practices to an advanced project.
- Demonstrate the techniques of project development through research and planning.
- Employ skills in record keeping during a project and the final presentation of the project.

HORT 143 Horticulture Skills Development

Units: 1
Hours: 54 hours LAB
Prerequisite: None
Corequisite: Completion or current enrollment in a college level horticulture class.
Catalog Date: June 1, 2020

This course offers the opportunity to develop technical, creative, and business skills learned in other horticulture classes. Participation in assigned, supervised projects to
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate proper watering of plants
- identify plant pest problems and select proper methods of control
- demonstrate proper pruning of a plant
- demonstrate proper techniques of planting and transplanting
- outline and apply basic principles of container plant design
- select a proper plant for the situation
- formulate a fertilizer application plan for a given planting area
- research and apply the propagation technique correct for the plant and season
- evaluate irrigation system needs and problems and recommend a solution
- calculate the cost of plants, media, and containers used in production

HORT 200 Introduction to Retail Floristry

Units: 2
Hours: 18 hours LEC; 54 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

This course presents fundamentals of design techniques and skills practiced in the floral industry. Topics include design mechanics, guides to design, identification of flower and foliage shapes and their use, cut flower care, corsage practice, and containers and designers’ aids. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify floral specimens used in commercial floristry by scientific names and availability
- process and display cut flowers
- assess floral wholesale sources and procure floral materials for flower shop use
- assess and select appropriate mechanics for the type of vase and container arrangement
- assess and utilize floral materials to create a visually appealing and salable arrangement
- apply the principles of color theory to floral design
- demonstrate methods in merchandising floral materials

HORT 201 Floral Design

Units: 2
Hours: 18 hours LEC; 54 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

This course presents the theories and techniques of basic/intermediate floral design. Identification of wholesale sources, origin of product, and seasonal price fluctuations in the industry and market are discussed. This course emphasizes design techniques including line, shape, and form. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- produce floral arrangements using line, shape, and form
• discuss color theory and its use in floral design
• create symmetrical and asymmetrical floral designs
• incorporate negative space into floral arrangements to enhance designs
• effectively integrate textures into floral designs

HORT 202 Corsage and Wedding Floral Design

Units: 2
Hours: 18 hours LEC; 54 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

This course presents the history and uses of wedding and body flower designs. The principles, methods, and practices used to create wedding bouquets and arrangements are explored and practiced. The techniques for wiring, taping, and gluing corsages, and the tools and materials for creating them and other body flower designs, are taught and practiced. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• produce wedding pricing calculations
• describe the history of American wedding and body flowers
• demonstrate the proper handling of flowers and greens to preserve freshness and visual appeal
• identify the elements involved in performing a wedding consultation
• apply techniques for creating a variety of types of wedding bouquets and body flowers
• create displays for use in weddings, ceremonies, and receptions
• source and purchase flowers and accessory items for wedding designs

HORT 203 Sympathy Design and the Mass Market

Units: 2
Hours: 18 hours LEC; 54 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

This course presents the theories of sympathy and tribute floral design. Design applications for standing, flat sprays, set work, and casket covers are included, as well as their delivery and setup. The mass market place in floral design is explored. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• relate the history of sympathy floral design to a specific design.
• apply design theory to the design and creation of casket covers, standing sprays, flat sprays, and set pieces.
• properly prepare arrangements for their delivery.
• develop marketing skills for working with mortuaries and cemeteries while meeting the needs of the family.
• identify distinctions between mass and retail markets in the floral industry.

HORT 208 Interior Plants

Units: 2
Hours: 18 hours LEC; 54 hours LAB
Prerequisite: None.
This course examines the indoor plant maintenance business as well as interior plant care for retail use. It includes plant identification and selection, location and design practices, care and maintenance, as well as purchasing and sales aspects. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate basic knowledge of the history of interior plants and careers in the interiorscape industry.
- assess the impact of plants in the interiorscape on human quality of life.
- understand the environmental requirements of common interior plants.
- identify the major interiorscape plants used in retail floral and the interior plant industry.
- demonstrate how to market interior plants for sale by selecting appropriate plant materials and accessories for use in interior landscaping and for retail purposes.
- demonstrate positive customer service skills through role play of customer contact.
- find and interpret the usefulness of interior plantscaping resources including research articles and websites.
- identify and diagnose common pest problems with interior plants.

HORT 298 Work Experience in Horticulture

Units: 1 - 4
Hours: 60 - 300 hours LAB
Prerequisite: None.
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position, or job related to the field of horticulture with a cooperating site supervisor. Students are advised to consult with the Horticulture Department faculty to review specific certificate and degree work experience requirements.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
General Education: AA/AS Area III(b)
Catalog Date: June 1, 2020

This course provides students with opportunities to develop marketable skills in preparation for employment or advancement within the field of horticulture. It is designed for students interested in work experience and/or internships in associate degree level or certificate occupational programs. Course content includes understanding of education to the workforce, completion of Title 5 required forms which document the student's progress and hours spent at the work site, and developing workplace skills and competencies.

During the semester, the student is required to complete 75 hours of related paid work experience, or 60 hours of related unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. All students are required to attend the first class meeting, a mid-semester meeting, and a final meeting. Additionally, students who have not already successfully completed a Work Experience course will be required to attend weekly orientations while returning participants may meet individually with the instructor as needed. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate mastery of specific job skills in the field of horticulture related to an associate degree or certificate occupational program level career as written in the minimum three (3) learning objectives created by the student and his/her employer or work site supervisor at the start of the course.
- make effective decisions, use workforce information, and manage his/her personal career plans.
- behave professionally, ethically, and legally at work, consistent with applicable laws, regulations, and organizational norms.
- behave responsibly at work, exhibiting initiative and self-management in situations where it is needed.
- apply effective leadership styles at work, with consideration to group dynamics, team and individual decision making, and workforce diversity.
- communicate in oral, written, and other formats, as needed, in a variety of contexts at work.
- locate, organize, evaluate, and reference information at work.
- demonstrate originality and inventiveness at work by combining ideas or information in new ways, making connections between seemingly unrelated ideas, and reshaping goals in ways that reveal new possibilities using critical and creative thinking skills such as logical reasoning, analytical thinking, and problem-solving.
HORT 300 Introduction to Horticulture

Designed to inform those seeking a career in horticulture, this course surveys sustainable principles and practices of horticulture. Emphasis is on plant growth, care and appearance, and how those are influenced by plant structure, function, and growing environment. Topics include plant naming, growing conditions and processes, cultural practices, propagation, pruning, careers in horticulture, pest problems and control, and use of references for future learning.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- research horticultural occupations and associated employment requirements and opportunities
- explain how plants are classified and given their scientific names
- label plant parts and explain the function of each part
- identify the cultural requirements of plants
- list and define environmental conditions required for successful plant growth
- diagnose growing conditions that lead to plant pest problems
- distinguish between monocotyledonous and dicotyledonous plants and explain differences in their growth
- research and choose a plant that satisfies a given set of environmental and usability criteria
- differentiate between sexual and asexual propagation
- choose and sow seed that are appropriate for the current season
- describe differences between field soil and container medium and explain reasons for these differences
- predict how water will move from container soil to field soil and vice-versa
- formulate container medium appropriate for good plant growth, identify components in the medium, and explain the purpose of each component
- chart the observed growth of a plant

HORT 302 Soils, Soil Management, and Plant Nutrition

This course is a study of the nature and properties of soils and their relationship to plant needs. Topics include soil origins and importance, soil and water conservation, life in the soil, and soil fertility. Soil components, structure, and methods to sustain healthy soils and the populations of organisms within and on it are analyzed.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify the basic principles of soil management including structure, water, organic matter, pH, and salinity.
- evaluate the techniques needed to evaluate soil productivity and fertility including soil sampling and testing.
- demonstrate skills in problem solving in relationship to irrigation practices and erosion prevention.
- maintain or return soils to a healthy structure capable of supporting plant and microorganisms.
- identify the soil organisms that support soil health and plant life.
- describe the complex relationships between soils physical components, soil life and a soil's ability to support plant growth.
promote and employ soil and water conservation methods.

HORT 305 Plant Identification-Fall Selections

This course is a study of the identification, growth habits, culturally sustainable methods, and uses of ornamental woody and herbaceous plants in the California landscape. Emphasis is on those plants best observed in the fall and winter seasons and includes both native and non-native species as well as some plants with an edible use component. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- recognize and utilize the binomial method of plant nomenclature and plant identification terminology.
- utilize a taxonomic plant key by identifying by leaf, flower, fruit, seed, bark and growth habit those plants best observed during California's fall and/or winter seasons.
- recognize and sight-identify 150 plant species and/or varieties utilizing taxonomic plant key techniques.
- identify the culturally sustainable requirements, including soils, sun exposures, water requirements, nutrients and temperature requirements of plants best observed and studied during California's fall and/or winter seasons.
- identify and select plants for specific landscape design uses for plants best observed and studied during California's fall and/or winter seasons.
- assemble a herbarium.
- recognize, evaluate, and utilize plant materials software and web sites.

HORT 306 Plant Identification-Spring Selections

This course is the study of the identification, growth habits, culturally sustainable methods, and uses of ornamental woody and herbaceous plants in the California landscape. Emphasis is on those plants best observed in the spring and summer seasons and includes both native and non-native species as well as some plants with an edible use component. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- recognize and utilize the binomial method of plant nomenclature and plant identification terminology.
- utilize a taxonomic plant key by identifying by leaf, flower, fruit, seed bark and growth habit, those plants best observed during California's spring and/or summer seasons.
- recognize and sight-identify 150 plant species and/or varieties utilizing taxonomic plant key techniques.
- identify the culturally sustainable requirements, including soils, sun exposures, water requirements, nutrients and temperature requirements of plants best studied during California's spring and/or summer seasons.
- identify and select plants for specific landscape design uses for plants best observed and studied during California's spring and/or summer seasons.
- assemble a herbarium.
- recognize, evaluate, and utilize plant materials software and web sites.
HORT 308 Viticulture-Vineyard Establishment

This course is an introduction to grape crops for Sacramento and Placer counties. It covers the history and principles of the grape growing industry in California. Topics include site preparation, vine and rootstock selection, trellis and irrigation system selection, installation procedures, and vine training. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the importance and potential of the grape growing industry in the Sacramento and Placer county area and its relationship to the landscape industry
- evaluate how climate, soils, and vineyard practices affect vine selection, vine growth, and grape quality
- create a vineyard design that is based on a site evaluation and that meets a client's vineyard needs
- identify the botanical structures of a grapevine and their function, and relate them to the yearly growth cycle of grapevines
- design and implement appropriate irrigation and trellis systems for grape varieties
- analyze, recommend, and implement appropriate sustainable techniques for grape crops

HORT 309 Viticulture - Sustainable Vineyard Management

This course covers sustainable management of vineyards, large and small, to serve the needs of owners while maintaining the environment. Topics include vine growth, fruit development, irrigation, pruning systems and canopy management, grapes as a wildlife habitat, management of the vineyard floor, pest identification and control, and vineyard laws and ordinances. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the growth of a grapevine, including where fruit is formed
- apply knowledge of vine growth to successfully prune vines to sustain fruit development and vine spread
- evaluate the nutritional needs of the vines, and create a plan to sustainably maintain nutrition to the plants
- analyze symptoms seen on a vine, determine the presence of pests and beneficials on the vine, and suggest sustainable pest control methods
- design a system to efficiently manage soil beneath the vines to control weeds, sustain the soil, and benefit the vines
- list laws and ordinances, including those that apply to vineyard sustainability, applicable to local growth of grapevines, production of grapes, and the organizations that disseminate this information

HORT 312 Plant Propagation

This course is a study of the fundamental principles involved in propagating plants, with special emphasis on types of propagules and techniques utilized to make more plants. Topics include history of plant propagation, tools and facilities, seed and vegetative propagation, media selection, growing propagules on, and sales of plants produced. Field trips may be required.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- examine the basic principles of plant production distinguishing between sexual and asexual methods
- demonstrate how to clean and sharpen pruning tools
- make propagation and container media and explain why each component is used or not used in each mix
- describe the physical environment needed to successfully propagate plants, including temperature, light, humidity, and root zone moisture
- label a plant properly, with a tag that correctly identifies the plant, date of propagation, and person doing the propagation
- assess the need to transplant previously rooted plants, and successfully do so
- test the germination rate of old seeds and describe how to use that information when planting those seeds
- enumerate steps of and reasons for scarifying plant seed
- employ correct techniques and processes to stratify plant seed and explain why it is done
- produce plants from seed
- prepare plant material as cuttings and use cuttings to make more plants
- define the different plant parts and plant tissue types used as clones to make more plants
- employ techniques of plant grafting
- propagate plants using layering techniques
- transplant plant plugs
- compare a plant that will benefit from division to one that will not and explain the differences

HORT 316 Plant Production, Facilities and Sales

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Corequisite: HORT 300
Advisory: ENGWR 102 and ENGRD 116 with grades of "C" or better OR ESLR 320 and ESLW 320 with grades of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This course is an overview of the practices and facilities used in production and sales of plants and related products and services. Topics include design and use of structures for horticultural production and sales, product selection and maintenance, marketing and sales of horticultural crops and services, employee management, vendor selection, sales area design and layout, advertising, merchandising, and customer service. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify horticultural occupations and evaluate how they function within the general horticultural market
- outline a basic business plan for a horticultural business
- analyze customers and suggest products and services they are most likely to purchase
- demonstrate proper care of plants in a retail and wholesale nursery
- create and maintain inventory of products for sale
- demonstrate customer service likely to lead to increased sales
- enumerate characteristics of employers likely to offer long term, satisfying employment in the horticultural industry
- evaluate characteristics of a desirable product supplier
- demonstrate marketing and merchandising techniques likely to increase sales
- identify components of a plant production facility and explain what they are used for
- design and construct an effective space for sales of horticultural services and products
• formulate realistic prices for horticultural products and services

HORT 320 Sustainable Landscape Construction

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: HORT 300 with a grade of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This course covers the theory and skills needed in the landscape construction industry. Landscape operations include carpentry, masonry, concrete pavers, water-conserving irrigation, watershed preservation and drainage, low-voltage lighting, sustainable soil preparation and drainage, plant materials/turf, plan reading, and estimating and bidding in the landscape trades. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• employ the basic principles of landscape construction and watershed preservation.

• assess and implement hands-on skills of construction operations, such as using wood, pavers, irrigation components, and sustainable soil preparation and grading.

• read landscape plans and translate plans into the bidding and estimating process.

• determine the correct tool or tools and equipment for various landscape operations.

• demonstrate the safe handling of tools and operation of equipment.

• recognize and comply with the state water regulations that affect landscaping.

HORT 321 Sustainable and Ecolandscape Practices

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

This course covers the application of ecologically sustainable design, construction, and maintenance practices for urban landscapes. Topics present a holistic approach to landscaping including, but not limited to, water conservation, green waste reduction, reduced chemical and inorganic fertilizer use, and the enhancement of natural ecosystems. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• compare and contrast conventional and sustainable landscape methods

• evaluate existing landscapes to enable maintenance with ecologically sustainable practices

• apply ecologically sustainable principles and methods to the design and construction of landscapes

• evaluate sustainable products and methods for use in the landscape

• interface with other green building disciplines in an effort to create integrated buildings and landscapes

HORT 322 Landscape and Irrigation Graphics and Design

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: HORT 300 with a grade of "C" or better
Transferable: CSU; UC
Catalog Date: June 1, 2020

This course is the study of technical drafting skills and freehand graphics, including line quality, lettering, and organization of the design space as it relates to landscape and
irrigation design. It includes ‘hand drafting techniques’, plant database software, introduction to CADD for landscape, and the use of a variety of graphics skills and media. Irrigation design for landscapes studies water hydraulics, irrigation equipment, including irrigation heads, pipes, pumps, controllers and valves, and water conservation. The course includes preparing landscape and irrigation plans, plan presentation, and reprographics.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- assess and apply the use of drafting equipment and techniques as they relate to landscape design and landscape architecture.
- develop the components included in a set of landscape plans and construction drawings.
- create an elevation view of a landscape design.
- assess and evaluate plant data software, plant materials web sites, and landscape CADD programs.
- employ the basic principles of irrigation design.
- identify and correctly apply sprinkler components for a landscape irrigation design.
- comply with water conservation regulations for our industry.
- create a full set of landscape drawings and present them to a client.
- create a portfolio of design work.

HORT 324 Sustainable Landscape Maintenance

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: HORT 300 with a grade of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This course is a study of sustainable landscape maintenance and management of exterior and interior residential and commercial landscapes, parks, highways, and public buildings. Topics include planting and transplanting, pruning, water conservation and use, sustainable plant nutrition and soils management, integrated pest management, and the safe operation and maintenance of power equipment for the trade. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply the basic skills and principles of sustainable landscape maintenance.
- assess and implement the hands-on skills and techniques of sustainable landscape management.
- evaluate and demonstrate methods of safe and proper use and maintenance of related tools and equipment.
- recognize and evaluate exterior and interior plant maintenance needs.
- evaluate software and websites available for the commercial landscape maintenance industry.
- utilize irrigation water auditing techniques and select equipment to correctly irrigate, schedule, and conserve water in the landscape.
- recognize and comply with the state water regulations that affect landscaping.

HORT 326 Landscape Design

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: HORT 322 with a grade of "C" or better
Advisory: HORT 110, 305, and 306
Transferable: CSU
Catalog Date: June 1, 2020

This course is a study of the basic principles and elements of landscape design related to the problem-solving process, design theory and composition, functional and design uses of landscape materials, and client and maintenance criteria.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- assess, evaluate, and implement the principles of landscape design.
- employ the hands-on skills utilized for the development of a residential landscape plan/design.
- assess, evaluate, and utilize supportive design techniques such as plant materials, space management, energy conservation, and elevation change and grading.
- demonstrate the various formats for design presentations.

**HORT 327 Advanced Landscape Design**

**Units:** 3  
**Hours:** 36 hours LEC; 54 hours LAB  
**Prerequisite:** HORT 322 with a grade of "C" or better  
**Transferable:** CSU  
**Catalog Date:** June 1, 2020

This course is the study of the advanced and in-depth principles of custom residential landscape design related to proposal writing, site analysis, design development and construction document preparation. Further exploration of design composition is studied as well as the development of spaces and the use of materials based upon a client's program desires.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- Assess, evaluate and implement the principles of custom residential landscape design
- Prepare a design proposal using landscape principles of proposal writing
- Utilize the hands-on approach to successfully create a residential landscape design
- Employ the skills to take a project from site analysis through design development and into construction documentation
- Assess and utilize the materials available to the designer

**HORT 329 Landscape CAD Design**

**Units:** 3  
**Hours:** 36 hours LEC; 54 hours LAB  
**Prerequisite:** HORT 322 with a grade of "C" or better  
**Advisory:** DESGN 301  
**Transferable:** CSU  
**Catalog Date:** June 1, 2020

This course is an introduction to computer assisted landscape design and drafting utilizing Computer Aided Drafting and Design (CADD) software to produce professional quality landscape designs for residential and commercial sites. It emphasizes site-plan development, landscape planting and irrigation plans, and the generation of materials lists based on the design created for the site. Field trips may be required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- create a new landscape design project using CADD.
- employ the basic principles of CADD.
- survey and draft a base plan using CADD.
- draft a demolition plan, layout plan, irrigation plan, planting plan, plant schedule, and construction details using CADD.
- create conceptual and detailed designs using 3D modeling.
- develop renderings from 3D model.
- create a portfolio of design work and construction documents.
HORT 330 Small Gas Engines, Outdoor Power Equipment

This course covers the basic operational theory, servicing, adjusting, and maintenance of 2-cycle and 4-cycle small gas engines as they pertain to the automotive and horticulture industries. In addition, the small engine repair skill areas included in the regional, state, and national Skills USA competitions are covered. AT 301 and/or HORT 330 may be taken two times for credit for a maximum of 8 units, using different equipment.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate accepted safety and work procedures, including Occupational Safety and Health Administration (OSHA) and proper hazardous materials disposal.
- identify the external and internal parts of 2-cycle and 4-cycle small engines.
- determine the proper lubrication and fuel requirements for 2-cycle and 4-cycle small engines using factory maintenance data.
- service and repair the cooling and oil systems of 2-cycle and 4-cycle small engines.
- service and repair the starter systems of 2-cycle and 4-cycle small engines.
- remove, rebuild, install, adjust, and tune 2-cycle and 4-cycle small engine fuel delivery and ignition system components.
- disassemble, inspect, repair, and assemble a single cylinder 2-cycle and 4-cycle engine.
- list the Skills USA competition requirements.
- list the Skills USA competition judging criteria.
- prepare to compete in Skills USA competition.

HORT 495 Independent Studies in Horticulture

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.
Associate Degree

A.A. in Hospitality Management: Culinary Arts/Restaurant Management

This degree focuses on basic and advanced culinary techniques, related to both hot food and baking. It emphasizes supervisory and management skills, marketing, and financial accountability. The Oak Cafe provides a management training lab for advanced students in the program.

Catalog Date: June 1, 2020

Degree Requirements

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HM 315 is a prerequisite for all HM hot-food lab classes

HM 370 HM 370 has a co-requisite of HM 498, requiring a minimum of 8 hours per week in The Oak Café.

HM 380 HM 370 has a co-requisite of HM 498, requiring a minimum of 16 hours per week in The Oak Café.

HM 375 has a corequisite of HM 498, requiring a minimum of two days per week in The Oak Café Bakery.

The Hospitality Management: Culinary Arts/Restaurant Management Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- analyze and design cost effective labor and production schedules.
- analyze and compare methods of internal cost control.
- assess contracts commonly used in the food service industry.
- choose and demonstrate optimal cooking procedures for all categories of foods to include, but not be limited to the following: vegetables, fruits, fats and oils, milk products, eggs, legumes, grains, baked products, poultry, meat, seafood, and soups.
- assess standards and procedures for delivery concepts into appropriate restaurant service.
- construct menus considering food, labor, production costs, and marketing.
- evaluate quality principles to management of the restaurant kitchen, including team building.

Career Information

The hospitality industry is one of the fastest growing market segments available for entry level and professional employees. Businesses including restaurants, hotels, theme parks, bakeries, cruise ships, caterers, and grocery stores are in search of line cooks, entry level and advanced managers, chefs, sous chefs, servers, and more.

Certificates of Achievement

Baking and Pastry Certificate

This certificate provides hands-on learning focused on job skills with an emphasis on baking and pastry. It includes production baking, candies, wedding and specialty cakes, plated desserts, and artisan breads.

Catalog Date: June 1, 2020

Certificate Requirements

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</table>
### Student Learning Outcomes

Upon completion of this program, the student will be able to:

- assess and demonstrate basic mixing methods for yeast doughs, cakes, cookies, and pastries.
- analyze and critique professional, commercial bakeshop ingredients and supplies.
- analyze quality defects in baked products and specify possible errors in technique or ingredient selection.
- prepare and critique a variety of products including biscuits, artisan breads, Danish pastries, muffins, coffee cakes, pies, tarts, puff pastries, cakes, cookies, pastry cream, pate a choux, icings, souffles, ice creams, and meringues.

### Career Information

Opportunities for qualified people in the restaurant field are endless. The demand for trained bakers in all types of restaurants and food service organizations continue to grow.

### Culinary Arts/ Restaurant Management Certificate

This certificate focuses on basic and advanced culinary techniques, related to both hot food and baking. It emphasizes supervisory and management skills, marketing, and financial accountability. The Oak Cafe is a small, fine dining restaurant that provides a management training lab for advanced students in the program.

Catalog Date: June 1, 2020

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HM 375 | Bakery Management and Production (2) |  
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Student Learning Outcomes

Upon completion of this program, the student will be able to:

- analyze and design cost effective labor and production schedules.
- analyze and compare methods of internal cost control.
- choose and demonstrate optimal cooking procedures for all categories of foods to include, but not limited to the following: vegetables, fruits, fats and oils, milk products, eggs, legumes, grains, baked products, poultry, meat, seafood, and soups.
- assess standards and procedures for delivery concepts into appropriate restaurant service.
- construct menus considering food, labor, production costs, and marketing.
- evaluate quality principles to the management of the restaurant kitchen, including team building.

Career Information

Opportunities for qualified people in the restaurant field are endless. The demand for trained cooks, chefs, and managers in all types of restaurants and food service organizations continues to grow.

Hospitality Management: Restaurant Management Certificate

This Certificate provides hands-on learning with an emphasis on supervisory and management skills in the restaurant environment. Management and the front-of-the-house skills are emphasized, with students learning basic culinary skills. The Oak Cafe is a small, fine dining restaurant that provides a management training lab for advanced students in the program.

Catalog Date: June 1, 2020

Certificate Requirements

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Hospitality Management (HM)

HM 100 Calculations in Foodservice Occupations

Units: 3  
Hours: 54 hours LEC  
Prerequisite: None.  
Advisory: MATH 25 or 41, or placement through the assessment process.  
Catalog Date: June 1, 2020

This course is a study of mathematical principles in the context of commercial food production. Topics include fractions, percentages, recipe conversions, yields, weights and measures, product yield tests, and recipe and food cost analysis.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply problem-solving strategies to theoretical foodservice problems.
- analyze production recipes in baking and foodservice.
- structure mathematical solutions and formulas to foodservice production equations.
- solve for recipe yields.
- calculate recipe and menu costs.

HM 101 Introductory Culinary Skills

Units: 1.5  
Hours: 27 hours LEC  
Prerequisite: None.  
Catalog Date: June 1, 2020

Career Information

The continued growth of the hospitality industry has resulted in an increased need for qualified managers, both entry level and advanced, in all levels of restaurants, hotels, bakeries and other food service and hospitality establishments.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- analyze and design cost effective labor and production schedules.
- analyze and compare methods of internal cost control.
- assess standards and procedures for delivery concepts into appropriate restaurant service.
- construct menus considering food, labor, production costs, and marketing.
- evaluate quality principles to the management of a restaurant, including team building and motivation.
This course introduces the foundational skills required for all entry-level food preparation courses. Topics include the development of job skills, equipment utilization, weights, measurements, knife cut identification, speed and accuracy, as well as kitchen product identification and utilization.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- define and properly utilize all types of basic professional kitchen equipment, including knives.
- identify and describe proper uses of each category of fresh herbs.
- identify and demonstrate classic French knife cuts.
- organize mis en place.
- convert recipes using knowledge of weights and measures.
- maintain kitchen safety and sanitation.

HM 110 Management and Supervision in the Hospitality Industry

Units: 2
Hours: 36 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; or ESLR 340 AND ESLW 340.
Catalog Date: June 1, 2020

This course covers the effective management of human resources in the hospitality industry. It includes the study of the functions of both management and leadership, including planning, recruitment, selection, training, performance management, coaching, counseling, and discipline. It also emphasizes management and leadership theories and application.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- differentiate management/supervisor obligations to owners, customers, and employees.
- research and appraise different management and leadership theories.
- explain principles and potential barriers of good oral and written communication.
- assess the costs/benefits of a multicultural work environment.
- develop recruitment strategies for hospitality employees.
- analyze training theories and procedures.
- develop a training program for a selected industry segment.
- evaluate and discuss methods of motivation.
- analyze methods of discipline and common discipline problems of employees in the food service industry.
- assess the characteristics of leadership.

HM 115 Advertising and Sales in Food Service

Units: 2
Hours: 36 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340
Catalog Date: June 1, 2020

This course introduces principles involved in advertising for food service establishments. Topics covered include menu planning, design, and pricing; marketing plans; market information systems; consumer behavior; and internal and external promotions.

Student Learning Outcomes

Upon completion of this course, the student will be able to:
• describe the role of marketing a food service operation
• identify and describe the components of the marketing plan
• apply the principles of consumer behavior to the development of a promotional scheme for a restaurant operation
• plan and design a restaurant menu
• design a comprehensive marketing plan for a restaurant

**HM 120 Beverage Operation**

Units: 2
Hours: 36 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Catalog Date: June 1, 2020

This course is a study of beverages, both alcoholic and non-alcoholic, used in the food service industry. Topics include non-alcoholic beverages, spirits, beer, and wine, including their production methods and regions, quality and characteristics. Beverage service, wine analysis, service and pairing with food are also covered, as are government regulations, licenses and product costing. Field trips may be required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

• identify and describe the types of beverages commonly sold in restaurant operations
• describe production methods, regions, and ingredient sources of each major category of spirits
• identify and describe styles of beer
• describe the process for tea and coffee production
• evaluate quality characteristics in different beverage categories
• categorize the major world wine regions and the types of wines produced in each region
• calculate beverage costs for mixed drinks, wine, and non-alcoholic beverages

**HM 150 Catering**

Units: 3
Hours: 18 hours LEC; 108 hours LAB
Prerequisite: HM 315 with a grade of "C" or better
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Catalog Date: June 1, 2020

This course covers the business and culinary aspects of catering and large-scale food production. It includes the study of starting a catering business, laws, licenses, taxes, insurance and contracts, menu development, pricing, and staffing. It also emphasizes quality and quantity production. On- and off-campus catering events are required. A portion of this course may be offered in a TBA component of 6-20 hours which may include setting tables, preparing food, and serving food for catered events.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

• evaluate basic types of catering services and needs.
• identify a potential target markets for a catering business.
• design and develop a catering image and company profile, menus, and pricing strategy.
• evaluate the kitchen and equipment requirements needed for various catered functions and business models.
• compose order lists and production schedules for catered events.
• analyze staff requirements for catered functions and prepare staffing schedules.
• interpret labor laws, tax laws, licensing, and contract requirements as prescribed by local and state government.
- design menus and cost recipes for suitability to multiple catered functions and markets.

HM 155 Mediterranean Cuisine

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: HM 315 with a grade of "C" or better; AND HM 310 (Sanitation, Safety, and Equipment) with a grade of "C" or better OR a CA Foodhandler’s Card.
Advisory: HM 100
Catalog Date: June 1, 2020

This course provides an in-depth look at the ingredients and culinary techniques used in preparing foods from the Mediterranean including France, Italy, Sicily, Greece, Spain, and North Africa, and regional focuses within these areas. The laboratory component includes skills development, production, and the use of equipment specific to the preparation of Mediterranean foods.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- differentiate between specific Mediterranean areas and foods related to these areas.
- appraise and properly handle ingredients used in Mediterranean cuisines.
- identify and safely use equipment in a commercial kitchen.
- analyze traditional and contemporary styles of food presentation, comparing Mediterranean techniques with modern American techniques.
- prepare starch-based dishes native to Mediterranean areas.
- create vegetable-based dishes native to Mediterranean areas.
- prepare protein-based dishes native to Mediterranean areas.
- define vocabulary used in Mediterranean ingredients and cooking techniques.

HM 165 Regional American Cuisine

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: HM 315 with a grade of "C" or better; AND HM 310 (Sanitation, Safety and Equipment) with a grade of "C" or better OR a CA Foodhandler’s Card.
Advisory: HM 100
Catalog Date: June 1, 2020

This course presents the study of ingredients and culinary techniques used in the preparation of foods from a variety of North American cuisines, including New England, Floribbean, Cajun, Creole, Californian, Midwestern, Southern, and Pacific Northwestern. Topics include the foods indigenous to the regions and the influences of early settlers. The laboratory component includes skills development, production, and the use of equipment specific to those individual areas.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe basic United States geography and the foods indigenous to those areas.
- choose and properly prepare ingredients indigenous to each U.S. region.
- identify and safely use equipment in a commercial kitchen.
- prepare starch-based dishes native to different U.S. regions.
- create vegetable-based dishes native to different U.S. regions.
- compose protein-based dishes native to different U.S. regions.
- define vocabulary used in different regions for ingredients and cooking terms.

HM 180 Garde Manger
This course focuses on the art of the cold kitchen with emphasis on both modern and classical techniques. Topics include hors d’oeuvre, canape, salads, brining, pickling, curing, and smoking. This course also includes basic charcuterie with emphasis on forcemeats, mousselines, terrines, pate, galantines, and sausages.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify kitchen tools and implements by name and describe their intended use
- measure and scale ingredients correctly
- prepare and evaluate sausages from various countries
- evaluate charcuterie and its place for buffet presentation
- create edible and non-edible display centerpieces
- effectively plan, prepare, and set up cold foods for hors d’oeuvre and buffets
- select and use forcemeats for preparation of pate, terrines, and galantines
- evaluate and demonstrate the functions of each ingredient in charcuterie production
- apply various methods of preservation for different meats and vegetables
- fabricate both edible and non-edible displays for centerpieces

HM 290 Competitive Culinary Training

Units: 2 - 4
Hours: 18 hours LEC; 54 - 162 hours LAB
Prerequisite: HM 315 with a grade of "C" or better
Catalog Date: June 1, 2020

This course is a cooperative effort between the college, The American Culinary Federation and The Capital Chefs’ Association. This course offers the skills necessary to compete in regional and national culinary competitions, using the American Culinary Federation format. 54 hours per unit of TBA practices include knife skills and hot food preparation. Field trips to local restaurants are required to work with local chefs. This course may be taken up to 4 times for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate proficiency in all classic knife skills
- demonstrate problem-solving abilities related to culinary crises
- prepare a team-directed four-course, sit-down meal in 75 minutes, from start to finish
- evaluate competitive standards for hot food dishes including seasonality and appropriate cooking methods
- analyze dessert presentations to maximize usage of all necessary components
- assemble mis en place under timed conditions
- judge results of team effort as noted in evaluation handbook
- plan and implement judge recommended improvements as required

HM 295 Independent Studies in Hospitality Management

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020
Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

HM 297 Internship in Hospitality Management

Units: 1 - 4
Hours: 6 hours LEC; 36 - 198 hours LAB
Prerequisite: None.
Enrollment Limitation: Must have completed 15 units in Hospitality Management with a grade of "C" or better.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Catalog Date: June 1, 2020

This course is a cooperative effort between the college and hospitality industries in the community to provide training through practical on-the-job experience. Internship sponsors/employers assist in the acquisition of skills and application of knowledge learned in the classroom. A portion of this course may be offered in a TBA component of 36 - 198 hours which may include setting tables, setting up food, and serving food.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply classroom experience and theory to employment in the hospitality industry.
- compare and contrast various job assignments within the hospitality industry.
- describe factors that lead to success in the workplace.

HM 300 Introduction to Hospitality - Becoming a Chef

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

This course covers the history of the hospitality and culinary professions, explores the numerous avenues of opportunity, and studies the advantages of continuing education in the field. It also covers the backgrounds and approaches of successful chefs and restaurateurs. Field trips are required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- assess key business, professional, and career opportunities in the hospitality field.
- analyze important changes in industry products and trends.
- identify periodicals, websites, and professional organizations to assist in career and vocational research.
- describe the backgrounds, history, and philosophies of the most successful chefs, restaurateurs, and hospitality professionals.
- plan a personal career ladder based on individual professional goals.

HM 310 Sanitation, Safety and Equipment

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU
Catalog Date: June 1, 2020

This course covers all phases of food sanitation, including the causes, controls and investigation of illness related to food contamination. It covers sanitary practices in food preparation; proper dishwashing procedures, sanitation of kitchen, dining room, and all equipment; cleaning materials and procedures and garbage and refuse disposal. This course includes general safety precautions, maintenance and operation of appropriate food service equipment, along with elements of kitchen planning and types of equipment used. Successful completion of this course results in Servsafe certification.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the importance of sanitation and safety in the food service industry.
- interpret local, state, and federal laws relating to food safety.
- describe the three categories of food contamination.
- evaluate the conditions required for bacterial growth in food.
- evaluate a hand washing station and explain the requirements of good hand washing.
- choose and perform proper food storage techniques.
- operate and clean food service equipment.
- plan for the selection of physical spaces and equipment for a food service facility.

HM 315 Food Theory and Preparation

| Units: | 4 |
| Hours: | 36 hours LEC; 108 hours LAB |
| Prerequisite: | None. |
| Advisory: | Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340. |
| Transferable: | CSU |
| Catalog Date: | June 1, 2020 |

This course is a comprehensive study of basic principles of food science, theory, and techniques involved in food preparation. It includes a study of the factors that influence foods and the changes which occur in foods during preparation. It also emphasizes basic cooking skills, theory application, product, and quality identification.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply principles of food theory to choose and demonstrate optimal cooking procedures for all categories of foods to include, but not limited to: vegetables, fruits, fats and oils, milk products, eggs, cereal grains, legumes, starches, poultry, meat, seafood, and soups.
- classify, describe, and safely utilize kitchen tools and equipment based on their intended function.
- demonstrate basic cooking techniques including: poaching, seaming, frying, braising, grilling, roasting, and sautéing.
- measure and scale ingredients correctly.
- distinguish between different methods of heat transfer and choose cooking materials and techniques accordingly.
- evaluate standard quality characteristics in raw and cooked foods.
- analyze quality defects in cooked products and specify possible errors in technique or ingredient selection.
- assess sources of food contamination and practice good sanitary techniques in the laboratory.

HM 320 Breads and Yeast Doughs

| Units: | 2 |
| Hours: | 18 hours LEC; 54 hours LAB |
| Prerequisite: | HM 100 with a grade of "C" or better, or placement through the assessment process. |
| Advisory: | Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340 |
| Transferable: | CSU |
| Catalog Date: | June 1, 2020 |

This course covers theory and principles of doughs, yeast, and pastries with emphasis in bread production, sweet and savory doughs, and egg doughs. It includes the study of croissant dough, puff dough, pate-a-choux, traditional breakfast pastries, and American cookies and teacakes. All content is intended for students interested in commercial restaurants, bakeries, and other food service facilities.

Student Learning Outcomes

Upon completion of this course, the student will be able to:
• evaluate and identify ingredients and equipment of fine baking.
• scale and measure ingredients properly.
• assess leavening agents and gluten development.
• assess the purposes and effects of fats.
• demonstrate correct use of yeast and evaluate yeast doughs.
• observe the effect of sugar on yeast doughs.
• evaluate and identify uses for sweet and savory doughs.
• analyze proofing, resting, sponge, and starters.
• analyze the effects of eggs on doughs.
• operate and use equipment safely and properly.
• produce and evaluate bakery products.

HM 325 Components of Baking and Pastry

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<tr>
<td>Hours:</td>
<td>18 hours LEC; 54 hours LAB</td>
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<tr>
<td>Prerequisite:</td>
<td>HM 320 with a grade of &quot;C&quot; or better</td>
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This course covers the theory and principles of baking and pastry. It focuses on pies, galettes, tarts, pate a choux, cheesecakes, and custard based desserts. This course is intended for students interested in commercial application in restaurants, bakeries, and other food service facilities.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• evaluate quality characteristics of individual pastry components
• measure and scale ingredients properly
• assess characteristics and effects of fats and flours on baked goods
• evaluate and prepare individual pastries
• describe and demonstrate the method for pate a choux
• produce and evaluate a variety of cheesecake styles
• evaluate and demonstrate a variety of pies and galettes
• evaluate and convert baking formulas for professional use

HM 326 Intermediate Baking Retail Bakery Products

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This course covers the theory and principles of baking and pastry with an emphasis on products commonly found in retail bakeries. It focuses on rich doughs, cookies, chocolate and puff pastry applications. This course is intended for students interested in commercial applications in bakeries, restaurants, and other food service facilities.

Student Learning Outcomes

Upon completion of this course, the student will be able to:
• evaluate the quality characteristics of rich doughs including Danish and croissants
• describe and evaluate the different categories of cookies and bars
• demonstrate basic chocolate work and piping skills
• produce and evaluate puff pastry dough
• assess characteristics and effects of fats and flours on rich doughs and cookies
• evaluate and describe the characteristics of chocolate and the effects of sugar and fats to the final product

HM 328 Intermediate Baking American and European Cakes

Units: 2
Hours: 18 hours LEC; 54 hours LAB
Prerequisite: HM 320 with a grade of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This course covers the theory and principles of both American and European cake tradition. It focuses on baking methods, ingredient selection, filling, and finishing components and techniques. This course is intended for students interested in commercial bakery application.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• describe and demonstrate the mixing methods for various categories of cakes.
• identify the components and describe the quality characteristics of American cakes.
• identify the components and describe the quality characteristics of traditional European cakes.
• evaluate and produce cake fillings appropriate to a cake style.
• evaluate and produce cake frostings appropriate to a cake style.
• demonstrate professional level piping skills.

HM 330 Advanced Baking and Pastry

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: HM 310, 320, and 325 with grades of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This course focuses on commercial production of baked products, pastries, candies, restaurant style desserts, and wedding cakes. It emphasizes advanced baking science and commercial production. Products include European style breads, restaurant style plate presentation, frozen desserts, tortes, cakes, sauces, tarts, pulled sugar, piping, and chocolate work. This course also emphasizes the production of high quality products and professional presentation. Field trips to professional bakeries are required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• critique and select professional and commercial bakeshop ingredients and supplies.
• scale and measure baking ingredients accurately.
• examine the factors that control the development of gluten in baked products.
• explain the changes that take place in dough or batter as it bakes.
• assess and demonstrate basic mixing methods for yeast doughs, cakes, cookies, and pastries.
• describe the use and control of leavening agents.
• prepare and critique a variety of products to include biscuits, artisan breads, Danish pastry, muffins, coffee cakes, pies, tarts, puff pastry, cakes, cookies, pastry cream, pâté a choux, icings, soufflés, ice creams, and meringues.
• evaluate the quality of finished products.
• operate bakeshop equipment to include scale, ovens, mixers, processors, proof box, and others.
• decorate pastry items using the paper cone, pastry bag, and chocolate decorations.
• analyze quality defects in baked products and specify possible errors in technique or ingredient selection.
• temper chocolate and explain the procedures of tempering and melting.
• create and design wedding and specialty cakes.

**HM 340 Cost Control in the Food Service Industry**

| Units: | 2 |
| Hours: | 36 hours LEC |
| Prerequisite: | HM 100 with a grade of "C" or better |
| Advisory: | Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340. |
| Transferable: | CSU |
| Catalog Date: | June 1, 2020 |

This course covers accounting and cost control principles in the food service industry. It includes the use of accounting techniques to analyze food and labor cost control, business operations, budgeting, financing, and profit and loss statements.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

• explain accounting principles and concepts as they relate to the food service industry
• calculate food and labor cost percentages
• evaluate a profit-and-loss statement to identify where cost savings might occur
• evaluate the relationship between food costs, labor costs, and overhead costs
• evaluate and calculate menu prices
• analyze a balance sheet, net income, gross income, and a profit and loss statement
• prepare and assess a break-even analysis
• compare and analyze methods of internal cost control

**HM 360 Professional Cooking**

| Units: | 3 |
| Hours: | 36 hours LEC; 54 hours LAB |
| Prerequisite: | HM 100 and 310 |
| Advisory: | HM 100 with a grade of "C" or better |
| Transferable: | CSU |
| Catalog Date: | June 1, 2020 |

This course covers intermediate and advanced culinary techniques. It includes production standards, recipe analysis, presentation, stocks, sauces, and major ingredients used in professional cooking. The laboratory component includes use of equipment, skills development, and time management in the commercial kitchen.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

• define vocabulary used in professional cooking.
• evaluate quality characteristics of protein, vegetable, and starch dishes.
• create production recipes for commercial cooking to determine scheduling (mise en place), quantities, and characteristics of final product.
• apply principles of safety and sanitation to kitchen and lab production.
• evaluate and produce stocks and the full range of sauces used in the professional kitchen.
set up and use equipment safely, effectively, and efficiently.

evaluate and select techniques in the preparation of meat, poultry, seafood, vegetables, and starches at a professional level.

prioritize and demonstrate proper culinary techniques including knife skills, cooking methods, balancing flavor and selection of proper ingredients in the creating of complete plate.

identify and demonstrate modern styles of presentation and garnishing.

### HM 370 Dining Room Management

**Units:** 2  
**Hours:** 36 hours LEC  
**Prerequisite:** HM 100 and 310 with grades of "C" or better  
**Corequisite:** HM 498, to include a minimum of eight hours per week of work experience in the operation of the front of the house for The Oak Café at American River College  
**Transferable:** CSU  
**Catalog Date:** June 1, 2020

This course focuses on restaurant management with emphasis on service and the dining room. Topics include the historical view of service, quality, and exceeding guest expectations, methods of service, management of service operations and personnel, internal and external marketing, and daily reports and controls. The work experience component allows for hands-on experience running the dining room of the Oak Café two days a week.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- compare styles and techniques of service throughout history  
- assess characteristics of professional service and service personnel  
- define quality concepts, including exceeding expectations, constant improvement, and team building  
- evaluate service in the various segments of the hospitality industry and restaurants in particular  
- incorporate standards and procedures for delivery concepts into appropriate restaurant service  
- analyze the manager's role in the delivery of professional service  
- plan effective internal and external marketing relating to particular concepts and menus  
- analyze daily operations data

### HM 375 Bakery Management and Production

**Units:** 2  
**Hours:** 36 hours LEC  
**Prerequisite:** HM 310, 315, 320, and 325 with grades of "C" or better  
**Corequisite:** HM 498  
**Transferable:** CSU  
**Catalog Date:** June 1, 2020

This course focuses on bakery production, merchandising, and management for a professional bakery/cafe outlet. It includes production techniques, recipe development, customer service, advertising and promotion, menu planning, costing, production, and staff scheduling. Work experience takes place in the Oak Cafe Bakery two days a week.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- apply the basic principles of baking to production recipes.  
- design merchandising displays that encourage sales.  
- critique and prepare accurate and efficient production schedules.  
- evaluate quality characteristics of baked items, including quick breads, roll-in doughs, yeast breads, and patisserie items.  
- structure and execute menus that are seasonal and meet the needs of the client.
- generate purchase orders for food and supplies using inventories, menu analysis, and cost-effective principles.
- use formulas to construct and calculate profit-and-loss statements for bakery production.

HM 380 Restaurant Management and Production

Units: 3
Hours: 54 hours LEC
Prerequisite: HM 100, 310, 315, 320, 325, and 380 with grades of "C" or better, or placement through the assessment process.
Corequisite: Concurrent enrollment in HM 498 (to include a minimum of 16 hours per week of work experience in the commercial kitchen of The Oak Café American River).
Transferable: CSU
Catalog Date: June 1, 2020

This course provides an in-depth look at restaurant management with emphasis on the kitchen. It includes the study of successful restaurant concepts, food styles and ethnic influences, production methods and standards, menu design (including specific purchasing and cost control), application of sanitation and safety standards, employee scheduling, motivation and supervision, and product marketing. These concepts are emphasized in the work experience corequisite. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply the principles and techniques of cooking previously acquired to large-scale production.
- design and apply standards of safety and sanitation to daily food production.
- critique and prepare accurate and efficient production schedules.
- generate purchase orders for food and supplies using inventories, menu analyses, and cost effective principles.
- compare styles of successful chefs and restaurant concepts.
- construct and execute menus considering food, labor, production costs, and marketing.
- assess quality principles to the management of the restaurant kitchen, for both food and employees, including team building and evaluation.

HM 494 Topics in Hospitality Management

Units: 0.5 - 4
Hours: 18 - 54 hours LEC
Prerequisite: None.
Advisory: ENGWR 102 or 103, and ENGRD 116 with a grade of "C" or better; OR ESLR 320 and ESLW 320 with a grade of "C" or better; OR placement through assessment process.
Transferable: CSU
Catalog Date: June 1, 2020

This course is designed to give students an opportunity to study topics in Hospitality which are job oriented and not included in current offerings. The course may be repeated for up to 6 units of credit provided there is no duplication of topics.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply concepts acquired for the special topics
- demonstrate knowledge received in the class setting or on the job
- apply critical thinking skills to explain project outcomes as related to specific topic.

HM 495 Independent Studies in Hospitality Management

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020
Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

HM 498 Work Experience in Hospitality Management

| Units: | 1 - 4 |
| Hours: | 60 - 300 hours LAB |
| Prerequisite: | None. |
| Enrollment Limitation: | Students must be in a paid or unpaid internship, volunteer position, or job related to hospitality management with a cooperating site supervisor. Students are advised to consult with the Hospitality Management Department faculty to review specific certificate and degree work experience requirements. |
| Advisory: | Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340. |
| Transferable: | CSU |
| General Education: | AA/AS Area III(b) |
| Catalog Date: | June 1, 2020 |

This course provides students with opportunities to develop marketable skills in preparation for employment or advancement within the field of hospitality management. It is designed for students interested in work experience and/or internships in transfer-level degree occupational programs. Course content includes understanding the application of education to the workforce, completion of Title 5 required forms which document the student's progress and hours spent at the work site, and developing workplace skills and competencies.

During the semester, the student is required to complete 75 hours of related paid work experience, or 60 hours of related unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. All students are required to attend the first class meeting, a mid-semester meeting, and a final meeting. Additionally, students who have not already successfully completed a Work Experience course will be required to attend weekly orientations while returning participants may meet individually with the instructor as needed. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate application of industry knowledge and theoretical concepts in the field of hospitality management related to a transfer degree level career as written in the minimum three (3) learning objectives created by the student and his/her employer or work site supervisor at the start of the course
- make effective decisions, use workforce information, and manage his/her personal career plans.
- behave professionally, ethically, and legally at work, consistent with applicable laws, regulations, and organizational norms.
- behave responsibly at work, exhibiting initiative and self-management in situations where it is needed.
- apply effective leadership styles at work, with consideration to group dynamics, team and individual decision making, and workforce diversity.
- communicate in oral, written, and other formats, as needed, in a variety of contexts at work.
- locate, organize, evaluate, and reference information at work.
- demonstrate originality and inventiveness at work by combining ideas or information in new ways, making connections between seemingly unrelated ideas, and reshaping goals in ways that reveal new possibilities using critical and creative thinking skills such as logical reasoning, analytical thinking, and problem-solving.

1 - 4
Units:
60 - 300 hours LAB
Hours:
None.
Prerequisite:
Students must be in a paid or unpaid internship, volunteer position, or job related to hospitality management with a cooperating site supervisor. Students are advised to consult with the Hospitality Management Department faculty to review specific certificate and degree work experience requirements.

Enrollment Limitation:
Advisory:
Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

Transferable:
CSU

General Education:
AA/AS Area III(b)

Catalog Date:
June 1, 2020

This course provides students with opportunities to develop marketable skills in preparation for employment or advancement within the field of hospitality management. It is designed for students interested in work experience and/or internships in transfer-level degree occupational programs. Course content includes understanding the application of education to the workforce, completion of Title 5 required forms which document the student's progress and hours spent at the work site, and developing workplace skills and competencies.

During the semester, the student is required to complete 75 hours of related paid work experience, or 60 hours of related unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. All students are required to attend the first class meeting, a mid-semester meeting, and a final meeting. Additionally, students who have not already successfully completed a Work Experience course will be required to attend weekly orientations while returning participants may meet individually with the instructor as needed. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate application of industry knowledge and theoretical concepts in the field of hospitality management related to a transfer degree level career as written in the minimum three (3) learning objectives created by the student and his/her employer or work site supervisor at the start of the course
- make effective decisions, use workforce information, and manage his/her personal career plans.
- behave professionally, ethically, and legally at work, consistent with applicable laws, regulations, and organizational norms.
- behave responsibly at work, exhibiting initiative and self-management in situations where it is needed.
- apply effective leadership styles at work, with consideration to group dynamics, team and individual decision making, and workforce diversity.
- communicate in oral, written, and other formats, as needed, in a variety of contexts at work.
- locate, organize, evaluate, and reference information at work.
- demonstrate originality and inventiveness at work by combining ideas or information in new ways, making connections between seemingly unrelated ideas, and reshaping goals in ways that reveal new possibilities using critical and creative thinking skills such as logical reasoning, analytical thinking, and problem-solving.
American River College’s Human Career Development courses are designed to help students achieve success in college through a variety of classes, which include study skills, career exploration, college success, transferring to four year institutions, life skills, peer mentoring, and academic learning strategies for students with specific learning disabilities.

HCD 111 College Discovery Program

Units: 1  
Hours: 18 hours LEC  
Prerequisite: None.  
Catalog Date: June 1, 2020

This course explores options and resources relevant to student success at American River College. It covers academic and personal goal setting, campus resources, academic requirements, basic study skill development, and strategies that are compatible with academic success.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe and choose college options related to educational goals.
- explain campus policies and procedures that relate to academic success.
- locate and use varied campus resources.
- state academic and career goals based on assessments, values, and experiences.
- utilize skills and examine barriers that impact student success.
- evaluate achievement of goals and objectives based on performance in course work.

HCD 114 Human Potential Seminar

Units: 2  
Hours: 36 hours LEC  
Prerequisite: None.  
Advisory: Eligible for ENGRD 116 AND ENGWR 101; OR ESLR 320 AND ESLW 320.  
Catalog Date: June 1, 2020

This course provides an in-depth examination of techniques and strategies to be used in enhancing a student’s chance for academic success in college. It is designed for students who need assistance to achieve their goals in higher education. Topics include motivation, goal setting, communication skills, time management, exam preparation, note taking, reading college textbooks, and the use of technology as it relates to being a student.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- assess and evaluate a variety of skills, ideas, and techniques for academic success.
discover, locate, utilize, and describe a variety of campus support services.

differentiate and apply stress management strategies and techniques.

compare and adopt sound health practices.

discover and employ effective communication skills, in person and through the use of technology.

research, contrast, and practice planning and decision-making processes.

contrast, compare, discuss, and recognize academically successful and non-successful behaviors.

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**HCD 115 Orientation to College**

Units: 0.5  
Hours: 9 hours LEC  
Prerequisite: None  
Catalog Date: June 1, 2020

This course is an introduction to programs and services at American River College. Topics include procedures and college requirements, steps to success, and campus resources.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- identify academic and student service programs.
- list college academic requirements.
- describe academic regulations and performance expectations.
- identify educational goals.
- create a personal education plan with counselor.

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**HCD 122 Study Skills**

Units: 1  
Hours: 18 hours LEC  
Prerequisite: None  
Advisory: Eligible for ENGRD 116 AND ENGWR 101; OR ESLR 320 AND ESLW 320.  
Catalog Date: June 1, 2020

This course covers specific study skills strategies. It provides the opportunity to analyze attitudes toward studying and current study skills or habits. Topics include specific learning styles, strategies for time management, goal setting, note-taking, memory improvement, reading skills, and how to prepare for and take exams.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- analyze their own attitudes toward studying and current study skills or habits.
- demonstrate appropriate time management.
- practice appropriate goal setting skills.
- apply note-taking methodology and incorporate these techniques into lecture notes.
- employ reading techniques such as systematically marking and taking study notes on a college level textbook.
- identify the components of memorization and practice memory and concentration techniques.
- demonstrate test-taking strategies, including how to prepare for and take exams.
- describe personal learning styles and how they impact study methods and life experience.
HCD 160 Applied Life and Success Skills

This course covers the skills and tools necessary for daily independent living and success as a college student. It focuses specifically on disability management, life skills, personal goals, and community and campus resources. It would also be appropriate for those students interested in a career with disability services.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify personal skills, attitudes, and techniques that support one's goals.
- identify campus and community resources to support one's goals and success.
- develop independent living skills, which include health and wellness, to support success on a college campus.
- acquire skills to address challenges that may impact student success, such as managing transportation, childcare, and medication.
- practice self-sufficient daily living skills to enhance punctuality, attendance, and assignments.
- utilize study skills techniques congruent with one's own personal learning style, such as flash cards, highlighters, or recorders.
- apply conflict resolution skills to interpersonal relationships.
- use technology such as computer, email, and the Internet.

HCD 310 College Success

This course covers the skills and knowledge necessary for college success, as well as personal issues that are commonly encountered by many college students. Topics include motivation, self-discipline, learning styles, memory development, time management, communication skills, goal-setting, career planning, study skills and techniques, and critical thinking skills. Campus resources, college regulations, and information competency are also addressed. This course is highly recommended for first time college students and/or continuing college students who would benefit. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- assess student success strategies and identify techniques and campus resources to build effective learning skills in areas such as: textbook reading, note taking, memory skills, exam preparation, and exam taking.
- distinguish among different learning styles (i.e. auditory, visual, kinesthetic, and/or read/write) in identifying personal learning preference(s).
- locate and identify campus programs and support services.
- incorporate campus rules and requirements for degree and transfer planning.
- analyze and choose effective communication skills that apply to the academic, career, and/or personal life issues.
- demonstrate measurable goal-setting and decision-making skills.
- recognize the various elements of diversity on our campus.
- demonstrate problem-solving and critical-thinking skills.
- demonstrate personal wellness skills such as stress reduction and health maintenance.
- discriminate between effective and non-effective goal and life planning skills.
- formulate and implement appropriate interpersonal skills and conflict resolution strategies.
HCD 318 Transfer: Making It Happen

Units: 2
Hours: 36 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 116 AND ENGRD 101; OR ESLR 320 AND ESLW 320
Transferable: CSU; UC
General Education: AA/AS Area III(b)
Catalog Date: June 1, 2020

This course provides a comprehensive study of the university transfer process as it relates to community college students. Topics include an overview of American higher education, student support services, major selection, college research, transfer admissions requirements, the college application process, transfer resources, transitional issues, and preparation for graduate and professional education. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain the transfer process as it pertains to both lower and upper division transfer admissions.
- compare and contrast various four-year institutions to include the California State University, the University of California, private/independent colleges and universities, and public institutions outside of California.
- compose a statement of purpose for transfer admissions and/or scholarships.
- construct an educational plan that reflects admission, general education, and major requirements for a major of study offered at a four-year institution.
- discuss the differences and similarities between transfer general education patterns including CSU-GE Breadth, IGETC, and campus-specific general education requirements.
- evaluate how individual preferences, skills, interests, and values impact the choice of academic major and educational/career goals.
- research financial aid and other financial resources to help maximize the affordability of a college education.
- define and identify common student support services offered at community colleges and at four-year institutions.
- access and navigate online resources pertinent to student transfer including, but not limited to ASSIST, California Colleges, AICCU, UC Pathways, Cal State Apply, and Eureka.
- define and identify opportunities for student involvement to include participation in student organizations, internships/co-operatives, and other activities that supplement the undergraduate experience.

HCD 330 Life and Career Planning

Units: 1
Hours: 18 hours LEC
Prerequisite: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340
Advisory: CSU
Transferable: AA/AS Area III(b)
Catalog Date: June 1, 2020

This course is a comprehensive approach to life and career planning based on extensive interests, personality type, values, and skills assessments. Personal and career goals are formulated using career research and decision-making strategies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- interpret and appraise their own skills, interests, and personality characteristics.
- identify values and skills in relation to career opportunities.
- analyze and apply the principles of decision making.
- describe types of careers and associate skills and interests.
- research occupational information.
• develop a plan to achieve academic and career goals.

HCD 331 Career and Job Search Strategies

Units: 1
Hours: 18 hours LEC
Prerequisite: None.
Advisory: HCD 330
Transferable: CSU
General Education: AA/AS Area III(b)
Catalog Date: June 1, 2020

This course assists students preparing for the current job market. Topics include: researching career fields, developing specific career/educational goals, informational interviewing, internships, professional networking, resume writing, interviewing skills, and current job search strategies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• research various career fields
• identify skills necessary to be competitive in today's job market
• identify present and future employment trends
• set specific educational and career goals
• define obstacles to decision making and develop strategies to overcome those obstacles
• examine effective job search and interviewing strategies
• develop and refine interviewing skills
• write a professional resume and cover letter
• research work experience and internship opportunities
• research and identify professional networks and associations

HCD 336 Exploring Health Careers

Units: 1
Hours: 18 hours LEC
Prerequisite: None.
Transferable: CSU
General Education: AA/AS Area III(b)
Catalog Date: June 1, 2020

This course introduces a wide variety of healthcare and healthcare-related occupations, emphasizing educational programs and career opportunities. It includes the identification and analysis of career interests, skills, values, and personal traits, as well as occupational research, resulting in the development of educational and career plans.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• explore healthcare and healthcare-related occupations.
• identify career interests, skills, values, and personal traits and their relationship to healthcare and healthcare-related occupations.
• describe the educational requirements and prerequisites needed for admission into various healthcare and healthcare-related occupations.
• investigate academic and licensure requirements for selected healthcare and healthcare-related occupations.
This course provides an opportunity to obtain information about a variety of health professions. This course explores the requirements to enter various health fields, including education, licensures, and volunteer experience. In addition, it offers opportunities to observe and gain knowledge in order to choose an appropriate health career goal.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- prepare a resume for a chosen health field.
- set realistic health career goals.
- describe the educational requirements of a chosen health career.
- create an educational plan to reflect chosen goal.

**HCD 364 Introduction to Peer Mentoring**

Units: 1.5 - 4  
Hours: 18 hours LEC; 27 - 162 hours LAB  
Prerequisite: HCD 111, 114, 115, 310, or 318 with a grade of "C" or better  
Transferable: CSU  
Catalog Date: June 1, 2020  

This course offers instruction on the role of the peer mentor at the community college level. Topics include skills and strategies associated with interpersonal communication, peer leadership, collaborative learning, problem solving, and assisting students in how to effectively and efficiently assist their peers in managing college and life experiences. This course is only open to students who have been selected to serve as peer mentors in an on-campus program, such as the First Year Experience, SAGES, Journey program, MESA, Puente, EOP&S, and Umoja.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- describe and demonstrate the role and purposes of peer mentors and the characteristics of effective peer-led sessions.
- assess mentee's personal strengths and weaknesses with college-level learning strategies and life skills.
- demonstrate effective problem-solving skills.
- demonstrate collaborative learning and facilitative strategies.
- describe policies, resources, and programs for referring students.

**HCD 382 Learning Strategies for College and Life**

Units: 3  
Hours: 54 hours LEC  
Prerequisite: None.  
Advisory: Eligibility for ENGRD 116 and ENGWR 101; OR ESLR 320 and ESLW 320  
Transferable: CSU; UC  
General Education: AA/AS Area III(b); CSU Area E1  
Catalog Date: June 1, 2020  

This course provides a universal learning environment that supports students with specific learning differences, through adaptive strategies and techniques essential for achieving academic and personal success. Topics include adaptive technology, organization, learning modalities, time management, memory development, motivation, note-taking, personal wellness, study skills, testing techniques, and critical thinking methods. Also covered are communication approaches, personal and academic barriers, and disability awareness. Additionally, campus/community resources, college regulations, and proficiency expectations are covered.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:
• describe the rationale behind specific learning strategies and accommodations.
• evaluate individual strengths and weaknesses for learning, and describe strategies and appropriate educational interventions to facilitate academic success.
• identify and apply strategies for academic and personal success: life planning skills, organization, time management, self-advocacy, general and adaptive technology, critical thinking, interpersonal communication, and personal wellness.
• locate and utilize applicable campus and community resources, online resources, and study groups.
• demonstrate knowledge of campus policies and procedures.
• analyze the psychology of motivation and goal setting to change motivation and set appropriate educational and lifelong goals.
• examine the human memory system and apply memory strategies compatible with personal learning style.
• recognize and utilize specific reading, writing, math, test-taking, and note-taking strategies and accommodations.

HCD 495 Independent Studies in Human Career Development

Units: 1 - 3
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020
Human Lactation | American River College

This program fulfills the criteria for staff education as set by the Baby Friendly Hospital Initiative. It focuses on the physiology of attachment, bonding, and breastfeeding and the short- and long-term impacts of perinatal care practices on the mother-baby dyad. It grapples with the challenges of applying best-practice guidelines and model hospital policies to alleviate barriers for mothers choosing exclusive breastfeeding and to create environments that support maternal-infant biology and the newborn’s natural capabilities, allowing improved outcomes with less time and effort.

Division Dean  Jan DeLapp
Department Chairs  Kathleen Fox

Certificates

Baby Friendly Hospital Staff Certificate

This program fulfills the criteria for staff education as set by the Baby Friendly Hospital Initiative. It focuses on the physiology of attachment, bonding, and breastfeeding and the short- and long-term impacts of perinatal care practices on the mother-baby dyad. It grapples with the challenges of applying best-practice guidelines and model hospital policies to alleviate barriers for mothers choosing exclusive breastfeeding and to create environments that support maternal-infant biology and the newborn's natural capabilities, allowing improved outcomes with less time and effort.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
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</thead>
<tbody>
<tr>
<td>HLACT 301</td>
<td>Supporting the Mother-Baby Connection: Evidence-Based Practices for Perinatal Care (1)</td>
<td>1</td>
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<tr>
<td>or NURSE 391</td>
<td>Supporting the Mother-Baby Connection: Evidence-Based Practices for Perinatal Care (1)</td>
<td>1</td>
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<td>Total Units:</td>
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<td>1</td>
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</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- examine and explain the rationale for professional, national, and international policies that promote, protect, and support breastfeeding as a public health goal.
- identify human species-specific norms for growth and development and disease resistance based on the exclusively breastfeeding mother-baby dyad and explain the risks to the mother and infant of early introduction of artificial milk.
- communicate effectively about infant feeding, identifying teaching points appropriate for prenatal and postpartum women regarding breastfeeding and when educating or counseling parents who are using bottles and/or formula.
- evaluate current hospital practices in terms of barriers to maintaining mother-baby connectedness.
- devise solutions to alleviate common barriers to exclusive breastfeeding in the hospital setting, integrating concepts of system change.
- create an environment that supports the newborn's natural capabilities.
- integrate concepts of the neurobiology of breastfeeding to address initiation and problem remediation and to support milk-supply maintenance issues.
- demonstrate techniques and skills to transition the newborn from one state of alertness to another and to help families perceive and understand the language and
patterns of the newborn.

- describe essential components of community support for mothers to sustain breastfeeding beyond the early weeks.
- discuss contraindications to breastfeeding in the United States and identify acceptable medical reasons for supplementation of breastfed babies based on national and international authorities.
- uncover and explore personal values and attitudes related to the birthing and breastfeeding experience.

Career Information

Hospital staff require upgraded education to meet Joint Commission accreditation standards for lactation competency and support services. SB 402, signed into law in 2013, requires all perinatal hospitals in California to implement all Ten Steps to Successful Breastfeeding as adopted by Baby Friendly USA, or an equivalent evidence-based process recognized by the California Department of Public Health, by January 1, 2025. An expanding number of local hospitals, including all those within Sacramento County, have signed letters of intent and are in the process of meeting, or have already met, Baby Friendly Hospital Initiative standards, requiring all staff to obtain this level of preparation. This means that registered nurses, particularly those in the perinatal field, will require this preparation to maintain their career. This preparation will be of significant benefit to the new nursing graduate when competing for jobs in this field.

Lactation Consultant Assistant Certificate

This program is designed for community workers responsible for promoting and protecting breastfeeding and charged with providing basic assessment, support, and appropriate referral for breastfeeding mothers in the community. It is also useful for students entering or preparing for professions in nursing, nutrition, health education, or early childhood development as well as for practicing professionals in these fields. Topics include an overview of factors impacting breastfeeding rates, anatomy and physiology of lactation, health effects and current recommendations, and the role of the lactation consultant assistant in facilitating breastfeeding, with a focus on counseling skills and cultural awareness.

Certificate Date: June 1, 2020

Certificate Requirements

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<tr>
<td>HLACT 302</td>
<td>Fundamentals of Lactation Consultant Assisting</td>
<td>2.5</td>
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<tr>
<td>Total Units:</td>
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<td>2.5</td>
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</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- describe the lactation consultant assistant's role, scope, and limits of practice.
- evaluate breastfeeding status and potential based on understanding of lactation anatomy/physiology and signs of adequate milk transfer.
- compare and contrast breastmilk and breastfeeding with artificial baby milks and artificial feeding in terms of composition and physiologic/developmental effects.
- employ effective counseling skills, establishing a therapeutic relationship with respect for individual and cultural differences.
- demonstrate the educational and technical skills required to provide basic assistance with successful breastfeeding initiation and maintenance.
- recommend appropriate interventions and referrals given a range of common early breastfeeding problems, questions, and challenging situations.
- examine barriers to breastfeeding, and investigate approaches to normalizing breastfeeding in the community and society.
- propose counseling options to address individual responses to barriers that are impacting breastfeeding success.
- recommend in-hospital practices to support breastfeeding in light of current research evidence.
- apply concepts of client confidentiality, professional etiquette, and appropriate documentation practices to the lactation consultant assistant's role.

Career Information

Lactation Consultant Assistants/Peer Counselors are utilized in the federal Women, Infants, and Children (WIC) program. Many service agencies require that their home visitors to families with young children be capable of providing basic lactation counseling and of recognizing when and where to refer an individual when lactation difficulties arise.
Lactation Educator/Counselor Certificate

This certificate provides the educational coursework to function as a lactation counselor or educator. Topics include an introduction to professionalism in the healthcare context; business models and opportunities for practice; limits of the lactation educator/counselor role and making appropriate referrals; evidence and rationale related to health initiatives to promote, protect, and support breastfeeding as a public health priority; systems change and acting as a change agent; physiologic basics of normal lactation; lactation-support preparation, addressing norms, barriers, and common problems; counseling essentials; and adult education principles to provide individual or group teaching. Opportunity is provided to practice these concepts in a supervised field/lab environment.

Catalog Date: June 1, 2020

Certificate Requirements

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<tr>
<td>HLACT 311</td>
<td>Human Lactation for Lactation Counselors &amp; Educators</td>
<td>2.5</td>
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<tr>
<td>HLACT 321</td>
<td>Interpreting Baby Behavior</td>
<td>0.5</td>
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<td>Total Units:</td>
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<td>6.5</td>
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Student Learning Outcomes

Upon completion of this program, the student will be able to:

- practice within the lactation educator/counselor role, scope, and limits of practice, applying concepts of client confidentiality, professional etiquette, and appropriate documentation.
- evaluate physical, behavioral, cultural and social conditions predisposing mothers and babies to either a complex or an uncomplicated breastfeeding experience, integrating concepts of the neurobiology of breastfeeding and baby behavior, and assist in preventing or resolving common problems through counseling, education, and support, distinguishing possible need for and appropriate level of referral to other care providers as indicated.
- compare and contrast breastmilk and breastfeeding with artificial baby milks and artificial feeding in terms of composition and physiologic/developmental effects, identifying human species-specific norms for growth and development and disease resistance.
- choose and apply appropriate counseling skills and techniques in support of pregnant and breastfeeding mothers, their babies, and their partners and significant others, and develop an individualized teaching plan specific to the needs identified through assessment and counseling.
- plan and conduct lactation and related group health classes or programs and facilitate breastfeeding support groups.
- evaluate written and media materials for their suitability in lactation education and counseling, and recommend community resources for lactation support.
- defend and advocate for evidence-based breastfeeding management programs that facilitate optimal health outcomes and public health strategies to protect, promote, and support breastfeeding.

Career Information

Lactation educators and counselors are often employed by obstetric and pediatric offices and clinics, hospitals, public health and community perinatal programs, federal Women, Infants, and Children (WIC) programs, and private baby boutiques. Individuals may desire this credential to augment their birth or postpartum doula role and are capable of working in independent practice.

Human Lactation (HLACT)

HLACT 301 Supporting the Mother-Baby Connection: Evidence-Based Practices for Perinatal Care

Same As: NURSE 391
Units: 1
Hours: 18 hours LEC
Prerequisite: None.
Transferable: CSU
This course is designed for practicing health care professionals as well as students preparing to enter the fields of nursing, nutrition, health education, or early childhood development. It focuses on the physiology of attachment, bonding, and breastfeeding and the short- and long-term impacts of perinatal care practices on the mother-baby dyad. It grapples with the challenges of applying best-practice guidelines and model hospital policies to alleviate barriers for mothers choosing exclusive breastfeeding and creating environments that support maternal-infant biology and the newborn’s natural capabilities, allowing improved outcomes with less time and effort. This course meets Board of Registered Nursing continuing education requirements and, when combined with requisite supervised clinical experience, fulfills all criteria for staff education as set by the Baby Friendly Hospital Initiative. This course is not open to students who have completed NURSE 391.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- examine and explain the rationale for professional, national, and international policies that promote, protect, and support breastfeeding as a public health goal.
- identify human species-specific norms for growth and development and disease resistance based on the exclusively breastfeeding mother-baby dyad and explain the risks to the mother and infant of early introduction of artificial milk.
- communicate effectively about infant feeding, identifying teaching points appropriate for prenatal and postpartum women regarding breastfeeding and when educating or counseling parents who are using bottles and/or formula.
- evaluate current hospital practices in terms of barriers to maintaining mother-baby connectedness.
- devise solutions to alleviate common barriers to exclusive breastfeeding in the hospital setting, integrating concepts of system change.
- create an environment that supports the newborn’s natural capabilities.
- integrate concepts of the neurobiology of breastfeeding to address initiation and problem remediation and to support milk-supply maintenance issues.
- demonstrate techniques and skills to transition the newborn from one state of alertness to another and to help families perceive and understand the language and patterns of the newborn.
- describe essential components of community support for mothers to sustain breastfeeding beyond the early weeks.
- discuss contraindications to breastfeeding in the United States and identify acceptable medical reasons for supplementation of breastfed babies based on national and international authorities.
- uncover and explore personal values and attitudes related to the birthing and breastfeeding experience.

HLACT 302 Fundamentals of Lactation Consultant Assisting

Units: 2.5
Hours: 45 hours LEC
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

This course is designed for community workers responsible for promoting and protecting breastfeeding and charged with providing basic assessment, support, and appropriate referral for breastfeeding mothers in the community. It is also an introductory course in human lactation for students entering or preparing for professions in nursing, nutrition, health education, or early childhood development as well as for practicing professionals in these fields. This course provides an overview of factors impacting breastfeeding rates, explores health effects and current recommendations, discusses the anatomy and physiology of lactation, and considers the role of the lactation consultant assistant in facilitating breastfeeding. It covers counseling skills, cultural awareness, and community resources for promoting, protecting, and supporting breastfeeding. This course is formerly known as NURSE 390.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the lactation consultant assistant's role, scope, and limits of practice.
- evaluate breastfeeding status and potential based on understanding of lactation anatomy/physiology and signs of adequate milk transfer.
- compare and contrast breastmilk and breastfeeding with artificial baby milks and artificial feeding in terms of composition and physiologic/developmental effects.
- employ effective counseling skills, establishing a therapeutic relationship with respect for individual and cultural differences.
- demonstrate the educational and technical skills required to provide basic assistance with successful breastfeeding initiation and maintenance.
- recommend appropriate interventions and referrals given a range of common early breastfeeding problems, questions, and challenging situations.
• examine barriers to breastfeeding and investigate approaches to normalizing breastfeeding in the community and society.
• propose counseling options to address individual responses to barriers that are impacting breastfeeding success.
• recommend in-hospital practices to support breastfeeding in light of current research evidence.
• apply concepts of client confidentiality, professional etiquette, and appropriate documentation practices to the lactation consultant assistant's role.

HLACT 311 Human Lactation for Lactation Counselors & Educators

Units: 2.5
Hours: 42 hours LEC; 9 hours LAB
Prerequisite: HLACT 302 with a grade of "C" or better
Corequisite: HLACT 301 or NURSE 391; AND HLACT 321.
Advisory: ECE 312, PSYC 300, PSYC 372, or SPEECH 361
Transferable: CSU
Catalog Date: June 1, 2020

This course prepares healthcare professionals, or other interested individuals who work with mothers and children, to provide evidence-based support to families, focusing on the normal processes of human lactation, the principles of adult education, and the art of counseling. It enables participants to provide accurate and consistent information about breastfeeding and lactation from birth through the process of weaning to improve breastfeeding outcomes.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• evaluate physical, behavioral, cultural, and social conditions predisposing mothers and babies to either a complex or an uncomplicated breastfeeding experience.
• construct and promote conditions that predispose mothers and babies to an uncomplicated breastfeeding experience or to resolution of common problems throughout the breastfeeding experience, through counseling, education, and support.
• recommend sound nutritional practices for both breastfed and non-breastfed children during the first two years of life.
• distinguish possible need for and appropriate level of referral to other care providers as indicated.
• choose and apply appropriate counseling skills and techniques in support of pregnant and breastfeeding mothers, their babies, and their partners or significant others.
• develop an individualized teaching plan specific to the needs identified through assessment and counseling.
• plan and conduct lactation and related group health classes or programs and facilitate breastfeeding support groups.
• evaluate written and media materials for their suitability in lactation education and counseling.
• catalogue and recommend community resources for lactation support.
• discuss issues of professionalism and practice.
• defend and advocate for evidence-based breastfeeding management programs that facilitate optimal health outcomes and public health strategies to protect, promote, and support breastfeeding.

HLACT 321 Interpreting Baby Behavior

Units: 0.5
Hours: 9 hours LEC
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

This course provides expertise in cutting-edge, evidence-based messages about babies’ cues, crying, and sleep patterns and how to teach these to new parents. Parents with inaccurate expectations about infant behavior are less able to interact effectively with their infants. Infant crying and waking are common reasons for using supplemental formula or discontinuing breastfeeding. Helping parents better understand their infant’s behavior supports new mothers in providing appropriate interactions and responsiveness to their infant’s needs while meeting their breastfeeding goals, preventing overfeeding and the risk of obesity. This expertise is essential for lactation support professionals as well as for those in the child development and early childhood education professions.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• explain the rationale and evidence base for specified focused messages on infant cues, crying, and sleep when teaching parents and caregivers of infants.
explain infant states and state modulation, describe the six distinct infant states, and teach the key caregiver education messages associated with each state and with helping infants when changing states.

differentiate between engagement and disengagement cues, explain the relationship between states and cues, and interpret clustered cues in young infants.

discuss normal crying, explain persistent crying, assess parental perceptions of crying, and teach techniques for promoting self-soothing skills in infants and for calming crying babies.

discuss misconceptions and realities around infant sleep states and sleep-wake cycles, developmental changes through infancy, comparison to adult sleep cycles, and reasons for excessive waking.

demonstrate skills in teaching the simplified core messages about infant cues, infant crying, and infant sleep and supporting healthy caregiver-infant interactions.

describe abnormal baby behaviors that are possible signs of newborn illness or compromise.

HLACT 322 Nutrition and Biochemistry of Human Lactation

This course addresses dietary recommendations for lactating women and for infants and young children with an emphasis on breastfeeding as the evidence-based norm. It also covers cultural and physiologic weaning practices and appropriate complementary foods. Primary topics include comparison of human milk with milks of other mammals and with other products and artificial baby milks, the array of individual biochemical and biological components in human milk, and their multiple nutritional and bioactive functions with a focus on immunologic components. Toxicology and pharmacology related to human milk and lactation are addressed. This course is not open to students who have completed NUTRI 321.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- recommend dietary choices for lactating women with consideration of health status and cultural or lifestyle preferences and evaluate the need for further lactational or nutritional services.
- evaluate infant and young child intake based on international standards for best practices with reference to caloric and volume requirements and adequacy of key nutrients and determine the need for further lactational or nutritional services.
- explain the rationale for current breastfeeding recommendations and the health and nutritional effects for both mother and child.
- correlate maternal dietary intake with the possible effects on milk volume and composition and describe the adaptive nature of human milk as well as the range of causes for variability.
- describe the detrimental effects of unclear definitions of breastfeeding on development of a sound evidence base for infant and young child feeding recommendations.
- compare human milk with milks of other mammals and with other products and artificial baby milks, discuss the array of individual components in human milk, and explain their multiple nutritional and bioactive functions.
- discuss principles of lactational pharmacology and toxicology as they relate to medications, vaccination, environmental chemicals, and drugs of abuse.

HLACT 331 Foundations of Lactation Consultant Practice

This course builds core competencies for lactation consultant practice. It is designed for individuals who will be working with mothers and young children in a variety of healthcare and other settings and is suitable for physicians; midwives; community, pediatric, and perinatal nurses; dietitians; speech, physical, and occupational therapists; social workers; and others with the requisite background in social and biological sciences and the field of human lactation. It provides preparation for conducting a systematic assessment of mother and child related to breastfeeding; selecting effective, evidence-based, individualized assistance for the breastfeeding dyad including triage and referral to other care providers as indicated; evaluating the outcomes; and revising the plan of care as required. Emphasis is placed on coordinating care of women and babies who are at risk of or currently experiencing lactation difficulties related to pregnancy, labor, birth, postpartum, and newborn interventions and
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply to lactation consultant practice the Code of Professional Conduct, Scope of Practice, and Clinical Competencies standards, legal mandates, and occupational safety principles of the profession.
- evaluate breastfeeding research critically and apply it to client education and practice and to the support of public policy that is evidence-based.
- recommend and structure a plan of care in the context of selected breastfeeding challenges based on the lactation consultant process.
- incorporate effective communication, documentation, and professional collaboration into lactation consultant practice.

HLACT 342 Managing Complex Problems in Lactation Consultant Practice

Units: 2
Hours: 36 hours LEC
Prerequisite: HLACT 331 with a grade of "C" or better
Corequisite: HLACT 322 or NUTRI 321; AND HLACT 352.
Transferable: CSU
Catalog Date: June 1, 2020

This course builds on the skills and knowledge base acquired through HLACT 331 and HLACT 351 to cover all areas of the International Board of Lactation Consultant Examiners certification examination blueprint. It applies the lactation consultant process to complex breastfeeding experiences, including those affected by mental or physical health alterations or physical disabilities in the mother; anatomical, neurological, gastrointestinal, or other serious health alterations in the child; and vulnerable, at-risk populations including those experiencing emergency events or disasters. It covers appropriate use of selected breastfeeding aids, techniques, and devices in specific clinical situations and integrates behaviors consistent with standards of professional ethics and the lactation consultant scope of practice. The systematic review and critical analysis of relevant research is developed to support evidence-based practice.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- synthesize a professional self-definition as lactation consultant that incorporates concepts of ethical practice, quality standards, cultural and professional competence with humility, mentoring the next generation, and engagement with the wider community from local to global levels as promoter, protector, and supporter of breastfeeding as the community norm.
- apply the lactation consultant process to complex breastfeeding experiences, including those impacted by mental or physical health alterations or physical disabilities in the mother or the need to induce lactation or to relactate.
- apply the lactation consultant process to complex breastfeeding experiences, including those impacted by twin or higher-order-multiple offspring, prematurity, or anatomical, neurological, gastrointestinal, or other serious health alterations in the child.
- apply the lactation consultant process to complex breastfeeding experiences, including those impacted by factors related to membership in vulnerable, at-risk populations including those experiencing emergency events or disasters.
- evaluate the appropriateness of selected breastfeeding aids, techniques, and devices when applied to specific clinical situations.
- integrate the systematic review and critical analysis of relevant research into evidence-based practice and accurate education of clients and the healthcare team.
- manage the basics of lactation consultant practice at entry level in relation to a variety of possible settings, including healthcare institutions, independent or collaborative practice, community outreach, milk banks, schools, and workplaces.

HLACT 351 Clinical Preceptorship in Lactation Consulting I

Units: 3.5
Hours: 189 hours LAB
Prerequisite: None.
Corequisite: HLACT 331
Transferable: CSU
Catalog Date: June 1, 2020

This course provides clinical opportunities to apply the cognitive knowledge and skills gained in HLACT 331 and its prerequisite courses. It serves as preparation for the more advanced clinical expectations in HLACT 352. Clinical experience is provided in regional hospitals and clinics under the direct supervision and evaluation of an International Board Certified Lactation Consultant (IBCLC) with over 5 years post-certification experience. Field trips are required. Students are responsible for costs
associated with meeting the health, background check, liability insurance, and CPR certification requirements for Allied Health Program clinical placement.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply the IBLCE Code of Professional Conduct for IBCLCs, the IBLCE Scope of Practice for the IBCLC, and the IBLCE Clinical Competencies for the Practice of IBCLCs as the framework for professional practice and conduct.

- recognize and apply evidence-informed findings to practice within the laws and regulations of the given jurisdiction and setting, and provide evidence-informed education that is free of conflicts of interest to women, families, health professionals and the community about breastfeeding and human lactation.

- utilize appropriate counseling skills and techniques, respecting the mother’s race, creed, religion, sexual orientation, age, and national origin; obtain her permission to provide care to her and her child; ascertain her goals for breastfeeding; and offer support and encouragement to enable her to meet her goals.

- evaluate potential or existing challenges and factors that may impact on a mother or her child in meeting her breastfeeding goals; provide anticipatory guidance to reduce potential risks; and assist and support the mother to develop, implement, and evaluate an appropriate, acceptable, and achievable breastfeeding plan utilizing all resources available.

- perform a maternal, child, and feeding assessment related to lactation and provide services for mothers and families at a beginning level with guidance.

- gain the mother’s consent for obtaining and disclosing of information as needed with respect for the privacy, dignity, and confidentiality of individuals and families, except where the reporting of a danger to a mother or child is specifically required by law.

- produce written documentation of all client contacts, assessments, feeding plans, recommendations, and evaluations of care.

- practice collaboratively with the health care team and provide information on community resources for breastfeeding assistance.

HLACT 352 Clinical Preceptorship in Lactation Consulting II

Units: 3.5
Hours: 189 hours LAB
Prerequisite: HLACT 331 and 351 with grades of "C" or better
Corequisite: HLACT 342
Transferable: CSU
Catalog Date: June 1, 2020

This course provides clinical opportunities to apply the cognitive knowledge and skills gained in HLACT 342 and its prerequisite courses. It serves as the final clinical preparation course for Lactation Consultant preparation. Clinical experience is provided in regional hospitals and clinics under the direct supervision and evaluation of an International Board Certified Lactation Consultant (IBCLC) with over 5 years post-certification experience. Field trips are required. Students are responsible for costs associated with meeting the health, background check, liability insurance, and CPR certification requirements for Allied Health Program clinical placement.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- integrate into personal practice the International Board of Lactation Consultant Examiners (IBLCE) Code of Professional Conduct for International Board Certified Lactation Consultants (IBCLCs), the IBLCE Scope of Practice for the IBCLC, and the IBLCE Clinical Competencies for the Practice of IBCLCs as the framework for professional conduct.

- incorporate evidence-informed findings into practice within the laws and regulations of the given jurisdiction and setting, and formulate thorough evidence-informed education that is free of any conflicts of interest for women, families, health professionals and the community about breastfeeding and human lactation.

- integrate the appropriate counseling skills and techniques, respecting the mother’s race, creed, religion, sexual orientation, age, and national origin; applying the principles of family-centered care to maintain a collaborative, supportive relationship; obtain her permission to provide care to her and her child; ascertain her goals for breastfeeding; and offer support and encouragement to enable her to meet her goals.

- evaluate potential or existing challenges and factors that may impact on a mother or her child in meeting her breastfeeding goals; provide anticipatory guidance to reduce potential risks; and assist and support the mother to develop, implement, and evaluate an appropriate, acceptable, and achievable breastfeeding plan utilizing all resources available.

- manage all components of a comprehensive maternal, child, and feeding assessment related to lactation; prioritize and provide competent services for mothers and families; and choose techniques and devices appropriately to support initiation and/or continuation of breastfeeding when indicated.

- gain the mother’s consent for obtaining and disclosing of information as needed with respect for the privacy, dignity, and confidentiality of individuals and families, except where the reporting of a danger to a mother or child is specifically required by law.

- create complete written documentation of all client contacts, assessments, feeding plans, recommendations, and evaluations of care.

- practice collaboratively with the health care team to provide coordinated services to families, organize information on community resources for breastfeeding assistance, and make appropriate referrals to other health care providers and community support resources in a timely manner depending on the urgency of the situation.
Human Services | American River College

Division Dean Kathy Sorensen (Interim)
Department Chairs Andrea Garvey

(916) 484-8512
ARCHSER@arc.losrios.edu

Associate Degrees

A.A. in Chemical Dependency Studies

The degree program in Chemical Dependency Studies centers around the specific skills and abilities necessary to provide comprehensive drug and alcohol counseling. Course work includes the twelve counselor core function applications in addiction screening, intake, assessment, orientation, counseling, crisis intervention, consultation, clients education, client's rights, confidentiality, professional ethics, and reports and record keeping.

Catalog Date: June 1, 2020

Degree Requirements

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<td>Total Units: 34 - 37</td>
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The Chemical Dependency Studies Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- evaluate the components of a quality chemical dependency counseling program
- demonstrate the twelve essential counseling skills as they apply to chemical dependency and recovery processes
- utilize counseling strategies based on examination of scientific theories of addiction
- identify the community resources used in assisting clients with addiction issues
- appraise and apply the knowledge of California Professional Codes of Ethics for Drug and Alcohol counselors
- evaluate one's own values and attitudes as they apply to ethical decision making
- demonstrate appropriate interpersonal and social skills in interactions with a diverse population using principles of equity, justice, and inclusion

Career Information

Upon completion of the A.A. degree a student possesses the coursework required for initial certification as a California drug and alcohol counselor (CDAC).

A.A. in Human Services

The A.A. degree program in Human Services centers around the broad array of entry level skills and abilities effectively used in social service delivery systems. Coursework includes the twelve helper core function applications in client screening, intake, assessment, orientation, counseling, consultation, client's rights, confidentiality, crisis intervention, client education, professional ethics, and reports and record keeping.

Catalog Date: June 1, 2020

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Student Learning Outcomes

Upon completion of this program, the student will be able to:

- define the functions of social service delivery systems
- analyze public policy issues, complexities and controversies affecting social service agencies and their clients
- integrate different theoretical approaches in working with clients
- identify the community resources used in assisting clients
- appraise and apply the knowledge of existing California professional codes of ethics for the helping professions
- describe the application of clients' rights in the social service delivery system
- evaluate one's own values and attitudes as they apply to ethical decision making
- demonstrate appropriate interpersonal and social skills in interactions with a diverse population using principles of equity, justice, and inclusion

Certificates of Achievement

Chemical Dependency Studies Certificate

The certificate program in Chemical Dependency Studies centers around the specific skills and abilities necessary to provide comprehensive drug and alcohol counseling. Course work includes the twelve counselor core function applications in addiction screening, intake, assessment, orientation, counseling, crisis intervention, consultation, clients education, client's rights, confidentiality, professional ethics, and reports and record keeping.

Catalog Date: June 1, 2020

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Student Learning Outcomes

Upon completion of this program, the student will be able to:

- evaluate the components of a quality chemical dependency counseling program
- demonstrate the twelve essential counseling skills as they apply to chemical dependency and recovery processes
- utilize counseling strategies based on examination of scientific theories of addiction
- identify the community resources used in assisting clients with addiction issues
- appraise and apply the knowledge of California Professional Codes of Ethics for Drug and Alcohol counselors
- evaluate one's own values and attitudes as they apply to ethical decision making
- demonstrate appropriate interpersonal and social skills in interactions with a diverse population using principles of equity, justice, and inclusion

Career Information

Upon completion of the certificate a student possesses the coursework required for initial certification as a California drug and alcohol counselor (CDAC).

Human Services Certificate

The certificate in Human Services centers around the broad array of entry level skills and abilities effectively used in social service delivery systems. Coursework includes the twelve helper core function applications in client screening, intake, assessment, orientation, counseling, consultation, client's rights, confidentiality, crisis intervention, client education, professional ethics, and reports and record keeping.

Catalog Date: June 1, 2020

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### Human Services (HSER)

#### HSER 300 Introduction to Human Services

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<tr>
<td>Hours:</td>
<td>54 hours LEC</td>
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<tr>
<td>Prerequisite:</td>
<td>Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.</td>
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<tr>
<td>Transferable:</td>
<td>CSU</td>
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</table>

This course is a comprehensive overview of the field of human services and an introduction to attitudes and methods that enhance communication skills in human relations and enable effective intervention in problem situations. It emphasizes the roles and skills of associate professionals, such as but not limited to drug and alcohol counselors, mental health workers, and activity directors with the elderly, and adolescent and child welfare assistants. It also emphasizes group techniques. An off-campus site visit is required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- distinguish between the different client populations most commonly served by human services workers
- compare and contrast the different functions of human service agencies in both the private and public sector
- compare and contrast the duties and responsibilities of workers in a variety of human services positions
- understand diverse client populations served by human services workers
- analyze public policy issues, controversies, and complexities affecting human service agencies or their clients
- compare different theoretical approaches for working with clients
- describe career opportunities in the field of human services
- demonstrate increased self-awareness (e.g., verbal fluency, voice tone, body language, feelings, attitudes, strengths)
- demonstrate clarity (concreteness), brevity, and objectivity in verbal communication
- demonstrate an awareness of others’ feelings, concerns, and ideas as expressed verbally and through body and tonal messages

#### HSER 310 Ethical Issues and Client's Rights

Two units are required.

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- define the functions of social service delivery systems
- analyze public policy issues, complexities and controversies affecting social service agencies and their clients
- integrate different theoretical approaches in working with clients
- identify the community resources used in assisting clients
- appraise and apply the knowledge of existing California professional codes of ethics for the helping professions
- describe the application of clients’ rights in the social service delivery system
- evaluate one’s own values and attitudes as they apply to ethical decision making
- demonstrate appropriate interpersonal and social skills in interactions with a diverse population using principles of equity, justice, and inclusion
This course is a comprehensive exploration of the basic ethical issues involving human services delivery. Topics include professional ethics, confidentiality, counselor and clients' rights, and other areas involving ethical controversies. This course is not open to students who have completed GERON 304.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- evaluate the state and federal laws most often violated in human services delivery
- analyze existing California Professional Codes of Ethics
- describe the application of clients' rights in human services agencies and institutions
- describe appropriate professional behavior in human services agencies and institutions
- examine one's own values and attitudes as they apply to ethical decision making

HSER 330 Issues of Diverse Populations

Same As: PSYC 365
Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGRW 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC
General Education: AA/AS Area V(b); AA/AS Area VI; CSU Area D; CSU Area E1
Catalog Date: June 1, 2020

This course is a study of the values, problems, issues, concerns and counseling needs of diverse populations by race, ethnicity, class, gender, sexual orientation, gender identity, physical/cognitive/emotional/developmental ability, and age. It also explores the cognitive and emotional aspects of prejudice as it relates to institutional and individual discrimination. This course is not open to students who have completed PSYC 365.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify and examine specific values, beliefs, and practices of diverse populations by race, ethnicity, gender, sexual orientation, ability/disability, age, and socioeconomic class
- evaluate the impact of bias, stereotyped thinking, prejudice, and discrimination in working with diverse populations
- analyze the issues of racism, sexism, heterosexism, ableism, ageism, and classism as they relate to working with diverse populations
- develop culturally responsive prevention, intervention, and/or resolution to identified issues and problems affecting diverse populations
- assess one's personal attitudes regarding diverse populations

HSER 340 Introduction to Chemical Dependency

Same As: PSYC 400
Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGRW 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU
General Education: AA/AS Area III(b); CSU Area E1
Catalog Date: June 1, 2020

This course examines the biopsychosocialcultural effects of chemical dependency on the individual and the family. It includes an analysis of drug use; misuse and abuse across age, gender, race, ethnicity, and economic conditions contributing to substance abuse; and a description of community efforts at prevention and treatment.
Course is not open to students who have completed PSYC 400.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze the psychological, physiological, and sociocultural issues related to substance use, misuse, and abuse
- describe the psychological and physiological progression of substance abuse
- examine the dynamics of race, ethnicity, age, and gender inherent in substance use, misuse, and abuse situations including drug preferences and codependency
- compare and contrast the key components of assessment and recovery programs for alcoholism and drug abuse including Alcoholics Anonymous (AA), Narcotics Anonymous (NA), Al-Anon, American Counseling Association (ACA), private and public, inpatient and outpatient

HSER 341 Physiology and Pharmacology: Alcohol & Other Drugs

Same As: PSYC 401
Units: 3
Hours: 54 hours LEC
Prerequisite: ENGWR 102 or ESLW 320 and HSER 340 or PSYC 400 with a grade of "C" or better.
Transferable: CSU
Catalog Date: June 1, 2020

This course is a study of the chemical composition of alcohol and the mechanism of action of alcohol and other psychoactive drugs, including opiates, stimulants, depressants, psychotherapeutics, and psychedelics. It also includes the social and psychological implications of tolerance, habituation, and substance abuse of the user and abuser. This course is not open to students who have completed PSYC 401.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- compare the effects of each class of psychoactive drugs upon the human body.
- define the biological, social, and psychological implications of psychoactive drug use, misuse, and abuse.
- describe the effects of psychoactive drugs on behavior.
- analyze treatment issues and challenges.
- compare intervention and treatment approaches.
- examine alternatives to drug use.

HSER 342 Alcoholism: Intervention, Treatment & Recovery

Same As: PSYC 402
Units: 3
Hours: 54 hours LEC
Prerequisite: HSER 341 or PSYC 401 with a grade of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This course is a study and evaluation of techniques used in the treatment of chemical dependency. Topics include intervention, individual and group counseling, detoxification, twelve-step program, therapeutic communities, and aftercare programs. This course is not open to students who have completed PSYC 402.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze drug and alcohol use, misuse, abuse, and addiction
- compare various theories of drug and alcohol addiction
- differentiate treatment issues of drug and alcohol use, misuse, abuse, and addiction
- describe treatment methods and counseling approaches of drug and alcohol use, misuse, abuse, and addiction
HSER 360 Techniques of Interviewing and Counseling

Units: 3
Hours: 54 hours LEC
Prerequisite: HSER 300 with a grade of "C" or better
Corequisite: GERON 304 or HSER 310
Advisory: ENGW 102 and ENGRD 116 with a grade of "C" or better; OR ESLR 320 and ESLW 320 with a grade of "C" or better; AND ESLL 310 or ESLL 320 with a grade of "C" or better.
Transferable: CSU
Catalog Date: June 1, 2020

This course is a survey of interview and counseling techniques appropriate for paraprofessionals in mental health, corrections, and substance abuse counseling. It includes theories of family co-dependency and techniques for counseling the family and significant others of substance abusers.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- evaluate techniques for interviewing and counseling
- analyze and apply appropriate approaches in dealing with a variety of human problems
- demonstrate an awareness of one’s own reactions to clients, based on one’s own past experiences
- demonstrate the techniques of interviewing and counseling appropriate for associate level helpers in social service agency settings

HSER 362 Practices in Human Services

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Corequisite: HSER 365 and 498
Enrollment Limitation: Completion of the American River College Human Services Agency Placement Process.
Transferable: CSU
Catalog Date: June 1, 2020

This course provides advanced study and applied integration of human services theory to prepare students for field experience. Techniques applying concepts, values, and skills acquired in other core courses to the process of helping others are covered.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply the principles of the twelve core functions of counseling for successful employment in the fields of human services and/or chemical dependency
- evaluate ethical and legal issues related to interventions with individuals, groups, organizations and communities in generalist practices and chemical dependency
- demonstrate accurate client charting and documentation
- demonstrate cultural sensitivity in working with diverse client populations
- differentiate among the community resources used for referring clients.
- integrate personal growth and development goals with professional growth and development goals

HSER 365 Techniques of Group Counseling

Units: 3
Hours: 54 hours LEC
Prerequisite: HSER 360 with a grade of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This course covers the basic elements of group counseling. Ethical issues are compared and analyzed. Emphasis is on the use of facilitating skills and group dynamics.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- evaluate the general goals of the group counseling experience
- analyze ethical and professional issues in group experiences
- describe rights of group participants and/or obligations of group leaders
- demonstrate multiple group techniques of counseling
- analyze the theoretical and practical approaches used by successful group leaders
- demonstrate growth in self-understanding and in communicating with others

HSER 495 Independent Studies in Human Services

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

HSER 498 Work Experience in Human Services

Units: 1 - 4
Hours: 60 - 300 hours LAB
Prerequisite: Students must be in a paid or unpaid internship, volunteer position, or job related to human services with a cooperating site supervisor. Students are advised to consult with the Human Services Department faculty to review specific certificate and degree work experience requirements.
Transferable: CSU
General Education: AA/AS Area III(b)
Catalog Date: June 1, 2020

This course provides students with opportunities to develop marketable skills in preparation for employment or advancement within the field of human services. It is designed for students interested in work experience and/or internships in transfer-level degree occupational programs. Course content includes understanding the application of education to the workforce, completion of Title 5 required forms which document the student's progress and hours spent at the work site, and developing workplace skills and competencies.

During the semester, the student is required to complete 75 hours of related paid work experience, or 60 hours of related unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. All students are required to attend the first class meeting, a mid-semester meeting, and a final meeting. Additionally, students who have not already successfully completed a Work Experience course will be required to attend weekly orientations while returning participants may meet individually with the instructor as needed. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate application of industry knowledge and theoretical concepts in the field of human services related to a transfer degree level career as written in the minimum three (3) learning objectives created by the student and his/her employer or work site supervisor at the start of the course
- make effective decisions, use workforce information, and manage his/her personal career plans.
- behave professionally, ethically, and legally at work, consistent with applicable laws, regulations, and organizational norms.
- behave responsibly at work, exhibiting initiative and self-management in situations where it is needed.
- apply effective leadership styles at work, with consideration to group dynamics, team and individual decision making, and workforce diversity.
- communicate in oral, written, and other formats, as needed, in a variety of contexts at work.
- locate, organize, evaluate, and reference information at work.
- demonstrate originality and inventiveness at work by combining ideas or information in new ways, making connections between seemingly unrelated ideas, and reshaping goals in ways that reveal new possibilities using critical and creative thinking skills such as logical reasoning, analytical thinking, and problem-solving.
Associate Degrees

A.A. in English Communication and Literature

This degree emphasizes verbal and written communication skills, and the study of literature. It offers a general background in communication skills which may be used in the workplace. In addition to earning the degree, students who work closely with their counselor may also fulfill significant lower-division requirements of four-year colleges/universities in English Composition, Literature and Communication.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
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<th>UNITS</th>
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<tr>
<td>ENGWR 481</td>
<td>Honors College Composition and Literature (3)</td>
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<tr>
<td>or ENGWR 301</td>
<td>College Composition and Literature (3)</td>
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<tr>
<td>ENGWR 482</td>
<td>Honors Advanced Composition and Critical Thinking (3)</td>
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<tr>
<td>or ENGWR 302</td>
<td>Advanced Composition and Critical Thinking (3)</td>
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<tr>
<td>ENGWR 303</td>
<td>Argumentative Writing and Critical Thinking Through Literature (4)</td>
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<tr>
<td>SPEECH 301</td>
<td>Public Speaking (3)</td>
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<td>SPEECH 331</td>
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<td>SPEECH 361</td>
<td>The Communication Experience (3)</td>
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<tr>
<td>ENGLT 304</td>
<td>Introduction to Poetry (3)</td>
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<tr>
<td>ENGLT 308</td>
<td>The Graphic Novel and Manga (3)</td>
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<tr>
<td>ENGLT 310</td>
<td>English Literature I (3)</td>
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<td>ENGLT 311</td>
<td>English Literature II (3)</td>
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<td>ENGLT 321</td>
<td>American Literature II (3)</td>
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<td>ENGLT 327</td>
<td>Literature of California (3)</td>
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<td>ENGLT 335</td>
<td>Latino, Mexican-American, and Chicano Literature (3)</td>
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<td>ENGLT 338</td>
<td>Native American Literature (3)</td>
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<td>ENGLT 341</td>
<td>World Literature II (3)</td>
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<td>ENGLT 345</td>
<td>Mythologies of the World (3)</td>
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<td>ENGLT 360</td>
<td>Women in Literature (3)</td>
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<td>ENGLT 365</td>
<td>Introduction to Gay, Lesbian, Bisexual and Transgender Literature (3)</td>
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<td>ENGLT 370</td>
<td>Children and Literature (3)</td>
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<td>ENGLT 378</td>
<td>Young Adult Literature (3)</td>
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<td>ENGLT 380</td>
<td>Introduction to Shakespeare (3)</td>
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<td>ENGLT 382</td>
<td>Introduction to Dramatic Literature (3)</td>
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<td>ENGLT 392</td>
<td>Science Fiction and Fantasy (3)</td>
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<td>ENGLT 403</td>
<td>Film Adaptations (3)</td>
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<td>SPEECH 302</td>
<td>Persuasive Speech (3)</td>
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<td>SPEECH 311</td>
<td>Argumentation and Debate (3)</td>
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<tr>
<td>SPEECH 321</td>
<td>Interpersonal Communication (3)</td>
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A minimum of 3 units from the following:

A minimum of 3 additional units chosen from either of the groups of courses listed above.

Total Units: 18

The English Communication and Literature Associate in Arts (A.A.) degree may be obtained by completion of 60 transferable, semester units, including (a) the major or area of emphasis described in the Required Program, and (b) one of the following: the ARC General Education, the Intersegmental General Education Transfer Curriculum (IGETC), or the California State University General Education-Breadth Requirements.

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- apply the elements of style in writing.
- evaluate premises, both explicitly stated and implied.
- maximize communication effectiveness by planning and adapting to specific audiences.
- write analytically about literature.
- examine fiction as a reflection of the authors' cultures and values.

**A.A. in History of the Creative Arts**

This degree provides an area of emphasis in the arts and humanities. It is intended for students who plan to transfer to a four-year college/university to earn a baccalaureate degree.

Catalog Date: June 1, 2020

**Degree Requirements**

<table>
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<td>ARTH 302</td>
<td>Art: Stone Age Through the Middle Ages (3)</td>
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<td>ARTH 308</td>
<td>Renaissance Tradition in Art (3)</td>
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<td>ARTH 310</td>
<td>Modern Art (3)</td>
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<tr>
<td>ARTH 322</td>
<td>Art History of the Non-Western World (3)</td>
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<tr>
<td>ARTH 333</td>
<td>Introduction to Islamic Art (3)</td>
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<td>ARTH 334</td>
<td>International Contemporary Art (3)</td>
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<td>ARTNM 305</td>
<td>History of Graphic Design (3)</td>
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<td>FASHN 330</td>
<td>History of Western World Fashion (3)</td>
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<tr>
<td>HUM 300</td>
<td>Classical Humanities (3)</td>
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<td>HUM 301</td>
<td>Introduction to the Humanities (3)</td>
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<td>HUM 302</td>
<td>Global Humanities: Atheism in Creativity, Thought, and Inspiration Traditions (3)</td>
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<td>HUM 310</td>
<td>Modern Humanities (3)</td>
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<td>HUM 320</td>
<td>Asian Humanities (3)</td>
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<td>HUM 324</td>
<td>Global Islam: Culture and Civilization (3)</td>
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<td>HUM 326</td>
<td>Middle Eastern Humanities (3)</td>
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<td>HUM 330</td>
<td>Humanities of the Americas (3)</td>
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<td>HUM 355</td>
<td>Introduction to World Religions (3)</td>
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<td>HUM 360</td>
<td>Introduction to the Old Testament (The Hebrew Bible) (3)</td>
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<td>Introduction to Music (3)</td>
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<td>Introduction to Music: Rock &amp; Roll (3)</td>
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<td>Survey of Music History and Literature (Greek Antiquity to 1750) (3)</td>
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<td>MUFHL 315</td>
<td>Jazz History (3)</td>
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<td>MUFHL 330</td>
<td>World Music (3)</td>
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<td>TA 300</td>
<td>Introduction to the Theatre (3)</td>
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<td>TA 302</td>
<td>History and Theory of the Theatre I (3)</td>
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<td>TA 306</td>
<td>Diversity in American Drama (1960 to Present) (3)</td>
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<td>TAFILM 300</td>
<td>Introduction to Film (3)</td>
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<td>TAFILM 302</td>
<td>History of Film (3)</td>
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<td>TAFILM 303</td>
<td>History of Film: 1880's through 1950's (3)</td>
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<td>TAFILM 304</td>
<td>History of Film: 1950's to Present (3)</td>
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<td>TAFILM 307</td>
<td>Diversity in American Film (3)</td>
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<td>TAFILM 320</td>
<td>Cinema Genres (3)</td>
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<td>Total Units</td>
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The History of the Creative Arts Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- recognize the role of the arts in society.
- analyze the influences of social, political, and ethnic issues on the arts.
- compare and contrast styles of artistic expressions.
- assess the historical, artistic, social, and philosophical environments in an artistic genre.
A.A. in Language Studies

This degree provides an area of emphasis in communication skills in both English and foreign languages. It is intended for students wishing to develop communication skills for the workplace. Students who work closely with their counselors can use this area of emphasis to prepare for majoring at a four-year college in foreign languages as well as any other majors which require proficiency in one or more foreign languages.

Catalog Date: June 1, 2020

Degree Requirements

<table>
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<tr>
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<td>ENGWR 301</td>
<td>College Composition and Literature (3)</td>
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<td>or ENGWR 481</td>
<td>Honors College Composition and Literature (3)</td>
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<td>ENGWR 302</td>
<td>Advanced Composition and Critical Thinking (3)</td>
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<td>or ENGWR 482</td>
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<td>ENGWR 303</td>
<td>Argumentative Writing and Critical Thinking Through Literature (4)</td>
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<td>SPEECH 301</td>
<td>Public Speaking (3)</td>
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<td>SPEECH 331</td>
<td>Group Discussion (3)</td>
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<td>SPEECH 361</td>
<td>The Communication Experience (3)</td>
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<td>DEAF 310</td>
<td>American Sign Language I (4)</td>
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<td>DEAF 312</td>
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<td>DEAF 314</td>
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<td>DEAF 316</td>
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<td>DEAF 318</td>
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<td>FREN 402</td>
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SPAN 411  Intermediate Spanish (4)  
SPAN 412  Intermediate Spanish (4)  
Total Units:  18

1These 12 units must be completed in a single language.

The Language Studies Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- write expository and argumentative papers.
- synthesize ideas and develop conclusions.
- examine the connection between culture and communication.
- engage in conversation and written correspondence in a language other than English.

A.A. in The Individual and Society

This degree provides an area of emphasis in the effects of culture, religion, ethnicity, and gender on individuals living in a global society. It is designed for students wishing to work more effectively with others in the workplace. Students who work closely with their counselor can use this area of emphasis to prepare for majoring at a four-year college in Psychology, Sociology, Ethnic Studies, Women's Studies and Child Development.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tr>
<td>ANTH 319</td>
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<td>ANTH 320</td>
<td>Introduction to Archaeology and World Prehistory (3)</td>
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<td>ANTH 330</td>
<td>Magic, Witchcraft, and Religion (3)</td>
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<td>American Indians of California (3)</td>
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<td>Native Peoples of North America (3)</td>
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<td>Anthropology of Sex, Sexuality and Gender (3)</td>
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<td>The Child, the Family and the Community (3)</td>
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<td>Children with Special Needs (3)</td>
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Total Units: 18

The Individual and Society Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- examine human diversity in relation to psychological theory.
- identify the consequences of ethnocentrism and gender bias on social interactions.
- analyze the influence of culture, family, society, and environment on an individual's development.
- analyze patterns of social problems which are based on ethnic and cultural differences in the United States.

**Certificates of Achievement**
CSU General Education Certificate of Achievement Certificate

This certificate is designed for students planning to transfer to a California State University (CSU) campus. Completion of this certificate ensures that the student has met the lower division General Education requirements for all CSU campuses.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td></td>
<td>A minimum of 39 units from the following:</td>
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Students must complete a minimum of 39 units used to satisfy the CSU General Education requirements. See the CSU General Education patterns listed in the American River College (ARC) catalog or consult with an ARC counselor.

Total Units: 39

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- explain the values of a culture as expressed through its art or language.
- demonstrate effective expository and persuasive writing skills.
- develop a reasoned solution to a problem.
- evaluate new and accepted ideas about the natural universe using testable methodology.
- evaluate the methods of inquiry and evidence used in the behavioral and social sciences.

Intersegmental General Education Transfer (IGETC) Certificate of Achievement Certificate

This certificate is designed for students planning to transfer to a California State University (CSU) or University of California (UC) campus. It ensures that the student has met the lower division General Education/Breadth requirements for all CSU and UC campuses.

Catalog Date: June 1, 2020

Certificate Requirements

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Students must complete a minimum of 34 - 37 units used to satisfy either the UC or CSU IGETC certification requirements. See the IGETC pattern in the American River College (ARC) catalog or consult with an ARC counselor.

Total Units: 34

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- explain the values of a culture as expressed through its art or language.
- demonstrate effective expository and persuasive writing skills.
- develop a reasoned solution to a problem.
- evaluate new and accepted ideas about the natural universe using testable methodology.
- evaluate the methods of inquiry and evidence used in the behavioral and social sciences.
Indis 1000 Learning Communities

Units: 0.5 - 12
Prerequisite: None.
Catalog Date: June 1, 2020
Associate Degree

A.A. in Interior Planning and Design

This degree provides a foundation of education and skills in the expanding field of interior design. Topics include space planning, building and Life-Safety codes, and the Americans with Disabilities Act (ADA). Additionally, it covers a variety of subjects ranging from architectural and furniture history to reading construction documents.

Catalog Date: June 1, 2020

Degree Requirements

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<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<td>IDES 322</td>
<td>Materials of Interior Design</td>
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<td>IDES 324</td>
<td>Interior Design Business Practices</td>
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<td>IDES 326</td>
<td>Interior Design Sales</td>
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<td>IDES 330</td>
<td>Beginning Interior Design Studio</td>
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<td>IDES 332</td>
<td>Portfolio and Presentation in Interior Design</td>
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<td>IDES 334</td>
<td>Interior Environment and Space Planning</td>
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<td>IDES 340</td>
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<tr>
<td>or DESGN 320</td>
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<tr>
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<td>ART 323</td>
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<td>ARTH 302</td>
<td>Art: Stone Age Through the Middle Ages (3)</td>
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<tr>
<td>ARTH 308</td>
<td>Renaissance Tradition in Art (3)</td>
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</table>
### Student Learning Outcomes

Upon completion of this program, the student will be able to:

- incorporate the appropriate finishes and materials for commercial and residential interiors.
- examine building types and occupancy classifications.
- create construction and presentation drawings that meet California building codes.
- assess client's needs and plans with the Americans with Disabilities Act (ADA), Life-Safety Codes and Universal/Barrier-Free Design.
- analyze interiors to reflect the needs of the end user.
- design spaces that are aesthetically pleasing and incorporate sound design principles.

### Career Information

The field of interior design offers a variety of career options, including residential design by itself, or with a specialty such as Universal Design, Green/Sustainable, smart-home, home office, and home theater design. It also offers commercial design, which can include ADA compliance, hospitality (restaurant, hotel, cruise ship) design, set design, and contract space planning. Additional career opportunities are available in product design, retailer, buyer/purchaser, manufacturers’ representative, and facilities management.

### Certificate of Achievement

**Para Professional Interior Planning and Design Certificate**

This certificate provides a foundation of education and skills in the expanding field of interior design. It focuses on the fundamentals of both residential and commercial design. A variety of topics taught for this certificate include space planning, building and Life-Safety codes, the Americans with Disabilities Act (ADA), and architectural and furniture history. This certificate includes an internship within the interior design industry.

**Catalog Date:** June 1, 2020

### Certificate Requirements

<table>
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<td>IDES 310</td>
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<td>History of Interior Architecture and Furnishings II</td>
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Total Units: 40 - 43

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- categorize building types and occupancy classifications.
- create construction and presentation drawings that meet California building codes.
- appraise the client's needs and plans with the Americans with Disabilities Act (ADA), Life-Safety codes and Universal/Barrier-Free Design.
- distinguish historical periods and styles of architecture and interior design.
- identify sales proposals.
- select textiles for the appropriate end use.

Career Information

This certificate offers a variety of career options, including residential design by itself or with a specialty of home office and home theater design. It also offers commercial design opportunities, which include space planning, hospitality (restaurant, hotel, cruise ship) design, set design, and historical and adaptive re-use design. Additional career opportunities are available as product designers, retailers, buyers, manufacturers' representatives, and facilities managers.

Certificates

Designed 4 Life Certificate

This certificate provides training in designing quality living environments. It includes various courses in Gerontology and Interior Design and covers how to successfully, safely, effectively, and aesthetically design interiors for all ages and abilities.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
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<th>COURSE CODE</th>
<th>COURSE TITLE</th>
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<td>GERON 302</td>
<td>Psychology of Aging: Adult Development and Aging</td>
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</tbody>
</table>
Student Learning Outcomes

Upon completion of this program, the student will be able to:

- evaluate interior environments and design changes in their function.
- categorize specific expectations and desires in terms of the client's needs.
- design environments for all ages and abilities.
- design interiors that reflect the needs of the client.

Career Information

Our aging population is requiring more specialized design for long-term independence. This certificate offers opportunities in careers for both gerontology and interior design.

Green Building and Sustainable Design for Interiors Certificate

This certificate provides students with expertise in the requirements for designing green and sustainable interiors.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
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<td>Fundamentals of Interior Design</td>
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<td>Introduction to Green Building and Sustainable Design in Interiors</td>
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<td>IDES 381</td>
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Student Learning Outcomes

Upon completion of this program, the student will be able to:

- describe the history and development of the green movement as it applies to interior design
- choose appropriate materials and finishes to achieve a green and sustainable interior
- identify the skills that are required to apply for certification as a Leadership in Energy and Environmental Design (LEED) Accredited Professional and describe the process for receiving LEED certification for projects.
- assess the role of the interior designer as part of a team of professionals involved in creating green buildings and sustainable design

Career Information

This certificate offers additional opportunities for an interior designer specializing in green design. It helps students be more employable by demonstrating a more focused skill set.
Interior Retail Merchandising Certificate

This certificate provides a foundation of education and skills in the expanding field of interior design. Topics include the materials of interior design, architectural (global and regional) and furniture history, business practices, and event planning.

Catalog Date: June 1, 2020

Certificate Requirements

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<td>History of Interior Architecture and Furnishings I</td>
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Student Learning Outcomes

Upon completion of this program, the student will be able to:

- select the appropriate finishes and materials for commercial and residential interiors.
- analyze interiors that reflect the needs of the end user.
- design spaces that are aesthetically pleasing and that incorporate sound design principles.

Career Information

This certificate offers a variety of career options in residential design. Additional career opportunities are available as product designers, retailers, buyers, manufacturers' representatives, and Sacramento architectural and interiors historians.

Universal Design Certificate

This certificate prepares students to work in the field of interior design with an emphasis on Universal Design. Multi-generational or universal design addresses the needs and abilities of people of all ages. Universal Design gives careful consideration to space planning, accessibility, security, and privacy issues, to create an environment that promotes independent living for every member of the household.

Catalog Date: June 1, 2020

Certificate Requirements

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</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>13</td>
</tr>
</tbody>
</table>

Student Learning Outcomes
Upon completion of this program, the student will be able to:

- assess the client's interior space planning needs.
- design residences that will successfully meet the needs of most people.
- analyze how Universal Design is used in a floor plan.

Career Information

Students who have completed this certificate may work in full residential design. They may also specialize in residential kitchen and/or bath design.

Interior Design (IDES)

IDES 101 Interior Design Careers

<table>
<thead>
<tr>
<th>Units:</th>
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</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>9 hours LEC</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course explores a variety of career options in the multi-faceted field of interior design. Field trips are required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the career offerings within the field of interior design.
- explore the need for different career offerings within the field of interior design.
- evaluate hiring trends, requirements, and salaries of careers within the field of interior design.

IDES 102 Working with Clients

<table>
<thead>
<tr>
<th>Units:</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>9 hours LEC</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course covers methods for effectively working with clients. Field trips are required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- compose a client interview to best assess a project's needs.
- qualify a client's budget for best project outcome.
- discuss client needs.

IDES 103 Furniture Markets

<table>
<thead>
<tr>
<th>Units:</th>
<th>0.5</th>
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</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>9 hours LEC</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
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<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course provides an opportunity to attend seasonal markets, such as the San Francisco Design Center (SFDC), to tour showrooms, attend lectures, and see the upcoming interior design offerings. Trends, markets, budgets, and products are discussed. Field trips are required.
Upon completion of this course, the student will be able to:

- explain the value of seasonal markets in the interior design industry.
- differentiate product lines, manufacturers, materials, and styles.

### IDES 104 Home Staging

**Units:** 0.5  
**Hours:** 9 hours LEC  
**Prerequisite:** None.  
**Catalog Date:** June 1, 2020

This course is a basic introduction to the process of staging homes for sale. Topics include model homes and resale. Field trips are required.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- assess what elements are needed to stage a room.
- arrange furnishings for optimal use.
- analyze how to improve a space based on staging techniques.

### IDES 105 Color and Interior Design

**Units:** 0.5  
**Hours:** 9 hours LEC  
**Prerequisite:** None.  
**Catalog Date:** June 1, 2020

This course is a basic introduction to color and how it relates to interior design. Topics include basic dynamics of color, its principles, fundamentals, psychology, and applications. Field trips are required. Pass/No Pass only.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze theories related to color psychology.
- discover effects of color use in interior design.

### IDES 108 Lighting For Better Health

**Units:** 0.5  
**Hours:** 9 hours LEC  
**Prerequisite:** None.  
**Catalog Date:** June 1, 2020

This course introduces better lighting design that could improve your health. New research shows that properly designed lighting can enhance our human biology and overall good health. Field trips are required.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the impact of natural light on the circadian system.
- examine the impact of artificial light on the circadian system.
- recommend lighting designs to improve the circadian system.
IDES 109 Interior Design Specifications

This is a basic introduction to the process of specifying interior fixtures, furniture, and equipment. Topics include selection, documentation, and industry standards for specification writing. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- organize the sequence client programming in interior projects.
- prepare and document finish and materials specifications.

IDES 110 Estimating and Calculating for Interior Design

This course includes techniques for accurately calculating yardage and materials of interior products for residential and commercial installations. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain the differences between interior residential and commercial products.
- measure accurately for window, wall, and floor coverings.
- estimate yardage for window, wall, and floor coverings.
- write work orders for interior products.

IDES 120 Seasonal Decorating

This course introduces the basics for changing decor according to various seasons and holidays. Resourcing for props, elements and accessories is included. This course covers both commercial and residential applications.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze decorative finishes and accessories for seasonal display.
- assess the appropriate decor based upon seasonal or holiday needs.
This course is a basic introduction to event planning and how it relates to interior design. Topics include fund raisers, corporate events, and private events such as weddings and parties. Field trips are required. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- recognize the business of event planning.
- assemble the essential components of an event.
- calculate the budget for an event.

IDES 130 Sacramento Design History - Architectural Gems

Units: 0.5
Hours: 9 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020

This course explores the rich architectural and interior design history in the Sacramento area. Field trips are required. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- research architectural gems and their interiors in the Sacramento area.
- analyze architectural gems and their interiors in the Sacramento area.

IDES 131 Sacramento Design History - Old Town

Units: 0.5
Hours: 9 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020

This course explores the rich architectural and interior design history of Old Town Sacramento. Field trips are required. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- research Old Town Sacramento architecture and interiors.
- analyze Old Town Sacramento architecture and interiors.

IDES 132 Sacramento Design History - Victorian

Units: 0.5
Hours: 9 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020

This course explores the styles of Victorian architectural and interior design history in the Sacramento area. Field trips are required. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:
• research Victorian architecture and interiors in the Sacramento area.
• analyze Victorian architecture and interiors in the Sacramento area.

IDES 133 Sacramento Design History - Bungalows

Units: 0.5
Hours: 9 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020

This course explores the architectural and interior design history of bungalows in the Sacramento area. Field trips are required. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• research bungalow architecture and interiors in the Sacramento area.
• analyze bungalow architecture and interiors in the Sacramento area.

IDES 134 Sacramento Design History - Fabulous Forties

Units: 0.5
Hours: 9 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020

This course explores architectural and interior design history of the Fabulous Forties area in Sacramento. Field trips are required. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• research Fabulous Forties architecture and interiors in the Sacramento area.
• analyze Fabulous Forties architecture and interiors in the Sacramento area.

IDES 135 Sacramento Design History - Mid-Century Modern

Units: 0.5
Hours: 9 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020

This course explores mid-century modern architectural and interior design history in the Sacramento area. Field trips are required. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• research mid-century modern architecture and interiors in the Sacramento area.
• analyze mid-century modern architecture and interiors in the Sacramento area.

IDES 136 Sacramento Design History - Modern and Contemporary

Units: 0.5
Hours: 9 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020
This course explores the Modern and contemporary architectural and interior design history in the Sacramento areas. Field trips are required. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- research examples of Modern and contemporary architecture and interiors in the Sacramento area.
- analyze Modern and contemporary architecture and interiors in the Sacramento area.

IDES 300 Fundamentals of Interior Design

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU
Catalog Date: June 1, 2020

This introductory survey course addresses various aspects of the interior design industry and profession. It includes the study and application of design principles and elements; influences of historical, cultural, and functional design factors; the selection and arrangement of interior furnishings and materials; and an overview of career options in interior design. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- list various career options in the field of interior design.
- compare and contrast the principles and elements of design when used in interior design.
- arrange furniture and materials that are functional and aesthetically pleasing.

IDES 302 Introduction to Green Building and Sustainable Design in Interiors

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

This course introduces the basic principles of green building and sustainable design (GBSD) and focuses on applications in the practice of commercial or residential interior space planning and design. It includes a historic perspective and the appropriate application of these principles in the profession and also introduces the requirements for Leadership in Energy and Environmental Design (LEED) certification. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- evaluate the basic requirements for planning green and sustainable interiors
- analyze interiors according to GBSD and/or LEED requirements
- research the process and basic requirements for LEED certification
- compile finishes, materials, and fixtures that fulfill the requirements of green design
- experiment with finishes, materials, and fixtures that meet LEED requirements

IDES 310 History of Interior Architecture and Furnishings I

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
This course covers the historical relationship between the decorative arts, period furniture, and interior architecture from antiquity through Victorian. Emphasis is placed on identification of specific furniture styles and architectural features. Field trips may be required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- evaluate how architectural and furniture styles and designs originated, including how they are adapted to subsequent periods.
- differentiate between "classics", lasting, and short-lived styles.
- analyze social, historical, and geographical factors affecting the development of design styles.
- research contributions from historical periods that have influenced the decorative arts, furniture, and interior architecture.
- compare the decorative arts, period furniture, and interior architectural from Ancient Egypt through the English Regency Period.

### IDES 312 History of Interior Architecture and Furnishings II

**Units:** 3  
**Hours:** 54 hours LEC  
**Prerequisite:** None.  
**Advisory:** Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.  
**Transferable:** CSU; UC  
**General Education:** AA/AS Area I; CSU Area C1  
**Catalog Date:** June 1, 2020

This course covers the historical relationship between the decorative arts, period furniture, and interior architecture from the American Colonial periods through Modern and Contemporary, Emphasis is on style development as it relates to socio-economic and political factors of the times, as well as identification of specific furniture styles and architectural features. Asian, African, Mid-Eastern, and other non-western styles are also included.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- analyze and describe furniture and architectural styles and characteristics of those styles from the late 19th century to present.
- distinguish contemporary designers and their major contributions.
- differentiate characteristics of Asian, Mid-Eastern, African, and other non-western styles.
- examine and evaluate current styles in relation to their historical origins.
- evaluate how social, historical, and geographical factors affect the development of design styles.
- categorize "classical" and lasting styles as well as short-lived or "trendy" styles.

### IDES 322 Materials of Interior Design

**Units:** 3  
**Hours:** 54 hours LEC  
**Prerequisite:** None.  
**Advisory:** Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.  
**Transferable:** CSU  
**General Education:** AA/AS Area I; CSU Area C1  
**Catalog Date:** June 1, 2020

This course covers the industry, technology, products, and specification issues of interior finish materials. Textiles, floor coverings, paint and wall coverings, window treatments, furnishings and surface materials, and lighting are included. Field trips may be required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- analyze and specify interior finish materials and products for functional, aesthetic, maintenance, and budget considerations.
- research resources for interior finish materials and products.
- analyze construction characteristics of interior finish materials and products.
- describe installation criteria for interior finish materials and products.

IDES 324 Interior Design Business Practices

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

This course covers the business and practical aspects of interior design. Topics include ethical practices, methods of compensation, establishing clients' budgets, estimating costs, purchasing, billing, marketing, and sales. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- examine purchase orders of interior design furnishings, finish materials, products, and their installation.
- review purchase orders, contracts, purchase agreements, and other documents required for client approval.
- identify and interpret various methods of compensation for interior design services.
- develop, compare, and contrast marketing plans and strategies.

IDES 326 Interior Design Sales

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

This course covers various aspects of selling proposed residential and commercial design projects. Included are personal presentation, selling techniques, making the sale, closing the deal, job completion, and follow up. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- evaluate interior design sales techniques.
- devise and practice sales techniques for client presentations.
- compare and contrast sales techniques targeted for interior design services, products, and materials.

IDES 330 Beginning Interior Design Studio

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: MATH 25 or 41 with a grade of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This course covers basic construction, layouts, products, and materials. Topics include floor plans, structural elements, and interior space planning. Presentation methods are explored. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:
• describe the various drawing standards and conventions used in interior design.

• identify the components of floor plans.

• measure using an architectural scale.

• calculate the measurements of a space and record the dimensions.

• create a floor plan to scale with dimensions and appropriate titles.

• create a floor plan to scale with functional furniture arrangements.

• measure and convert a room and furniture to 1/4” scale.

• draw simple interior elevations.

• examine and identify the components of a set of floor plans.

• select appropriate material to compile a color/materials board.

IDES 332 Portfolio and Presentation in Interior Design

Units: 3  
Hours: 36 hours LEC; 54 hours LAB  
Prerequisite: IDES 330 with a grade of "C" or better  
Transferable: CSU  
Catalog Date: June 1, 2020

This course covers procedures for developing finished presentations in interior design. It includes methods of visually communicating with clients. It also covers both traditional and technology-based portfolio preparation.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• list various methods of visually communicating with clients

• produce portfolio materials using both traditional and technology-based techniques

• create sketches using both traditional and computer-based tools

• demonstrate basic rendering techniques using color media

• prepare professional presentations for communication of design solutions

IDES 334 Interior Environment and Space Planning

Units: 3  
Hours: 36 hours LEC; 54 hours LAB  
Prerequisite: IDES 330 with a grade of "C" or better  
Corequisite: IDES 350  
Transferable: CSU  
Catalog Date: June 1, 2020

This course covers the analysis and application of design concepts and space planning techniques. It includes resources necessary to creatively solve problems relative to the function and quality of human environments. Topics include the integration of barrier-free design, the Americans with Disabilities Act (ADA), resource management, and environmental psychology design. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• evaluate user needs to develop appropriate interior design parameters.

• compile creative visual presentation techniques for the communication of design solutions.

• examine the use of Universal Design principles in planning of residential living space.

• integrate Barrier-Free design and Americans with Disabilities Act (ADA) requirements effectively into an interior space.
IDES 340 Beginning CADD for Interior Design

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: IDES 330 with a grade of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This course employs beginning computer-aided drafting and design (CADD) for interior design projects. Floor plans, space planning, elevations, and perspectives are created. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- create flat plan and 3D drawings using CADD software.
- choose the necessary functions of CADD software to an architectural plan.
- plan and design structures utilizing CADD software.
- experiment with CADD software to design interiors.

IDES 341 Intermediate CADD for Interior Design

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: IDES 340 with a grade of "C" or better
Advisory: IDES 334
Transferable: CSU
Catalog Date: June 1, 2020

This course is a continuation of the computer-aided drafting and design (CADD) skills developed in IDES 340, utilizing a different CADD program. It also includes placing floor plans into view ports, adding attributes, and the creation of customized tool bars. Field trips are required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- create symbol libraries with icons for interior projects.
- choose toolbars to aid in efficient use of the software.
- design floor plans utilizing the software.
- classify the various attributes of CADD (i.e. creating, extracting, databases).

IDES 350 Codes and Universal Access for Interior Design

Units: 2
Hours: 36 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU
Catalog Date: June 1, 2020

This course explores local, state, and federal regulations concerning life-safety issues and barrier-free access (Americans with Disabilities Act and Universal Design requirements) relative to residential and contract design. It also covers codes and interior specifications. Special attention is given to performance, health-safety, and barrier-free design when estimating and preparing specifications for space planning, materials, and furnishings/products.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze barrier-free accessibility and Americans with Disabilities Act (ADA) requirements as they pertain to interior design.
evaluate performance criteria, Life-Safety standards, and Universal Design applications in preparing specifications for interior materials and furnishings & products.

research building codes and Life-Safety standards to interior design.

compare fire and smoke prevention, detection, and suppression systems.

evaluate the types of egress and occupancy classifications, and determine exit locations, arrangements, capacity, and travel distance.

collect recently published articles pertaining to ADA, Life-Safety codes, Universal Design and building codes.

IDES 351 Codes and Universal Access Lab

Units: 1
Hours: 54 hours LAB
Prerequisite: IDES 330 with a grade of "C" or better
Corequisite: IDES 350
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU
Catalog Date: June 1, 2020

This course applies the content and skills from IDES 350 to various design scenarios requiring Universal Design, Barrier-Free design and ADA (Americans with Disabilities Act) compliance. Projects are drafted following prescribed criteria.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• design using Barrier-Free standards.

• apply ADA requirements as they pertain to interior design.

• evaluate performance criteria, health-safety factors, and Universal Design principles in preparing specifications for interior materials, furnishings, and products.

• research and apply building codes and Life-Safety standards to interior design.

• draft specifications with clearly communicated format and content.

• compose egress, exit locations, arrangements, capacity, and travel distance.

IDES 355 Residences: Designed 4 Life

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

This course covers the successful design of residences for a variety of users, regardless of their age, size, physical abilities, or limitations. It also encompasses specialty and adaptive appliances, plumbing fixtures, cabinetry, appropriate finish materials, space planning, and furnishings. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• compare and contrast efficient floor plans for people of various ages and abilities.

• synthesize design criteria allowances and tolerances of Universal Design, evidenced-based design, and aging-in-place principles.

• research and identify materials, products, space planning, and lighting that are appropriate to people of various ages and abilities.

• analyze residential materials, products, space plans, furnishings, and lighting that are appropriate to people of various ages and abilities.

• assess how other cultures design residences for special populations.

IDES 381 Lighting and Electrical for Green and Sustainable Interiors

Units: 3
This course introduces green and sustainable lighting design in both commercial and residential interiors. Topics include Leadership in Energy and Environmental Design (LEED) certification, photometrics, light sources, and effective lighting control. Field trips may be required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- calculate effective lighting solutions for both residential and commercial interior design projects.
- integrate green or energy efficient light sources, distribution systems, and electric light programming into interior designs.
- plan for effective overall integration of lighting in commercial and residential interiors.
- evaluate the environmental impact of appropriate lighting solutions including fixtures and associated equipment.
- analyze the basic process of LEED certification.

**IDES 412 Specifications for Interior Design**

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

This course introduces the process of specifying interior fixtures, furniture, and equipment. Topics include selection, documentation, and industry standards for specification writing. Field trips may be required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- research appropriate interior design sources and/or vendors
- organize the sequence and process of an interior project
- prepare and document finish specifications for successful application
- analyze specifications to meet industry standards and client approval

**IDES 494 Topics in Interior Design**

Units: 2 - 4
Hours: 36 - 72 hours LEC
Prerequisite: None.
Advisory: CISC 300; ENGWR 102 or 103, and ENGRD 116 with a grade of “C” or better; OR ESLR 320 and ESLW 320 with a grade of “C” or better; OR placement through assessment process.
Transferable: CSU
Catalog Date: June 1, 2020

This course is designed to provide an opportunity to study topics in Interior Design not included in current course offerings. Examples include kitchen & bath design; barrier-free design; in depth period style design.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- research resources of interior furnishings, finish materials and products
- research and evaluate historical implications that affect design today
- analyze variations of Interior Design through culture and period.
IDES 495 Independent Studies in Interior Design

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

IDES 498 Work Experience in Interior Design

Units: 1 - 4
Hours: 60 - 300 hours LAB
Prerequisite: None.
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position, or job related to interior design with a cooperating site supervisor. Students are advised to consult with the Interior Design Department faculty to review specific certificate and degree work experience requirements.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU
General Education: AA/AS Area III(b)
Catalog Date: June 1, 2020

This course provides students with opportunities to develop marketable skills in preparation for employment or advancement within the field of interior design. It is designed for students interested in work experience and/or internships in transfer-level degree occupational programs. Course content includes understanding the application of education to the workforce, completion of Title 5 required forms which document the student's progress and hours spent at the work site, and developing workplace skills and competencies.

During the semester, the student is required to complete 75 hours of related paid work experience, or 60 hours of related unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. All students are required to attend the first class meeting, a mid-semester meeting, and a final meeting. Additionally, students who have not already successfully completed a Work Experience course will be required to attend weekly orientations while returning participants may meet individually with the instructor as needed. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate application of industry knowledge and theoretical concepts in the field of interior design related to a transfer degree level career as written in the minimum three (3) learning objectives created by the student and his/her employer or work site supervisor at the start of the course
- make effective decisions, use workforce information, and manage his/her personal career plans.
- behave professionally, ethically, and legally at work, consistent with applicable laws, regulations, and organizational norms.
- behave responsibly at work, exhibiting initiative and self-management in situations where it is needed.
- apply effective leadership styles at work, with consideration to group dynamics, team and individual decision making, and workforce diversity.
- communicate in oral, written, and other formats, as needed, in a variety of contexts at work.
- locate, organize, evaluate, and reference information at work.
- demonstrate originality and inventiveness at work by combining ideas or information in new ways, making connections between seemingly unrelated ideas, and reshaping goals in ways that reveal new possibilities using critical and creative thinking skills such as logical reasoning, analytical thinking, and problem-solving.
International Studies | American River College

This degree provides an understanding of international issues and the impact of globalization on developed and developing economies. It covers a number of issues, including trade, economic development, war and conflict, and foreign relations and diplomacy.

Division Dean
Kathy Sorensen (Interim)

(916) 484-8283

Associate Degrees for Transfer

A.A.-T. in Global Studies

This degree provides an understanding of international issues and the impact of globalization on developed and developing economies. It covers a number of issues, including trade, economic development, war and conflict, and foreign relations and diplomacy.

The Associate in Arts in Global Studies for Transfer (AA-T) degree provides students with a major that fulfills the general requirements of the California State University for transfer. Students with this degree will receive priority admission with junior status to the California State University system. The Associate in Arts in Global Studies for Transfer (AA-T) degree may be obtained by the completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program outlined below (earning a C or better in these courses) and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
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</tr>
</thead>
<tbody>
<tr>
<td>IS 301</td>
<td>Introduction to Global Studies</td>
<td>3</td>
</tr>
<tr>
<td>IS 302</td>
<td>Issues in Global Studies</td>
<td>3</td>
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<tr>
<td></td>
<td>A minimum of 15 units from the following:</td>
<td>15</td>
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<tr>
<td></td>
<td>Select five courses from a minimum of four of the following areas:</td>
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<td></td>
<td>CULTURE AND SOCIETY</td>
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<tr>
<td>ANTH 310</td>
<td>Cultural Anthropology (3)</td>
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<tr>
<td>HIST 308</td>
<td>History of World Civilizations, 1500 to Present (3)</td>
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<td>Physical Geography: Exploring Earth's Environmental Systems (3)</td>
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<td>POLS 310</td>
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The Associate in Arts in Global Studies for Transfer (AA-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- evaluate their role as a member of a global network of interdependent societies.
- formulate a cohesive understanding of world issues and events and incorporate that knowledge into their daily life and career.
- analyze various social-scientific perspectives that explain the causes and consequences of globalization.
- apply various social-scientific perspectives to daily life and work environment, recognize people's socio-economic, political, and geographical background.
- analyze local and societal issues and problems within a global context.

**Associate Degrees**

**A.A. in International Studies**

This degree provides an understanding of international issues and the impact of globalization on developed and developing economies. It covers a number of issues, including trade, economic development, war and conflict, and foreign relations and diplomacy.

Catalog Date: June 1, 2020

**Degree Requirements**

<table>
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<tr>
<th>COURSE CODE</th>
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<tbody>
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<td>or ANTH 481</td>
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<td>HIST 308</td>
<td>History of World Civilizations, 1500 to Present</td>
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<td>POLS 310</td>
<td>Introduction to International Relations (3)</td>
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<td>IS 302</td>
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<td>IS 305</td>
<td>Introduction to Middle East Studies (3)</td>
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<td>Peace and Conflict (3)</td>
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<td>Current Global Development Issues (3)</td>
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<td>GERM 411</td>
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</table>

The International Studies Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- evaluate his/her role as a member of a global network of interdependent societies.
- formulate a cohesive understanding of world issues and events and incorporate that knowledge into his/her daily life and career.
- analyze various social-scientific perspectives that explain the causes and consequences of globalization.
- apply various social-scientific perspectives to daily life and work environment.
- recognize people's socio-economic, political, and geographical background.
- analyze local and societal issues and problems within a global context.

Career Information

This degree provides career opportunities with local, state, federal agencies, and in the private sector. The core courses provide students with diverse knowledge to work in a variety of fields, including international business, law, government and non-governmental service, social services, natural sciences, health fields, and education.
IS 301 Introduction to Global Studies

This course introduces an interdisciplinary and multi-dimensional understanding of the process of globalization, including its history, socio-economic, political, and cultural causes and consequences. It focuses on how nation-states are increasingly becoming part of complex interconnected global economic, political, social, cultural, and ecological systems and structures. This course deals with how the actions of one nation state shapes trends and events in other nations. It also deals with how actions and events in one nation create a ripple effect across the globe and the extent to which nation-states are able to maintain a level of national autonomy and national identity within a global system. It utilizes globalization theories to provide a scientific framework for understanding various aspects of globalization including socio-economic, political, cultural, and ecological benefits and costs.

Upon completion of this course, the student will be able to:

- identify and describe various definitions and meanings of globalization
- identify and define concepts and terms pertaining to globalization
- analyze various historical, political, socio-economic, and cultural causes and forces involved in the process of globalization
- compare and contrast the impact and consequences of globalization on different regions and across continents
- apply theories of globalization to examples from different regions of the globe to understand varied intended and unintended outcomes of globalization
- discuss the extent to which nation-states are able to act autonomously and maintain their national identity within an increasingly interconnected global system

IS 302 Issues in Global Studies

This course introduces the origins, current status, and future trends of major transnational issues confronting the global community. Topics include economic development and inequality, environmental issues and challenges, human rights, human security (food, water, and health care), international conflict and security issues, migration, and population trends. This course also focuses on global governance, including the study of collective global responsibility.

Upon completion of this course, the student will be able to:

- identify major recurring and emerging global issues
- analyze one or more specific global problems of international or regional nature
- discuss approaches to global problems from an international perspective
- analyze the interconnections between and among global issues
- compare and evaluate the efficacy of national, regional, and international efforts to solve problems associated with global issues
- analyze the role of non-state actors and transnational organizations in causing, responding to, and resolving global issues
- evaluate the relationship between globalization and specific global issues
IS 305 Introduction to Middle East Studies

This course introduces the contemporary Middle East from global and interdisciplinary perspectives. It covers the major developments and events that have shaped the socio-economic and political institutions and structures within a distinct geopolitical area. This course examines processes of state formation, colonialism, independence movements, major power players in the region, and the modern challenges of globalization. It also covers the consequences for foreign policy. Countries may include but are not limited to: Algeria, Egypt, Iran, Iraq, Israel, Jordan, Lebanon, Libya, Palestine, Saudi Arabia, Syria, and Tunisia. This course provides a foundation in Middle East Studies in the context of a globally interconnected world system.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain current socio-economic and political dynamics in the Middle East in a global context.
- identify major economic and political actors/forces as well as political structures and systems in the Middle East.
- demonstrate knowledge of the region and the major ongoing domestic and global forces that shape Middle Eastern countries.
- analyze the significance of the Middle East in the context of United States, Western European, and other powers’ interests in the region.
- examine and critique existing social scientific perspectives on the Middle East.
- construct a critical understanding of the complex nature of Middle Eastern politics and culture within global and interdisciplinary perspective.
- formulate a scientific understanding of the region, free of stereotypes and anecdotes.

IS 310 Peace and Conflict

This course examines the political and socioeconomic causes and consequences of peace and conflict from different theoretical views. It includes an analysis of inter- and intra-state conflicts and wars, terrorism, ethnic and sectarian conflicts, and gender issues and conflicts. Additional topics include war theory, “negative peace,” post-conflict reconciliation, policy recommendations and proposed solutions for conflict resolution, and achieving peace through the engagement of the global community. This course is formerly known as SOCSC 310.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- compare and contrast various socio-economic, political, and cultural theories of the causes of conflict and war
- analyze the origins/causes, escalation, spread of conflict, violence, and war within various theoretical frameworks
- evaluate the termination, consequences, and future of both conventional and nonconventional wars
- analyze proposed conventional and nonconventional recommendations and solutions to conflict resolutions and attainment of sustainable peace including solutions such as arms control, alliances, economic development, and diplomacy
- apply problem-solving approaches to issues which include international law, international organizations, interdependence, global and regional integration, and prospects for world peace

IS 312 Current Global Development Issues

This course is designed to fulfill the requirements for...
This course covers current socio-economic and political issues in developing countries in a global context. It presents alternative theories pertaining to the causes and consequences of development, underdevelopment, and uneven development with a particular focus on the issues of globalization including political and social change. It also includes proposed solutions to various development problems from various scientific perspectives.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- evaluate, compare, and contrast various theories of development and social change in a global context.
- explain internal and external causes and consequences of development, underdevelopment, and uneven development within the various theoretical frameworks.
- explain the relative usefulness of proposed solutions provided by different theories of development and social change in the context of a globally interconnected world.
- relate theories of development and social change to proposed development policies that are dictated by the forces of globalization and are implemented in developing economies.
- compare and contrast the effects of various development policies on developing countries and their people.
- define the role of agencies of social change and development both domestic and international within a globally connected world.
- assess the impact of actions taken by one nation on the global community.
Journalism | American River College

Division Dean
Douglas Herndon

Department Chairs
Rachel Leibrock

Associate Degrees for Transfer

A.A.-T. in Journalism and Mass Communications

The Associate in Arts in Journalism for Transfer provides students with a major that fulfills the general requirements of the California State University for transfer. Students with this degree will receive priority admission with junior status to the California State University system.

The Associate in Arts in Journalism for Transfer (A.A.-T.) may be obtained by the completion of 60 transferable, semester units with a minimum of a 2.0 GPA, including (a) the major or area of emphasis described in the Required Program outlined below (earning a C or better in these courses), and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education Breadth Requirements.

Students interested in transferring to a CSU campus to pursue a bachelor's degree in Journalism should meet with a counselor to confirm the courses required for lower division preparation in the major.

Catalog Date: June 1, 2020

Degree Requirements

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<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>JOUR 300</td>
<td>Newswriting and Reporting</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 310</td>
<td>Mass Media and Society</td>
<td>3</td>
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<tr>
<td>JOUR 410</td>
<td>College Media Production I</td>
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<td>JOUR 301</td>
<td>Advanced Newswriting and Reporting (3)</td>
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<tr>
<td>JOUR 351</td>
<td>Public Relations Writing and Media Techniques (3)</td>
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<td>JOUR 360</td>
<td>Photojournalism (3)</td>
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<td>JOUR 361</td>
<td>Multimedia Journalism (3)</td>
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<td>JOUR 411</td>
<td>College Media Production II (3)</td>
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<td>ECON 304</td>
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<td>JOUR 320</td>
<td>Race and Gender in the Media (3)</td>
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<td>JOUR 350</td>
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<td>JOUR 300</td>
<td>Newswriting and Reporting</td>
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<td>JOUR 310</td>
<td>Mass Media and Society</td>
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<td>JOUR 320</td>
<td>Race and Gender in the Media</td>
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<tr>
<td>JOUR 351</td>
<td>Public Relations Writing and Media Techniques</td>
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The Associate in Arts in Journalism and Mass Communications for Transfer (AA-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- analyze content of newspapers, magazines, and online media.
- demonstrate an understanding of basic news, feature writing, and reporting in print and on-line media.
- critique his or her own journalistic work and the work of others.
- apply knowledge of grammar and AP style to create mass media products that conform to journalistic conventions.
- produce news and feature articles and/or news and feature photographs for publication in a newspaper or on-line publication.
- apply principles of audience and journalistic ethics to writing and photography, especially as the student's journalistic work relates to gender, ethnicities, and culture.
- demonstrate understanding of the fundamentals of mass media theories, concepts, and practices as they relate to gender, ethnicity, and cultural constructs.

Career Information

The Journalism AA-T degree prepares students for careers in print, broadcast, and online news media.

Associate Degrees

A.A. in Journalism and Mass Communication

This program offers comprehensive training for careers in journalism and communications. Students learn how to create journalistic content for a variety of media platforms, including print, broadcast and online. The program covers news writing and reporting, public relations writing and techniques, photojournalism, and multimedia journalism. It also offers instruction in design and production for both print and online media products.

Catalog Date: June 1, 2020

Degree Requirements
COURSE CODE  | COURSE TITLE | UNITS
--- | --- | ---
JOUR 412  | College Media Production III | 3

A minimum of 2 units from the following:

JOUR 420  | College Media Production Lab I (0.5 - 3) | 2
JOUR 421  | College Media Production Lab II (0.5 - 3) | 2

Total Units: 29

The Journalism and Mass Communication Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- write and edit news, features, editorials, and press releases that adhere to professional journalistic standards for a variety of outlets.
- conduct research and evaluate information using appropriate methods.
- analyze and evaluate media materials for credibility, fairness, accuracy, appropriate style and grammatical correctness.
- apply journalism ethics and law appropriate to professional practice.
- complete journalistic assignments on deadline.
- create multimedia to accompany text news and feature stories in a variety of formats.
- design, develop and lay out pages for different types of publications using a variety of software programs and applying visual design principles.
- identify and explain the processes, elements, history, theory, and effects of journalism and modern mass media in society.

Career Information

This program is designed to train students for entry-level positions as reporters, writers, editors, producers, photographers, designers, copy editors, and fact checkers for newspapers, magazines, broadcast outlets, websites and other media platforms. It also trains them for entry-level communications/public relations positions that include writing, editing, photography, and/or page layout and design duties. Some career options may require more than two years of college study. This program prepares journalism/mass communications students who plan to transfer to four-year institutions.

Journalism (JOUR)

JOUR 300 Newswriting and Reporting

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU
General Education: AA/AS Area II(b)
C-ID: C-ID JOUR 110
Catalog Date: June 1, 2020

This course covers evaluating, gathering, and writing news in accepted journalistic style for different types of media under newsroom conditions. Topics include personal interviews, along with coverage of speeches, meetings, and other events. In addition, the role of the reporter and the legal and ethical issues related to reporting are examined.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply the processes of news gathering.
- describe the traditional roles of journalists in society.
- analyze information related to observed events to determine its significance to particular audiences.
• demonstrate interpersonal communication skills by conducting informative interviews.
• compose text using grammar and style in accordance with Associated Press style (when using an AP Stylebook).
• compose a variety of news stories, including coverage of events and meetings, feature stories, and personality profiles.
• compose and revise a simple news story with a compelling lede, adequate sourcing and context, clear transitions, and a minimal number of technical writing errors.
• organize and write news stories in a timely manner for both print and website publications.
• discuss and apply broad libel, privacy, and ethical guidelines to common reporting situations.

JOUR 301 Advanced Newswriting and Reporting

Units: 3
Hours: 54 hours LEC
Prerequisite: JOUR 300 with a grade of "C" or better
Transferable: CSU
C-ID: C-ID JOUR 210
Catalog Date: June 1, 2020

This course covers the development of advanced skills of reporting, interviewing, and writing in the range of work handled by a general assignment reporter. It emphasizes in-depth research, critical analysis, and story format. It also introduces feature and editorial writing.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• identify the major components of local and state government and describe their interrelationships.
• use public records as a newsgathering source.
• explain state and federal laws pertaining to information access.
• describe the essential processes of the judicial system.
• prepare and conduct interviews that produce substantive discussion.
• write news stories that explain complex process and/or relationships.
• write feature stories that explore personalities and explain conditions.
• utilize the Internet as a newsgathering source.
• collect and confirm information essential to substantive reporting.
• research and produce in-depth news and feature stories and news and feature packages that include sidebars, fact boxes, and statistical charts.

JOUR 310 Mass Media and Society

Units: 3
Hours: 54 hours LEC
Prerequisite: None
Transferable: CSU; UC
General Education: AA/AS Area V(b); CSU Area D7; IGETC Area 4
C-ID: C-ID JOUR 100
Catalog Date: June 1, 2020

The course is a survey of the mass media. It covers the history, philosophy, structure, and trends of mass media, as well as the theories that help to explain its effects on social institutions. It includes an exploration of economics, technology, law, ethics, and social issues, including cultural and ethnic diversity.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• analyze the essential and structural processes of mass communication
• analyze theories that have been developed to understand the effects of mass communication on the behavior of individuals, groups, and on social change
• explain major terms and trends in media studies
• describe legal and ethical issues that affect the relationship of the media and society
• utilize his/her understanding of the history, economics, and structure of the media to analyze and appraise media products and current controversies
• explain how the media affect our culture, attitudes, and beliefs
• perform a simple content analysis of a media product
• describe the role, influence, and impact of new and emerging media formats and the practical, legal, and ethical issues associated with them

JOUR 320 Race and Gender in the Media

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: AA/AS Area V(b); AA/AS Area VI; CSU Area D3; CSU Area D4; CSU Area D7; IGETC Area 4C
Catalog Date: June 1, 2020

This course examines the roles of gender, ethnicity, and social class as represented and documented in the mass media. These issues are analyzed within the context of media content, development, policy, and ownership, including stereotypes and the role of alternative and community media. Critical thinking is emphasized through the review of mass media, focusing on the contributions of diverse groups to mass media and mass communication as an agent and documenter of social change.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• differentiate among the various approaches of media.
• describe the structure of print, broadcast, and digital media.
• identify media’s role as documenter of history and perpetrator of mainstream culture.
• analyze key research and theory on attitudinal, behavioral, and social effects of mass media with emphases on literature that examines social groups and ethnic minorities.
• critically analyze the presentation of social groups and classes in various media.
• evaluate the bias and balance in each form of mass media.
• identify the role minority-owned and alternative media play in building communities and reaching audiences.
• discuss how minority groups can further social change using the education, enculturation, and social mobilization functions of the mass media.
• define how ethnocentrism, prejudice, and racism have shaped the American experience, media content, policy, ownership, and distribution.

JOUR 340 Writing for Publication

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU
Advisory: Eligibility for ENGWR 300 or ESLW 340
Catalog Date: June 1, 2020

This course introduces writing non-fiction for publication. Emphasis is on analyzing magazines; finding ideas; writing a query letter; developing a saleable magazine idea and article; researching and interviewing; as well as organizing, writing and marketing an article. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• propose, write, and edit saleable magazine articles.
• formulate and plan magazine article ideas and identify the most appropriate places to sell them.
• critically analyze and identify niche publications, readership, and demographics and propose freelance opportunities.
• plan story ideas and focus and target them to particular publications.
• collect research and successfully execute interviews.
• tailor a story for different markets and publications.
• apply First Amendment law and libel restrictions in professional practice.

JOUR 350 Writing for Broadcasting/Podcasting

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

This course introduces the theory and technique of writing for the broadcast media. It includes reporting for radio and television news, writing and storyboarding commercials and public service programming, and an introduction to production techniques. It is recommended for students as preparation for work in broadcasting, instructional media, and related fields.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• write, edit, and produce news and feature stories for television, radio, and web-based news sources.
• describe the basic structure of radio and television journalism.
• analyze audiences of electronic media.
• develop sources and conduct interviews for produced stories.

JOUR 351 Public Relations Writing and Media Techniques

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU
C-ID: C-ID JOUR 150
Catalog Date: June 1, 2020

This course is a study of public relations (PR), including planning PR campaigns, preparing client messages for newspapers, magazines, radio, broadcast and online outlets, and working with reporters to position stories. It examines public relations techniques in business, education, entertainment, social service, and other fields. It also covers crisis PR.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• evaluate and assess the role of the PR practitioner in PR firms, corporations, and public information offices.
• research, plan, design, and generate a public relations campaign.
• analyze the use of mass media for PR.
• generate researched and targeted media messages for clients.
• produce researched and targeted press releases, brochures, newsletters, and press kits.
• analyze and apply the legal and ethical limits of PR.

JOUR 360 Photojournalism

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Transferable: CSU
C-ID: C-ID JOUR 160

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• collect research and successfully execute interviews.
• tailor a story for different markets and publications.
• apply First Amendment law and libel restrictions in professional practice.
This course is an introduction to the theory and technique of telling stories with pictures. The role of the photojournalist in the media, pertinent ethical and legal issues, and professional standards are emphasized. Topics include digital still camera operation, composition and lighting, digital image processing, news judgment, and accuracy. Also covered are environmental portraits, photo stories, and feature, sports, and breaking news photography.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- use digital still photography equipment
- explain terms and procedures typically used in photojournalism
- analyze ethical and legal issues pertinent to photojournalism
- explain the role of the photojournalist in the media
- capture, process, and caption digital still images
- select images appropriate for use with specific stories
- assemble a portfolio of digital still images that can be used to obtain career advancement in the professional world

JOUR 361 Multimedia Journalism

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: JOUR 360 with a grade of "C" or better
Transferable: CSU
C-ID: C-ID JOUR 120
Catalog Date: June 1, 2020

This course is an introduction to the theory and technique of combining still images, audio, and video to create multimedia photojournalism content for distribution via the Internet. It provides practical experience in capturing and editing still images, audio, and video with software such as Adobe Photoshop, Audacity, Soundslides Pro, and Apple’s iMovie and Final Cut Pro. A digital, still or video camera is required.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- use digital still photography, audio, and video equipment to create a multimedia project
- edit a multimedia project using digital still photography, audio, and video software
- explain terms and procedures typically used in multimedia production
- explain multimedia editing principles
- select images, audio, and video content appropriate for use with specific stories
- assemble a 3-minute multimedia project that can be used to obtain career advancement in the professional world

JOUR 404 Editing and Production

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: JOUR 300
Transferable: CSU
Catalog Date: June 1, 2020

This course provides instruction and practice in editing and design, including page makeup, copy editing, photo editing, legal/ethical issues and production methods for newspapers, magazines, and other publications. It also includes preparing, planning, and organizng publications.

Student Learning Outcomes
Upon completion of this course, the student will be able to:
• describe editing and production processes
• design and lay out a variety of publications
• demonstrate and coordinate the elements contained in each type of publication
• convey design principles
• compare and contrast techniques in photo editing
• assess the target audience
• develop a design to convey the correct message
• evaluate publications for their efficacy, strengths, and weaknesses
• analyze the legal and ethical issues journalists, photographers, and designers experience

JOUR 410 College Media Production I

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: JOUR 300 with a grade of "C" or better
Transferable: CSU
C-ID: C-ID JOUR 130
Catalog Date: June 1, 2020

This course offers hands-on experience in reporting, writing, photography, layout, and online production skills. This course provides preparation for transfer work in journalism or entry-level jobs in the field.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• produce beginner-level work suitable for publication in print and/or online.
• apply the basic principles of news judgment to assignments.
• explain the role of the student press as a member of the campus community.
• utilize production processes while working under deadline pressure in the college newsroom.
• apply the principles of the First Amendment and other laws appropriate to professional practice.
• apply basic ethical principles in pursuit of truth, accuracy, fairness, and diversity.
• evaluate work for accuracy, fairness, appropriate style, and grammatical correctness.
• develop an electronic portfolio of at least 10 writing, design, photo, or multimedia stories published in the student publications.
• write and report stories that are free of libel.
• publish photos that take into account copyright regulations.

JOUR 411 College Media Production II

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: JOUR 410 with a grade of "C" or better
Transferable: CSU
C-ID: C-ID JOUR 131
Catalog Date: June 1, 2020

This course builds on experience gained in JOUR 410. It focuses on intermediate writing and production skills, using the school newspaper The American River Current and its online companion www.arcurrent.com, as a practical laboratory. The course provides the opportunity to work in at least two of the following areas: researching, writing, and editing articles for the two publications; taking photographs and creating graphic illustrations; developing multimedia stories; or designing pages. Ethical and legal aspects of communication are also covered.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- produce intermediate work suitable for publication in print and/or online.
- apply basic and advanced principles of news judgment to assignments.
- utilize the production processes while working under deadline pressure in the college newsroom.
- apply the principles of the First Amendment and other laws appropriate to professional practice.
- develop an intermediate electronic portfolio of 14 assignments that includes work in at least two of these areas: writing, editing, design, photo, or multimedia assignments published in student publications.
- write and report and/or edit stories that are free of libel.
- publish photos that take into account copyright regulations.
- apply basic and advanced ethical principles in pursuit of truth, accuracy, fairness and diversity.

JOUR 412 College Media Production III

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: JOUR 411 with a grade of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This course builds on the experience gained in JOUR 411. It focuses on advanced intermediate writing and production skills, using the school newspaper The American River Current and its online companion www.arcurrent.com, as a practical laboratory. The course provides the opportunity to work in at least three of the following areas: researching, writing, and editing articles for the two publications; taking photographs and creating graphic illustrations; developing multimedia stories; or designing pages. Ethical and legal aspects of communication are also covered.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- produce advanced intermediate work suitable for publication in print and/or online.
- evaluate the work of others for accuracy, fairness, appropriate style, grammatical correctness, and news judgment.
- plan and execute a production process while working under deadline pressure in the college newsroom.
- apply the principles of the First Amendment and other laws appropriate to professional practice.
- adhere to ethical principles and adhere to professional standards while pursuing assignments and editing the works of others.
- develop an advanced intermediate electronic portfolio of 18 assignments that includes work in at least two of these areas: writing, editing, design, photo, or multimedia assignments published in student publications.
- write, report, and/or edit stories that are free of libel.
- publish photos with respect to copyright regulations.
- play a basic role in the management of the newsroom.

JOUR 413 College Media Production IV

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: JOUR 412 with a grade of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This course builds on the experience gained in JOUR 412. It focuses on advanced writing and production skills, using the school newspaper The American River Current and its online companion www.arcurrent.com, as a practical laboratory. It provides the opportunity to produce work in each of the following areas: researching, writing, and editing advanced and in-depth articles for the two publications; taking photographs and creating graphic illustrations; developing multimedia stories; and designing pages. Ethical and legal aspects of communication and media leadership/management are also covered and students are expected to serve in leadership roles.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- produce advanced intermediate work suitable for publication in print and/or online.
- evaluate their own work and that of others for accuracy, fairness, appropriate style, grammatical correctness, and news judgment.
- plan and execute a production process while working under deadline pressure in the college newsroom.
- develop an advanced intermediate electronic portfolio of 18 assignments that includes work in at least three of these areas: writing, editing, design, photo, or multimedia assignments published in student publications.
- play an active role in leadership of the news organization, including making decisions based on the professional and ethical standards of journalism.
- manage a newsroom.
- mentor new journalists.

JOUR 420 College Media Production Lab I

Units: 0.5 - 3
Hours: 27 - 162 hours LAB
Prerequisite: None.
Corequisite: JOUR 404 or 410
Transferable: CSU
Catalog Date: June 1, 2020

This lab course provides inexperienced journalism students with hands-on instruction in writing, editing, photography, design and computer-based publication. This includes one-on-one and small-group instruction in publication software, such as Adobe Creative Suite programs, and Web content management systems.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply journalistic principles to hands-on assignments.
- report and write stories for publication using multiple sources.
- assess and apply the basic skills of layout and design.
- take and prepare photographs for publication for print and online.
- write basic headlines for print and online editions.
- develop a basic digital portfolio of up to ten writing, photo, editing, and/or design pieces published in student publications.

JOUR 421 College Media Production Lab II

Units: 0.5 - 3
Hours: 27 - 162 hours LAB
Prerequisite: JOUR 404 or 411
Corequisite: JOUR 404 or 411
Transferable: CSU
Catalog Date: June 1, 2020

This lab course provides experienced journalism students with hands-on instruction in writing, editing, photography, design and computer-based publication, as well as instruction in newsroom management and leadership. This includes advanced lessons in publication software, such as Adobe Creative Suite programs, and Web content management systems.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply intermediate journalistic principles to hands-on assignments.
- report and write in-depth or enterprise stories for publication using multiple sources.
- apply the intermediate skills of layout and design.
- take and prepare photographs and photo essays for publication for print and online.
• write advanced/complex headlines for print publications.
• write online headlines under search engine optimization guidelines.
• develop an intermediate digital portfolio of up to ten writing, photo, editing, and/or design pieces published in student publications.

JOUR 495 Independent Studies in Journalism

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

Independent Study is an opportunity for the student to extend classroom experience in journalism, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in journalism and secure approval. Only one independent study for each catalog course will be allowed.
Kinesiology & Athletics | American River College

The ARC Kinesiology and Athletics program offers a wide variety of courses that improve physical fitness, sport skills, and dance performance abilities.

All activity classes are open to both men and women unless noted. Students may enroll in more than one physical education class at the same time. They may not enroll in more than two sections of the activity during the same semester. DANCE, FITNS, PACT, and TMACT classes may be taken one time for credit. SPORT classes may be taken four times for credit. The prefixes “ADAPT, DANCE, FITNS, PACT, TMACT, and SPORT” refer to courses used to satisfy the one-unit physical education graduation requirement.

Courses which are designated with a KINES prefix are theory-oriented rather than activity-oriented and DO NOT satisfy the physical education activity requirement.

Division Dean Kathy “Kat” Sullivan-Torrez
Department Chairs Tim Finnecy
 (916) 484-8201

Associate Degrees for Transfer

A.A.-T. in Kinesiology

This Associate in Arts in Kinesiology for Transfer provides a path to students who wish to transfer to a CSU campus in Kinesiology and serves the diverse needs of students who wish to obtain a broad and an in-depth understanding of the field. Additionally, this degree allows students to learn the fundamental principles and practices of Kinesiology in order to create a solid foundation for their future personal and academic endeavors.

The Associate in Arts in Kinesiology for Transfer provides students with a major that fulfills the general requirements of the California State University for transfer. Students with this degree will receive priority admission with junior status to the California State University system.

The Associate in Arts in Kinesiology for Transfer (AA-T) may be obtained by the completion of 60 transferable, semester units with a minimum of a 2.0 GPA, including (a) the major or area of emphasis described in the Required Program outlined below (earning a C or better in these courses), and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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</thead>
<tbody>
<tr>
<td>BIOL 430</td>
<td>Anatomy and Physiology</td>
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</tr>
<tr>
<td>BIOL 431</td>
<td>Anatomy and Physiology</td>
<td>5</td>
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<tr>
<td>KINES 300</td>
<td>Introduction to Kinesiology</td>
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<tr>
<td></td>
<td>A minimum of 8 units from the following:</td>
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<tr>
<td>BIOL 310</td>
<td>General Biology (4)</td>
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<tr>
<td>CHEM 305</td>
<td>Introduction to Chemistry (5)</td>
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<tr>
<td>or CHEM 400</td>
<td>General Chemistry I (5)</td>
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<tr>
<td>or CHEM 309</td>
<td>Integrated General, Organic, and Biological Chemistry (5)</td>
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<tr>
<td>PHYS 410</td>
<td>Mechanics of Solids and Fluids (5)</td>
<td></td>
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<tr>
<td>or PHYS 350</td>
<td>General Physics (4)</td>
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<tr>
<td>STAT 300</td>
<td>Introduction to Probability and Statistics (4)</td>
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<tr>
<td></td>
<td>A minimum of 3 units from the following:</td>
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Select three courses, each from a different category listed below.
<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td><strong>Dance:</strong></td>
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<td></td>
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<tr>
<td>DANCE 340</td>
<td>Ballroom Dance (1)</td>
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<tr>
<td>DANCE 341</td>
<td>Ballroom Dance II (1)</td>
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<tr>
<td>DANCE 342</td>
<td>Ballroom Dance III: Club Dancing (1)</td>
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<tr>
<td>DANCE 343</td>
<td>Ballroom Dance IV: Latin (1)</td>
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<tr>
<td>DANCE 344</td>
<td>Ballroom Dance V: Swing (1)</td>
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<tr>
<td>DANCE 345</td>
<td>Ballroom Dance VI: Tango (1)</td>
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<tr>
<td>DANCE 348</td>
<td>Ballroom Challenge: Competition and Performance (1)</td>
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<tr>
<td><strong>Fitness:</strong></td>
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<tr>
<td>FITNS 303</td>
<td>Dance Aerobics (1)</td>
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<tr>
<td>FITNS 306</td>
<td>Aerobics: Cardio-Kickboxing (1)</td>
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<td>FITNS 307</td>
<td>Aerobic Mix (1)</td>
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<tr>
<td>FITNS 308</td>
<td>Step Aerobics (1)</td>
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<tr>
<td>FITNS 321</td>
<td>Core Conditioning (1)</td>
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<tr>
<td>FITNS 325</td>
<td>Pilates (1)</td>
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<tr>
<td>FITNS 380</td>
<td>Circuit Weight Training (1)</td>
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<tr>
<td>FITNS 381</td>
<td>Weight Training (1)</td>
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<tr>
<td>FITNS 392</td>
<td>Yoga (1)</td>
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<tr>
<td>FITNS 400</td>
<td>Body Fitness (Walking or Jogging) (1)</td>
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<tr>
<td><strong>Aquatics:</strong></td>
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<tr>
<td>FITNS 310</td>
<td>Aquatic Fitness I (1)</td>
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<tr>
<td>FITNS 316</td>
<td>Lap Swimming (1)</td>
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<tr>
<td>FITNS 440</td>
<td>Swimming I (1)</td>
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<td>FITNS 441</td>
<td>Swimming II (1)</td>
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<tr>
<td>FITNS 442</td>
<td>Swimming III (1)</td>
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<tr>
<td>FITNS 443</td>
<td>Swimming IV (1)</td>
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<tr>
<td><strong>Combatives:</strong></td>
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<tr>
<td>FITNS 412</td>
<td>Taekwondo I (1)</td>
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<tr>
<td>FITNS 414</td>
<td>Tai Chi (1)</td>
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<tr>
<td><strong>Individual Sports:</strong></td>
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<tr>
<td>PACT 300</td>
<td>Archery I (1)</td>
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<tr>
<td>PACT 310</td>
<td>Badminton I (1)</td>
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<tr>
<td>PACT 350</td>
<td>Golf I (1)</td>
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<tr>
<td>PACT 351</td>
<td>Golf II (1)</td>
<td></td>
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<tr>
<td>PACT 390</td>
<td>Tennis I (1)</td>
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<tr>
<td><strong>Team Sports:</strong></td>
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<tr>
<td>TMACT 300</td>
<td>Soccer, Indoor (1)</td>
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<tr>
<td>TMACT 302</td>
<td>Soccer - Outdoor (1)</td>
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<tr>
<td>TMACT 320</td>
<td>Basketball (1)</td>
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<tr>
<td>TMACT 330</td>
<td>Volleyball (1)</td>
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<tr>
<td>TMACT 331</td>
<td>Volleyball II (1)</td>
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<tr>
<td>TMACT 333</td>
<td>Volleyball III (1)</td>
<td></td>
</tr>
</tbody>
</table>
### Student Learning Outcomes

Upon completion of this program, the student will be able to:

- recount the historical evolution of physical education/kinesiology.
- evaluate current theories, philosophies, and trends in the field of kinesiology.
- identify key aspects of personal fitness as it relates to physical fitness programs.
- construct a philosophy of kinesiology that includes goals for lifetime fitness.
- discuss how sociological, historical, and philosophical factors influence the field of kinesiology.
- outline the basic principles of current accepted nutritional standards for physically active individuals.
- describe the basic structure of the human body and how its various systems respond to exercise.

### Career Information

This degree is designed to prepare students for transfer to a four-year college or university in Kinesiology. Career opportunities include, but are not limited to, kinesiology instructor, exercise physiologist, athletic trainer, strength and conditioning coach, athletic coach, personal trainer, physical educator, and corporate fitness director.

### Associate Degrees

#### A.S. in Physical Education

This degree provides an educational and practical foundation for students interested in multiple professions in the area of physical education. It also provides coursework required for transfer in physical education majors. Topics include introduction to physical education, care and prevention of athletic injuries, CPR, psychology, nutrition, dance, fitness, recreation, and sport. Students who work closely with their counselor can use this degree to prepare for majoring in kinesiology at a four-year college.

Catalog Date: June 1, 2020

### Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>TMACT 352</td>
<td>Softball, Slow Pitch (1)</td>
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<tr>
<td>TMACT 370</td>
<td>Water Polo (1)</td>
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<tr>
<td><strong>Total Units:</strong></td>
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<td><strong>24</strong></td>
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</tbody>
</table>

The Associate in Arts in Kinesiology for Transfer (AA-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.
A minimum of 3 units from the following:

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEED 300</td>
<td>Health Science (3)</td>
<td>3</td>
</tr>
</tbody>
</table>

OR three units from any of the following: DANCE, FITNS, PACT, SPORT, or TMACT.

Total Units: 19 - 20.5

*If student has Community CPR certification through the American Red Cross, or Basic Life Support certification through the American Heart Association, the HEED 310 or HEED 311 requirement may be waived.

The Physical Education Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- list various occupations in the field of physical education
- identify basic bones, muscles, and ligaments of the human body
- compare key aspects of personal fitness as it relates to physical fitness programs
- construct a philosophy of physical education that includes goals for lifetime fitness
- evaluate current theories, philosophies, and trends in physical education
- recognize current job opportunities in the field of physical education
- summarize the education requirements for employment as a professional physical educator
- evaluate common athletically-related injuries in the field of physical education
- outline the basic principles of current accepted nutritional standards for physically active individuals
- discuss the role of physical and psychological health as it relates to physical education
- recount the historical evolution of physical education
- demonstrate skills needed to meet the minimal certification standards when performing first aid and CPR as required by a nationally recognized organization

Career Information

This degree is designed for those pursuing a career in coaching, health and fitness, personal training, and prepares students for transfer to four-year colleges and universities.

A.S. in Sports Medicine

This degree is designed to prepare students for transfer in the area of athletic training, exercise science, kinesiology, and other sports medicine related fields. Prevention, identification, evaluation, treatment, and rehabilitation of athletic injuries are emphasized.

Catalog Date: June 1, 2020

Degree Requirements
The Sports Medicine Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes
Upon completion of this program, the student will be able to:

- list the minimum requirements to become a certified athletic trainer
- identify normal musculoskeletal anatomy
- evaluate common athletic-related injuries
- demonstrate proper wrapping and taping skills needed to protect commonly injured joints
- develop a diet for an active individual that is based on current accepted nutritional values
- create treatment protocols for common athletic-related injuries
- develop basic rehabilitation protocols for common athletic-related injuries
- manage the daily athletic training room set-up and break-down for fall and spring sports
- discuss how injuries affect the psychological health of the injured athlete

Certificates of Achievement

Fitness Specialist Certificate
This program prepares students for employment in the health and fitness industry and equips them with the knowledge and hands-on experience necessary to begin a career in the dynamic field of fitness. Upon completion of this certificate, the students are prepared to take national certification exams such as the National Academy of Sports Medicine (NASM), American College of Sports Medicine (ACSM), or the American Council of Exercise (ACE).

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>KINES 400</td>
<td>Applied Physiology of Exercise</td>
<td>2</td>
</tr>
<tr>
<td>KINES 401</td>
<td>Applied Kinesiology</td>
<td>2</td>
</tr>
<tr>
<td>KINES 402</td>
<td>Nutrition for Fitness (2)</td>
<td>2</td>
</tr>
<tr>
<td>or NUTRI 307</td>
<td>Nutrition for Fitness (2)</td>
<td></td>
</tr>
<tr>
<td>KINES 403</td>
<td>Fitness and Exercise Assessment</td>
<td>2</td>
</tr>
<tr>
<td>KINES 404</td>
<td>Identification and Management of Fitness Injuries</td>
<td>2</td>
</tr>
<tr>
<td>KINES 405</td>
<td>Effects of Exercise on Special Populations</td>
<td>2</td>
</tr>
<tr>
<td>KINES 406</td>
<td>Techniques of Strength Training Instruction</td>
<td>2</td>
</tr>
<tr>
<td>KINES 407</td>
<td>Techniques of Group Fitness Instruction</td>
<td>2</td>
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<td>A minimum of 2 units from the following:</td>
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<tr>
<td>BUS 210</td>
<td>The Business Plan (1)</td>
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<tr>
<td>BUS 212</td>
<td>Marketing for Small Businesses (1)</td>
<td></td>
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<tr>
<td>BUS 214</td>
<td>Financing a Small Business (1)</td>
<td></td>
</tr>
<tr>
<td>BUS 218</td>
<td>Management Skills for the Small Business (1)</td>
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</tr>
</tbody>
</table>
Student Learning Outcomes

Upon completion of this program, the student will be able to:

- design, implement, and analyze fitness programs for a diverse population.
- critique and explore various health and fitness job opportunities.
- demonstrate knowledge and skills necessary to pass national certification exams such as NASM, ACSM, and ACE.

Career Information

The fitness certificate program is ideal for anyone desiring an entry-level position as a personal trainer, fitness center or health club employee, group exercise instructor, or strength and conditioning coach.

Senior Fitness Specialist Certificate

The Senior Fitness Specialist program prepares students for employment as a fitness leader in settings where people ages 50+ exercise with other age groups and in settings that cater to older adults. The program provides students with the knowledge and hands on experience necessary to begin a career in this growing field of fitness.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tr>
<td>FITNS 351</td>
<td>Exercise, Balance and Mobility</td>
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<tr>
<td>GERON 205</td>
<td>Validation: Theory and Practice</td>
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<tr>
<td>GERON 230</td>
<td>Motivating Older Adults to Stay Active</td>
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<td>GERON 335</td>
<td>Wellness for Older Adults</td>
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<td>GERON 378</td>
<td>Body Mechanics and Safety</td>
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<td>GERON 380</td>
<td>Nutrition and Aging</td>
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<td>HEED 310</td>
<td>Community CPR and Adult AED</td>
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<td>KINES 403</td>
<td>Fitness and Exercise Assessment</td>
<td>2</td>
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<tr>
<td>KINES 405</td>
<td>Effects of Exercise on Special Populations</td>
<td>2</td>
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<tr>
<td>KINES 406</td>
<td>Techniques of Strength Training Instruction</td>
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<tr>
<td>KINES 407</td>
<td>Techniques of Group Fitness Instruction</td>
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<tr>
<td>WEXP 498</td>
<td>Work Experience in (Subject) (1 - 4)</td>
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</tr>
<tr>
<td>Total Units:</td>
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<td>16</td>
</tr>
</tbody>
</table>

\(^1\)One unit of work experience is required in one of the following environments: recreation center, senior center, senior community, assisted living facility, or another site for seniors.
Student Learning Outcomes

Upon completion of this program, the student will be able to:

- recommend beneficial exercises for seniors and individuals with disabilities or medical conditions.
- behave responsibly at work, exhibiting initiative and self-management in situations where it is needed.
- create an individualized fitness plan to promote functional independence throughout the remainder of life.
- analyze how nutrition plays a part in overall health and aging.
- compare and contrast different self and group motivational techniques for staying active.
- identify and respond to life-threatening conditions (including breathing emergencies, cardiac emergencies, and severe bleeding).
- evaluate physical activities relative to risk factors.
- design and lead a group exercise activity, and provide modifications and variations to exercises when necessary.
- identify basic principles of body mechanics and posture.
- design an individualized exercise prescription program that includes muscular strength and muscular endurance development.
- explain normal aging-related changes and analyze how lifestyle choices influence the aging process.
- demonstrate techniques for validating and encouraging older adults during fitness activities.

Career Information

The Senior Fitness Specialist program is ideal for anyone seeking an entry-level position as a fitness leader in community, recreation, and senior centers, health clubs, retirement and assisted living communities, and other sites that cater to seniors.

Adapted Physical Education (ADAPT)

ADAPT 310 Adapted Lifetime Sports

Upon completion of this course, the student will be able to:

- create a plan to participate in recreational sports.
- demonstrate skills and knowledge of rules while playing a sport.
- identify strategies, rules, and etiquette needed to be successful in sport activities.

Student Learning Outcomes

This course introduces students with physical disabilities to a variety of sports. Modifications and assistive devices are used to enable students to safely participate in a variety of sports, such as archery, badminton, volleyball, tennis, soccer, softball, basketball, and golf.

Adapted Physical Education (ADAPT)

ADAPT 314 Wheelchair Sports and Games

Upon completion of this course, the student will be able to:

- create a plan to participate in recreational sports.
- demonstrate skills and knowledge of rules while playing a sport.
- identify strategies, rules, and etiquette needed to be successful in sport activities.
This course is designed for individuals with physical disabilities who use a wheelchair for mobility or who are ambulatory, but more successful in sports when using a wheelchair. Sports include, but are not limited to, basketball, quad rugby, volleyball, badminton, and tennis.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate increased strength, flexibility, and cardiovascular fitness
- apply the rules and strategies for the sports presented
- compile and relate appropriate drills and skills specific to each sport taught
- justify the importance of sports, health, and fitness as a lifelong pursuit

ADAPT 316 Adapted Personal Safety

Units: 1  
Hours: 54 hours LAB  
Prerequisite: None.  
Enrollment Limitation: A statement from a health care professional verifying the disability, contraindications, and recommended activities.  
Transferable: CSU; UC (Any or all PE activity courses combined: maximum credit, 4 units)  
General Education: AA/AS Area III(a); CSU Area E2  
Catalog Date: June 1, 2020

This course is designed for students who are unable to participate in a general personal safety course. It includes the skills, knowledge, and attitude which are important in avoiding or defending a physical attack. Topics include awareness and prevention of dangerous situations. Defensive strategies for protection while in the home, in the community, and on mass transit are also covered.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe a stranger in detail.
- assess different environments for safety.
- predict and plan ways to avoid dangerous situations.
- demonstrate skills needed to defend against an attack.
- revise and justify a personal safety plan.

ADAPT 324 Heart Healthy

Units: 1  
Hours: 54 hours LAB  
Prerequisite: None.  
Transferable: CSU; UC  
General Education: AA/AS Area III(a); CSU Area E2  
Catalog Date: June 1, 2020

This course is designed for individuals with disabilities. Individualized and/or group activities are used to increase cardiovascular fitness. Exercise principles are discussed to encourage a continued healthy and active lifestyle. Students must have a physician’s statement indicating (a) the disability, (b) specific restrictions, and (c) recommended activities.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- discuss cardiovascular fitness and how it relates to fitness and disability
- demonstrate increased cardiovascular endurance
- demonstrate ability to take resting, exercise, and recovery heart rates
ADAPT 330 Adapted Weight Training and Fitness

Units: 1
Hours: 54 hours LAB
Prerequisite: None.
Enrollment Limitation: A statement from a health care professional verifying the disability, contraindications, and recommended activities.
Transferable: CSU; UC (Any or all PE activity courses combined: maximum credit, 4 units)
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course is designed for students who are unable to participate in a general physical education activity course. It includes individualized physical fitness programs including activities to develop muscular strength, flexibility, and cardiovascular endurance.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze his/her own personal fitness level.
- develop and follow a plan to increase and maintain the highest possible level of fitness and efficiency to meet the demands of healthy living.
- analyze his/her own personal physical limitations and recognize a need to live as actively as possible.
- identify and practice skills and safety habits for participation in physical activities needed for work and recreation.

ADAPT 332 Adapted Aquatics

Units: 1
Hours: 54 hours LAB
Prerequisite: None.
Enrollment Limitation: A physician's statement verifying the disability, contraindications, and recommended activities
Transferable: CSU; UC (Any or all PE activity courses combined: maximum credit, 4 units)
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This is an individualized swimming, water safety, and fitness course designed for individuals with disabilities. It focuses on cardiovascular endurance, range of motion, mobility, muscular strength, and muscular endurance.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze and examine various methods of water exercise and perform them within individual limitations
- apply general fitness concepts and modify them to accomplish individualized aquatics goals
- identify and practice safety strategies to be used near and in a pool

ADAPT 335 Adapted Yoga

Units: 1
Hours: 54 hours LAB
Prerequisite: None.
Advisory: Eligible for ENGRD 116 AND ENGWR 101; OR ESLR 320 AND ESLW 320.
Transferable: CSU; UC
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course is designed for students with a disabilities. It includes group and individual yoga activities that emphasize breathing, stretching, and relaxation techniques. Students must have a physician’s statement indicating (a) the disability, (b) specific restrictions, and (c) recommended activities.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- practice safe breathing, stretching, and relaxation techniques.
- identify yoga activities and choose those to fit personal needs.
explain the differences in resting, exercise, and recovery heart rates and how they relate to relaxation.

participate in group yoga exercises.

create and practice an individual yoga exercise plan.

ADAPT 337 Adapted Walk and Wheel

Units: 1
Hours: 54 hours LAB
Prerequisite: None.
Enrollment Limitation: A statement from a health care professional verifying the disability, contraindications, and recommended activities.
Transferable: CSU; UC (Any or all PE activity courses combined: maximum credit, 4 units)
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course is designed for students who are unable to participate in a general physical education activity course. Individualized walking or wheeling programs are designed to enhance cardiorespiratory endurance. The course also includes specific exercises for muscular strength, muscular endurance, and flexibility. Small group games and activities are included to promote fitness and fun.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply fitness concepts to personal workouts for meeting the demands of healthy living
- evaluate personal physical limitations and devise a plan to live as actively as possible
- analyze and develop coordinated locomotion within personal limits
- identify and practice skills and safety habits for participation in physical activities at work and during recreation

ADAPT 338 Adapted Aerobic Activity

Units: 1
Hours: 54 hours LAB
Prerequisite: None.
Enrollment Limitation: A physician's statement verifying the disability, contraindications and recommended activities.
Advisory: Eligible for ENGRD 310 or 312 AND ENGW 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC (Any or all PE activity courses combined: maximum credit, 4 units)
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course is designed for students with a disability who are unable to participate in a general physical education activity course. It includes group activities as well as individualized activities. Indoor and outdoor workouts are used to enhance cardiovascular endurance and affect body composition. Activities may include walking and jogging, aerobic dance, cardio-kickboxing, step aerobics, chair aerobics, circuit training and cardio equipment workouts.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- practice safe stretching in preparation for aerobic activities.
- identify aerobic activities and choose those to fit personal needs.
- explain the differences in resting, exercise, and recovery heart rate and how they relate to the target heart rate.
- participate in a group aerobic exercise.
- create and practice an individualized aerobic exercise plan.

ADAPT 495 Independent Studies in Adapted Physical Education

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

Fitness (FITNS)

FITNS 100 Utility Workforce Wellness

Units: 1
Hours: 9 hours LEC; 27 hours LAB
Prerequisite: None.
Corequisite: PREAP 122
General Education: AA/AS Area III(a)
Catalog Date: June 1, 2020

This course covers health and physical fitness related to utility worker occupations. Exercise programs are designed to improve specific muscle groups impacted in the occupational setting.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze components of health and fitness and how they aid in work/life balance.
- develop an effective personalized fitness program that is relevant to occupational work duties to assist in injury prevention and personal health.
- apply proper lifting/movement techniques applicable to utility worker occupations.
- implement a personal fitness plan using proper strength and cardiovascular training.

FITNS 101 Green Technology Workforce Wellness

Units: 1
Hours: 9 hours LEC; 27 hours LAB
Prerequisite: None.
Corequisite: PREAP 141
General Education: AA/AS Area III(a)
Catalog Date: June 1, 2020

This course covers health and physical fitness related to green technology workforce occupations. Exercise programs are designed to improve specific muscle groups impacted in the occupational setting.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- assess the validity of fitness and health information using the scientific method and the relationship between scientific research and established knowledge as it applies to personal health and wellness.
- demonstrate an effective personalized health program to aid in occupational injury prevention relevant to green technology workforce practices.
- apply proper lifting/movement techniques applicable to green technology workforce occupations.
- identify motivational techniques that can result in lifestyle changes in fitness and health.
- assess behavioral modification procedures to ensure healthier choices and how they aid in work/life balance.

FITNS 102 Infrastructure Workforce Wellness

Units: 1
Hours: 9 hours LEC; 27 hours LAB
This course covers health and physical fitness related to general construction. Exercise programs are designed to improve specific muscle groups impacted in the occupational setting.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- determine the validity of fitness and health information using the scientific method and the relationship between scientific research and established knowledge.
- describe components of health and fitness.
- develop an effective personalized fitness program.
- use proper lifting techniques.
- implement a personal fitness plan using proper strength and cardiovascular training.
- identify motivational techniques that can result in lifestyle changes in fitness and health.
- assess behavioral modification procedures to ensure healthier choices.

**FITNS 302 Latin Aerobics**

This course combines a variety of rhythmic Latin-style dance movements into a form of cardiorespiratory training of low to moderate impact. It improves cardiorespiratory endurance, muscular strength and endurance, flexibility, and body composition.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- demonstrate measurable improvement in aerobic fitness.
- discuss the relevance of aerobic fitness as part of a lifelong commitment to fitness.
- apply techniques for using a timed pulse rate, rating of perceived exertion (RPE), and the talk test to establish an overall target heart rate.
- identify the major muscle groups and their potential for moving the body.
- define six different elements of movement that raise the heart rate in any aerobic workout.
- describe and perform steps from several Latin styles of dance.

**FITNS 303 Dance Aerobics**

This course promotes cardiovascular fitness and endurance through aerobic dance movement. It encourages core strength and flexibility with strength and muscular development exercises. It also covers the importance of basic nutrition, health, and safety.

**Student Learning Outcomes**
Upon completion of this course, the student will be able to:

- demonstrate measurable improvement in aerobic fitness.
- discuss the significance of changes in pulse rate before, during, and after activity.
- describe the attributes of cardiovascular fitness, muscular endurance, muscular strength, and flexibility.
- analyze the basic relationship between exercise and a healthy lifestyle.
- identify areas of stress in life and list four ways to minimize the negative effects of living under stress.
- list safe and effective exercise techniques that protect the joints and lower back and show modifications for these exercises and movements.

FITNS 304 Cardio Circuit

| Units: | 1 |
| Hours: | 54 hours LAB |
| Prerequisite: | None. |
| Transferable: | CSU; UC (UC credit limitation: Any or all PE activity courses: combined maximum credit 4 units.) |
| General Education: | AA/AS Area III(a) (effective Summer 2020) |
| Catalog Date: | June 1, 2020 |

This course is designed as a cardio circuit form of fitness training. It combines cardio and weight training equipment in a circuit format. Emphasis will be on timed intervals to train major muscle groups and the cardiovascular system. It will include flexibility and core strengthening.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- measure improvements in cardiovascular efficiency, muscular strength and endurance, flexibility, and body composition.
- safely operate cardiovascular and strength training equipment.
- discuss various workout strategies.
- set goals for cardiovascular improvement.
- design a fitness plan that promotes life-long health and fitness.

FITNS 306 Aerobics: Cardio-Kickboxing

| Units: | 1 |
| Hours: | 54 hours LAB |
| Prerequisite: | None. |
| Transferable: | CSU; UC (Any or all PE Activity courses combined: maximum credit, 4 units.) |
| General Education: | AA/AS Area III(a); CSU Area E2 |
| Catalog Date: | June 1, 2020 |

This course promotes cardiovascular fitness and endurance through kickboxing. It emphasizes proper alignment, execution, and timing of faster-paced movements from kickboxing, boxing, and aerobic dance.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate measurable improvement in aerobic fitness.
- discuss the relevance of aerobic fitness as part of a lifelong commitment to fitness.
- apply techniques for using a timed pulse rate, rating of perceived exertion (RPE), and the talk test to establish an overall target heart rate.
- identify proper cardio-kickboxing delivery technique.
- identify the major muscle groups and their potential for moving the body.
FITNS 307 Aerobic Mix

This course includes a variety of aerobic activities that provide a new approach to each workout. It emphasizes rotating aerobic forms such as aerobic dance, step, cardio-kickboxing, and aerobic circuit to keep the workouts challenging and interesting. It covers basic heart rate calculations, nutrition, and workout facts.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- calculate a resting and a target heart rate
- evaluate and relate a perceived level of exertion
- calculate and use six-second, ten-second, and sixty-second heart rates as interchangeable measurements of exertion
- define six different elements of movement that raise the heart rate in any aerobic workout
- compare and contrast the elements of four different aerobic methods of workout

FITNS 308 Step Aerobics

This course is designed to improve cardiovascular fitness and encourage better endurance, flexibility, and strength through the use of step aerobics. It includes rhythmic and choreographed step routines, basic stretch and toning exercises, and provides information related to overall health and fitness.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply proper techniques to establish target heart rate
- demonstrate measurable improvement in fitness level
- discuss the immediate and lifelong benefits of aerobic exercise
- design a program to fulfill personal aerobic fitness goals
- describe the significance of changing heart rates that occur before, during, and after physical activity
- utilize aerobic exercise as a means of managing stress

FITNS 310 Aquatic Fitness I

This course focuses on using the resistance of water for low- or non-weight-bearing exercise for improvement in cardiovascular fitness, muscular endurance, flexibility, and strength. It includes exercises in deep and shallow water and provides information related to overall health and fitness. No swimming skills are needed.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- describe and demonstrate knowledge of physical fitness training principles and how they can be applied in a water environment.
- analyze cardiovascular activities and select those activities best suited for individual fitness goals.
- analyze fitness assessments, formulate individual fitness goals, and apply training principles toward acquisition of fitness goals.

FITNS 314 Aquatic Fitness III- Deep Water Jogging

Units: 1
Hours: 54 hours LAB
Course Family: Aerobic Water Fitness
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC (Any or all PE Activity courses combined: maximum credit, 4 units.)
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course uses the resistance of water for non-weight-bearing exercises. Emphasis is on cardiovascular fitness, muscular endurance, strength, and flexibility. Progress is monitored through appropriate fitness testing. No swimming skills are needed. An optional flotation belt is provided.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate and discuss fitness components of deep-water jogging.
- identify and utilize training methods for deep-water jogging.
- describe the relationship between resting and training heart rates.
- compute and measure target heart rate and resting heart rate.
- analyze workouts for proper techniques and mechanics.
- perform, measure, and discuss the intensity and duration of two deep-water jogging activities.

FITNS 316 Lap Swimming

Units: 1
Hours: 54 hours LAB
Prerequisite: None.
Transferable: CSU; UC (Any or all PE Activity courses combined: maximum credit, 4 units.)
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course provides a fitness based approach to swimming that emphasizes aerobic and anaerobic fitness through lap swimming. It utilizes interval training, cardiovascular conditioning, swimming technique, and aerobic training principles.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate correct biomechanics in at least three different swimming strokes.
- demonstrate fitness training principles for lap swimming.
- evaluate measurable improvements in aerobic fitness levels.
- design individual lap swimming programs.
- utilize swim training equipment.

FITNS 321 Core Conditioning
This course incorporates a variety of activities including exercises with the stability ball, Bosu ball, and Pilates mat, and yoga styles of core work to enhance abdominal, lower back, gluteal, and hip strength with toning benefits to the entire body.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- develop better posture, body alignment, and balance
- demonstrate proper form and techniques when executing various skills
- increase and balance muscle strength, particularly of the abdominals, lower back, hips, and gluteals
- create a personalized exercise program for lifelong fitness

FITNS 324 Mat Pilates

Units: 1
Hours: 54 hours LAB
Prerequisite: None.
Transferable: CSU; UC (UC credit limitation: Any or all PE activity courses: combined maximum credit 4 units.)
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course utilizes a systematic method of mindful and precise conditioning exercises designed to develop core strength, flexibility, and body awareness. Through the regular practice of theoretical and applied principles of the Mat Pilates method, students will see improved posture, control, balance, and concentration.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate applied and cognitive understanding of Mat Pilates method theory.
- exhibit increased muscular awareness, core strength, and range of motion.
- perform Pilates matwork sequences with proper physical execution and controlled breathwork.
- design a personalized home exercise practice.

FITNS 325 Pilates

Units: 1
Hours: 54 hours LAB
Prerequisite: None.
Transferable: CSU; UC ("(maximum of 4 units of PE activity courses accepted")
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course focuses on precision alignment, flexibility, core strength, and building an awareness of the body. It involves a kinesthetic awareness that builds core strength and confidence in movement. Mat and wall stretches, exercises, and relaxations are used to encourage flexibility, balance, and coordination beginning with the deep postural muscles of the body.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate structured breathing techniques and discuss how they improve circulation and enable ease of movement.
- create a chart diagram of continuous focused motion for at least five mat exercises.
- identify and evaluate the six philosophies of Pilates form.
• discuss the history of Pilates.
• define the vocabulary of Pilates as it applies to any given Pilates exercise.
• analyze and compare the differences of each Pilate exercise and its modifications.
• create, diagram, and label a head-to-toe checklist for ten mat exercises.

FITNS 326 Mat Pilates II

Units: 1
Hours: 54 hours LAB
Prerequisite: FITNS 324 with a grade of “C” or better
Transferable: CSU; UC (UC credit limitation: Any or all PE activity courses: combined maximum credit 4 units.)
General Education: AA/AS Area III(a) (effective Summer 2020)
Catalog Date: June 1, 2020

This course will include the basic foundation of mat exercises with the addition of intermediate level exercises. Routines will include resistance methods of training with a focus on developing stronger core muscles and flexibility.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• demonstrate applied and cognitive understanding of anatomical constructs with Mat Pilates method theory.
• understand methods for modifying exercises to adjust intensity levels.
• perform intermediate level Mat Pilates matwork sequences with proper physical execution, controlled breathwork technique, and utilizing resistance equipment.
• design a personalized home exercise practice that includes modifications.

FITNS 331 Boot Camp Fitness

Units: 1
Hours: 54 hours LAB
Prerequisite: None
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC ((maximum of 4 units of PE activity courses accepted))
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This is an intense boot camp fitness course conducted on and off campus using indoor and outdoor facilities. It includes aerobic and anaerobic conditioning, strength and endurance training, and individual and team fitness concepts.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• develop and improve overall fitness
• identify and discuss changes in body composition
• design a consistent fitness program and apply this to everyday activities
• compare and contrast the elements of aerobic and anaerobic exercise
• demonstrate proper form when performing strengthening exercises

FITNS 332 Off Season Conditioning

Units: 0.5 - 1
Hours: 27 - 54 hours LAB
Prerequisite: None
Transferable: CSU; UC ((maximum of 4 units of PE activity courses accepted))
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020
This course involves sport specific training, conditioning and movement techniques for the intercollegiate off-season athlete. There is a concentration of basic concepts with emphasis on conditioning. This course may be taken three times for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate improvement of footwork techniques specific to the sport.
- increase cardiovascular endurance and muscular strength needed in order to be competitive in the sport.
- demonstrate proper form and techniques when executing various drills.

FITNS 339 Multi Sport Training for Fitness

Units: 1
Hours: 54 hours LAB
Prerequisite: None.
Transferable: CSU; UC (Any or all PE Activity courses combined: maximum credit, 4 units.)
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course covers multi-sport training, including swimming, biking (stationary and non-stationary), and running. Topics include transitional techniques for duathlons and triathlons. Some class sessions meet off-campus. Students must supply their own road or mountain bike and helmet.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply basic knowledge and skills learned to participate in cross training or triathlons.
- design progressive swimming, biking, and running workouts that will improve his/her cardiovascular fitness.
- evaluate his/her own fitness level and create a training program to prepare for cross training for fitness or triathlons.
- compare a pre- and post-test to assess his/her fitness level.
- understand and apply the safety rules, etiquette rules, and procedures within the sports of swimming, cycling, and running.

FITNS 343 Spin Bike

Units: 1
Hours: 54 hours LAB
Prerequisite: None.
Transferable: CSU; UC
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course is specifically designed for students to improve their cardiovascular and strength levels with low impact on the joints. It emphasizes basic cycling and fitness drills based on speed work, resistance, and recovery periods.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate increased aerobic capacity.
- assess heart rate.
- demonstrate proper technique while using the spin bike.
- discuss various workout strategies on the spin bike.

FITNS 344 Dynamic Fitness Training I
This course introduces constant varied functional movements performed at relatively high intensity. It emphasizes proper mechanics utilizing body weight resistance. The workouts are varied daily and designed to optimize fitness levels.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- define fitness as increased work capacity across broad time and modal domains
- develop and improve overall fitness
- perform proper functional non-weight bearing movements
- perform various cardiovascular workouts of varied time increments

FITNS 345 Dynamic Fitness Training II

This course provides dynamic fitness training via Olympic weight lifting and varied cardio-vascular training and conditioning. It is recommended for athletes with some background in weight training.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- define fitness as increased work capacity across broad time and modal domains
- develop and improve overall fitness
- perform proper functional non-weight bearing movements: heel squats, lunges, dead lift, push press, front squat, back squat
- perform various cardiovascular workouts of varied time increments

FITNS 346 Dynamic Cardio Training

This course improves cardiovascular conditioning through constant and varied training. Training consists of walking, running, jumping, spinning, and rowing with body weight strength training. Workouts are scaled to meet the level of each participant to train in the appropriate target heart rate zone.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- take his/her heart rate and understand the proper target heart rate training zone
- demonstrate improved cardiovascular conditioning
FITNS 347 Dynamic Aquatic Fitness Training

Units: 1
Hours: 54 hours LAB
Course Family: Dynamic Fitness
Prerequisite: None.
Transferable: CSU; UC (Any or all PE Activity courses combined: maximum credit, 4 units)
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course provides a fast moving, challenging aquatic workout, integrating traditional swim training with the addition of weight-bearing exercises in and out of the pool for complete body strength and cardiovascular conditioning.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- develop and improve overall fitness
- perform proper functional non-weight bearing movements
- perform various cardiovascular workouts of varied time increments
- read and understand a pace clock for interval training
- perform proper stroke drills for freestyle and backstroke
- compose a dryland and water workout utilizing target training zones

FITNS 348 High-Intensity Interval Training

Units: 1
Hours: 54 hours LAB
Prerequisite: None.
Transferable: CSU; UC (UC transfer credit limitation: Any or all PE activity courses combined: maximum credit 4 units.)
General Education: AA/AS Area III(a) (effective Summer 2020)
Catalog Date: June 1, 2020

This course is designed to be a physically intense and total body workout. It includes workouts which incorporate running, obstacle courses, and a variety of calisthenics designed to enhance muscular strength and endurance used in high-intensity interval workouts.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- evaluate strength and personal fitness levels for high-intensity interval training using standard fitness testing.
- identify and apply exercises related to interval conditioning.
- design and implement a High-Intensity Interval Training (HIIT) program for personal use.
- understand and apply safety techniques, proper biomechanics, and training etiquette to interval training.

FITNS 350 Fitness And Weight Control

Units: 2
Hours: 18 hours LEC; 54 hours LAB
Prerequisite: None.
Transferable: CSU; UC ((maximum of 4 units of PE activity courses accepted))
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course encourages a healthy attitude toward exercise, wellness, and weight management. Topics include assessing and improving fitness levels, as well as nutrition, healthy living, and active lifestyle strategies that are involved in attaining and maintaining appropriate levels of wellness. Field trips may be required.
Upon completion of this course, the student will be able to:

- identify the need for lifelong fitness
- maintain an exercise log including heart rate and exercise exertion
- explain the importance of physical activity and nutrition in devising an individualized wellness program
- explain the benefits of participating in a regular physical conditioning program
- develop a nutritional eating plan
- prepare nutritionally sound snacks and meals
- demonstrate improvement in the fitness components, such as muscular endurance and strength, flexibility, aerobic conditioning, and body composition

FITNS 351 Exercise, Balance and Mobility

| Units: | 1 |
| Hours: | 54 hours LAB |
| Prerequisite: | None. |
| Transferable: | CSU; UC ((maximum of 4 units of PE activity courses accepted)) |
| General Education: | AA/AS Area III(a); CSU Area E2 |
| Catalog Date: | June 1, 2020 |

This course meets the needs of students who wish to start an individualized exercise program at a modified level. It focuses on improving flexibility through gentle range of motion exercises. It also focuses on increasing muscular strength through modified strength training exercises. Balance and coordination exercises are used to help reduce risk of falls and increase fitness levels and mobility. Individualized exercises are developed that can be carried out in a fitness center or at home.

Upon completion of this course, the student will be able to:

- analyze and practice safe and effective stretching utilizing gentle range of motion exercises
- calculate safe, individualized aerobic exercise training levels to construct personalized workout protocol
- practice and perform safe and effective balance exercises
- create an individualized fitness plan to promote functional independence throughout the remainder of life

FITNS 375 Introduction to Meditation

| Units: | 1 |
| Hours: | 54 hours LAB |
| Prerequisite: | None. |
| Transferable: | CSU; UC |
| General Education: | AA/AS Area III(a); CSU Area E2 |
| Catalog Date: | June 1, 2020 |

This course emphasizes the mind/body connection through techniques of visualization, affirmation, concentration, and body movements.

Upon completion of this course, the student will be able to:

- perform assessment of heart rate at the beginning and end of meditation
- analyze effects of diet and music on meditation practice
- evaluate the relationship of energy level and state of mind
- perform safe breathing, relaxation, and meditative body movements
FITNS 380 Circuit Weight Training

This course introduces a system of exercise using weights and cardiovascular activities to provide a balanced approach to physical fitness training. It emphasizes increasing muscular strength and endurance, cardiovascular endurance, and flexibility.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- relate the elements of circuit weight training to maintaining lifetime fitness
- demonstrate increased levels of muscular strength
- demonstrate improved cardiovascular fitness
- discuss the relationship between cardiovascular fitness, muscular strength, and body composition
- establish a target/training heart rate

FITNS 381 Weight Training

This course provides instruction in weight training to promote muscular strength and endurance. Safety, weight training principles, and program design are emphasized to reach personal fitness and strength goals. Components of fitness are addressed, including flexibility and body composition. Workout guidelines for general fitness, sport performance, and/or bodybuilding may be chosen for individual goals.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply correct and safe techniques for weight training.
- improve personal strength and fitness through weight training.
- develop personal goals of fitness/strength and critique progress.
- define principles and strategies for muscle strength, endurance, sculpting, and building.
- evaluate improved muscular strength, endurance, flexibility, and body composition.
- analyze fitness testing results.
- propose a personal workout plan.
- discuss and apply knowledge of proper nutrition for a healthy lifestyle.

FITNS 385 Weight Training for Competition

This course is a strength training program for students involved in advanced weight training. It is designed to develop strength, power, and muscle endurance appropriate to
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain the importance of flexibility and range of motion
- demonstrate common strengthening techniques to improve general muscle strength and power
- identify strengthening techniques to improve muscular endurance
- execute four aspects of strength training for competition

FITNS 392 Yoga

Units: 1
Hours: 54 hours LAB
Prerequisite: None.
Transferable: CSU; UC (maximum of 4 units of PE activity courses accepted)
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course in Yoga emphasizes breathing, stretching, and relaxing techniques. Yoga positions and philosophies are examined.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify and demonstrate 12 Yoga postures
- classify Yoga methods
- identify the major muscle groups, breathing patterns as well as duration and repetition guidelines associated with Yoga asanas
- evaluate the benefits of Yoga as a tool for stress reduction and improved range of motion
- relate the origins of Yoga to Indian culture, history, and philosophy
- compare and contrast the different types of Yoga

FITNS 393 Yoga II

Units: 1
Hours: 54 hours LAB
Prerequisite: FITNS 392 with a grade of "C" or better
Transferable: CSU; UC (UC transfer credit limitation: Any or all PE activity courses combined: maximum credit 4 units.)
General Education: AA/AS Area III(a) (effective Summer 2020)
Catalog Date: June 1, 2020

This course is designed to strengthen and enhance muscle tone through the practice of asanas and pranayama techniques. Yoga practice with elements of meditation are examined to decrease stress, improve concentration, and increase spiritual connection.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- utilize knowledge to design, develop, and implement a progressive personal yoga session.
- identify breath-control practices for calming the mind, balancing emotions, and relaxing the body.
- demonstrate a solid understanding of yoga principles, practices, history, and philosophy.
- evaluate ways to create lifestyle changes in fitness and overall health.
FITNS 395 Stretch

Units: 1
Hours: 54 hours LAB
Prerequisite: None.
Transferable: CSU; UC ((maximum of 4 units of PE activity courses accepted))
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course emphasizes stretching for better alignment, health, and increased range of motion. It provides an individualized approach to stretching and includes pre- and post-stretching techniques for specific activities such as sports, dance, or repetitive stress work-related movements.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify the major muscle groups and demonstrate target area stretches pertaining to those muscles.
- describe the benefits of stretching and the basic components of a thirty-second stretch.
- identify correct alignment for three standing stretches.
- discuss the usefulness of pre- and post-exercise stretching.
- explain the basic mechanics of a muscle stretching.
- evaluate a stretching program with twelve target areas of stretch.

FITNS 400 Body Fitness (Walking or Jogging)

Units: 1
Hours: 54 hours LAB
Prerequisite: None.
Transferable: CSU; UC ((maximum of 4 units of PE activity courses accepted))
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course promotes physical well-being through physical activity, including but not limited to walking and jogging, to increase cardiovascular fitness, produce stress reduction, and encourage weight control. Attention is given to increasing cardiovascular efficiency, muscular strength, and endurance.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- practice proper biomechanics techniques for walking and jogging for lifelong health and fitness
- calculate resting and training heart rates
- demonstrate measurable improvement in cardiovascular fitness
- identify and utilize safety procedures while walking and jogging
- create a personal fitness program for individual needs

FITNS 412 Taekwondo I

Units: 1
Hours: 54 hours LAB
Prerequisite: None.
Transferable: CSU; UC ("(maximum of 4 units of PE activity courses accepted)"
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course is an introduction to basic Taekwondo skills which include stances, blocking, striking, kicking, poomsae, and self-defense techniques. Conditioning exercises are used to increase strength, flexibility, aerobic, and anaerobic fitness. Martial arts etiquette and traditions are taught and emphasized. Fields trips may be required.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- demonstrate proficiency in the basic stances, blocking, and kicking techniques.
- demonstrate beginning-level poomsae.
- apply basic self-defense techniques with a partner.
- utilize Taekwondo terminology and numerical counting.
- exhibit increased aerobic capacity.
- demonstrate four-directional footwork.
- exhibit an effective level of technique for beginning-level competition.

**FITNS 414 Tai Chi**

**Units:** 1  
**Hours:** 54 hours LAB  
**Prerequisite:** None.  
**Transferable:** CSU; UC (*maximum of 4 units of PE activity courses accepted*)  
**General Education:** AA/AS Area III(a); CSU Area E2  
**Catalog Date:** June 1, 2020  

This course explores the traditional Chinese fitness exercise of Tai Chi. It provides for the development of basic skills and techniques that lead toward an integration of the mind-body-spirit trilogy. Various Chinese fitness exercises in relation to health are explored. Principles of Confucianism and Taoism, including a basic review of Tai Chi history and philosophy are discussed. Overall, the physical discipline and structure of Tai Chi movements are emphasized.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- demonstrate Tai Chi movements and attain proficiency sufficient to continue individual practice and improvement.
- demonstrate and apply basic exercises for maintenance of health and energy.
- demonstrate techniques of rolling forward and backward, change of direction, low bending stances and mental concentration leading to the development of strength, flexibility, and coordination.
- assess and practice martial arts etiquette in a classroom or social group environment.
- employ an improved sense of kinesthetic awareness and balance in everyday movements.
- appraise and explain how Tai Chi exercise promotes a healthy way of daily living and slows the aging process.

**FITNS 416 Taekwondo II**

**Units:** 1  
**Hours:** 54 hours LAB  
**Prerequisite:** None.  
**Transferable:** CSU; UC (*UC transfer credit limitation: Any or all PE activity courses combined: maximum credit 4 units.*)  
**General Education:** AA/AS Area III(a); CSU Area E2  
**Catalog Date:** June 1, 2020  

This course provides instruction in intermediate level of Taekwondo. Aerobic, anaerobic, and plyometric training drills are employed to increase students strength, speed, and agility. More complex footwork, one-step sparring, paddle drills, and free sparring combinations are introduced. Intermediate level poomsae is practiced in addition to basic competition training in both sparring and poomsae. Field trips may be required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- demonstrate stances, blocking, and kicking techniques.
- demonstrate intermediate level poomsae.
- apply self-defense techniques with a partner.
- exhibit improved aerobic capacity and flexibility.
• demonstrate four-directional footwork with improved balance, agility, timing, and speed.

• exhibit a level of effective sparring that would enable competitiveness at an intermediate level.

FITNS 417 Taekwondo III

Units: 1
Hours: 54 hours LAB
Prerequisite: None.
Transferable: CSU; UC (UC transfer credit limitation: Any or all PE activity courses combined: maximum credit 4 units.)
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course provides instruction in advanced level of Taekwondo. A higher level of aerobic, anaerobic, and plyometric training drills are employed to increase student’s strength, speed, agility, and competitiveness. It also introduces Kyupka (demonstration of power) and a higher level of poomsae. Sparring strategies, ring management, and other skills associated with being successful at this advanced level are taught. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• discuss the visualization of the “imaginary opponent.”

• demonstrate appropriate plyometric drills for high-level competition.

• demonstrate the proper use of hand-held training aids.

• develop fluid and dynamic floor drills.

• describe different training methods and strategies to become a high-level competitor.

FITNS 440 Swimming I

Units: 1
Hours: 54 hours LAB
Course Family: Swimming (http://arc.losrios.edu/course-families#id_100018)
Prerequisite: None.
Advisory: ENGWR 102 or 103, and ENGRD 116 with a grade of “C” or better; OR ESLR 320 and ESLW 320 with a grade of “C” or better.
Transferable: CSU; UC ((maximum of 4 units of PE activity courses accepted))
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course is offered as beginning, intermediate, or advanced swimming. Beginning swimming covers basic water acclimation, water safety, and introductory skills in freestyle and backstroke. Intermediate swimming covers refined freestyle and backstroke, and introduces breaststroke and butterfly. Advanced swimming further refines freestyle, backstroke, breaststroke and butterfly and also introduces individual medley, touch turns, flip turns, and starts. In addition, various aerobic and anaerobic training methods are taught. Endurance and stroke efficiency are emphasized.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• Beginning - demonstrate the ability to kick in streamline

• Beginning - demonstrate the freestyle for 25 yards

• Beginning - demonstrate proper bi-lateral breathing technique for freestyle for 25 yards

• Beginning - demonstrate backstroke for 25 yards

• Beginning - develop improved cardiovascular fitness during timed swims in class

• Intermediate - refine the stroke of freestyle with improved stroke efficiency to swim 200 yards

• Intermediate - refine the stroke of backstroke with improved stroke efficiency to swim 100 yards

• Intermediate - develop improved cardiovascular fitness during timed swims in class

• Intermediate - acquire fundamental skills in breaststroke for 50 yards

• Intermediate - acquire fundamental skills in butterfly for 50 yards
Advanced - refine the 4 strokes of the Individual Medley
Advanced - refine flip turns for speed and underwater efficiency
Advanced - develop race diving techniques for platform starts and backstroke starts

FITNS 441 Swimming II

Units: 1
Hours: 54 hours LAB
Course Family: Swimming (http://arc.losrios.edu/course-families#id_100018)
Prerequisite: None.
Advisory: Student must demonstrate comfort and confidence in the water and in their ability to demonstrate submersion, front float, and back float. This course is taught in deep water.
Transferable: CSU; UC (a maximum of 4 units of PE activity courses allowed.)
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course is designed for beginning swimmers with limited skills. Topics include mastery of basic water adjustment skills, floats, glides, streamline, freestyle, and backstroke techniques. This course is appropriate for those who are uncomfortable in deep water or those who need to refine their ability to swim 25 yards without stopping.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- demonstrate mastery of proper posture, and streamline position.
- explain and demonstrate the fundamental techniques of freestyle and backstroke.
- demonstrate proper stroke mechanics and progression in freestyle and backstroke, kicking and sculling.
- demonstrate proper water safety techniques associated with maintaining personal water safety.
- differentiate, and demonstrate the proper use of the swimming equipment.
- develop and improve personal comfort level in and around shallow and deep water.

FITNS 442 Swimming III

Units: 1
Hours: 54 hours LAB
Course Family: Swimming (http://arc.losrios.edu/course-families#id_100018)
Prerequisite: FITNS 441
Advisory: CSU; UC (A maximum of 4 units of PE activity allowed for transfer )
Transferable: AA/AS Area III(a); CSU Area E2
General Education: None.
Catalog Date: June 1, 2020

This course covers skills for intermediate swimmers; water safety, and basic swimming skills, swim training protocols and technique, further refinement of stroke development, proper starts and turns technique, and development of cardiovascular capacity. It includes stroke technique in freestyle, backstroke, and breaststroke, as well as turns for freestyle, backstroke and breaststroke.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- identify and demonstrate proper form and technique in freestyle, backstroke, and breaststroke.
- demonstrate proper form and technique of sculling and treading water.
- demonstrate proper form and technique of freestyle, backstroke, and breaststroke turns and breakouts.
- demonstrate proper diving technique and practice progressions.
- analyze the stroke technique of others.
- design swim training programs.
FITNS 443 Swimming IV

This course for advanced swimmers (those who have mastered intermediate swimming skills) covers proper technique specific to the four competitive strokes, proper training protocols, and training design. It emphasizes proper stroke technique of freestyle, backstroke, breaststroke, and butterfly, as well as underwater efficiency in diving, turns, and breakouts for all competitive strokes. It also introduces more advanced swim training protocols, drills, and workout designs.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify and demonstrate proper form and technique in freestyle, backstroke, breaststroke, and butterfly.
- demonstrate proper form and technique of turns and breakouts in freestyle, backstroke, breaststroke, and butterfly.
- display technique of drilling, sculling, and treading water.
- create fitness-level appropriate swim workouts.
- demonstrate proper diving safety, technique, and practice progressions.
- analyze, critique, and give feedback to training partners on their stroke technique.

FITNS 450 Personal Safety

This course provides information and develops skills for an individual's personal safety in a variety of situations. Topics include awareness and prevention of dangerous situations along with physical and non-physical defensive strategies. Community resources for victims of assault are discussed.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- integrate the principles of avoidance and awareness in one's daily life.
- analyze the potential for danger and determine the appropriate response.
- apply appropriate self-defense techniques (physical and non-physical).

FITNS 495 Independent Studies in Fitness

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.
Kinesiology (KINES)

KINES 300 Introduction to Kinesiology

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC (UC credit limitations: All KINES courses combined: maximum credit, 8 units.)
General Education: AA/AS Area III(b)
C-ID: C-ID KIN 100
Catalog Date: June 1, 2020

This course provides an introduction to the interdisciplinary approach to the study of human movement. It provides an orientation to various educational pathways, requirements, and career opportunities in kinesiology in the areas of teaching, coaching, allied health, and fitness professions. Basic concepts of the kinesiology discipline and the importance of the sub-disciplines are discussed.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify the basic concepts of kinesiology.
- relate the history of kinesiology.
- identify the fundamental concepts of basic movement.
- evaluate the philosophical foundations of kinesiology.
- describe the allied fields of health, dance, and recreation.
- identify the sub-disciplines of kinesiology.
- identify the pathways and requirements for career opportunities in kinesiology.

KINES 307 Mental Skills for Sport Performance

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGW 102 or 103, and ENGRD 116 with a grade of “C” or better; OR ESLR 320 and ESLW 320 with a grade of "C" or better.
Transferable: CSU
Catalog Date: June 1, 2020

This course provides a concentrated study of competition and motivation for sports. It also includes the study of the brain's impact on muscular activity in athletic performance. Stress management, goal setting, peak performance, adaptability, sport imagery training, and effective practice are covered. This course is formerly known as PET 307.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- develop motivational techniques
- discuss the psychological effects of stress as a result of negative self-talk
- compare and contrast goal-setting techniques and tools
- design an imagery and relaxation sequence
- formulate daily goal-setting strategies for reducing stress
- revise daily practice strategies into effective communication appropriate to the goals set for the day

KINES 330 Care and Prevention of Athletic Injuries

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
This course is an introduction to injury prevention, injury care, and rehabilitation of athletic injuries. It includes basic information regarding sports injuries, their causes, and treatments. This course is formerly known as PET 330.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify potentially dangerous situations on/around athletic fields/courts and practice/game situations
- identify basic medical terminology
- synthesize indication and contraindications for basic therapeutic modalities
- evaluate elementary athletic injuries and apply proper treatment
- demonstrate basic taping and wrapping skills of commonly injured joints
- apply basic first aid skills
- assess degrees of injury

KINES 334 Practical Applications in Athletic Training/Sports Medicine

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Corequisite: KINES 330
Transferable: CSU; UC
Catalog Date: June 1, 2020

This course is designed to provide an overall experience of the sports medicine/athletic training profession. Topics include common evaluation and rehabilitative techniques, modality usage, and advanced taping and wrapping methods. This course is formerly known as PET 334.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze the role of an athletic trainer
- demonstrate athletic taping, wrapping, and padding skills
- demonstrate evaluation of the ankle, knee, and shoulder
- apply therapeutic modalities to common athletic injuries
- utilize effective writing skills for injury evaluations and rehabilitation documentation

KINES 340 Theory of Baseball

Units: 1
Hours: 18 hours LEC
Prerequisite: None.
Advisory: High school or college level baseball playing experience; ENGWR 102 and ENGRD 116 with a grade of “C” or better; OR ESLR 320 and ESLW 320 with a grade of “C” or better.
Transferable: CSU; UC (UC credit limitation: All KINES courses combined: maximum credit, 8 units.)
Catalog Date: June 1, 2020

This course develops a thorough understanding of baseball. The emphasis is on learning and understanding basic concepts of training, individual techniques, strategies, and systems of defense, offense, pitching, base running, and field maintenance. Philosophies and drills are included.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze, and demonstrate the skills necessary for playing/coaching defense, offense, pitching, base running, teamwork.
relate the importance of participation and teamwork in baseball.

• compare and contrast strategies, drills, and game philosophies.
• identify, discuss, and execute basic concepts of field maintenance.

KINES 350 Theory of Football

Units: 1
Hours: 18 hours LEC
Prerequisite: None.
Transferable: CSU; UC (UC credit limitations: All KINES courses combined: maximum credit, 8 units.)
Catalog Date: June 1, 2020

This course covers applications of different strategies when football teams face various schemes. This course is formerly known as PET 350.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• analyze basic offensive, defensive, and kicking game concepts
• compare and contrast various football theories
• describe the physical and psychological characteristics needed to be a successful participant in football

KINES 356 Theory of Softball

Units: 1
Hours: 18 hours LEC
Prerequisite: None.
Advisory: ENGWR 102 and ENGRD 116 with a grade of "C" or better OR ESLR 320 and ESLW 320 with a grade of "C" or better.
Transferable: CSU; UC (UC credit limitations: All KINES courses combined: maximum credit, 8 units.)
Catalog Date: June 1, 2020

This course develops advanced analysis of softball. Focus is placed on analysis and instruction of individual skills and team concepts. Specific areas of emphasis include, but are not limited to, practice organization, individual fundamentals, team building fundamentals, as well as drills to develop these skills. The analysis of various coaching techniques, theories, and philosophy are included.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• identify softball rules and applications
• recognize various strategies and philosophies of softball
• set up fitness programs for softball
• organize a softball practice routine

KINES 400 Applied Physiology of Exercise

Units: 2
Hours: 36 hours LEC
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

This course examines how the body functions under conditions of exercise stress. It covers the practical applications of muscle function, cardiovascular and respiratory functions, training techniques, and the effect of environmental conditions on exercise. This course is formerly known as PET 400.

Student Learning Outcomes

Upon completion of this course, the student will be able to:
- identify the basic components of a muscle cell.
- describe the principles and components of an exercise program.
- explain how to calculate an individual's maximal oxygen uptake (VO2max).
- describe the positive effects exercise has on the body.
- formulate an individualized exercise training prescription.
- explain the positive effects of exercise on reducing obesity.

KINES 401 Applied Kinesiology

Units: 2
Hours: 36 hours LEC
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

This course addresses movement as it relates to exercise. It includes analysis of movement in sport skills, stressing the contributions made by the muscular and skeletal systems.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the structure and composition of bones and muscles.
- define the different types of muscular contractions.
- explain the body's physical structures in both normal and injury conditions.
- differentiate between the various types of joint movement and their respective planes of movement.
- formulate an individual exercise program for an individual with special needs.

KINES 402 Nutrition for Fitness

Same As: NUTRI 307
Units: 2
Hours: 36 hours LEC
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

This course covers the basic principles of nutrition and the interactions between nutrition and fitness training. Topics include dietary practices and nutrient intake modifications that affect physical performance, including intake of energy nutrients, vitamins, water, electrolytes, and dietary supplements. It also covers the study of body weight and body composition, as well as factors that affect body weight and the effect of body composition on physical performance. This course is not open to students who have completed NUTRI 307.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the basic principles of nutrition, including classification of essential nutrients and identification of key nutrients of various foods.
- explain the role of nutrients for achieving optimal fuel and energy utilization for physical performance.
- critique dietary programs for weight control.
- evaluate the effectiveness and recognize the safety concerns of various nutritional supplements.
- explain how nutrient intake relates to health status and the development of chronic disease.
- incorporate current dietary recommendations into planning healthy diets for physically active persons.
- describe the importance of proper water and electrolyte regulation in terms of safety, health, and exercise performance.
- explain the causes and symptoms of nutrient deficiency and toxicity.
KINES 403 Fitness and Exercise Assessment

This course covers the assessment of cardiorespiratory endurance, body composition, muscular strength and endurance, flexibility, blood pressure, and evaluation of exercise test results. Additional topics include the factors influencing exercise programs, development of individual exercise programs, and the risk factors associated with exercise programs and fitness testing.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- define the health components of fitness.
- administer physical fitness tests and health assessments.
- formulate an individual exercise program.
- evaluate physical activities relative to their risk factors.
- measure body composition and interpret results.
- list the safety factors related to exercise testing and prescription.
- utilize the results of graded exercise tests for the purpose of exercise program design.

KINES 404 Identification and Management of Fitness Injuries

This course addresses elementary human anatomy and the injuries that can occur to the musculoskeletal system as it relates to physical activity. The treatment and rehabilitation of these injuries and the use of protective equipment are presented.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- employ the use of basic medical terminology
- illustrate methods for preventing fitness related injuries
- recognize the causes of common fitness related injuries
- apply proper treatment techniques to common fitness related injuries
- provide emergency first aid for fitness related injuries
- demonstrate correct applications of common braces and protective devices used in the fitness industry

KINES 405 Effects of Exercise on Special Populations

This course covers the effects of exercise on special populations and provides information to modify exercise based on age, disability, and medical conditions. It includes
discussions of special groups including seniors, children with disabilities, adults with disabilities or chronic conditions, and individuals requiring exercise modifications due to physical impairments.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- differentiate the physiological and anatomical differences in healthy older adults and older adults with chronic medical conditions.
- analyze the physiological and anatomical characteristics of individuals with specific disabilities.
- recommend beneficial exercises for seniors and individuals with disabilities or medical conditions.
- detect contraindicated exercises for seniors and individuals with disabilities or medical conditions.
- describe warning signs of medical conditions.

KINES 406 Techniques of Strength Training Instruction

| Units: | 2 |
| Hours: | 36 hours LEC |
| Prerequisite: | None |
| Transferable: | CSU |
| Catalog Date: | June 1, 2020 |

This course covers how to teach a variety of strength training techniques and activities to individuals. It studies strength training sequences, strength training equipment, safety factors, and anatomy and physiology as it applies to strength training. It includes the development of strength training exercises and routines. Field trips may be required. This course is formerly known as PET 406.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- cite the historical evolution of strength training.
- describe the physiological changes which occur with strength training.
- analyze the components of flexibility.
- compare and contrast different training programs.
- integrate the principles of strength training into an individualized training regimen.
- integrate appropriate flexibility protocol.
- design an individualized exercise prescription program that includes muscular strength and muscular endurance development.

KINES 407 Techniques of Group Fitness Instruction

| Units: | 2 |
| Hours: | 36 hours LEC |
| Prerequisite: | None |
| Transferable: | CSU |
| Catalog Date: | June 1, 2020 |

This course covers how to teach a variety of fitness activities to groups of individuals. Emphasis is on how to design a physiologically safe and effective group fitness exercise class. This course is formerly known as PET 407.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- discuss the evolution of fitness and group exercise.
- integrate the health-related fitness components into group exercise class design.
- identify and compare various types of exercise/fitness activities relevant to a group setting.
- design and lead a group exercise activity.
- participate in community based group exercise settings.
- provide modifications and variations to exercises when necessary.
- identify factors that may increase group exercise adherence.

KINES 408 Administration of Fitness Programs

Units: 2
Hours: 36 hours LEC
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

This course serves as an introduction to the administration of fitness programs. It includes business operations, office procedures, facility design, and equipment considerations. Field trips may be required. This course is formerly known as PET 408.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain what equipment is essential to the successful operation of a sport/fitness facility.
- implement evaluation procedures for routine exercise testing programs.
- describe the legal concepts of contracts relating to consent, confidentiality, liability, and negligence.
- analyze the safety requirements of equipment and facilities.
- develop a basic budget for a sport/fitness facility.
- evaluate methods for attracting and retaining sport/fitness clients.

KINES 494 Topics in Physical Education Theory

Units: 0.5 - 4
Hours: 18 hours LEC
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

This umbrella course provides concentrated study of a variety of current fitness issues. Topics reflect contemporary concerns for physical fitness, performance in competitive sport, and wellness. This course is formerly known as PET 494.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze techniques applied during physical activity and physical education
- discuss the effects of physical activity on the human body
- compare and contrast physical fitness goal-setting techniques
- formulate a life-long plan to remain physically active
- identify basic kinesiology and physical education terminology

KINES 495 Independent Studies in Physical Education Theory

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020
Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

**KINES 498 Work Experience in Physical Education**

**Units:** 1 - 4  
**Hours:** 60 - 300 hours LAB  
**Prerequisite:** None.  
**Enrollment Limitation:** Students must be in a paid or unpaid internship, volunteer position, or job related to physical education with a cooperating site supervisor.  
Students are advised to consult with the Physical Education Department faculty to review specific certificate and degree work experience requirements.  
**Advisory:** Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.  
**Transferable:** CSU  
**General Education:** AA/AS Area III(a)  
**Catalog Date:** June 1, 2020

This course provides students with opportunities to develop marketable skills in preparation for employment or advancement within the field of physical education. It is designed for students interested in work experience and/or internships in transfer-level degree occupational programs. Course content includes understanding the application of education to the workforce, completion of Title 5 required forms which document the student's progress and hours spent at the work site, and developing workplace skills and competencies.

During the semester, the student is required to complete 75 hours of related paid work experience, or 60 hours of related unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. All students are required to attend the first class meeting, a mid-semester meeting, and a final meeting. Additionally, students who have not already successfully completed a Work Experience course will be required to attend weekly orientations while returning participants may meet individually with the instructor as needed. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- demonstrate application of industry knowledge and theoretical concepts in the field of physical education related to a transfer degree level career as written in the minimum three (3) learning objectives created by the student and his/her employer or work site supervisor at the start of the course.
- make effective decisions, use workforce information, and manage his/her personal career plans.
- behave professionally, ethically, and legally at work, consistent with applicable laws, regulations, and organizational norms.
- behave responsibly at work, exhibiting initiative and self-management in situations where it is needed.
- apply effective leadership styles at work, with consideration to group dynamics, team and individual decision making, and workforce diversity.
- communicate in oral, written, and other formats, as needed, in a variety of contexts at work.
- locate, organize, evaluate, and reference information at work.
- demonstrate originality and inventiveness at work by combining ideas or information in new ways, making connections between seemingly unrelated ideas, and reshaping goals in ways that reveal new possibilities using critical and creative thinking skills such as logical reasoning, analytical thinking, and problem-solving.

**Personal Activity (PACT)**

**PACT 300 Archery I**

**Units:** 1  
**Hours:** 54 hours LAB  
**Course Family:** Archery (http://arc.losrios.edu/course-families#id_100020)  
**Prerequisite:** None.  
**Transferable:** CSU; UC (UC credit limitation: Any or all PE Activity courses combined: maximum credit, 4 units)  
**General Education:** AA/AS Area III(a); CSU Area E2  
**Catalog Date:** June 1, 2020

The course emphasizes safety, knowledge, and basic skill development in recurve archery. No compound or crossbows are allowed. It also covers basic techniques with an emphasis on knowledge and use of the bow and related equipment.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:
• demonstrate ability to select correct bow poundage and string a recurve bow safely.

• identify eye dominance for sighting a target.

• demonstrate improved upper body strength by increasing repetitions of ends on the practice range.

• demonstrate correct scoring using a beginning scoring criteria.

PACT 310 Badminton I

Units: 1
Hours: 54 hours LAB
Course Family: Badminton (http://arc.losrios.edu/course-families#id_100021)
Prerequisite: None.
Transferable: CSU; UC (UC credit limitation: Any or all PE Activity courses combined: maximum credit, 4 units.)
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course provides instruction in basic fundamentals, techniques, and rules of badminton. The emphasis is on skill and technique development, as well as strategies for singles and doubles.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• analyze the benefits of badminton as a lifetime fitness activity.

• execute effectively all shots used in badminton.

• analyze and apply fundamental rules and strategies of the game.

• evaluate the importance of sportsmanship in competitive situations.

PACT 311 Badminton II

Units: 1
Hours: 54 hours LAB
Course Family: Badminton (http://arc.losrios.edu/course-families#id_100021)
Prerequisite: None.
Enrollment Limitation: PACT 310 with a grade of "C" or better OR the ability to demonstrate skills beyond that of a beginning player - serve, smash, high clear, drop shot.
Transferable: CSU; UC (UC credit limitation: Any or all PE Activity courses combined: maximum credit, 4 units.)
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course provides instruction in intermediate skills, techniques, and rules of badminton. It emphasizes skill and technique development beyond that of a beginning player, as well as intermediate strategies for singles and doubles.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• describe the benefits of badminton as a lifetime fitness activity.

• effectively execute serves, drop shots, smashes, and backhand shots consistent with an intermediate-level badminton player.

• describe rules and intermediate-level strategies of the game.

• evaluate the importance of sportsmanship in competitive situations.

• execute intermediate-level playing strategies by playing to personal strengths, while taking advantage of an opponent's weaknesses.

PACT 350 Golf I

Units: 1
Hours: 54 hours LAB
This beginning golf course introduces the basic skills and knowledge necessary to play the game of golf. It focuses on the fundamental skills necessary to strike and putt the ball. It introduces the rules and etiquette necessary to play the game. Some sections of this course may be held on regulation golf courses to which students must bring their own golf clubs and pay for range and/or greens fees.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- perform the golf swing correctly.
- identify the various clubs and define their uses.
- demonstrate a level of skill that will allow continuation of the game as a means of lifetime physical activity.
- demonstrate the basic skills and etiquette to play golf on a course.
- Use appropriate golf terms.

**PACT 351 Golf II**

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<tr>
<th>Units:</th>
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<tr>
<td>Hours:</td>
<td>54 hours LAB</td>
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<tr>
<td>Course Family:</td>
<td>Golf (<a href="http://arc.losrios.edu/course-families#id_100026">http://arc.losrios.edu/course-families#id_100026</a>)</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
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<tr>
<td>Enrollment Limitation:</td>
<td>PACT 350 with a grade of &quot;C&quot; or better; or the ability to perform a golf swing correctly and demonstrate the basic skills and etiquette needed to play golf on a course.</td>
</tr>
<tr>
<td>Transferable:</td>
<td>CSU; UC (UC credit limitation: Any or all PE Activity courses combined: maximum credit, 4 units.)</td>
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<tr>
<td>General Education:</td>
<td>AA/AS Area III(a); CSU Area E2</td>
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<td>Catalog Date:</td>
<td>June 1, 2020</td>
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This course covers the intermediate skills and knowledge necessary to play the game of golf. It focuses on swing evaluation necessary to improve ball striking, the rules and etiquette necessary to play on a public course, and course management strategies in order to negotiate a golf course. Some sections of this course may be held on area regulation golf courses in which students must bring their own golf clubs and pay range costs and/or greens fees.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- demonstrate approach shots for particular circumstances.
- analyze and diagnose the full golf swing.
- organize a practice session for the driving range, bunker practice, short game - pitching and chipping, putting.
- develop a course management plan based on course conditions.
- describe the variety of golf equipment currently on the market and the advantages of various types of clubs.
- analyze the putting stroke with regard to distance control and direction control.

**PACT 352 Golf III**

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<tr>
<th>Units:</th>
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<tr>
<td>Hours:</td>
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<tr>
<td>Course Family:</td>
<td>Golf (<a href="http://arc.losrios.edu/course-families#id_100026">http://arc.losrios.edu/course-families#id_100026</a>)</td>
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<tr>
<td>Prerequisite:</td>
<td>None.</td>
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<tr>
<td>Enrollment Limitation:</td>
<td>PACT 351 (Golf II) or experience playing on a golf course.</td>
</tr>
<tr>
<td>Transferable:</td>
<td>CSU; UC (UC credit limitation: Any or all PE Activity courses combined: maximum credit, 4 units.)</td>
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<tr>
<td>General Education:</td>
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<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
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</tbody>
</table>

This course covers advanced skills and knowledge necessary to excel at the game of golf. It focuses on improving the swing, special shot-making techniques, course management strategies for the advanced golfer, and clarification of rules and etiquette necessary to play the game at an advanced level. Different tournament formats are explored. This course is held on area regulation golf courses in which students must bring their own golf clubs, pay greens fees, and/or range costs.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- diagnose swing faults and make proper corrections.
- explain the essential elements of golf equipment.
- analyze the golf swing with regard to proper swing plane and faults which occur with improper swing plane.
- adapt personal game and playing style to various types of competition.

PACT 390 Tennis I

Units: 1
Hours: 54 hours LAB
Course Family: Tennis
Prerequisite: None.
Transferable: CSU; UC (UC credit limitation: Any or all PE Activity courses combined: maximum credit, 4 units.)
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course covers basic technique of strokes, rules of play, simple strategies, and the etiquette of tennis.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- execute the basic tennis strokes including forehand, backhand, serve, volley, overhead, and serve return.
- apply the rules and etiquette of tennis.
- apply a basic strategy to competitive match-play situations.

PACT 391 Tennis II

Units: 1
Hours: 54 hours LAB
Course Family: Tennis
Prerequisite: PACT 390
Advisory: CSU; UC
Transferable: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course reviews basic fundamentals, techniques, rules, and social courtesies of tennis. It is intended for intermediate-level tennis players.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify, implement, and demonstrate competency in tennis techniques and tactics at an intermediate level.
- attain an intermediate level of tennis fitness with a variety of conditioning drills designed to improve the specific physical skills needed for intermediate tennis players.
- understand and apply mental strategies to effectively compete at an intermediate ability level.
- understand and be aware of the etiquette and expectations of sportsmanship while competing in competitive tennis matches.

PACT 393 Tennis III

Units: 1
Hours: 54 hours LAB
Course Family: Tennis
Prerequisite: None.
Transferable: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020
This course focuses on improving and refining the physical and mental skills and techniques of tennis. Particular attention is given to strategic development of the player, while refining the racket skills that set up and finish points. Developing patterns, serving placement, and tactical court positioning are introduced and developed.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify, implement, and demonstrate competency in tennis techniques and tactics as they best apply to the respective skill level of the student.
- attain an elite level of tennis fitness with a variety of conditioning drills designed to improve the specific physical skills needed for advanced tennis players.
- apply mental strategies to effectively compete at an advanced tennis level.
- demonstrate proper etiquette and expectations of sportsmanship while competing in competitive tennis matches.

PACT 430 Pickleball I

Units: 1
Hours: 54 hours LAB
Course Family: Pickleball (http://arc.losrios.edu/course-families#id_100066)
Prerequisite: None.
Transferable: CSU: UC (UC transfer credit limitation: Any or all PE activity courses combined: maximum credit 4 units.)
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course covers basic technique of strokes, rules of play, simple strategies, and the etiquette of pickleball.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- execute the basic pickleball strokes including forehand, backhand, serve, volley, dink, lob, overhead, and serve return.
- apply the rules and etiquette of pickleball.
- apply a basic strategy to competitive match-play situations.

PACT 431 Pickleball II

Units: 1
Hours: 54 hours LAB
Course Family: Pickleball (http://arc.losrios.edu/course-families#id_100066)
Prerequisite: None.
Transferable: CSU: UC (UC transfer credit limitation: Any or all PE activity courses combined: maximum credit 4 units.)
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course reviews basic fundamentals, techniques, rules, and social courtesies of pickleball. It emphasizes skill and technique development beyond that of a beginning player, as well as intermediate strategies for singles and doubles.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify, implement, and demonstrate competency in pickleball techniques and tactics at an intermediate level.
- attain an intermediate level of pickleball fitness with a variety of conditioning drills designed to improve the specific physical skills needed for intermediate players.
- demonstrate and apply mental strategies to effectively compete at an intermediate ability level.
- demonstrate proper etiquette and expectations of sportsmanship while competing in competitive matches.
PACT 432 Pickleball III

This course focuses on improving and refining the physical and mental skills and techniques of pickleball. Particular attention is given to strategic development of the player, while refining the paddle skills that set up and finish points. Developing patterns, dink placement, and tactical court positioning are introduced and developed.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify, implement, and demonstrate competency in pickleball techniques and tactics as they best apply to the respective skill level of the student.
- attain an advanced level of pickleball fitness with a variety of conditioning drills designed to improve the specific physical skills needed for advanced player.
- apply mental strategies to effectively compete at an advanced level.
- demonstrate proper etiquette and expectations of sportsmanship while competing in competitive matches.

PACT 495 Independent Studies in Personal Activity

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

Sports (SPORT)

SPORT 300 Baseball, Intercollegiate-Men

This course provides opportunity for intercollegiate competition in men's baseball. It provides baseball related skills, fundamentals, and team strategy. This course may be taken four times for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze one's personal level of fitness
- develop skills appropriate to intercollegiate level athletic competition
- apply proper etiquette and sportsmanship during the athletic experience
- synthesize the knowledge necessary to assess various contest situations and apply appropriate solutions
SPORT 301 Off Season Conditioning for Baseball

This course is designed to optimize sports performance and reduce risk of injury for the off-season intercollegiate athlete in the sport of baseball. Course content includes sport-specific skill development, sport-specific strength training, cardiovascular conditioning, agility work, plyometrics, speed training, and flexibility exercises. This course may be taken up to four times for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate proper form and techniques when executing sport-specific drills for baseball.
- execute proper warm-up and cool-down procedures for injury prevention.
- demonstrate proper form in executing strength-training techniques, plyometrics, agility drills, and functional sport-specific drills.

SPORT 303 Pre-Season Conditioning for Baseball

This course is designed to optimize sports performance and reduce risk of injury for the pre-season intercollegiate athlete in the sport of baseball. Course content includes sport-specific skill development, sport-specific strength training, cardiovascular conditioning, agility work, plyometrics, speed training, and flexibility exercises. This course may be taken up to four times for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- interpret sign systems for offense and defense.
- demonstrate several defensive positions at a level to be competitive in intercollegiate baseball.
- hit the baseball at a level to be competitive in intercollegiate baseball.

SPORT 311 Basketball, Intercollegiate-Men, Fall

This course covers fundamentals, rules, individual and/or team strategy appropriate to intercollegiate athletic competition. May be taken three times for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Demonstrate an improved level of physical fitness.
Develop and apply skills at the intercollegiate level of athletic competition.

Demonstrate proper etiquette and sportsmanship during the athletic experience.

Assess various contest situations and apply appropriate solutions.

**SPORT 312 Basketball, Intercollegiate-Men, Spring**

- **Units:** 1.5
- **Hours:** 87 hours LAB
- **Prerequisite:** None.
- **Enrollment Limitation:** Tryout
- **Advisory:** ENGR 102 or 103, and ENGRD 116 with a grade of "C" or better; OR ESLR 320 and ESLW 320 with a grade of "C" or better; OR placement through assessment process. (UC credit limitation: Any or all PE activity courses combined: maximum credit, 4 units.)
- **Transferable:** CSU: UC
- **General Education:** AA/AS Area III(a); CSU Area E2
- **Catalog Date:** June 1, 2020

This course covers fundamentals, rules, individual and/or team strategy appropriate to intercollegiate athletic competition. May be taken three times for credit.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- Demonstrate an improved level of physical fitness.
- Develop and apply skills at the intercollegiate level of athletic competition.
- Demonstrate proper etiquette and sportsmanship during the athletic experience.
- Assess various contest situations and apply appropriate solutions.

**SPORT 313 Off Season Conditioning for Basketball**

- **Units:** 0.5 - 3
- **Hours:** 27 - 162 hours LAB
- **Prerequisite:** None.
- **Enrollment Limitation:** Tryout.
- **Transferable:** CSU: UC
- **General Education:** AA/AS Area III(a); CSU Area E2
- **Catalog Date:** June 1, 2020

This course is designed to optimize sports performance and reduce risk of injury for the off-season intercollegiate athlete in the sport of basketball. Topics include college-level basketball-specific skill development, sport specific strength training, agility work, plyometrics, speed training, and flexibility exercises. This course may be taken up to four times for credit.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- Demonstrate proper form and techniques when executing various drills for basketball.
- Apply appropriate warm-up and cool-down procedures for injury prevention.
- Demonstrate proper form in strength training techniques.
- Demonstrate proper form in plyometrics.
- Demonstrate proper form in agility skills.
- Demonstrate proper form in functional sports-specific drills.

**SPORT 314 Pre-Season Conditioning for Basketball**

- **Units:** 0.5 - 3
- **Hours:** 27 - 162 hours LAB
- **Prerequisite:** None.
This course is designed to increase sport performance and overall understanding of intercollegiate basketball concepts and strategic philosophies. Topics include collegiate level basketball-specific skill development, collegiate level offensive and defensive concepts, team-specific basketball fundamentals, team-specific drills for individual improvement and sport-specific agility drills, plyometrics, and speed training. This course may be taken up to 4 times for credit.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- assess various practice situations and apply appropriate solutions
- demonstrate and apply intercollegiate basketball offensive and defensive philosophies
- demonstrate proper technique in basketball fundamentals
- demonstrate an improved level of agility and speed training

**SPORT 316 Basketball, Intercollegiate-Women, Fall**

| Units: | 1.5 |
| Hours: | 87 hours LAB |
| Prerequisite: | None. |
| Enrollment Limitation: | Tryout |
| Advisory: | ENGWR 102 or 103, and ENGRD 116 with a grade of "C" or better; OR ESLR 320 and ESLW 320 with a grade of "C" or better; OR placement through assessment process. |
| Transferable: | CSU; UC (UC credit limitation: Any or all PE activity courses combined: maximum credit, 4 units.) |
| General Education: | AA/AS Area III(a); CSU Area E2 |
| Catalog Date: | June 1, 2020 |

This course covers fundamentals, rules, individual and/or team strategy appropriate to intercollegiate athletic competition. May be taken three times for credit.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- Demonstrate an improved level of physical fitness.
- Develop and apply skills at the intercollegiate level of athletic competition.
- Demonstrate proper etiquette and sportsmanship during the athletic experience.
- Assess various contest situations and apply appropriate solutions.

**SPORT 317 Basketball, Intercollegiate-Women, Spring**

| Units: | 1.5 |
| Hours: | 87 hours LAB |
| Prerequisite: | None. |
| Enrollment Limitation: | Tryout |
| Advisory: | ENGWR 102 or 103, and ENGRD 116 with a grade of "C" or better; OR ESLR 320 and ESLW 320 with a grade of "C" or better; OR placement through assessment process. |
| Transferable: | CSU; UC (UC credit limitation: Any or all PE activity courses combined: maximum credit, 4 units.) |
| General Education: | AA/AS Area III(a); CSU Area E2 |
| Catalog Date: | June 1, 2020 |

This course covers fundamentals, rules, individual and/or team strategy appropriate to intercollegiate athletic competition. May be taken three times for credit.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- Demonstrate an improved level of physical fitness.
- Develop and apply skills at the intercollegiate level of athletic competition.
- Demonstrate proper etiquette and sportsmanship during the athletic experience.
SPORT 320 Cross Country, Intercollegiate-Men

Units: 3
Hours: 175 hours LAB
Prerequisite: None.
Enrollment Limitation: Tryout
Transferable: CSU; UC (UC credit limitation: Any or all PE activity courses combined: maximum credit, 4 units.)
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course covers fundamentals, rules, and individual and team strategies appropriate to intercollegiate athletic competition in men's cross country. It provides opportunities for student-athletes to compete at the intercollegiate level. This course may be taken up to four times for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate advanced cross country skills/tactics appropriate for intercollegiate level competition.
- apply proper track and field rules, etiquette, and sportsmanship during the athletic experience.
- achieve higher levels of fitness.
- assess various contest situations and apply appropriate solutions.
- demonstrate a sense of the importance of teamwork in cross country.
- improve in individual techniques for practice and competition.

SPORT 325 Cross Country, Intercollegiate-Women

Units: 3
Hours: 175 hours LAB
Prerequisite: None.
Enrollment Limitation: Tryout
Transferable: CSU; UC (UC credit limitation: Any or all PE activity courses combined: maximum credit, 4 units)
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This is an advanced team activity for female students providing specialized training for competition. It covers fundamental and advanced techniques needed for specific events, along with the rules and strategies appropriate for intercollegiate competition. This course may be taken up to four times for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate advanced cross country skills, techniques, and tactics that are appropriate for intercollegiate-level competition.
- identify rules and display sportsmanship during the athletic experience.
- increase levels of fitness, along with improvements in techniques and performances in practice and competition settings.
- demonstrate an appreciation for teamwork.

SPORT 330 Football, Intercollegiate-Men

Units: 3
Hours: 175 hours LAB
Prerequisite: None.
Enrollment Limitation: Tryout
Transferable: CSU; UC (UC credit limitation: Any or all PE activity courses combined: maximum credit, 4 units.)
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020
This course is an intercollegiate sport providing opportunity for competition in men's football. It provides football fundamentals, skills, rules, and individual and team strategies appropriate for intercollegiate athletic competition. This course may be taken up to four times for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- develop the basic core and advanced fundamentals utilized for intercollegiate football student-athletes.
- apply the development of basic core and advanced fundamentals into a competitive environment versus opposition.
- demonstrate proper safety, etiquette, and sportsmanship in all phases of the football program.
- describe and illustrate an understanding of the concepts for the offensive, defensive, and special teams playbook.
- demonstrate physical improvement through a strength and conditioning program to compete on the practice field and in games.

SPORT 331 Off Season Conditioning for Football

Units: 0.5 - 3
Hours: 27 - 162 hours LAB
Prerequisite: None
Enrollment Limitation: Tryout
Transferable: CSU; UC (UC credit limitation: Any or all PE activity courses combined: maximum credit, 4 units.)
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course involves training and technical skill development specific to the sport of football for off-season student-athletes. Topics include skill development, strength training, speed development, agility training, plyometric drills, cardiovascular conditioning, and increased flexibility. This course may be taken up to four times for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate basic core and advanced fundamentals in football that are specific to preparing for the season.
- exhibit an increase in speed, agility, and quickness as used in football.
- validate increased cardiovascular endurance, muscular strength, and anaerobic power needed to be competitive in football through testing during the term.
- demonstrate proper form executing the drills and exercises in strength training, cardiovascular training, anaerobic training, and flexibility.
- apply appropriate warmup and cooldown procedures for injury prevention.
- display the conceptual understanding of offensive, defensive, and special teams playbooks.
- demonstrate efficient practice routines used to prepare for the football season.

SPORT 332 Pre-Season Conditioning for Football

Units: 0.5 - 3
Hours: 27 - 162 hours LAB
Prerequisite: None
Transferable: CSU; UC (UC credit limitation: Any or all PE activity courses combined: maximum credit, 4 units.)
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course covers advanced offensive and defensive strategies for football at the college level. Blocking schemes, tackling techniques, as well as offensive and defensive formations are discussed. Strength and conditioning drills are included to enhance football skills. This course may be taken up to four times for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- define the benefits of a lifetime fitness program as it relates to football.
- demonstrate the skills necessary to participate in game situations while playing various positions.
- evaluate team play concept in practice and game situations.
- interact with classmates as teammates in a collaborative and competitive environment.
- compare and contrast pre-season, in-season, and off-season training.

**SPORT 340 Golf, Intercollegiate-Men**

**Units:** 3  
**Hours:** 175 hours LAB  
**Prerequisite:** None  
**Enrollment Limitation:** Tryout  
**Transferable:** CSU; UC (UC credit limitation: Any or all PE activity courses combined: maximum credit, 4 units.)  
**General Education:** AA/AS Area III(a); CSU Area E2  
**Catalog Date:** June 1, 2020

This course provides opportunity for competition in men's golf. It covers golf fundamentals and skills. It also includes rules and individual and team strategies appropriate for intercollegiate athletic competition. This course may be taken up to four times for credit.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- demonstrate an improved level of physical fitness  
- apply skills appropriate to intercollegiate level golf competition  
- demonstrate proper etiquette and sportsmanship during golf matches  
- assess various golf situations and apply appropriate solutions

**SPORT 341 Off Season Conditioning for Golf**

**Units:** 0.5 - 3  
**Hours:** 27 - 162 hours LAB  
**Prerequisite:** None.  
**Enrollment Limitation:** Tryout  
**Transferable:** CSU; UC (UC credit limitation: Any or all PE activity courses combined: maximum credit, 4 units.)  
**General Education:** AA/AS Area III(a); CSU Area E2  
**Catalog Date:** June 1, 2020

This course involves a combination of fundamental skills and strategy with an emphasis on a fitness component for the sport of golf. It offers a mental training component for peak performance. This course is designed to prepare students for intercollegiate golf competition. This course may be taken up to four times for credit.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- demonstrate the ability to walk the golf course carrying or pulling golf bag.  
- choose the appropriate club for specific shots and distances.  
- analyze personal swing and make appropriate corrections.  
- develop strength, endurance and flexibility.  
- apply good course management skills when playing golf.

**SPORT 345 Golf, Intercollegiate-Women**

**Units:** 3  
**Hours:** 175 hours LAB  
**Prerequisite:** None.  
**Enrollment Limitation:** Tryout  
**Transferable:** CSU; UC (UC credit limitation: Any or all PE activity courses combined: maximum credit, 4 units.)  
**General Education:** AA/AS Area III(a); CSU Area E2  
**Catalog Date:** June 1, 2020
This course is an intercollegiate sport providing opportunities for competition in women's golf. It covers fundamentals and skills, rules, individual and/or team strategy appropriate to intercollegiate athletic competition. This course may be taken up to four times for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate an improved level of physical fitness
- develop and apply skills appropriate to intercollegiate level competitive golf
- demonstrate proper etiquette and sportsmanship during the athletic experience
- assess various contest situations and apply appropriate solutions

SPORT 350 Soccer, Intercollegiate-Men

Units: 3
Hours: 175 hours LAB
Prerequisite: None.
Enrollment Limitation: Tryout
Transferable: CSU; UC (UC credit limitation: Any or all PE activity courses combined: maximum credit, 4 units.)
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course provides opportunity for intercollegiate competition in men's soccer. Soccer fundamentals and skills are covered. It also includes rules, and individual and team strategies appropriate for intercollegiate athletic competition. This course may be taken up to four times for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate an improved level of physical fitness
- apply skills appropriate to intercollegiate level athletic competition
- describe proper etiquette and sportsmanship during the athletic experience
- assess various soccer contest situations and apply appropriate solutions

SPORT 351 Off-Season Conditioning for Men's Soccer

Units: 0.5 - 3
Hours: 27 - 162 hours LAB
Prerequisite: None.
Enrollment Limitation: Tryout.
Transferable: CSU; UC (UC credit limitation: Any or all PE activity courses combined: maximum credit, 4 units.)
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course covers off-season training and conditioning skills and techniques specific for intercollegiate soccer. Topics include skill development, strength training, cardiovascular conditioning, and speed training. This course may be taken up to four times for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate proper footwork techniques specific to soccer.
- demonstrate improved endurance and strength.
- demonstrate proper form and techniques when executing various drills for soccer.
- apply appropriate warm up and cool down procedures for injury prevention.
- demonstrate proper technique in agility training.
SPORT 355 Soccer, Intercollegiate-Women

This course is an intercollegiate sport providing opportunity for competition in women's soccer. It provides soccer fundamentals and skills, including rules as well as individual and team strategy appropriate for intercollegiate athletic competition. This course may be taken up to four times for credit.

Upon completion of this course, the student will be able to:

- demonstrate an improved level of physical fitness
- apply skills appropriate to intercollegiate-level soccer competition
- demonstrate proper etiquette and sportsmanship during the athletic experience
- assess various contest situations and apply appropriate solutions

SPORT 356 Off Season Conditioning for Women's Soccer

This physical education course covers training and conditioning skills and techniques specific for intercollegiate soccer. It focuses on basic concepts and skills with emphasis on conditioning. This course may be taken up to four times for credit.

Upon completion of this course, the student will be able to:

- demonstrate proper footwork techniques specific to soccer.
- show endurance and strength needed in order to be competitive in soccer.
- demonstrate proper form and techniques when executing various drills for soccer.
- apply appropriate warm up and cool down procedures for injury prevention.
- demonstrate proper technique in agility training.

SPORT 358 Pre-Season Conditioning for Men's Soccer

This course increases sport performance and the overall understanding of intercollegiate soccer concepts and strategic philosophies. Topics include collegiate-level soccer-specific skill development, collegiate-level offensive and defensive concepts, team-specific soccer fundamentals, team-specific drills for individual improvement and sport specific agility work, plyometrics, and speed training.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- demonstrate proper footwork techniques specific to soccer.
- show endurance and strength needed in order to be competitive in soccer.
- demonstrate proper form and techniques when executing various drills for soccer.
- apply appropriate warm-up and cool-down procedures for injury prevention.
- demonstrate proper technique in agility training.

SPORT 365 Softball, Intercollegiate-Women

Units: 3
Hours: 175 hours LAB
Prerequisite: None.
Enrollment Limitation: Tryout
Transferable: CSU; UC (UC credit limitation: Any or all PE activity courses combined: maximum credit, 4 units.)
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This is an advanced softball activity that provides competition with other community college teams. Fundamentals, rules, team strategy, and softball skills appropriate to intercollegiate athletic competition are expected of the competitors. This course may be taken up to four times for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate advanced softball tactics/skills appropriate to intercollegiate level athletic competition
- exhibit proper etiquette and sportsmanship during the athletic experience
- exhibit the knowledge necessary to assess game situations and utilize appropriate solutions
- demonstrate team work

SPORT 366 Off Season Conditioning for Softball

Units: 0.5 - 3
Hours: 27 - 162 hours LAB
Prerequisite: None.
Enrollment Limitation: Tryout
Transferable: CSU; UC (UC credit limitation: Any or all PE activity courses combined: maximum credit, 4 units.)
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course covers basic fundamental skills and strategy tactics with an emphasis on a fitness component for intercollegiate athletics in the sport of softball. It offers a mental training component for peak performance. This course may be taken up to four times for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate proper footwork techniques specific to softball
- demonstrate proper weight lifting techniques needed to improve muscular strength and power for softball
- demonstrate proper form and technique executing various defensive drills for softball
- demonstrate proper form and technique executing offensive drills, such as hitting, bunting, and slapping for softball
- demonstrate proper form and technique executing various drills for the pitching position
- demonstrate proper form and technique executing various drills for the catching position
SPORT 368 Pre-Season Conditioning for Softball

This course is designed to optimize sports performance and reduce the risk of injury for the pre-season intercollegiate athlete in the sport of softball. Course content includes softball fundamental skills development, strength training, cardiovascular conditioning, agility, plyometric, speed training, and flexibility exercises. This course may be taken up to four times for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate the proper basic fundamentals of offense, including baserunning, lead-offs, bunts, and proper hitting machines
- demonstrate the proper basic fundamentals of defense, including catching, throwing, and fielding
- understand and properly execute offensive situational play and strategies, including hit and run, bunt and run, steals, delay steals, tagging up, sacrifice bunt, squeeze play, and applying signs from the coach
- understand and properly execute defensive situational play and strategies including 1st and 3rd, bunt coverage, slap coverage, and runners on base

SPORT 370 Swimming and Diving, Intercollegiate-Men

This is an advanced swimming and diving activity course that provides competition with other community college teams. It provides swimmers and divers with fundamentals, rules, team strategies, and aquatic skills. This course may be taken up to four times for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate advanced aquatic skills appropriate for intercollegiate level athletic competition
- exhibit proper etiquette and sportsmanship during athletic experience
- demonstrate the knowledge necessary to assess various training and competing situations and utilize appropriate solutions to swim and dive
- demonstrate the concept of teamwork
- show an improved individual level of fitness

SPORT 375 Swimming and Diving, Intercollegiate-Women

This is an advanced swimming and diving activity course that provides competition with other community college teams. Fundamentals, rules, team strategy, and aquatic skills appropriate to intercollegiate athletic competition are expected of competitors. This course may be taken up to four times for credit.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- demonstrate advanced aquatic skills appropriate to intercollegiate level athletic competition.
- exhibit proper etiquette and sportsmanship during the athletic experience.
- demonstrate the knowledge necessary to assess various content situations and apply appropriate solutions specific to swim and dive.
- demonstrate team work.
- show an improved individual level of fitness.

**SPORT 376 Off Season Swim & Dive**

Units: 0.5 - 3  
Hours: 27 - 162 hours LAB  
Prerequisite: None.  
Enrollment Limitation: Try out. This course is designed for athletes on the swim and dive team.  
Transferable: CSU; UC (UC credit limitation: Any or all PE activity courses combined: maximum credit, 4 units.)  
General Education: AA/AS Area III(a); CSU Area E2  
Catalog Date: June 1, 2020

This course combines basic skills and stroke technique with an emphasis on a fitness component for the sport of swim and dive. It also offers a dry-land training component for peak performance. This course is designed to prepare students for intercollegiate swim and dive competition. This course may be taken up to four times for credit.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- demonstrate proper strength and endurance specific to the sport of swimming and diving.
- perform weight lifting and/or body lifting techniques.
- perform the basic fundamentals of freestyle, backstroke, breaststroke and butterfly, including corresponding turns, flip turns and touch turns.
- apply and demonstrate speed, agility, and endurance training to the sport of swim and dive.
- properly execute dives in each of the 6 categories of diving: front, back, reverse, tuck, inward, and open.

**SPORT 377 Pre-Season Conditioning Swim & Dive**

Units: 0.5 - 3  
Hours: 27 - 162 hours LAB  
Prerequisite: None.  
Enrollment Limitation: Try out  
Transferable: CSU; UC (UC credit limitation: Any or all PE activity courses combined: maximum credit, 4 units.)  
General Education: AA/AS Area III(a); CSU Area E2  
Catalog Date: June 1, 2020

This course combines basic skills and stroke technique with an emphasis on a fitness component for the sport of swim and dive. It also offers a dry-land training component for peak performance. This course is designed to prepare students for intercollegiate swim and dive competition. It may be taken up to four times for credit.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- demonstrate improved cardiovascular endurance specific to the sport of swimming and diving.
- demonstrate proper strength and endurance specific to the sport of swimming and diving.
- perform weight lifting and/or body lifting techniques.
- perform the basic fundamentals of freestyle, backstroke, breaststroke, and butterfly, including corresponding turns, flip turns, and touch turns.
- apply and demonstrate speed, agility, and endurance training to the sport of swim and dive.
- properly execute dives in each of the 6 categories of diving: front, back, reverse, tuck, inward, and open.
SPORT 380 Tennis, Intercollegiate-Men

This course covers fundamentals, rules, and individual and/or team strategy appropriate to intercollegiate athletic competition in tennis. This course may be taken four times for credit.

Upon completion of this course, the student will be able to:

- show an improved individual level of fitness
- apply skills appropriate to intercollegiate level athletic competition
- learn proper etiquette and sportsmanship during the athletic experience
- demonstrate the knowledge necessary to assess various contest situations and apply appropriate solutions

SPORT 385 Tennis, Intercollegiate-Women

This course covers fundamentals, rules, and individual and/or team strategy appropriate to intercollegiate athletic competition in tennis. This course may be taken four times for credit.

Upon completion of this course, the student will be able to:

- demonstrate an improved individual level of fitness
- apply skills appropriate to intercollegiate level athletic competition
- learn proper etiquette and sportsmanship during the athletic experience
- assess various contest situations and apply appropriate solutions

SPORT 386 Off Season Conditioning for Tennis

This course prepares the intercollegiate tennis player for the competitive season and reduces risk of injury. Course content includes collegiate level tennis-specific skill development, a solid aerobic conditioning plan, sport-specific strength training, agility work, plyometrics, speed training, flexibility exercises and other activities designed to prepare the athlete both physically and mentally. This course may be taken up to four times for credit.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- assess fitness level for competition by applying the following fitness tests: body fat analysis, abdominal test, flexibility, and strength.
- demonstrate increased cardiovascular endurance, flexibility, and strength.
- perform and execute various baseline shots directed to specific targets on the court.
- explain and demonstrate tactics and strategies as they relate to both singles and doubles play.
- employ goal-setting techniques toward establishing a fitness program specific for tennis athletes.
- apply safety techniques and training/tennis etiquette to workouts.

SPORT 390 Track and Field, Intercollegiate-Men

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<tr>
<th>Units:</th>
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<tr>
<td>Hours:</td>
<td>175 hours LAB</td>
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<tr>
<td>Prerequisite:</td>
<td>None.</td>
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<tr>
<td>Enrollment Limitation:</td>
<td>Tryout</td>
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<td>CSU; UC (UC credit limitation: Any or all PE activity courses combined: maximum credit, 4 units.)</td>
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<td>AA/AS Area III(a); CSU Area E2</td>
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<td>Catalog Date:</td>
<td>June 1, 2020</td>
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This intercollegiate track and field course provides specialized training for competition with other community college teams. It covers the fundamental and advanced techniques needed for specific events, along with the rules, strategies, sportsmanship, and teamwork appropriate for intercollegiate competition. This course may be taken up to four times for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate an athlete's level of physical fitness and track and field event-specific skills
- apply skills appropriate to intercollegiate level track and field athletic competition
- apply proper track and field rules, etiquette, and sportsmanship during the athletic experience
- assess various track and field contest situations and apply appropriate solutions

SPORT 395 Track and Field, Intercollegiate-Women

<table>
<thead>
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<tbody>
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<td>Hours:</td>
<td>175 hours LAB</td>
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<tr>
<td>Prerequisite:</td>
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</table>

This is an advanced track and field team activity for female students providing specialized training for competition. It covers the fundamental and advanced techniques needed for specific events, along with the rules and strategies appropriate for intercollegiate competition. This course may be taken up to four times for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate advanced track and field skills, techniques, and tactics that are appropriate for the intercollegiate-level athletic competition.
- identify rules and display sportsmanship during the athletic experience.
- increase levels of fitness, along with improvements in techniques and performances in practice and competition settings.
- demonstrate an appreciation for teamwork.

SPORT 396 Off Season Conditioning for Track and Field
This course includes sport-specific training, conditioning, and technical skill development specific to the sport of track and field for the off-season student athlete. Course content includes sport-specific skill development, event-specific strength training, cardiovascular conditioning, agility training, plyometric drills, anaerobic speed development, and enhancement of flexibility. This course may be taken up to four times for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate skill-specific techniques that are characteristic to the event areas in track and field.
- develop an increase in cardiovascular endurance, muscular strength, and anaerobic power needed for competitive performances.
- analyze proper form executing the drills and exercises in strength training, cardiovascular training, anaerobic training, and flexibility work.
- choose appropriate warm-up and cool-down procedures for injury prevention.

SPORT 403 Pre-Season Conditioning for Volleyball

This course involves a combination of skill development and strategy tactics with an emphasis on a fitness component for the sport of volleyball. It offers a mental training component for peak performance. This course is designed to prepare students for intercollegiate volleyball competition. It may be taken up to 4 times for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate improved anaerobic training in fitness tests and drills.
- execute speed, agility, and quickness drills correctly.
- demonstrate improvement in strength training exercises.
- implement appropriate offensive and defensive strategies in game-like situations.
- execute offensive and defensive skills correctly.

SPORT 405 Volleyball, Intercollegiate-Women

This course provides an opportunity for competition in intercollegiate women's volleyball. It provides volleyball fundamentals and skills. It also includes rules and individual and team strategies appropriate for intercollegiate athletic competition. This course may be taken four times for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:


• demonstrate an improved level of physical fitness
• apply skills appropriate to intercollegiate-level athletic competition
• demonstrate proper etiquette and sportsmanship during athletic competition
• assess various contest situations and apply appropriate solutions

SPORT 406 Off Season Conditioning for Volleyball

Units: 0.5 - 3
Hours: 27 - 162 hours LAB
Prerequisite: None.
Enrollment Limitation: Tryout.
Transferable: CSU; UC (UC credit limitation: Any or all PE activity courses combined: maximum credit, 4 units.)
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course provides training and technical skill development specific to the sport of volleyball for off-season student-athletes. Topics include skill development, strength training, cardiovascular conditioning, agility work, plyometrics, speed training, and flexibility exercises. This course may be taken up to four times for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• demonstrate proper form and techniques when executing various drills for volleyball
• apply appropriate warm up and cool down procedures for injury prevention
• demonstrate proper form in strength training techniques
• demonstrate proper form in plyometric exercises
• demonstrate proper form in functional sport-specific drills
• demonstrate proper technique in agility training

SPORT 410 Water Polo, Intercollegiate-Men

Units: 3
Hours: 175 hours LAB
Prerequisite: None.
Enrollment Limitation: Tryout
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC (UC credit limitation: Any or all PE activity courses combined: maximum credit, 4 units.)
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This advanced water polo team activity provides opportunities for competition with other community college teams. Fundamentals, rules, team strategy, and swimming skills appropriate to intercollegiate athletic competition are expected of the competitors. This course may be taken up to four times for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• demonstrate advanced water polo tactics/skills appropriate to intercollegiate level athletic competition.
• exhibit proper etiquette and sportsmanship during athletic practice and competition.
• assess various water polo situations and apply appropriate solutions.
• demonstrate team work.
• show an improved individual level of fitness.

SPORT 415 Water Polo, Intercollegiate-Women
This is an advanced water polo team activity that provides competition with other community college teams. Fundamentals, rules, team strategy, and swimming skills appropriate to intercollegiate athletic competition are expected of the competitors. This course may be taken up to four times for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate advanced water polo tactics/skills appropriate to intercollegiate level athletic competition.
- exhibit proper etiquette and sportsmanship during athletic practice and competition.
- assess various water polo situations and apply appropriate solutions.
- demonstrate team work.
- show an improved individual level of fitness.

SPORT 416 Off Season Water Polo

This course combines basic skills and strategy tactics with an emphasis on a fitness component for the sport of water polo. It also offers a dry-land training component for peak performance. This course is designed to prepare students for intercollegiate water polo competition. This course may be taken up to four times for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- increase proper strength and endurance specific to the sport of water polo.
- perform weight lifting and/or body lifting techniques specific to water polo training.
- demonstrate the basic fundamentals of offense formation and set up.
- demonstrate the basic fundamentals of defensive formation and set up.
- combine the basic water polo skills and distinguish which skills are most appropriate for specific game situations.
- develop ways to support, lead, and communicate amongst teammates.

SPORT 417 Pre-Season Conditioning for Water Polo

This course is designed for student athletes involved in or trying out for the collegiate water polo team. It combines basic skills and strategy tactics with an emphasis on a fitness component for the sport of water polo. It also offers a dry-land training component for peak performance. This course is designed to prepare students for intercollegiate water polo competition.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- demonstrate strength and endurance needed in the sport of water polo.
- demonstrate the basic fundamentals of offense formation and set up.
- demonstrate the basic fundamentals of defensive formation and set up.
- combine the basic water polo skills and distinguish which skills are most appropriate for specific game situations.
- support, lead, and communicate with teammates.
- perform weight lifting and/or body lifting techniques specific to water polo training.

**SPORT 495 Independent Studies in Sport**

Units: 1 - 3  
Hours: 54 - 162 hours LAB  
Prerequisite: None.  
Transferable: CSU  
General Education: AA/AS Area III(a)  
Catalog Date: June 1, 2020

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

**Team Activity (TMACT)**

**TMACT 300 Soccer, Indoor**

Units: 1  
Hours: 54 hours LAB  
Course Family: Soccer (http://arc.losrios.edu/course-families#id_100023)  
Prerequisite: None.  
Transferable: CSU; UC (UC credit limitation: Any or all PE activity courses combined: maximum credit, 4 units)  
General Education: AA/AS Area III(a); CSU Area E2  
Catalog Date: June 1, 2020

This course covers the beginning-level knowledge and skills needed to play indoor soccer. It also covers the differences between indoor and outdoor soccer as well as the history, techniques, rules, and strategies of the game with an emphasis on improvement of their physical fitness and skills.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- demonstrate formations, tactics, and terminology associated with indoor soccer.
- explain and employ indoor soccer rules.
- execute basic soccer skills.
- demonstrate proper sequence of dynamic stretching.

**TMACT 301 Indoor Soccer II**

Units: 1  
Hours: 54 hours LAB  
Course Family: Soccer (http://arc.losrios.edu/course-families#id_100023)  
Prerequisite: TMACT 300 with a grade of "C" or better  
Transferable: CSU; UC (UC credit limitation: Any or all PE activity courses combined: maximum credit, 4 units)  
General Education: AA/AS Area III(a); CSU Area E2  
Catalog Date: June 1, 2020

This course covers the intermediate-level player knowledge and skills needed to play indoor soccer, with an emphasis in defending, attacking, and technical ability. It also
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- evaluate personal technical skills in soccer.
- apply intermediate technical and tactical game strategies for indoor soccer.
- employ offensive as well as defensive systems and formations for indoor soccer.
- explain and employ indoor soccer rules.

TMACT 302 Soccer - Outdoor

This course covers the beginning-level knowledge and skills needed to play outdoor soccer, emphasizing defense, offense, passing, ball control, heading, and shooting. It also covers the skills, strategy, and rules that govern the play of outdoor soccer.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate beginning-level skills of passing, dribbling, trapping, and striking a soccer ball.
- execute basic goalkeeping skills and offensive and defensive tactics.
- execute a basic game plan in match competition.
- demonstrate improved endurance and strength.

TMACT 303 Outdoor Soccer II

This course covers the intermediate-level player environment to challenge and improve the player's knowledge and skills needed to play outdoor soccer, emphasizing defending, attacking, and technical ability. It covers the skills, strategy, and rules that govern the play of outdoor soccer. This class is not designed for beginning soccer players.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate an intermediate level of skills and knowledge in playing soccer.
- demonstrate intermediate technical skills such as dribbling and passing skills.
- explain and demonstrate systematic and organized offensive patterns.
- demonstrate knowledge of formations and systems such as 1-4-4-2, 1-4-2-3-1, 1-4-3-3, and 1-3-5-2.
- demonstrate and show the physical fitness to play intermediate soccer.
- explain the the laws of the game.
TMACT 304 Outdoor Soccer III

This course covers an advanced level knowledge and skills needed to play outdoor soccer, emphasizing technical and conditioning drills, game preparations, match analysis, and tactical knowledge, as well as defensive and offensive drills of advanced level play. It also introduces basic coaching techniques.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- apply advanced and intermediate technical skills in game situations.
- demonstrate advanced tactical game awareness, strategies, and conditioning.
- prepare for games including mental factors, food, and nutrition in soccer.
- identify factors to analyze games in matches.
- demonstrate soccer coaching ability, method, and knowledge of soccer.

TMACT 310 Baseball

This course emphasizes defense, offense, pitching, base running, team strategy, and conditioning for college level, advanced baseball.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- demonstrate the skills necessary to participate in game situations at various playing positions
- evaluate team play concepts in practice and game situations
- define the benefits of a lifetime fitness program as it relates to baseball
- compare and contrast strategies for fielding and base running
- interact with classmates as teammates in a collaborative and competitive environment

TMACT 320 Basketball

This course features tournament scrimmage play to improve offensive, defensive, and team skills for basketball. It also covers individual fundamental skills including shooting, passing, ball handling, individual defense, and rebounding.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- evaluate and execute offensive and defensive skills through participation in game situations.
- demonstrate the importance of team play in game situations.
- explain the elements of basketball that may be applied to maintaining lifetime fitness.
- demonstrate basketball-related skills including shooting, passing, ball handling, rebounding, and defensive techniques.

TMACT 330 Volleyball

Units: 1
Hours: 54 hours LAB
Course Family: Volleyball (http://arc.losrios.edu/course-families#id_100025)
Prerequisite: None.
Transferable: CSU; UC (UC credit limitation: Any or all PE activity courses combined: maximum credit, 4 units)
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This beginning volleyball course covers the basic techniques of passing, setting, serving, and attacking, as well as rules and simple strategies of play.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply the rules and etiquette of volleyball
- apply sport-specific terminology in a game-like setting
- demonstrate proper defensive positions and serve receive
- demonstrate basic skills of passing, setting, attacking, and serving
- demonstrate improved endurance and strength
- apply sport-specific terminology in drills and games

TMACT 331 Volleyball II

Units: 1
Hours: 54 hours LAB
Course Family: Volleyball (http://arc.losrios.edu/course-families#id_100025)
Prerequisite: TMACT 330 with a grade of "C" or better
Transferable: CSU; UC (UC credit limitation: Any or all PE activity courses combined: maximum credit, 4 units)
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This intermediate course focuses on refining basic skills of serving, passing, and setting as well as further developing skills in serve-receive, defense, spiking, blocking, and digging. It also covers challenging techniques and strategies that follow NCAA collegiate rules and etiquette.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate intermediate-level skills of passing, setting, serving, and blocking
- execute offensive and defensive systems
- execute a basic game plan in match competition
- demonstrate improved endurance and strength

TMACT 333 Volleyball III
This advanced volleyball class focuses on more complicated skills and techniques of the sport. Competitive play takes a higher priority. Topics include a variety of offensive and defensive systems, and how to apply them in a game-like setting.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- apply intermediate and advanced level knowledge and learned skills for the sport of volleyball in drills, games and tournament situations.
- demonstrate knowledge of offensive systems including but not limited to 5'1 and 6'2 serve receive.
- demonstrate knowledge of defensive systems including but not limited to perimeter defense and rotation defense.
- demonstrate advanced understanding of volleyball teamwork in game-like setting.
- execute all of the skills in volleyball including serving, passing, setting, spiking, blocking and digging.

**TMACT 340 Football**

Upon completion of this course, the student will be able to:

- define the benefits of a lifetime fitness program as it relates to football.
- demonstrate the skills necessary to participate in game situations while playing various positions.
- evaluate team play concept in practice and game situations.
- interact with classmates as teammates in a collaborative and competitive environment.

**TMACT 352 Softball, Slow Pitch**

Upon completion of this course, the student will be able to:

- develop and improve basic softball skills including catching, throwing, fielding, pitching, hitting, and base running.
- describe the rules of the game for participation in games and tournaments.
demonstrate the basic offensive and defensive strategies of softball

**TMACT 370 Water Polo**

Units: 1  
Hours: 54 hours LAB  
Prerequisite: Participants must be able to swim 300 yards freestyle without stopping and have sufficient egg beater and breast-stroke kicks to tread water for 5 minutes.  
Transferable: CSU; UC (UC credit limitation: Any or all PE activity courses combined: maximum credit, 4 units)  
General Education: CSU Area E2  
Catalog Date: June 1, 2020

This course features tournament-style scrimmage play to improve offensive, defensive, and team skills in water polo.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- evaluate and execute offensive and defensive skills through participation in game situations
- demonstrate the importance of team play in game situations
- explain the elements of water polo that may be applied to lifetime fitness

**TMACT 495 Independent Studies in Team Activity**

Units: 1 - 3  
Hours: 54 - 162 hours LAB  
Prerequisite: None.  
Transferable: CSU  
General Education: AA/AS Area III(a)  
Catalog Date: June 1, 2020

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.
Learning Resource Center | American River College

The Learning Resource Center (LRC) is an instructional facility that provides classrooms, a quiet learning environment, and instructional support services. The LRC advances the vision and mission of American River College by offering supplemental instruction and academic support through individualized tutoring and other alternative modes of instruction to currently enrolled ARC students seeking to successfully achieve their educational goals.

### LRC 300 Introduction to Tutor Training

**Units:** 1  
**Hours:** 18 hours LEC  
**Prerequisite:** None.  
**Enrollment Limitation:** A grade of B or better in the course to be tutored. Faculty recommendation and approval to be a tutor in the LRC Department.  
**Advisory:** Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.  
**Catalog Date:** June 1, 2020

This course is offered in coordination with the Learning Resource Center Tutorial Services Program. It introduces the role of a tutor and the methods of effective tutoring. It covers establishing goals and objectives, implementing a tutorial plan, applying effective learning skills, developing effective communication and listening skills, and fostering critical thinking. This course is formerly known as INDIS 320.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- demonstrate the necessary skills to become an effective tutor.
- analyze the tutoring needs of the students and implement a tutorial plan.
- recognize different learning styles and develop materials appropriate for each of those styles.
- display an awareness of cultural diversity.
- demonstrate effective communication and listening skills.
- assess and make recommendations to improve students' study skills.

### LRC 310 Introduction to Group Tutoring

**Units:** 1  
**Hours:** 18 hours LEC  
**Prerequisite:** None.  
**Enrollment Limitation:** A grade of B or better in the course to be tutored. Faculty recommendation to be a Beacon group tutor.  
**Transferable:** CSU  
**Catalog Date:** June 1, 2020

This course is offered in coordination with the Beacon Tutoring Program at American River College. It introduces the role of the tutor as a facilitator and presents the methods of effective group tutoring. This course emphasizes collaborative and interactive approaches to learning in a group setting. This course is formerly known as INDIS 321.

**Student Learning Outcomes**
Upon completion of this course, the student will be able to:

- develop the necessary skills to become an effective group tutor.
- provide for the students an environment that is conducive to learning.
- design collaborative, interactive activities and materials that encourage students to work together.
- recognize different learning styles and develop materials appropriate for each of those styles.
- help students identify learning styles or preferences.
- assess and make recommendations to improve students' study skills.

**LRC 1000 Supervised Tutoring**

<table>
<thead>
<tr>
<th>Units:</th>
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</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>500 hours LAB</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Enrollment Limitation:</td>
<td>Student must be enrolled in an ARC college credit course and be referred to tutoring by an ARC instructor or counselor on the basis of an identified learning need.</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course offers individualized tutoring designed to assist students to increase their success in college courses. Content varies depending upon the adjunct course. Attention is given to essential study skills and utilization of campus learning resources. Students may enroll for support of more than one college course per semester. This course may be repeated in subsequent semesters. This noncredit supervised tutoring course allows for 1-500 hours per semester.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- demonstrate essential study skills.
- effectively utilize available campus learning resources.
- demonstrate a positive attitude toward continued learning in the subject area.
Legal Studies | American River College

The Legal Studies program at American River College is approved by the American Bar Association. ARC’s Legal Studies program has been preparing students for entry-level positions in this profession for over 30 years.

‘Legal assistant and ‘paralegal’ are synonymous terms according to California Business & Professions Code (B & P Code) sections 6450-6456. Section 6450 defines a legal assistant as “a person qualified by education, training, is employed by an attorney, or other entity, and who performs substantial legal work under the direction and supervision of an active member of the State Bar of California”. Legal assistants do not provide legal advice. It is unlawful for anyone not currently licensed to practice law in California to give legal advice.

Division Dean  Kathy Sorensen (Interim)
Department Chairs  Asha Wilkerson

(916) 484-8512
legalclinic@arc.losrios.edu

Associate Degree

A.A. in Paralegal Studies

This degree prepares students to work in the legal field as an entry-level paralegal. It covers basic substantive and procedural areas including civil litigation, legal research and legal writing, contracts, and torts. This degree is in full compliance with California Business and Professions Code section 6450 regarding preparation for work in this field.

The American Bar Association (ABA) has specific requirements for 18 units of additional non-paralegal coursework (ABA Breadth). Students are encouraged to consult a counselor or the department chair for courses that satisfy the ABA Breadth requirements.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>LA 300</td>
<td>Introduction to Law and the American Legal System</td>
<td>3</td>
</tr>
<tr>
<td>LA 310</td>
<td>Civil Procedures and Litigation</td>
<td>3</td>
</tr>
<tr>
<td>LA 312</td>
<td>Torts and Personal Injury</td>
<td>3</td>
</tr>
<tr>
<td>LA 314</td>
<td>Contract Law</td>
<td>3</td>
</tr>
<tr>
<td>LA 320</td>
<td>Legal Research</td>
<td>3</td>
</tr>
<tr>
<td>LA 321</td>
<td>Legal Writing</td>
<td>3</td>
</tr>
<tr>
<td>LA 350</td>
<td>Law Office Management</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A minimum of 9 units from the following:</td>
<td>9</td>
</tr>
<tr>
<td>LA 322</td>
<td>Advanced Legal Research and Writing (3)</td>
<td></td>
</tr>
<tr>
<td>LA 330</td>
<td>Family Law and Procedure (3)</td>
<td></td>
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<tr>
<td>LA 332</td>
<td>Administrative Law and Procedure(3)</td>
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<tr>
<td>LA 334</td>
<td>Criminal Law and Procedure (3)</td>
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<tr>
<td>LA 336</td>
<td>Immigration Law (3)</td>
<td></td>
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<tr>
<td>LA 342</td>
<td>Evidence (3)</td>
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</tr>
</tbody>
</table>
COURSE CODE | COURSE TITLE                      | UNITS
------------|----------------------------------|------
LA 360      | Corporations Law (3)             |      
LA 362      | Estate Planning and Probate Procedure (3) |      
LA 364      | Landlord Tenant Law (3)          |      
LA 365      | Legal Clinic (3)                 |      
LA 366      | Basic Bankruptcy Law (3)         |      
LA 368      | Workers' Compensation Law (3)    |      
LA 495      | Independent Studies in Legal Assisting (1 - 3) |      
LA 498      | Work Experience in Legal Assisting (1 - 4) |      

A minimum of 18 units from the following: 18

**ABA Breadth:** Courses from at least three different areas of Areas 1-5B of the Intersegmental General Education Transfer Curriculum (IGETC), excluding performance courses, activity courses, administration of justice courses, and the lab component of science courses.

| Total Units: | 48 |

The Paralegal Studies Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- incorporate basic legal theories in various substantive areas of law as required by supervising attorney.
- define and use legal terminology accurately and appropriately.
- differentiate between relevant and irrelevant information and evidence.
- research relevant legal authority.
- verify the currency of relevant legal authority.
- draft correspondence to be sent to clients or opposing counsel and others.
- prepare basic legal documents for signature and submission to court by the supervising attorney.
- organize professional assignments efficiently.
- support the supervising attorney in all phases of legal practice.
- demonstrate ethical behavior in the legal setting.
- recognize acts that may constitute the unlicensed practice of law.
- express their thoughts effectively, both orally and in writing, with attorneys and clients.

**Career Information**

Career opportunities for paralegals have an excellent outlook. According to the US Department of Labor's Job Outlook, employment of paralegals is projected to grow 15 percent between 2016 and 2026, faster than the average for all occupations. Paralegals find employment in both the State and Federal government as well as private practice and corporate settings.

**Certificates of Achievement**

**Law Office Clerical Assistant Certificate**

This certificate provides the skills needed for entry-level clerical positions in law offices. The course work emphasizes workforce skills including an introduction to the use of terms particular to the legal field.

This Law Office Clerical Assistant certificate is not approved by the American Bar Association and does not prepare students to work as paralegals or legal assistants under California state law.

**Catalog Date:** June 1, 2020
# Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
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<tbody>
<tr>
<td>BUS 312</td>
<td>Workplace Behavior and Ethics</td>
<td>3</td>
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<tr>
<td>BUSTEC 100.1</td>
<td>Keyboarding Skills: Beginning (1)</td>
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<tr>
<td>or BUSTEC 300.1</td>
<td>Keyboarding/Applications: Beginning (1)</td>
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<tr>
<td>BUSTEC 100.2</td>
<td>Keyboarding Skills: Intermediate (1)</td>
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<tr>
<td>or BUSTEC 300.2</td>
<td>Keyboarding/Applications: Document Formatting (1)</td>
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<tr>
<td>BUSTEC 305</td>
<td>Business Technology Essentials</td>
<td>1</td>
</tr>
<tr>
<td>BUSTEC 310</td>
<td>Introduction to Word/Information Processing</td>
<td>3</td>
</tr>
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<td>LA 300</td>
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<td></td>
<td><strong>Total Units:</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

### Student Learning Outcomes

Upon completion of this program, the student will be able to:

- demonstrate keyboarding competence in the legal workplace.
- solve common office problems using current business technology and software applications.
- practice effective communication with law office personnel and clients.
- apply appropriate ethical standards to the special situations encountered in a law office.
- produce written documents in appropriate formats using typical legal office technology.

### Career Information

Typical career opportunities are entry-level clerical positions in a law office. In order to earn an A.A. or a Certificate to become a Legal Assistant/Paralegal, see the Legal Studies Program requirements in the Behavior and Social Sciences Division.

### Paralegal Studies Certificate

Students must possess an A.A. degree or higher from a regionally accredited institution to be eligible for the certificate. The Paralegal Studies Certificate is a one-year course of study consisting of 30 units of legal specialty courses. Legal courses cover basic substantive and procedural areas including civil litigation, legal research and legal writing, contracts, and torts, in addition to electives within the program. This certificate is in full compliance with California Business and Professions Code section 6450 regarding preparation for work in this field.

Catalog Date: June 1, 2020

### Certificate Requirements

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<td>LA 342</td>
<td>Evidence (3)</td>
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<tr>
<td>LA 360</td>
<td>Corporations Law (3)</td>
<td></td>
</tr>
<tr>
<td>LA 362</td>
<td>Estate Planning and Probate Procedure (3)</td>
<td></td>
</tr>
<tr>
<td>LA 363</td>
<td>Public Benefits Clinic (3)</td>
<td></td>
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<tr>
<td>LA 364</td>
<td>Landlord Tenant Law (3)</td>
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<td>LA 495</td>
<td>Independent Studies in Legal Assisting (1 - 3)</td>
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<tr>
<td>LA 498</td>
<td>Work Experience in Legal Assisting (1 - 4)</td>
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<td></td>
<td><strong>Total Units:</strong></td>
<td><strong>30</strong></td>
</tr>
</tbody>
</table>

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- incorporate basic legal theories in various substantive areas of law as required by supervising attorney.
- define and use legal terminology accurately and appropriately.
- differentiate between relevant and irrelevant information and evidence.
- research relevant legal authority.
- verify the currency of relevant legal authority.
- draft correspondence to be sent to clients or opposing counsel and others.
- prepare basic legal documents for signature and submission to court by the supervising attorney.
- organize professional assignments efficiently.
- support the supervising attorney in all phases of legal practice.
- demonstrate ethical behavior in the legal setting.
- recognize acts that may constitute the unlicensed practice of law.
- express their thoughts effectively, both orally and in writing, with attorneys and clients.

**Career Information**

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**Legal Assisting (LA)**
LA 300 Introduction to Law and the American Legal System

This course introduces the American legal system, its history, and function. It provides an overview of several important areas of law such as torts and crimes and the legal assistant's role in the system.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- define the role and functions of the legal assistant
- use basic legal terminology appropriately
- analyze a fact pattern
- research basic information in appropriate legal research sources
- integrate knowledge of ethical obligations into all aspects of practice

LA 310 Civil Procedures and Litigation

This course is an introduction to the California court system with emphasis on understanding the practical aspects of litigation and the proper procedures required by statutes and rules of court. It covers the phases of California court procedure, including state and Federal constitutional limitations, jurisdiction, venue, pleadings, and motions. It also includes the forms by which matters are submitted to the court system from pre-litigation through appeals.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify the practical procedural aspects of litigation, such as proper parties, jurisdiction, venue, claims, pleading, defaults, statutes of limitations, and various other motions.
- compare and contrast the major duties and responsibilities of paralegals in various civil litigation practices.
- demonstrate the use of proper methods and forms to submit civil matters to the court system.
- identify ethical issues that arise in litigation.

LA 312 Torts and Personal Injury

This course is an overview of substantive tort law as it applies to personal injury (PI) cases. It introduces tort concepts, such as negligence, intent, and strict liability, including the elements required to prove liability and defenses available to litigants. This course covers pretrial procedures, such as discovery, settlement offers, and witness and trial preparation.

Student Learning Outcomes

Upon completion of this course, the student will be able to:
- define the elements of common tort causes of action.
- identify the steps a typical personal injury (PI) case follows from identification of the client through trial preparation.
- evaluate the evidence available in light of a case.
- apply appropriate defenses to common tort causes of action.
- categorize the types of torts appropriately.
- manage information to assist the attorney in successful representation of a client.
- identify ethical issues that arise in a torts practice.

**LA 314 Contract Law**

<table>
<thead>
<tr>
<th>Units:</th>
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<tbody>
<tr>
<td>Hours:</td>
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<tr>
<td>Prerequisite:</td>
<td>None.</td>
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<td>Corequisite:</td>
<td>LA 300</td>
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<tr>
<td>Transferable:</td>
<td>CSU</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course covers basic contract principles. Topics include formation, validity, defenses, rights of third parties, performance, breach, remedies, and damages.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- analyze contractual disputes for the required elements of prosecution or defense.
- apply and interpret standard contract terms.
- prepare a draft of a valid and enforceable document meeting the client's needs.
- evaluate a contract as to sufficiency of required elements.
- draft effective contract clauses to meet client's objectives.
- describe common defenses to contract causes of action.
- identify ethical issues arising in a transactional law practice.

**LA 320 Legal Research**

<table>
<thead>
<tr>
<th>Units:</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>54 hours LEC</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Corequisite:</td>
<td>LA 300</td>
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<tr>
<td>Transferable:</td>
<td>CSU</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course provides the paralegal with the basic tools of legal research in both federal and California law, with emphasis on California materials. It covers the location and use of primary and secondary sources, the elements of a court decision, and how to brief a case.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- classify the various legal research resources.
- identify appropriate resources for various legal research questions.
- synthesize the information provided in legal resources into a useful summary for the use by an attorney.
- plan a research approach to an issue.
- utilize a variety of computer resources to aid the research process.
- research California State Bar ethics opinions.
• analyze California State Bar ethics opinions.

LA 321 Legal Writing

This course is a continuation of LA 320: Legal Research. It includes the application of research methods to gather information which may be used in a variety of written products. It covers synthesizing information into various documents typically used in the law office. Documents created may include interoffice memoranda, court briefs, and letters to clients.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- prepare points and authorities which accompany motions.
- compose interoffice memos, motions, points and authorities, and ancillary materials for filing with the court.
- produce documents which are intended to inform or persuade the recipient such as letters and memos.
- recognize the intended audience and purpose of a document.
- integrate computer research into the creation of appropriate documents such as legal research databases and electronic practice guides.

LA 322 Advanced Legal Research and Writing

This course builds on the research and writing skills covered in LA 320 and LA 321. It focuses on refining legal research, analytical, and writing skills with an emphasis on researching and applying most current codes, rules, and practices pertaining to e-discovery, meta data mining, and other technical issues; it also covers drafting various discovery requests/responses and discovery motions/oppositions and/or other documents filed in Law and Motion departments relative to electronically stored information. Extensive use of computers and the internet is required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- create a comprehensive and efficient approach to researching and applying current codes, rules, and practices pertaining to e-discovery, meta data mining and other topical technical issues.
- evaluate and identify facts and supporting evidence for use in drafting discovery requests and responses with a focus on e-discovery, meta data mining, and other topical technical issues.
- analyze and verify research to be used in drafting discovery motions and oppositions for filing with the court.
- draft correspondence, legal documents, and pleadings for use by attorney in Law and Motion practice.

LA 330 Family Law and Procedure

This course covers California Family Law relating to dissolution procedures, property issues, and non-marital relationships. Legal procedures, and preparation of necessary forms and their significance are emphasized.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- define the role of the paralegal in relation to the family law attorney in litigation of family law cases.
- apply knowledge of the process to work efficiently and effectively with counsel and court staff.
- identify the economic effects of dissolution.
- analyze the client's case to determine proper pleadings and procedures.
- analyze ethical issues that may arise in a family law practice.

LA 332 Administrative Law and Procedure

Units: 3
Hours: 54 hours LEC
Prerequisite: LA 300 with a grade of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This course covers administrative law and procedure. Topics include comparison of administrative law to civil and criminal law, and administrative due process.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- define basic elements of administrative law and procedure.
- evaluate simple administrative cases.
- identify the necessary elements of complex administrative law case to assist the attorney.
- analyze ethical issues that may arise in an administrative law practice.
- present a simple administrative case.

LA 334 Criminal Law and Procedure

Units: 3
Hours: 54 hours LEC
Prerequisite: LA 300 with a grade of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This course provides background in both substantive crimes and criminal procedure. It includes a detailed study of the operation of the criminal justice system, from arrest and filing of charges through trial, conviction and appeal.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- prepare pre-trial writs and motions, and post-trial writs.
- evaluate common situations in criminal law and the appropriate steps to be taken such as discovery requests, filing motions, etc.
- identify substantive crimes.
- recognize procedural rules.
- identify and analyze ethical issues which arise in a criminal law practice.

LA 336 Immigration Law

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- define the role of the paralegal in relation to the family law attorney in litigation of family law cases.
- apply knowledge of the process to work efficiently and effectively with counsel and court staff.
- identify the economic effects of dissolution.
- analyze the client's case to determine proper pleadings and procedures.
- analyze ethical issues that may arise in a family law practice.
This course is an elective in the Paralegal Studies program and is designed to prepare students for work in an immigration law setting. Students will learn about the Justice Department, the Labor Department, and the State Department, and how these agencies administer immigration and naturalization laws.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- identify various paths to immigration and naturalization in the United States.
- demonstrate requisite skills needed to interview alien clients effectively.
- identify agencies involved in the immigration and naturalization process in the United States.
- prepare legal forms and documents related to administrative proceedings.
- differentiate between criteria for deportation and exclusion.
- identify various alien and immigrant categories.

**LA 340 Techniques of Interview**

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<thead>
<tr>
<th>Units:</th>
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<tbody>
<tr>
<td>Hours:</td>
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<td>Prerequisite:</td>
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<tr>
<td>Transferable:</td>
<td>CSU</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course provides general background information about basic communication and relates this information to the skills used by a legal assistant in interviewing clients and witnesses.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- identify interview techniques appropriate to the type of information needed to assist the attorney handling the client's case
- apply the various interviewing techniques
- evaluate the source evidence
- classify evidence as to relevancy

**LA 342 Evidence**

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<thead>
<tr>
<th>Units:</th>
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</thead>
<tbody>
<tr>
<td>Hours:</td>
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<tr>
<td>Prerequisite:</td>
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<td>Advisory:</td>
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<td>Transferable:</td>
<td>CSU</td>
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<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course covers the rules of evidence in federal and state courts. Topics include Hearsay Rule, Best Evidence Rule, and organizing deposition transcripts.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- evaluate and prepare evidence for trial under the supervision of an attorney.
- define admissibility of testimony, documents, and other evidence in federal and state courts.
- apply proper rules and forms to prepare objections and other responses to discovery requests.
LA 350 Law Office Management

This course covers aspects of the paralegal's role in a law office. Law office technology, accounting, time and records management, and communication skills are examined.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- differentiate between the role of the law office manager and the legal assistant.
- apply basic principles of time and records management.
- assess ethical requirements in various law office situations.
- evaluate the various associations for professional development.
- identify appropriate methods of communication in the law office setting.
- demonstrate an understanding of computer technology applications used in the practice of law.

LA 360 Corporations Law

This course covers corporation terminology and legal requirements governing corporations. Topics include formation, dissolution and liquidation of a corporation.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify and apply the legal requirements for forming, operating, merging, and dissolving a corporation.
- identify the necessity for and write a board resolution.
- apply requirements to create corporate documents.
- maintain an orderly minute book.
- identify corporate equity, debt securities, and tax considerations.
- identify corporate distribution issues.
- identify the appropriate government agencies for filings.
- identify ethical issues that arise in a corporate law practice.

LA 362 Estate Planning and Probate Procedure

This course is not available for credit in the CSU system.
This course covers estate planning, including the manner in which property may be held and ways it can be transferred. Testate and intestate probate procedures are included.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- analyze cases in order to assist the attorney in meeting the immediate needs of the client.
- prepare and file appropriate forms and documents to transfer property.
- identify the need for additional professional assistance in such areas as taxes and accounting.
- identify and analyze ethical issues that arise in an Estates and Probate practice.

**LA 364 Landlord Tenant Law**

**Units:** 3  
**Hours:** 54 hours LEC  
**Prerequisite:** LA 300 with a grade of "C" or better  
**Transferable:** CSU  
**Catalog Date:** June 1, 2020

This course focuses on the most common types of landlord-tenant disputes. It covers litigation and non-litigation matters. Topics also include the different types of tenancy, what constitutes habitability, and tenant's rights and obligations.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- identify the law that governs landlord-tenant relations.
- select and complete the appropriate forms required by California law.
- create a plan to accommodate the various stages of the landlord-tenant relationship.
- analyze the facts to determine an appropriate course of action.
- analyze ethical issues that arise in a landlord-tenant law practice.

**LA 365 Legal Clinic**

**Units:** 3  
**Hours:** 36 hours LEC; 54 hours LAB  
**Prerequisite:** LA 300, 310, 320, and 321 with grades of "C" or better  
**Transferable:** CSU  
**Catalog Date:** June 1, 2020

This course is a study of the activities of a legal clinic, including conducting client interviews, participating in legal consultations, performing legal research, and carrying out tasks needed in clinic operations, all under the direct supervision of clinic attorneys. This course also covers research, examinations, and conduct according to the Professional Rules of Responsibility and Ethics.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- identify, describe, and discuss the ethical rules of the American Bar Association (ABA) and the Rules of Professional Responsibility for lawyers in California.
- compare and contrast the authorized work of lawyers with the authorized work of non-lawyers.
- describe the Duty of Confidentiality, including its length and the way it is affected by technology.
- explain how conflicts of interest arise and how paralegals can avoid such conflicts when changing jobs.
- demonstrate a satisfactory level of expertise for interviewing legal clinic clients and meeting with attorneys during consultation.
- identify, analyze, and research legal issues presented by clients.
• demonstrate appropriate use of forms for interviewing clients, fact gathering, and reporting.
• demonstrate an understanding and knowledge of how paralegals are utilized in a professional setting.
• understand and demonstrate knowledge of a case lifecycle such as initial client contact, interview, representation, and case closure.
• draft appropriate documents needed to assist a clinic client with his or her legal matter.
• synthesize essential facts of a case and communicate findings to attorney supervisor.
• analyze legal issues and perform legal research accordingly.

LA 366 Basic Bankruptcy Law

Units: 3
Hours: 54 hours LEC
Prerequisite: LA 300 with a grade of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This course is an introduction to the practical aspects of representing debtors or creditors within the bankruptcy system. Topics include voluntary and involuntary bankruptcy, preparation of statements, and schedules for filing.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• identify fundamental aspects of bankruptcy.
• define the role of the legal assistant in a bankruptcy practice.
• manage document production for a typical bankruptcy filing.
• evaluate research needs and appropriate litigation support for potential bankruptcy action.
• identify ethical issues which may arise in a bankruptcy practice.

LA 368 Workers' Compensation Law

Units: 3
Hours: 54 hours LEC
Prerequisite: LA 300 with a grade of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This course provides an overview of the Workers' Compensation Law in California. It focuses on the procedural aspects of handling a Workers' Compensation claim from both the applicant perspective and the defense perspective.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• analyze the fundamentals of Workers' Compensation Law in relation to the legal assistant's role in the process.
• research California case law.
• formulate a discovery plan.
• analyze ethical considerations.
• prepare basic documents for a Workers' Compensation claim.

LA 495 Independent Studies in Legal Assisting

Units: 1 - 3
Hours: 54 - 162 hours LAB
Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

LA 498 Work Experience in Legal Assisting

Units: 1 - 4
Hours: 60 - 300 hours LAB
Prerequisite: None.
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position, or job related to legal assisting with a cooperating site supervisor. Students are advised to consult with the Legal Assisting Department faculty to review specific certificate and degree work experience requirements.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU
General Education: AA/AS Area III(b)
Catalog Date: June 1, 2020

This course provides students with opportunities to develop marketable skills in preparation for employment or advancement within the field of legal assisting. It is designed for students interested in work experience and/or internships in transfer-level degree occupational programs. Course content includes understanding the application of education to the workforce, completion of Title 5 required forms which document the student’s progress and hours spent at the work site, and developing workplace skills and competencies.

During the semester, the student is required to complete 75 hours of related paid work experience, or 60 hours of related unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. All students are required to attend the first class meeting, a mid-semester meeting, and a final meeting. Additionally, students who have not already successfully completed a Work Experience course will be required to attend weekly orientations while returning participants may meet individually with the instructor as needed. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• demonstrate application of industry knowledge and theoretical concepts in the field of legal assisting related to a transfer degree level career as written in the minimum three (3) learning objectives created by the student and his/her employer or work site supervisor at the start of the course

• make effective decisions, use workforce information, and manage his/her personal career plans.

• behave professionally, ethically, and legally at work, consistent with applicable laws, regulations, and organizational norms.

• behave responsibly at work, exhibiting initiative and self-management in situations where it is needed.

• apply effective leadership styles at work, with consideration to group dynamics, team and individual decision making, and workforce diversity.

• communicate in oral, written, and other formats, as needed, in a variety of contexts at work.

• locate, organize, evaluate, and reference information at work.

• demonstrate originality and inventiveness at work by combining ideas or information in new ways, making connections between seemingly unrelated ideas, and reshaping goals in ways that reveal new possibilities using critical and creative thinking skills such as logical reasoning, analytical thinking, and problem-solving.
The American River College Library courses teach vital research skills that enable students to achieve success in their college classes, their careers, and their day-to-day lives. Students will learn research skills to cope with the information rich environment in which they live. In particular, students will learn how to find and critically evaluate information from a wide variety of sources to meet their information needs.

**LIBR 102 Introduction to Library Resources**

Units: 1  
Hours: 18 hours LEC  
Prerequisite: None  
Catalog Date: June 1, 2020

This course introduces basic library services and resources. It covers the services and functions of an academic library and includes the skills needed to retrieve information from print and electronic resources using the library catalog, online databases, and the Internet. Access to and use of an academic library are required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- describe the services and resources available in an academic library.
- develop basic search strategies.
- use a variety of research tools to locate, select, and retrieve information in various formats.
- explain the characteristics and uses of various types of information sources.
- explain the importance and basic principles of avoiding plagiarism and citing sources.

**LIBR 318 Library Research and Information Literacy**

Units: 1  
Hours: 18 hours LEC  
Prerequisite: None  
Advisory: CISC 300 with a grade of "C" or better; Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340

Transferable: CSU; UC

General Education: AA/AS Area III(b)

Catalog Date: June 1, 2020

This course introduces the information competency skills necessary to conduct academic, professional, and personal research. It provides a step-by-step guide to the research process that is applicable to course work, professional work, and life-long learning. It emphasizes effective search strategies, selecting information tools, locating and retrieving information sources, analyzing and critically evaluating information, and using the information in an ethical manner.

**Student Learning Outcomes**
Upon completion of this course, the student will be able to:

- assess the nature and extent of information needed to complete a research task.
- formulate a research strategy.
- locate needed information effectively and efficiently.
- evaluate information sources for information depth and accuracy, credibility, authority, point of view or bias, intended audience, relevance, and physical accessibility.
- describe the economic, legal, social, and ethical issues related to the use of information.

LIBR 320 Introduction to Internet Research

Units: 1
Hours: 18 hours LEC
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

This course introduces the use of the Internet for academic research. It covers the scope of information available on the Web, presents various Web search tools, and provides strategies and techniques for locating and evaluating appropriate Web resources. This course also explores social and ethical issues concerning the Internet.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- recognize when an academic information need can be fulfilled using Internet resources.
- utilize a variety of search tools and techniques to find appropriate Internet sources for academic use.
- evaluate Internet information and sources.
- recognize and discuss major social and ethical issues concerning the Internet.
- utilize Internet information sources to create an informed response to an information need.

LIBR 325 Internet Research Skills

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: CISC 300; and eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC
General Education: AA/AS Area III(b)
Catalog Date: June 1, 2020

This course surveys the content, use, and evaluation of electronic information sources. Emphasis is placed on the effective use of the Internet as a research tool. It covers Internet resources including the deep Web, Web portals, online databases, and library catalogs. Communication services such as email, newsgroups, listservs, blogs, and social networks are also studied as are Web 2.0 and other emerging technologies. Database search strategies, techniques, and critical evaluation of information are covered. Historical and social issues surrounding the Internet are also discussed.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the historical and ongoing development of the Internet with emphasis on technical, social, economic, legal, and ethical issues.
- compare and contrast information retrieval systems, such as search engines, directories, and library databases in terms of content, reliability, ease of use, and consistency.
- identify online databases and other electronic sources to select the most appropriate, relevant information for a research need.
- formulate a research question and construct effective search strategies and techniques that address the nature of the question.
- critically evaluate online information for authority, relevance, scope, timeliness, and accuracy.
LIBR 494 Topics in Library Science

This course provides an opportunity to study current topics in library science that are not included in existing courses.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Analyze an information need and determine the extent of information needed
- Access information effectively and efficiently
- Evaluate information and its sources critically
- Use information effectively to accomplish a specific purpose
- Describe the economic, legal, and social issues surrounding the use of information

LIBR 495 Independent Studies in Library

This course provides an opportunity for independent study on issues related to library science.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Analyze an information need and determine the extent of information needed
- Access information effectively and efficiently
- Evaluate information and its sources critically
- Use information effectively to accomplish a specific purpose
- Describe the economic, legal, and social issues surrounding the use of information
Associate Degrees

A.A. in Leadership

This degree program centers around the leadership and management functions essential to building world class organizations. It focuses on the design of effective organizational systems and includes customer service, effective planning, statistical analysis, teamwork, and leadership. It also includes systems design, development, measurement, and improvement. Additionally, it examines the study of physics, statistics, ethics, business communications, and organizational psychology.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>MGMT 300</td>
<td>Introduction to Leadership in Action</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 320</td>
<td>Leadership in Action: Organizational Variation</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 330</td>
<td>Leadership in Action: Organizational Teams</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 340</td>
<td>Leadership in Action: Organizational Systems</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 350</td>
<td>Leadership in Action: Organizational Learning</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 142</td>
<td>Project Management Techniques and Software</td>
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A minimum of 6 units from the following:

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<tbody>
<tr>
<td>MGMT 374</td>
<td>Social Responsibility and Ethics in Management (3)</td>
</tr>
<tr>
<td>PHYS 310</td>
<td>Conceptual Physics (3)</td>
</tr>
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</table>

Total Units: 24

The Leadership Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- define the underlying principles and practices of leadership both personally and professionally.
- construct a systems approach to work, providing fundamental systems diagrams, flow charts, and functional methodologies for improvement.
- apply organizational strategies to ensure management functions are focused on the customer and measured for efficiency and effectiveness.
- analyze the relationship between leading and managing with an understanding of leadership styles and issues.
- develop team-centered corporate cultures to enhance organizational success.
- measure the importance of operations management in relationship to designing effective control procedures that evolve into a continual improvement approach to
A.A. in Management

This program is intended for those who wish to progress to positions of responsibility in their respective industry. Its strong management focus provides the knowledge and skills needed to progress into management positions. Topics include management communication, human resources, organizational behavior, diversity management, and business computer applications.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
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<tr>
<td>MGMT 300</td>
<td>Introduction to Leadership in Action</td>
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<tr>
<td>MGMT 304</td>
<td>Principles of Management (3)</td>
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<tr>
<td>MGMT 308</td>
<td>Personnel and Human Resources Management (3)</td>
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<tr>
<td>MGMT 360</td>
<td>Management Communication (3)</td>
<td>3</td>
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<tr>
<td>MGMT 362</td>
<td>Techniques of Management</td>
<td>3</td>
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<tr>
<td>MGMT 372</td>
<td>Human Relations and Organizational Behavior</td>
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<td>A minimum of 6 units from the following:</td>
<td>6</td>
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<tr>
<td>BUS 340</td>
<td>Business Law (3)</td>
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<tr>
<td>CISA 306</td>
<td>Intermediate Word Processing (2)</td>
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<td>CISA 308</td>
<td>Exploring Word Processing and Presentation Software (1)</td>
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<td>CISA 316</td>
<td>Intermediate Electronic Spreadsheets (2)</td>
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<td>CISA 318</td>
<td>Exploring Spreadsheet Software (1)</td>
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<td>CISA 340</td>
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<td>MGMT 142</td>
<td>Project Management Techniques and Software (3)</td>
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<td>Total Units:</td>
<td>24</td>
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The Management Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- incorporate leadership skills and abilities that are effective in managing a multicultural workforce.
- analyze practical business problems.
- apply current management philosophies to current management problems.
- integrate management principles in relationship to finance, personnel, products, services and information.
- communicate effectively verbally and in writing in various business settings.
- utilize critical thinking and research skills in the evaluation of alternative solutions.

Certificates of Achievement

Conflict Management Certificate

This certificate focuses on identifying and understanding the underlying causes of workplace conflict and strategies for managing conflict effectively. It explores the impact of conflict on workplace communication, decision-making, and leadership. It covers practical and strategic skills to prevent escalation of conflict and defuse disruptive behaviors.
Certificate Requirements

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<tr>
<th>COURSE CODE</th>
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<tr>
<td>BUS 317</td>
<td>Managing Workplace Conflict</td>
<td>3</td>
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<tr>
<td>BUS 330</td>
<td>Managing Diversity in the Workplace</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 308</td>
<td>Personnel and Human Resources Management</td>
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<tr>
<td>MGMT 372</td>
<td>Human Relations and Organizational Behavior</td>
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<td>Total Units</td>
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</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- explain and assess the role personality and negotiating temperament play in workplace conflict management
- analyze the negotiation process, strategies, and techniques for effective conflict resolution in the workplace
- apply a situational approach to workplace conflict resolution
- evaluate the benefits and drawbacks of various conflict management strategies in the context of the workplace
- explain the key challenges to personnel and human resource management in developing the flexible and skilled workforce needed in governmental and private organizations
- describe the effective philosophies of human behavior at work
- define culture within the context of the United States workplace

Introduction to Leadership in Action Certificate

The Introduction to Leadership in Action certificate focuses on the leadership and management functions essential to building world class organizations in today’s diverse and complex environments. It also addresses customer satisfaction with emphasis on the development of effective planning, systems design, statistical analysis, teamwork and leadership.

Certificate Requirements

<table>
<thead>
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<td>MGMT 350</td>
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<td>3</td>
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<tr>
<td>Total Units</td>
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<td>15</td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Assess the underlying principles and practices of organizational leadership both personally and professionally.
- Analyze and plan organizational strategies to ensure leadership and management functions are focused on the customer and measured for efficiency and effectiveness.
- Distinguish between leading and managing as well as the effective design and use of groups and teams within organizational processes for the purpose of creating
Leadership Certificate

This certificate focuses on the leadership and management functions essential to building world class organizations. It also includes concepts, such as customer satisfaction with emphasis on effective planning, systems design, statistical analysis, teamwork, and leadership. It includes the study of physics, statistics, ethics, and organizational psychology.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGMT 142</td>
<td>Project Management Techniques and Software</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 300</td>
<td>Introduction to Leadership in Action</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 320</td>
<td>Leadership in Action: Organizational Variation</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 330</td>
<td>Leadership in Action: Organizational Teams</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 340</td>
<td>Leadership in Action: Organizational Systems</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 350</td>
<td>Leadership in Action: Organizational Learning</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 374</td>
<td>Social Responsibility and Ethics in Management</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 310</td>
<td>Conceptual Physics</td>
<td>3</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>24</td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- describe the underlying principles and practices of leadership
- construct a systems approach to work using fundamental systems diagrams, flow charts, and functional methodologies for improvement.
- analyze the relationship between leading and managing.
- develop team-centered corporate cultures to enhance organizational success.
- measure the importance of operations management in relationship to designing effective control strategies.

Management Certificate

This program is designed for those who wish to progress from entry-level positions in management and related areas. Topics include human resources, business law, management communication, and organizational behavior.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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</thead>
<tbody>
<tr>
<td>MGMT 304</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 308</td>
<td>Personnel and Human Resources Management</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 360</td>
<td>Management Communication</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 362</td>
<td>Techniques of Management</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 372</td>
<td>Human Relations and Organizational Behavior</td>
<td>3</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>
Upon completion of this program, the student will be able to:

- analyze practical management problems.
- apply current management philosophies to current management problems.
- integrate management principles in relationship to finance, personnel, products, services and information.
- utilize critical thinking and research skills in the evaluation of alternative solutions.

Project Management Certificate

This certificate covers the responsibilities of a project manager. It includes the knowledge needed to manage a project, control costs, and schedule resources. It also introduces the use of project management software to track project resources, tasks, and milestones. Included in the program are basic business and management theory, as well as accounting principles.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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</thead>
<tbody>
<tr>
<td>ACCT 101</td>
<td>Fundamentals of College Accounting (3)</td>
<td>3 - 4</td>
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<tr>
<td>or ACCT 301</td>
<td>Financial Accounting (4)</td>
<td></td>
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<tr>
<td>BUS 300</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 142</td>
<td>Project Management Techniques and Software (3)</td>
<td>3</td>
</tr>
<tr>
<td>or CISA 160</td>
<td>Project Management Techniques and Software (3)</td>
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<td>MGMT 304</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>12 - 13</td>
</tr>
</tbody>
</table>

Upon completion of this program, the student will be able to:

- construct a basic plan of action utilizing project management software
- compare and contrast various theories of leadership and motivation
- explain the principles of project management with regard to case studies
- demonstrate the ability to formulate a project plan, given specific scenarios
- assess the inherent advantages and shortcomings in various software packages
- interpret the basic elements of financial statements
- apply the basic functions of management, such as planning and control functions

Career Information

Organizations need employees who understand basic business and management theory and can manage a project from inception to completion. Employment outlook for the 2012-2022 period projects over 40,000 job openings nationally for Project Managers, in a variety of industries, as a "new and emerging" occupation.

Certificates

Leadership in Action: Organizational Learning Certificate

This certificate centers on the basic business systems and the practical application of the tools of systems thinking. It focuses on the principles of Profound Knowledge as it
relates to the planning processes of organizations, the manager’s ability to design and implement effective systems to the prediction of the strategic plans, and the measurement of the output and outcomes on overall effectiveness.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
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</thead>
<tbody>
<tr>
<td>MGMT 300</td>
<td>Introduction to Leadership in Action</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 350</td>
<td>Leadership in Action: Organizational Learning</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 374</td>
<td>Social Responsibility and Ethics in Management</td>
<td>3</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>9</td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- appraise organizational progress with the tools of Essential Process Analysis (EPA) to revise and design the delivery of organizational products and services.
- explore human capabilities of systems’ members.
- apply the theories of Emotional Intelligence at work.
- use the tools of information management to explore patterns in systems thinking.

Leadership in Action: Organizational Systems Certificate

This certificate focuses on the holistic nature of life and examines organizations from this foundational perspective. It centers on the design, implementation and measurement of systems that carry out predefined actions as a result of anticipated events, identifies the nature of imperfect implementation technology and describes how system limitations complicate organizational progress.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
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</tr>
</thead>
<tbody>
<tr>
<td>MGMT 300</td>
<td>Introduction to Leadership in Action</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 340</td>
<td>Leadership in Action: Organizational Systems</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 310</td>
<td>Conceptual Physics</td>
<td>3</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>9</td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Evaluate the defining factors of a system by determining the purpose of the system, the events to which it must respond, its fundamental activities and the formation of both current and past events that the system must store in order to carry out its responses to establish and maintain system integrity.
- Construct systems models of organizational processes specific to the individual's work for the purpose of performance measurement and improvement.
- Analyze the functionality of systems design in relationship to overall product output, organizational productivity and customer satisfaction.

Leadership in Action: Organizational Teams Certificate

This certificate centers around the elements of human psychology as it relates to organizational groups, work teams and self-managed teams. It provides a framework of individual self-study as it relates to interacting with others. Furthermore, it includes the design, development and implementation of high performance teams to maximize organizational success.
Certificate Requirements

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<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>MGMT 300</td>
<td>Introduction to Leadership in Action</td>
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<tr>
<td>MGMT 330</td>
<td>Leadership in Action: Organizational Teams</td>
<td>3</td>
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<tr>
<td>Total Units:</td>
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<td>6</td>
</tr>
</tbody>
</table>

Upon completion of this program, the student will be able to:

- Analyze the important aspects of group behavior and team process in relationship to individual psychological variance.
- Identify the organizational and social benefits of group and team formation and the four stages of their development: forming, storming, norming and performing.
- Measure the utilization and effectiveness of empowerment, teamwork and self-managed teams from a task and maintenance function perspective in teams as it relates to organizational success.
- Apply team empowerment concepts relative to organizational effectiveness.

Leadership in Action: Organizational Variation Certificate

This certificate centers on the importance of statistical knowledge of variation, variation patterns and the methodology and use of statistical tools to assist managers with the measurement and improvement of organizational processes. It emphasizes the practical application of statistical tools in the workplace.

Certificate Requirements

<table>
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<tr>
<th>COURSE CODE</th>
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<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGMT 300</td>
<td>Introduction to Leadership in Action</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 320</td>
<td>Leadership in Action: Organizational Variation</td>
<td>3</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Apply statistical tools to effect direct improvement to critical variances in organizational performance.
- Collect valid data on real-life organizational problems and perform statistical analysis.
- Evaluate the methods of the Taguchi Loss Function in the development and design of administrative and service processes.
- Compare and contrast the appropriate uses for Statistical Process Control (SPC) as an organizational tool to measure and improve overall systems effectiveness and customer satisfaction.

Management (MGMT)

MGMT 142 Project Management Techniques and Software

Same As: CISA 160
Units: 3
Hours: 54 hours LEC
This introductory course covers the responsibilities of a project manager. It includes the knowledge needed to manage a project, control costs, and schedule resources. It also introduces the use of project management software to track project resources, tasks, and milestones. This course is not open to students who have taken CISA 160.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- construct a basic plan of action utilizing project management software.
- compare and contrast various theories of leadership and motivation.
- explain the principles of project management with regard to case studies.
- demonstrate the ability to formulate a project plan, given specific scenarios.
- assess the inherent advantages and shortcomings in various software packages.

MGMT 230 Introduction to Purchasing Contracts

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020

This course introduces students to purchasing contract theory and practice. Topics include Uniform Commercial Code, contractual business and legal risk mitigation, contract development for goods and services purchases, scope of work and specification development, and contract breach.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain the basics of purchasing contract theory (offer, acceptance, and consideration) and the utilization of contracts to mitigate business and legal risk.
- describe the importance of proper specifications and scope of work definition in contract development.
- analyze how the terms and conditions negotiated in a contract reflect components of total cost.

MGMT 231 Negotiation Planning

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020

This course introduces students to the concept of “total cost,” and covers the skills to perform cost analysis in support of supplier selection and effective supplier negotiations. It also includes participatory exercises in mock negotiations using the techniques learned in this course.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain the concept of “total cost,” and differentiate between acquisition cost and total cost.
- differentiate between data-based and behavioral-based negotiation techniques and how they are used.
- express the necessary post-negotiation steps to ensure effective documentation of the outcome of supplier negotiations.

MGMT 233 Purchasing Organization Management

Units: 3
Hours: 54 hours LEC
This course focuses on the management of a global or regional purchasing operation within a corporation. Concepts covered include organizational structure, hiring, success metrics, tactical and strategic purchasing focus areas, community and environmental obligations, purchasing code of ethics, purchasing policies and procedures, and eCommerce tools and applications.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- summarize the purpose and role of the purchasing organization and its obligation to the company.
- explain the importance of purchasing success metrics and their role in assessing effective operations.
- express how purchasing policies and procedures are used to manage risk and improve results.
- articulate the role and importance of green purchasing initiatives.

MGMT 295 Independent Studies in Management

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate the importance of organizational processes for the area of study.
- analyze the issues of the area of study.
- define the terms of the area of study.
- apply the theories of the area of study.

MGMT 300 Introduction to Leadership in Action

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

This course examines the underlying principles and practices of leadership and their implementation by both individuals and organizations. Topics include leadership traits, motivation, empowerment, communication, continuous process improvement, customer-focused management, and leading change.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain the role of individual and organizational educational processes for implementing leadership principles.
- apply principles of effective leadership in managing people and processes.
- describe basic relationships required to establish, maintain, and lead effective teams.
- compare differences between personal and organizational requirements of leadership and management.
MGMT 304 Principles of Management

This survey course covers a multitude of management subject areas, such as planning, organization, staffing, leadership and control, team development, communication, business ethics, and global management perspectives. It is a core requirement for management majors. This course provides an overview that is helpful for selecting a specific career and/or major in the field of management.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain the concept that organizations are collections of people working together to achieve a common purpose.
- identify the duties managers accomplish to facilitate the achievement of organizational outcomes.
- define the five functions of management: planning, organizing, staffing, leading, and controlling in relationship to managerial situations.
- apply a variety of management philosophies to contemporary management problems.
- analyze the various process theories of motivation, such as Maslow, Alderfer, Hersberg, McGregor, and McClelland.

MGMT 308 Personnel and Human Resources Management

This course is an introduction to the study and analysis of personnel and human resource management. It covers essential topics, such as civil rights, labor law, and various management theories foundational to both public and private sector organizations. This course provides an overview that is helpful for selecting a specific career and/or major in the field of business or management.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain the key challenges to personnel and human resource management in developing the flexible and skilled workforce needed in governmental and private organizations.
- evaluate the impact of cost pressures on human resource policies.
- apply personnel recruitment and selection methods.
- describe performance appraisal techniques.
- analyze the dynamics and legal foundations of labor and management relations.

MGMT 320 Leadership in Action: Organizational Variation

This course covers basic managerial statistics, with a focus on understanding variation, variation patterns, and how statistical tools can be used to improve existing organizational processes. It also focuses on the support and use of Statistical Process Control (SPC). Emphasis is placed on the immediate application of the tools in the workplace.

Student Learning Outcomes

Upon completion of this course, the student will be able to:
apply the principles of fact-based management to improve organizational process.

• predict outcomes from valid data collection activities.

• use the results of data collection activities for organizational improvement.

• describe the value of a systems approach to the improvement of organizational processes.

• develop statistically valid customer survey questionnaires for customer feedback.

• analyze data using computer software.

**MGMT 330 Leadership in Action: Organizational Teams**

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<th>Units:</th>
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<tr>
<td>Hours:</td>
<td>54 hours LEC</td>
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<tr>
<td>Prerequisite:</td>
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<td>Transferable:</td>
<td>CSU</td>
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<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
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</tbody>
</table>

This course covers basic knowledge of organizational team process with a focus on the practical application of teamwork, team leadership, and individual/group interactive skills. Emphasis is placed on the immediate application of the tools to the work place.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

• apply the tools of teamwork to organizational process.

• demonstrate team visions and strategies to achieve organizational process excellence.

• construct training presentations, educational environments, and facilitation procedures.

• analyze team creativity and innovation leadership strategies for organizational change.

• describe conflict management approaches to resolve team problems, pressures, and conflicts.

**MGMT 340 Leadership in Action: Organizational Systems**

<table>
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<tr>
<th>Units:</th>
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<tbody>
<tr>
<td>Hours:</td>
<td>54 hours LEC</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Transferable:</td>
<td>CSU</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
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</tbody>
</table>

This course covers basic knowledge of organizational systems with a focus on the practical application of vision, mission, support processes, and organizational improvement methodologies. Emphasis is placed on the immediate application of the tools to the work place.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

• apply the tools of systems thinking to organizational design and delivery of quality service.

• compare critical process analysis tools and team facilitation skills to the design of organizational systems.

• describe systems dynamics in information processing, internal team relations, and technical communications.

• evaluate the level of fear and its elimination or reduction to assess organizational processes.

**MGMT 350 Leadership in Action: Organizational Learning**

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<tr>
<th>Units:</th>
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<tr>
<td>Hours:</td>
<td>54 hours LEC</td>
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<tr>
<td>Prerequisite:</td>
<td>None.</td>
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<tr>
<td>Transferable:</td>
<td>CSU</td>
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</tbody>
</table>
This course covers basic knowledge of organizational learning with a focus on the practical application of the concepts of theory and prediction, creating learning environments for structured organizational cultures, and the importance of courage, faith, and justice. Emphasis is placed on the immediate application of the tools to the workplace.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- define organizational integrity and how it is applied in organizations worldwide.
- demonstrate leadership strategies to provide integrity models for organizational learning.
- design a service model of quality for organizational learning.
- compare changes in leadership theory and practice between the classical industrial/bureaucratic leader and collaborative, team focused leaders.

MGMT 360 Management Communication

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGWR 102 or 103, and ENGRD 116 with a grade of "C" or better; OR ESLR 320 and ESLW 320 with a grade of "C" or better; and SPEECH 301 or 302 with a grade of "C" or better; OR placement through assessment process.
Transferable: CSU
General Education: AA/AS Area II(b)
Catalog Date: June 1, 2020

This course provides skill training in coping with communication problems in organizations. It includes the study of the communication process, the analysis of the barriers to effective oral and written communication, and the development of guidelines to improve interpersonal relations within organizations through the use of effective methods of communication.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze the process of communication and how to engage in it effectively.
- apply the essential elements of clear and purposeful oral and written communications to effective organizational effectiveness.
- define the characteristics of multicultural communication and cultural difference in the communication process.
- evaluate the importance of effective communications in organizational performance, efficiency, and effectiveness.

MGMT 362 Techniques of Management

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGWR 102 or 103, and ENGRD 116 with a grade of "C" or better; OR ESLR 320 and ESLW 320 with a grade of "C" or better; OR placement through assessment process.
Transferable: CSU
Catalog Date: June 1, 2020

This course is designed for supervisors and other entry level managers as well as those entering mid-management positions. It focuses on primary management functions of planning, organizing, controlling, and leading. Related skills, such as time management, cost control, performance evaluation, motivation, communication techniques, and the social responsibility of managers, are also emphasized.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply principles of time management, cost control, and decision-making to managerial responsibilities.
- assess responsibilities of management both within the organization and to the local, state, federal, and global community.
- demonstrate leadership skills.
• organize activities to achieve organizational goals.

MGMT 372 Human Relations and Organizational Behavior

This course emphasizes the psychology of human relations management. It covers human interaction principles that build confidence, competence, and positive attitudes in work organizations. Topics include the basis for human behavior, perception, communication, motivation, performance improvement, group behavior, ethics, and social responsibility.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• explain major approaches to organizational behavior.
• analyze theories of human behavior at work.
• describe an effective philosophy of human behavior at work.
• demonstrate effective human interaction skills in the workplace.

MGMT 374 Social Responsibility and Ethics in Management

This course examines the ethical climate, management problems which need to be confronted and analyzed, the role integrity plays in the survival and productivity of American organizations, and social responsibility as it relates to management.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• describe the importance of ethics in organizations.
• explain why ethics must be taught and nurtured in the workplace.
• analyze how current issues of quality, liability, and human relations, at the local, national, and international level are addressed in an ethical environment.
• describe the importance of integrity from all members of the organizations.
• evaluate traditional approaches, such as inspection and watchdog, for sound management.

MGMT 495 Independent Studies in Management

This course provides the opportunity for students and faculty to design a learning environment around an area of management study as defined in a proposal and approved by the Management department for each individual area of study.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- describe the importance of organizational processes for the area of study.
- analyze the issues of the area of study.
- define the terms of the area of study.
- apply the theories of the area of study.
- construct models for the area of study.
The Marketing degree provides an opportunity for students to acquire knowledge and training for careers in sales, advertising, and marketing. The competency-based curriculum is designed to prepare students for a variety of positions and to provide basic training for advancement to management positions and for transfer to four-year universities.

**Division Dean**  
Kirsten Corbin

**Department Chairs**  
Rachna Nagi-Condos  
(916) 484-8361

### Associate Degrees

#### A.A. in Advertising and Sales Promotion

This degree program covers the general areas of marketing. In addition it provides the knowledge and skills necessary to pursue a career in advertising. Graduates should qualify for employment opportunities with retail and general business organizations, advertising agencies, and advertising media (radio, television, magazines, newspapers and outdoor) companies.

**Catalog Date:** June 1, 2020

### Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
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</thead>
<tbody>
<tr>
<td>ACCT 101</td>
<td>Fundamentals of College Accounting (3)</td>
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<tr>
<td>or ACCT 301</td>
<td>Financial Accounting (4)</td>
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<tr>
<td>ARTNM 324</td>
<td>Digital Design</td>
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<td>BUS 110</td>
<td>Business Economics (3)</td>
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<tr>
<td>or ECON 302</td>
<td>Principles of Macroeconomics (3)</td>
<td>3</td>
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<tr>
<td>BUS 300</td>
<td>Introduction to Business</td>
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<td>BUS 340</td>
<td>Business Law</td>
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<td>CISA 330</td>
<td>Desktop Publishing</td>
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<tr>
<td>CISC 300</td>
<td>Computer Familiarization</td>
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<td>MKT 300</td>
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<td>MKT 310</td>
<td>Selling Professionally</td>
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<td>MKT 312</td>
<td>Retailing</td>
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<td>MKT 314</td>
<td>Advertising</td>
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<tr>
<td>GEOG 330</td>
<td>Introduction to Geographic Information Systems</td>
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<tr>
<td>CISA 331</td>
<td>Intermediate Desktop Publishing (2)</td>
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<tr>
<td>BUSTEC 305</td>
<td>Business Technology Essentials (1)</td>
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</tr>
<tr>
<td>BUSTEC 310</td>
<td>Introduction to Word/Information Processing (3)</td>
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</tbody>
</table>
The Advertising and Sales Promotion Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Apply advertising principles including strategies for planning, producing and selecting the appropriate media.
- Evaluate the characteristics of various types of promotion.
- Describe the consumer decision-making process and how marketing communications influence decisions.
- Analyze consumer buyer behavior and recommend how to utilize marketing communications most effectively to meet the consumer needs.
- Analyze and evaluate practical business problems and utilize critical thinking in the determination of alternative solutions.
- Integrate the major functional areas of the business organizations including management, marketing, finance, and accounting.
- Apply document design techniques utilizing desktop publishing programs to create effective marketing materials.
- Communicate effectively verbally and in writing in various business settings.
- Plan and design promotional programs.

Career Information

Sales, copywriter, in-house communications, public relations, technical communications, media planner, media buyer.

A.A. in Marketing

The Marketing degree provides an opportunity for students to acquire knowledge and training for careers in sales, advertising, and marketing. The competency-based curriculum is designed to prepare students for a variety of positions and to provide basic training for advancement to management positions and for transfer to four-year universities.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 101</td>
<td>Fundamentals of College Accounting (3)</td>
<td>3 - 4</td>
</tr>
<tr>
<td>or ACCT 301</td>
<td>Financial Accounting (4)</td>
<td></td>
</tr>
<tr>
<td>BUS 110</td>
<td>Business Economics (3)</td>
<td>3</td>
</tr>
<tr>
<td>or ECON 302</td>
<td>Principles of Macroeconomics (3)</td>
<td></td>
</tr>
<tr>
<td>BUS 300</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS 310</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>BUS 340</td>
<td>Business Law</td>
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<tr>
<td>CISA 305</td>
<td>Beginning Word Processing</td>
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</tr>
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<td>MKT 300</td>
<td>Principles of Marketing</td>
<td>3</td>
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<td>COURSE CODE</td>
<td>COURSE TITLE</td>
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<tr>
<td>MKT 310</td>
<td>Selling Professionally</td>
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<tr>
<td>MKT 312</td>
<td>Retailing</td>
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<tr>
<td>MKT 314</td>
<td>Advertising</td>
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<tr>
<td>CISA 340</td>
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<tr>
<td>BUS 320</td>
<td>Concepts in Personal Finance (3)</td>
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<tr>
<td>BUS 330</td>
<td>Managing Diversity in the Workplace (3)</td>
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</tr>
<tr>
<td>CISA 320</td>
<td>Introduction to Database Management (1)</td>
<td></td>
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<tr>
<td>CISA 330</td>
<td>Desktop Publishing (2)</td>
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<tr>
<td>MGMT 308</td>
<td>Personnel and Human Resources Management (3)</td>
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<td>MGMT 372</td>
<td>Human Relations and Organizational Behavior (3)</td>
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<td>MGMT 142</td>
<td>Project Management Techniques and Software (3)</td>
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<tr>
<td>GEOG 330</td>
<td>Introduction to Geographic Information Systems (3)</td>
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<tr>
<td>BUS 350</td>
<td>Small Business Management/Entrepreneurship (3)</td>
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<tr>
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<td>Total Units:</td>
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</tr>
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</table>

The Marketing Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Integrate the functions of the marketing mix.
- Apply principles of retailing such as business location, merchandising, inventory control, store management and vendor relationships.
- Plan, produce and select the appropriate media for advertising.
- Integrate management principles related to finance, personnel, products, services and information.
- Communicate effectively verbally and in writing in various business settings.
- Identify and examine consumer buyer behavior and evaluate which marketing communications medium will most effectively meet needs of the marketplace.
- Incorporate principles of product development, pricing, distribution strategies, promotion strategies and market research.
- Demonstrate professional sales skills by effectively interviewing and identifying the customers' needs.
- Evaluate practical business problems and utilize critical thinking in the determination of alternative solutions.
- Identify and explain the major functional areas of the business organizations including management, marketing, finance, and accounting.
- Apply the marketing mix to create and analyze various marketing strategies.

A.A. in Retail Management

The Retail Management program builds on the general business curriculum and prepares students for a leadership role in the retail industry. Depending upon the size of the retail company, retail managers are responsible for one or more parts of a retail operation including sales, marketing, buying, merchandising, operations, inventory control, human resources, and finance.

Catalog Date: June 1, 2020

Degree Requirements
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<thead>
<tr>
<th>COURSE CODE</th>
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<td>Principles of Marketing</td>
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<td>MKT 310</td>
<td>Selling Professionally</td>
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<td>Retailing</td>
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<td>BUS 350</td>
<td>Small Business Management/Entrepreneurship (3)</td>
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<tr>
<td>or BUS 330</td>
<td>Managing Diversity in the Workplace (3)</td>
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<tr>
<td>or BUS 224</td>
<td>Customer Service (1)</td>
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<td>or BUS 220</td>
<td>Retailing and Merchandising for the Small Business (1)</td>
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<td>or BUS 214</td>
<td>Financing a Small Business (1)</td>
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<tr>
<td>or BUS 210</td>
<td>The Business Plan (1)</td>
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<tr>
<td>or BUS 105</td>
<td>Business Mathematics (3)</td>
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<tr>
<td>CISC 305</td>
<td>Introduction to the Internet (1)</td>
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<td>or MGMT 362</td>
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</tbody>
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The Retail Management Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Demonstrate the principles of sales management including the development and analysis of sales programs, budget and expense reports.
- Apply principles of retail buying such as planning, merchandise selection and control, and building positive vendor relationships.
- Communicate effectively with consumers, staff and vendors.
- Integrate the nature of business operations, personnel, finances, regulations, marketing and decision-making.
- Analyze data related to market share, inventory control and profitability.
- Analyze practical business problems and utilize critical thinking in the determination of alternative solutions.
Integrate principles of product development, pricing, distribution strategies, promotion strategies and market research in the decision making process.

Career Information
Buyer, department manager, sales associate, account executive, merchandiser, sales manager.

Certificates of Achievement

Marketing Essentials Certificate
This certificate provides an introductory overview of the various aspects of marketing, such as target marketing, marketing strategy, advertising, professional selling, retailing, public relations, social media, and customer service. It is intended to meet the needs of employed students who wish to upgrade their marketing skills, as well as those students who are seeking entry-level marketing positions.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
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<tbody>
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<td>MKT 300</td>
<td>Principles of Marketing</td>
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<td>3</td>
</tr>
<tr>
<td>MKT 312</td>
<td>Retailing</td>
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<tr>
<td>MKT 314</td>
<td>Advertising</td>
<td>3</td>
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<td>3</td>
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<td>15</td>
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</table>

Student Learning Outcomes
Upon completion of this program, the student will be able to:

- analyze the philosophy of the marketing concept, and the importance of customer satisfaction.
- discover the function and elements of the marketing mix.
- incorporate strategies for planning, producing, and selecting the appropriate advertising media, and creating an advertising campaign.
- demonstrate professional selling skills, including sales presentations.
- evaluate principles of retailing, such as store location, store layout and design, pricing, human resource management, and promotional methods.
- compare and contrast various e-marketing tools, such as websites and social media.

Career Information
Marketing, selling, advertising, public relations, and marketing management positions, for profit and non-profit organizations. Also, enhancing marketing skills for the entrepreneur and small business owner.

Retail Management (WAFC) Certificate
This program provides an overview of the retail industry and the business skills needed to succeed in retail store management. It provides training for those wishing to be owners, managers, and employees of retail organizations. This certificate meets the needs of industry leaders such as the Western Association of Food Chains (WAFC).

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 301</td>
<td>Financial Accounting (4)</td>
<td>4</td>
</tr>
</tbody>
</table>
### Student Learning Outcomes

Upon completion of this program, the student will be able to:

- become a more productive retail manager, employee, or entrepreneur.
- incorporate basic marketing skills into retail operations, such as target marketing, product development, pricing, distribution decisions, promotion strategies, and marketing research.
- evaluate and develop basic management skills involving human relations, organizational behavior, and human resources management.
- demonstrate basic computer skills in word processing, presentations, and Internet searches.
- analyze and employ various written and verbal communication techniques.
- critique and recommend various retail store layouts and designs.
- recognize and confirm the importance that retailing has upon the American society and economy.

### Career Information

Department manager, store director, merchandise buyer, customer service representative, or entrepreneur.

### Marketing (MKT)

#### MKT 295 Independent Studies in Marketing

<table>
<thead>
<tr>
<th>Units:</th>
<th>1 - 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

#### MKT 300 Principles of Marketing

<table>
<thead>
<tr>
<th>Units:</th>
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<tbody>
<tr>
<td>Hours:</td>
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<tr>
<td>Prerequisite:</td>
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</tr>
<tr>
<td>Transferable:</td>
<td>CSU</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course provides a general overview of the principles of marketing. It focuses on the marketing concept and customer satisfaction. Topics include the controllable elements of the marketing mix (product, place or distribution, promotion, and price) as well as the uncontrollable elements of the marketing environment. This course also
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe how organizations apply the basic principles and concepts of marketing.
- explain the importance of customer satisfaction and the priorities of the marketing concept.
- evaluate how marketers plan and make decisions regarding the controllable factors of the marketing mix: product, place or distribution, promotion, and price.
- describe the elements of the marketing environment that are beyond the control of the marketer.
- illustrate how marketers segment their markets and design target markets.
- analyze and evaluate several companies and write about various concepts of marketing, such as target marketing, social responsibility, and product mix.

MKT 310 Selling Professionally

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

This course examines the personal selling philosophy and career opportunities in professional consumer and business selling. The development of a successful presentation strategy is examined, and techniques are illustrated for the steps of selling: approach, sales demonstration, overcoming objections, negotiation, closing, and servicing the sale. This course helps develop better selling and personal marketing techniques. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- evaluate professional appearance and create a plan to improve it.
- adapt his/her personal communication style to a prospect.
- identify and compare the career opportunities in professional consumer and business selling.
- analyze and demonstrate the steps of professional selling, including approach, needs assessment, presentation, overcoming objections and negotiating, closing, and servicing of the sale.
- give an effective sales presentation.

MKT 312 Retailing

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

This course is an introduction to the field of retailing. It covers various aspects of retailing, including store location and layout, consumer behavior, human resource management, merchandise buying, pricing, and promotion. Multichannel retailing is discussed, which includes stores, websites, catalogs, and telemarketing. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- cite examples of various types of food, general merchandise, nonstore, and services retailers.
- explain how needs and social factors affect consumer buying decisions and how retailers segment their markets.
- compare and contrast various retail locations, including shopping centers and malls, central business districts, and nontraditional locations, such as airports and hospitals.
- evaluate specific retail site locations, based upon factors such as trade area, competition, natural and artificial barriers, traffic flow, parking, and leases.
• identify some of the special conditions or challenges of human resource management in retailing.
• illustrate how retailers use Customer Relationship Management (CRM) to identify their best customers and build customer loyalty.
• explain how retailers use merchandise management decisions to implement their retail strategy, including planning, buying, pricing, branding, and promoting their merchandise.
• evaluate a retail store's atmospherics, including layout, lighting, colors, scents, and music.

MKT 314 Advertising

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: MKT 300
Transferable: CSU
Catalog Date: June 1, 2020

This course is an introduction to consumer advertising. It covers the advertising industry, including advertisers, agencies, media, and suppliers. Consumer behavior is also studied, to realize how advertisers attempt to understand their target audience. Advertising media are investigated in detail, including television, radio, newspapers, magazines, outdoor, Internet, social media, and direct mail. This course emphasizes group dynamics in the development of an advertising campaign. It is recommended for those interested in a career in advertising, as well as future entrepreneurs hoping to develop effective advertising for their businesses.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• identify the major social and economic impacts of advertising in the United States.
• describe how the advertising industry operates and produces advertising through the work of advertisers, agencies, media, and suppliers.
• evaluate the various advertising media, including television, radio, magazines, newspapers, outdoor, Internet, direct mail, and other media.
• create and produce advertising examples for magazine ads, television and radio commercials, and billboards.
• work together in groups to create and present media advertising for an advertising campaign.

MKT 330 Internet Marketing

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

This course introduces the use of social media and other Internet technologies, with an emphasis on the theory and practice of marketing in an electronic environment. Topics include the personalization and interactivity of the Internet to build strong customer relationships. These concepts are applied to traditional brick and mortar as well as exclusively online businesses.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• create effective Internet marketing strategies that enhance a business’ relationship with present and future customers.
• identify and evaluate decisions in the selection of Internet marketing strategies to make a business more effective.
• apply complex decision-making techniques to problems involving e-commerce practice and a company's role in this evolving business environment.

MKT 495 Independent Studies in Marketing

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020
Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

MKT 498 Work Experience in Marketing

Units: 1 - 4  
Hours: 60 - 300 hours LAB  
Prerequisite: None  
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position, or job related to marketing with a cooperating site supervisor. Students are advised to consult with the Marketing Department faculty to review specific certificate and degree work experience requirements.  
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.  
Transferable: CSU  
General Education: AA/AS Area III(b)  
Catalog Date: June 1, 2020

This course provides students with opportunities to develop marketable skills in preparation for employment or advancement within the field of marketing. It is designed for students interested in work experience and/or internships in transfer-level degree occupational programs. Course content includes understanding the application of education to the workforce, completion of Title 5 required forms which document the student’s progress and hours spent at the work site, and developing workplace skills and competencies.

During the semester, the student is required to complete 75 hours of related paid work experience, or 60 hours of related unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. All students are required to attend the first class meeting, a mid-semester meeting, and a final meeting. Additionally, students who have not already successfully completed a Work Experience course will be required to attend weekly orientations while returning participants may meet individually with the instructor as needed. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate application of industry knowledge and theoretical concepts in marketing related to a transfer degree level career as written in the minimum three (3) learning objectives created by the student and his/her employer or work site supervisor at the start of the course.

- make effective decisions, use workforce information, and manage his/her personal career plans.

- behave professionally, ethically, and legally at work, consistent with applicable laws, regulations, and organizational norms.

- behave responsibly at work, exhibiting initiative and self-management in situations where it is needed.

- apply effective leadership styles at work, with consideration to group dynamics, team and individual decision making, and workforce diversity.

- communicate in oral, written, and other formats, as needed, in a variety of contexts at work.

- locate, organize, evaluate, and reference information at work.

- demonstrate originality and inventiveness at work by combining ideas or information in new ways, making connections between seemingly unrelated ideas, and reshaping goals in ways that reveal new possibilities using critical and creative thinking skills such as logical reasoning, analytical thinking, and problem-solving.
Associate Degrees for Transfer

A.S.-T. in Mathematics

This degree is designed to meet common lower-division requirements for a major in Mathematics at a CSU campus. Satisfactory completion of the ARC Mathematics transfer degree provides a solid foundation and satisfies the standard prerequisites for upper division coursework for Mathematics majors. However, it is highly recommended that students meet with a counselor since major and general education requirements vary for each college/university.

The Mathematics Associate in Science for Transfer (AS-T) Degree may be obtained by the completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program outlined below (earning a C or better in these courses) and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education Breadth Requirements.

Catalog Date: June 1, 2020

Degree Requirements

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<th>COURSE CODE</th>
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</thead>
<tbody>
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<td>MATH 400</td>
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<tr>
<td>MATH 401</td>
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<td>MATH 402</td>
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<tr>
<td>MATH 410</td>
<td>Introduction to Linear Algebra (3)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 420</td>
<td>Differential Equations (4)</td>
<td>4</td>
</tr>
<tr>
<td>Total Units:</td>
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</table>

The Associate in Science in Mathematics for Transfer (AS-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- evaluate, describe, and apply single variable calculus including various forms of derivatives and integrals, to analyze and solve problems.
- evaluate, describe, and apply multivariate calculus, linear algebra, and differential equations to analyze and solve problems.
- prepare logical arguments and use them to prove basic mathematical theorems.
- solve real-world application problems using appropriate mathematical problem-solving skills.

Career Information
Mathematicians work as statisticians, analysts, computer programmers, actuaries, researchers, planners, and educators. This transfer degree is designed to meet the common lower-division requirements for most bachelor's degrees in Mathematics.

Associate Degrees

A.S. in Mathematics

The A.S. degree in mathematics provides a foundation of mathematics for students in preparation for transfer to a four-year program in mathematics or statistics. Course work includes a three-semester calculus series, differential equations, linear algebra, and statistics and/or symbolic logic.

Catalog Date: June 1, 2020

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<td>A minimum of 3 units from the following:</td>
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<tr>
<td>MATH 320</td>
<td>Symbolic Logic (3)</td>
<td>3</td>
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<tr>
<td>or PHIL 324</td>
<td>Symbolic Logic (3)</td>
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<tr>
<td>STAT 300</td>
<td>Introduction to Probability and Statistics (4)</td>
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<td></td>
<td>Total Units:</td>
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</table>

The Mathematics Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Identify, formulate, and solve applied problems (using calculus and linear algebra) in verbal, numeric, graphical, and symbolic form related to science, economics, or business.
- Recognize and construct valid arguments using deductive and inductive reasoning skills.
- Define and utilize terminology of mathematics with emphasis in calculus, linear algebra, and either statistics, logic or problem solving.
- Calculate derivatives and integrals using a variety of defined rules and strategies of calculus, algebraic properties and trigonometric identities.

A.S. in Physical Science/Mathematics

This degree provides a broad study in the fields of physical science and mathematics. It is a good foundation for transfer to a four-year program in science, technology, engineering, or mathematics (STEM).

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>ASTR 300</td>
<td>Introduction to Astronomy (3)</td>
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<tr>
<td>ASTR 310</td>
<td>The Solar System (3)</td>
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<tr>
<td>ASTR 320</td>
<td>Stars, Galaxies, and Cosmology (3)</td>
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<td>ASTR 330</td>
<td>Introduction to Astrobiology (3)</td>
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<td>ASTR 400</td>
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<td>ASTR 481</td>
<td>Honors Astronomy: Stars, Galaxies, and Cosmology (4)</td>
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<td>ASTR 495</td>
<td>Independent Studies in Astronomy (1 - 3)</td>
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<td>ASTR 499</td>
<td>Experimental Offering in Astronomy (0.5 - 4)</td>
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<td>CHEM 305</td>
<td>Introduction to Chemistry (5)</td>
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<td>CHEM 306</td>
<td>Introduction to Organic and Biological Chemistry (5)</td>
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<td>CHEM 309</td>
<td>Integrated General, Organic, and Biological Chemistry (5)</td>
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<td>Chemical Calculations (4)</td>
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<td>Organic Chemistry II (5)</td>
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<td>CHEM 423</td>
<td>Organic Chemistry - Short Survey (5)</td>
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<td>CHEM 499</td>
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<td>Engineering Survey Measurements (4)</td>
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<td>ENGR 412</td>
<td>Properties of Materials (4)</td>
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<td>ENGR 420</td>
<td>Statics (3)</td>
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<td>ENGR 495</td>
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<td>ENGR 499</td>
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<td>Physical Geography: Exploring Earth's Environmental Systems (3)</td>
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<td>Physical Geography Laboratory (1)</td>
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<td>GEOG 305</td>
<td>Global Climate Change (3)</td>
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<td>GEOG 306</td>
<td>Weather and Climate (3)</td>
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<td>GEOG 307</td>
<td>Environmental Hazards and Natural Disasters (3)</td>
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<td>GEOG 308</td>
<td>Introduction to Oceanography (3)</td>
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<td>GEOG 391</td>
<td>Field Studies in Geography: Mountain Landscapes (1 - 4)</td>
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<td>Field Studies in Geography: Coastal Landscapes (1 - 4)</td>
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<td>GEOG 393</td>
<td>Field Studies in Geography: Arid Landscapes (1 - 4)</td>
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<td>Physical Geology (3)</td>
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<td>GEOL 305</td>
<td>Earth Science (3)</td>
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<td>Environmental Hazards and Natural Disasters</td>
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<td>Geology of California</td>
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<td>MATH 300</td>
<td>Introduction to Mathematical Ideas</td>
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<td>MATH 310</td>
<td>Mathematical Discovery</td>
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<td>MATH 311</td>
<td>Mathematical Concepts for Elementary School Teachers - Number Systems</td>
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<td>Problem-Solving</td>
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<td>MATH 336</td>
<td>College Algebra</td>
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<td>MATH 340</td>
<td>Calculus for Business and Economics</td>
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<td>MATH 342</td>
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<td>MATH 356</td>
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<td>MATH 370</td>
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<td>MATH 420</td>
<td>Differential Equations</td>
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<td>Mechanics of Solids and Fluids</td>
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<td>PHYS 431</td>
<td>Heat, Waves, Light and Modern Physics</td>
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<td>STAT 300</td>
<td>Introduction to Probability and Statistics</td>
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</tbody>
</table>
The Physical Science/Mathematics Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- recognize and correctly use the terminology of math, statistics, and/or science.
- analyze and interpret data, charts, and graphs using quantitative and qualitative methods.
- recognize and construct valid arguments using deductive and inductive reasoning.
- evaluate new and accepted ideas about the natural universe using testable methodology.

Mathematics (MATH)

MATH 10 Developing Confidence in Math

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<td>Prerequisite:</td>
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<td>Advisory:</td>
<td>Concurrent enrollment in another math course</td>
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<td>Catalog Date:</td>
<td>June 1, 2020</td>
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This course helps students recognize common misconceptions of mathematics, overcome math anxiety, and build confidence in math. Topics include relaxation techniques, study habits, and problem solving strategies. This course is also useful for tutors, counselors, and teachers interested in helping others overcome their math anxiety. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze causes of math anxiety
- examine myths about mathematics
- describe the experiences in mathematics which have influenced personal attitudes towards math
- compare personal learning experiences, as related to mathematics
- apply skills to overcome fear and achieve success in mathematics
- create a study plan for mathematics courses
- apply learning strategies to achieve success in mathematics

MATH 25 Computational Arithmetic

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<tr>
<th>Units:</th>
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<tbody>
<tr>
<td>Hours:</td>
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<tr>
<td>Prerequisite:</td>
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<td>Advisory:</td>
<td>Placement through the math assessment process.</td>
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<td>Catalog Date:</td>
<td>June 1, 2020</td>
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</tbody>
</table>
This course introduces the fundamentals of arithmetic with an emphasis on computational skills. Topics include whole numbers, exponents, order of operations, factors, fractions, decimals, problem solving, and applications.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- evaluate problems using addition, subtraction, multiplication, and division of whole numbers, fractions, and decimals.
- use the order of operations to simplify expressions.
- read, write, and round whole numbers and decimals.
- identify and use factors and prime factorization of whole numbers.
- identify types of fractions.
- simplify fractions.
- demonstrate the relationships between fractions and decimals.
- set up and solve application problems using computational arithmetic.

MATH 32 Pre-Algebra

Units: 3
Hours: 54 hours LEC
Prerequisite: MATH 25 or 41 with a grade of "C" or better, or placement through the assessment process.
Catalog Date: June 1, 2020

This course briefly reviews the fundamentals of arithmetic, including fractions, decimals, and order of operations. Course content includes signed numbers, ratios, proportions, percent, concepts of variables, area/perimeter/volume of geometric figures, and solving basic linear equations.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- evaluate numerical expressions that contain integers, fractions, and decimals using the order of operations
- evaluate algebraic expressions for given value(s) of the variable(s)
- simplify variable expressions by using the distributive property and combining similar terms
- solve elementary linear equations
- set up and solve elementary application problems, including problems involving percents, ratios, and proportions
- convert between percents, decimals, and fractions
- convert units of measurement, including U.S. and metric systems
- evaluate numerical square root expressions
- calculate area, perimeter, and volume of geometric figures

MATH 41 Algebra Readiness - Part I

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: CISC 100, CISC 300, or CISC 305 with a grade of "C" or better, AND ENGRD 116 or ESLR 320 with a grade of "C" or better. Placement through the math assessment process.
Catalog Date: June 1, 2020

This course is the first of two parts covering algebra readiness in a mastery-based learning environment. The fundamentals of arithmetic are introduced, with an emphasis on problem solving and computational skills. Topics include whole numbers, exponents, order of operations, factors, fractions, decimals, proportion, ratios, rates, problem solving, and applications. The course is offered through the Multimedia Math Learning Center (MMLC), using an independent study approach under the direction of an instructor. Computer-based instruction via the Internet is an integral part of the course. Students are required to purchase a workbook that is bundled with the on-line video and math content system. One set of materials can be used for multiple MMLC courses, if completed in consecutive semesters. The content in the course is organized into various modules. Each module must be completed at a mastery level before the student moves on to the next. Students will demonstrate mastery by successfully
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- evaluate problems using addition, subtraction, multiplication, and division of whole numbers, fractions, and decimals.
- use the order of operations to simplify expressions.
- read, write, and round whole numbers and decimals.
- identify and use factors and prime factorizations of whole numbers.
- analyze and simplify fractions.
- demonstrate the relationships between fractions, decimals, and percents.
- analyze and estimate problems involving whole numbers, fractions, and decimals.
- set up and solve application problems using computational arithmetic.

MATH 42 Algebra Readiness - Part II

Units: 3
Hours: 54 hours LEC
Prerequisite: MATH 41 with a grade of "C" or better
Catalog Date: June 1, 2020

This course is the second of two parts covering algebra readiness in a mastery-based learning environment. The fundamentals of pre-algebra are introduced, with an emphasis on problem solving skills. Topics include order of operations, signed numbers, application problems, concepts of variables, exponents, operations on signed fractions, percent problems, solving algebraic equations, the rectangular coordinate system, introduction to graphing linear equations, applications of equations, and area/perimeter of geometric figures. The course is offered through the Multimedia Math Learning Center (MMLC), using an independent study approach under the direction of an instructor. Details about the program can be found in the catalog description for MATH 41. This course may be completed as quickly as possible but no later than the end of the semester. Students who complete this course during the first half of the semester may sign up immediately for MATH 131. For the most updated information, please visit the MMLC web page on the ARC website.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- evaluate expressions that contain addition, subtraction, multiplication, and division of real numbers.
- solve numerical and applied percent problems.
- simplify algebraic expressions using order of operations.
- evaluate and simplify exponential and square root expressions.
- solve linear equations, including those with signed numbers, fractions, and/or decimals.
- set up and solve elementary application problems using algebraic techniques.
- compute perimeter and area of geometric figures.
- translate words into symbols and equations.
- perform operations on signed fractions.
- graph linear equations.

MATH 100 Elementary Algebra

Units: 5
This course covers the fundamental concepts and operations of algebra and incorporates problem-solving skills. Topics include properties of real numbers, linear equations and inequalities, integer exponents, polynomials, and factoring polynomials. Other topics include rational and radical expressions, rational and radical equations, graphing and finding equations of lines, graphing and solving systems of linear equations, and graphing and solving quadratic equations.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- simplify expressions using the basic operations and properties of real numbers.
- solve one-variable equations and inequalities.
- combine polynomials using the basic operations of polynomials.
- factor polynomials.
- simplify rational expressions.
- solve rational equations.
- solve linear equations.
- graph linear equations.
- find the equation of a line given (a) the slope and a point on the line, and (b) two points on the line.
- solve and graph systems of linear equations.
- simplify expressions containing integer exponents.
- simplify expressions containing second and third degree roots.
- solve quadratic equations.
- graph quadratic equations.
- develop an appropriate equation or system of equations and use the resulting equation(s) to solve application problems.

MATH 110 Elementary Geometry

Units: 5
Hours: 90 hours LEC
Prerequisite: MATH 100 or 132 with a grade of "C" or better, or placement through the assessment process.
Catalog Date: June 1, 2020

This course covers aspects of elementary geometry. Topics include geometric terms and definitions, properties of parallel lines and parallelograms, congruent and similar triangles, properties of triangles, right triangles, basic trigonometry, properties of circles, geometric constructions, areas, and volumes. The course also emphasizes problem-solving strategies, elementary logic, and writing proofs.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- compute lengths, areas, and volumes of geometric objects
- apply algebraic skills to geometric problems
- solve mathematical and logical problems which require geometric skills
- prove geometric theorems using direct proof structures
- construct geometric loci using a straightedge and compass
- select the appropriate trigonometric identity to find angles and sides of right triangles
- identify theorems that relate angles, arcs, intercepted arcs in circles and polygons
MATH 120 Intermediate Algebra

Units: 5
Hours: 90 hours LEC
Prerequisite: MATH 100 or 132 with a grade of "C" or better, or placement through the assessment process.
General Education: AA/AS Area II(b)
Catalog Date: June 1, 2020

This course extends and reviews the concepts of elementary algebra while incorporating applications and problem-solving skills. Reviewed and extended topics include linear and quadratic equations and their graphs, linear inequalities, systems of linear equations, exponents, factoring polynomials, rational expressions, and radicals. New topics include absolute value equations and inequalities, graphs of absolute value functions, equations of parallel and perpendicular lines, graphs of linear inequalities, graphs of systems of linear inequalities, functions, function notation, domain and range, inverse functions, exponential and logarithmic functions and their graphs, quadratic and polynomial functions and their graphs, an introduction to the complex number system, finding the real and complex solutions for a variety of equations, an introduction to conic sections, and nonlinear systems of equations and their graphs.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- graph and solve linear inequalities.
- graph systems of linear inequalities.
- solve equations and inequalities containing absolute values.
- solve and graph linear equations and systems of linear equations.
- create linear equations that pass through a given point and are parallel to a given line.
- create linear equations that pass through a given point and are perpendicular to a given line.
- simplify polynomial expressions.
- choose and apply appropriate techniques to factor a variety of polynomials.
- state whether a mathematical relation is a function and find its domain and range.
- construct the inverse of a given function.
- sketch graphs of basic exponential functions.
- utilize the properties of exponents to simplify exponential expressions and to solve exponential equations.
- sketch graphs of basic logarithmic functions.
- utilize the properties of logarithms to simplify logarithmic expressions and to solve logarithmic equations.
- simplify expressions containing radicals, using complex numbers where appropriate.
- solve quadratic equations for real and complex solutions.
- solve equations containing radicals.
- simplify rational expressions and solve rational equations for real and complex solutions.
- sketch graphs of basic conic sections.
- solve and graph systems of non-linear equations.
- develop an appropriate equation or system of equations and use the resulting equation(s) to solve application problems.

MATH 125 Intermediate Algebra for Statistics and Liberal Arts

Units: 4
Hours: 72 hours LEC
Prerequisite: MATH 100 or 132 with a grade of "C" or better, or placement through the assessment process.
General Education: AA/AS Area II(b)
Catalog Date: June 1, 2020

This is an intermediate algebra course for non-STEM students. Topics include linear functions, models, systems, and graphs, as well as polynomial, exponential, logarithmic, and quadratic functions. The course emphasizes authentic applications and mathematical models using real-world data. This course does not meet the prerequisite for STEM-track math courses.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify and solve various types of equations and systems of equations.
- factor a variety of polynomials.
- collect like terms in simplifying polynomial, exponential, and logarithmic functions.
- create graphs of lines, parabolas, exponential, and logarithmic functions.
- associate equations and information from tables or charts with their corresponding graphs.
- explain the concept of a mathematical function/relation and use functional notation appropriately to formulate solutions.
- construct and compare inverse functions with their original functions.
- explain what a logarithm is and solve logarithmic equations and applications.

MATH 129 Elementary and Intermediate Algebra

| Units: | 9 |
| Hours: | 162 hours LEC |
| Prerequisite: | MATH 32 or 42 with a grade of "C" or better, or placement through the assessment process. |
| General Education: | AA/AS Area II(b) |
| Catalog Date: | June 1, 2020 |

This course covers the concepts of elementary and intermediate algebra with an emphasis on problem solving. Topics include linear and quadratic equations, inequalities, factoring polynomials, rational expressions, exponents, radicals, graphing, and system of equations. Additional topics include graphs and their translations and reflections, functions, exponential and logarithmic functions, graphs of quadratic and polynomial functions, nonlinear systems of equations, polynomial and rational inequalities, and an introduction to conic sections.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- recognize and solve various types of equations, inequalities, and systems of equations, and related applications.
- factor a variety of polynomials.
- collect like terms in simplifying polynomial, rational, exponential, and logarithmic expressions.
- sketch graphs of lines and conics and functions.
- associate equations and information from tables or charts with their corresponding graphs.
- recognize and explain the concept of a mathematical function/relation and use functional notation appropriately to formulate solutions.
- compare and contrast the properties of a mathematical function and its inverse function.
- analyze and solve applications related to linear, rational, and radical equations.
- define what a logarithm is and solve logarithmic equations and applications.
- define what an exponential function is and solve exponential equations and applications.

MATH 131 Combined Algebra - Part I

| Units: | 3 |
| Hours: | 54 hours LEC |
| Prerequisite: | MATH 32 or 42 with a grade of "C" or better, or placement through the assessment process. |
| Advisory: | CISC 100, CISC 300, or CISC 305 with a grade of "C" or better, AND ENGRD 116 or ESLR 320 with a grade of "C" or better. |
| Catalog Date: | June 1, 2020 |

This course is the first of three parts covering combined algebra in a mastery-based learning environment. Problem-solving skills are emphasized throughout the course. Topics include linear equations and inequalities, integer exponents, polynomials, systems of linear equations, the rectangular coordinate system, graphs and equations of lines, and related applications. The course is offered through the Multimedia Math Learning Center (MMLC), using an independent study approach under the direction of an instructor. Computer-based instruction via the Internet is an integral part of the course. Students are required to purchase a workbook that is bundled with the on-line video and math content system. One set of materials can be used for multiple MMLC courses, if completed in consecutive semesters. The content in the course is organized into various modules. Each module must be completed at a mastery level before the student moves on to the next. Students will demonstrate mastery by successfully
completing assignments and then earning at least 80% on the module exam that is taken on-line in the MMLC. If necessary students will repeat the exam until mastery is achieved. All modules must be completed before the student takes the final exam, a comprehensive test on paper that is taken once and determines the majority of the course grade. Regular class attendance is required throughout the semester, including the mandatory orientation during the first class meeting. Students may also visit the MMLC during other hours of operation to receive tutoring, complete assignments, and take exams. This course may be completed as quickly as possible but no later than the end of the semester. Students who complete this course during the first half of the semester may sign up immediately for MATH 133. For the most updated information, please visit the MMLC web page on the ARC website. Completion of MATH 131 AND MATH 132 with grades of "C" or better meets the prerequisite for MATH 133, MATH 110, MATH 120, and MATH 125.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- solve linear equations and inequalities.
- graph linear equations and inequalities.
- apply appropriate solving techniques to solve systems of linear equations.
- demonstrate addition, subtraction, and multiplication of polynomials.
- apply properties of exponents.
- set up and solve application problems using appropriate algebraic methods.

MATH 132 Combined Algebra - Part II

<table>
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<tr>
<th>Units:</th>
<th>3</th>
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<tr>
<td>Hours:</td>
<td>54 hours LEC</td>
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<tr>
<td>Prerequisite:</td>
<td>MATH 131 with a grade of &quot;C&quot; or better</td>
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<td>Catalog Date:</td>
<td>June 1, 2020</td>
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This course is the second of three parts covering combined algebra in a mastery-based learning environment. Problem-solving skills are emphasized throughout the course. Topics include polynomial factorization, rational expressions and equations, radical expressions and equations, rational exponents, and related applications. The course is offered through the Multimedia Math Learning Center (MMLC), using an independent study approach under the direction of an instructor. Details about the program can be found in the catalog description for MATH 131. This course may be completed as quickly as possible but no later than the end of the semester. Students who complete this course during the first half of the semester may sign up immediately for MATH 133. For the most updated information, please visit the MMLC web page on the ARC website. Completion of MATH 131 AND MATH 132 with grades of "C" or better meets the prerequisite for MATH 133, MATH 110, MATH 120, and MATH 125.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply appropriate factoring techniques to polynomials.
- demonstrate factoring and algebraic techniques to solve quadratic equations.
- simplify rational expressions and solve equations with rational expressions.
- identify and solve variation applications.
- use roots, radicals, and exponents in simplifying expressions.
- solve equations with radical expressions.
- set up and solve application problems using appropriate algebraic methods.

MATH 133 Combined Algebra - Part III

<table>
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<tr>
<th>Units:</th>
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<tbody>
<tr>
<td>Hours:</td>
<td>54 hours LEC</td>
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<tr>
<td>Prerequisite:</td>
<td>MATH 132 with a grade of &quot;C&quot; or better</td>
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<tr>
<td>General Education:</td>
<td>AA/AS Area II(b)</td>
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<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
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This course is the third of three parts covering combined algebra in a mastery-based learning environment. Problem-solving skills are emphasized throughout the course. Topics include function evaluation and notation, inverse functions, solving quadratic equations, complex numbers, graphs of quadratic functions, exponential and logarithmic functions, properties of logarithms, conic sections, and related applications. The course is offered through the Multimedia Math Learning Center (MMLC), using an independent study approach under the direction of an instructor. Details about the program can be found in the catalog description for MATH 131. This course may be completed as quickly as possible but no later than the end of the semester. For the most updated information, please visit the MMLC web page on the ARC website. Completion of MATH 131, MATH 132, AND MATH 133 with grades of "C" or better is equivalent to the completion of MATH 120 or MATH 125 or MATH 129.
Upon completion of this course, the student will be able to:

- differentiate between a mathematical function and relation.
- evaluate functions using function notation.
- solve quadratic equations using a variety of algebraic methods.
- analyze and graph quadratic functions.
- analyze and graph exponential and logarithmic functions.
- solve exponential and logarithmic equations using algebraic properties.
- classify and construct graphs of conic sections.
- set up and solve application problems using appropriate algebraic methods.

MATH 145 Mathematics for the Trades

Units: 1.5
Hours: 23 hours LEC; 12 hours LAB
Prerequisite: None
Catalog Date: June 1, 2020

This course introduces mathematics applicable to technical programs of study. Topics include the use of mathematical operators on whole numbers, fractions, and decimals. Additional content includes fundamentals of algebra, basic geometry, and triangle trigonometry. This course is intended for those in Pre-Apprenticeship programs or other technical educational programs. Completion of this course does not fulfill any prerequisites for any course, including MATH courses, at American River College.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- solve application problems which require basic algebraic skills.
- evaluate problems using addition, subtraction, multiplication, and division of whole numbers.
- evaluate problems using addition, subtraction, multiplication, and division of fractions.
- evaluate problems using addition, subtraction, multiplication, and division of decimals.
- apply basic geometric formulas and properties to solve problems.
- apply and use trigonometric ratios of right triangles to solve application problems.
- apply dimensional analysis in performing technical calculations.
- use units and dimensions in measurement problems involving customary units and metric terms.
- demonstrate problem-solving techniques of applications using ratio and proportions.

MATH 294 Topics in Mathematics

Units: 0.5 - 4
Hours: 9 - 72 hours LEC
Prerequisite: None
Catalog Date: June 1, 2020

This course is designed to give students an opportunity to study topics in mathematics not included in current course offerings. Individualized topics are developed to foster, complement and build upon arithmetic, geometric and algebraic skills with an emphasis on critical thinking.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- define the vocabulary of a given mathematical topic.
- translate open-ended problems into the given mathematical topic.
- apply techniques (processes or algorithms) to manipulate, illustrate or compute the mathematical objects of the given mathematical topic.
- generalize the techniques (processes or algorithms) of the given mathematical topic to other settings.

MATH 295 Independent Studies in Mathematics

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None
Catalog Date: June 1, 2020

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

MATH 300 Introduction to Mathematical Ideas

Units: 3
Hours: 54 hours LEC
Prerequisite: MATH 120, 125, 129, or 133 with a grade of "C" or better, or placement through the assessment process.
Transferable: CSU; UC
General Education: AA/AS Area II(b); CSU Area B4; IGETC Area 2
Catalog Date: June 1, 2020

This course makes fundamental concepts and processes more meaningful for non-mathematics majors through a study of several mathematical topics, including the history of mathematics, numeration systems, logic, geometry, algebraic modeling, combinatorics, probability, statistics, sets, matrices, consumer mathematics, equations and inequalities, functions and graphs, problem solving, graph theory, voting and apportionment, and number theory. It is not recommended for students entering elementary school teaching or business administration majors.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- discuss several branches of mathematics, including their history and uses beyond mathematics.
- identify appropriate procedures and solve exercises from selected mathematical topics.
- apply critical thinking skills to solve exercises in new settings.
- explain the process and results of several mathematical procedures.

MATH 310 Mathematical Discovery

Units: 3
Hours: 54 hours LEC
Prerequisite: MATH 110 with a grade of "C" or better or successful completion of high school geometry, AND MATH 120, 125, 129, or 133 with a "C" or better, or placement through the assessment process. Geometry is the only high school course that can be used to meet the prerequisite.
Transferable: CSU; UC
General Education: AA/AS Area II(b); CSU Area B4
Catalog Date: June 1, 2020

This course explores mathematical patterns and relations as well as the formulation and proof of conjectures. Topics from number theory, probability and statistics, and geometry are investigated. This course is recommended for students interested in a degree in education.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explore and discover mathematical patterns and relations for a variety of problems from number theory, statistics, and geometry.
- formulate conjectures based on exploration in a variety of problems from number theory, geometry, and statistics.
- prove or find a counterexample for proposed conjectures.
- analyze statistical data.
MATH 311 Mathematical Concepts for Elementary School Teachers - Number Systems

Units: 3
Hours: 54 hours LEC
Prerequisite: MATH 120, 125, 129, or 133 with a grade of "C" or better, or placement through the assessment process.
Transferable: CSU; UC
General Education: AA/AS Area II(b); CSU Area B4
C-ID: C-ID MATH 120
Catalog Date: June 1, 2020

This course focuses on the development of quantitative reasoning skills through in-depth, integrated explorations of topics in mathematics, including history of real number systems and subsystems, basic number theory, sets and relations, logic, mathematical induction, and current national and state curriculum standards for mathematics. It emphasizes comprehension and critical analysis of mathematical concepts and applications of logical reasoning.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- summarize the historical development of numeration systems, including an examination of the base ten numeration system and an analysis of place value systems in general using exponent and place value notation
- perform calculations with place value systems
- evaluate the equivalence of numeric algorithms and explain the advantages and disadvantages of equivalent algorithms in different circumstances
- apply algorithms from number theory to determine divisibility in a variety of settings
- analyze least common multiples and greatest common divisors and their role in standard algorithms
- explain the concept of rational numbers, using both ratio and decimal representations; analyze the arithmetic algorithms for these two representations; and justify their equivalence
- analyze the structure and properties of whole, rational, and real number systems; define the concept of rational and irrational numbers, including their decimal representation; and illustrate the use of a number line representation
- develop and reinforce conceptual understanding of mathematical topics through the use of patterns, problem solving, communication, connections, modeling, reasoning, and representation
- apply basic tools such as sets, functions, and logic together with deductive or inductive reasoning to solve problems from an elementary to advanced level of math
- develop activities implementing curriculum standards

MATH 320 Symbolic Logic

Same As: PHIL 324
Units: 3
Hours: 54 hours LEC
Prerequisite: MATH 120, 125, 129, or 133 with a grade of "C" or better, or placement through the assessment process.
Transferable: CSU; UC
General Education: AA/AS Area II(b)
C-ID: C-ID PHIL 210
Catalog Date: June 1, 2020

This course is an introduction to symbolic logic. It includes a study of the logic of sentences (propositional logic) and the logic of classes and relations (predicate logic), together with an introduction to the nature of deductive systems. This course is not open to students who have completed PHIL 324.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- represent statements of English in well-formed sentences of predicate logic.
- prove the validity of statements and arguments in predicate logic using formal proof techniques.
- apply truth table or truth tree methods to determine semantic properties such as invalidity and consistency.
- construct interpretations that satisfy statements and sets of statements.
• distinguish classical first order logical systems from other logical systems.

MATH 325 Problem-Solving

Units: 3
Hours: 54 hours LEC
Prerequisite: MATH 120, 125, 129, or 133 with a grade of "C" or better, or placement through the assessment process.
Transferable: CSU
General Education: AA/AS Area ll(b); CSU Area B4
Catalog Date: June 1, 2020

This course focuses on the development of specific strategies and skills necessary to solve real-world and advanced mathematics problems. It emphasizes the development of logical, organizational, and divergent thinking, as well as written and oral communication skills, individual and group work, and clear presentation of mathematical work. Topics include drawing a diagram, eliminating possibilities, making a systematic list, looking for a pattern, guessing and checking, solving an easier related problem, working backwards, using algebraic representation, and applying the method of finite differences.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• identify a collection of problem-solving strategies that would apply to a given mathematical situation, problem, or puzzle.
• generate suitable plans for solving a variety of mathematical problems.
• recognize similarities and differences in problems across various mathematical contexts.
• evaluate the appropriateness of a particular problem-solving strategy for a given mathematical problem.
• organize and present solutions to mathematics problems in a clear, coherent fashion in both written and oral forms.
• apply topics from mathematics, including functions, sequences, finite differences, counting methods, and factoring.

MATH 336 College Algebra

Units: 5
Hours: 90 hours LEC
Prerequisite: MATH 120, 129, or 133 with a grade of "C" or better, or placement through the assessment process.
Transferable: CSU; UC
General Education: AA/AS Area ll(b); CSU Area B4; IGETC Area 2
C-ID: C-ID MATH 150
Catalog Date: June 1, 2020

This course reviews and covers topics beyond those studied in intermediate algebra, including functions, matrices, The Rational Root Theorem, partial fractions, sequences and series, mathematical induction, and The Binomial Theorem. It focuses on applications and graphing of polynomial, logarithmic, and exponential functions, as well as solving systems of linear and non-linear equations and inequalities. It also covers analytic geometry, including straight lines, conic sections, and curve sketching.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• apply the basic concepts of the complex and real number systems to solve equations and inequalities
• analyze various functions, including their properties, operations, difference quotients, and graphs
• solve equations involving various functions, including linear, polynomial, absolute value, rational, exponential, logarithmic, and radical
• apply the Remainder, Factor, Rational Root, and Binomial Theorems; Descartes' Rule of Signs; and the Fundamental Theorem of Algebra
• analyze the geometry of lines and conic sections
• solve word problems using methods from algebra and analytic geometry
• solve systems of linear and nonlinear equations and inequalities, including applications of matrices, determinants, and Cramer's Rule
• find the sum of a geometric series
• use arithmetic and geometric sequences to solve application problems
• use mathematical induction as a proof technique
• apply partial fraction decomposition techniques to rewrite a rational expression as a sum or difference of partial fractions

MATH 340 Calculus for Business and Economics

Units: 3
Hours: 54 hours LEC
Prerequisite: MATH 120, 129, or 133 with a grade of "C" or better, or placement through the assessment process.
Transferable: CSU; UC (UC credit limitation: MATH 340, 350 & 400 combined: maximum credit, one course)
General Education: AA/AS Area II(b); CSU Area B4; IGETC Area 2
C-ID: C-ID MATH 140
Catalog Date: June 1, 2020

This course introduces how differential calculus and integral calculus are used in the fields of business, economics, social science, and biological science. Topics include finding limits, applying various rules to find derivatives of polynomial, rational, exponential, and logarithmic functions, as well as using derivatives to analyze marginal cost, revenue, and profit. It is not recommended for mathematics and physical science majors.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• evaluate and explore functions that represent quantities important in business, including profit, average cost, supply, and demand.

• compute limits graphically, numerically, and analytically.

• find derivatives of various functions, including polynomial, rational, exponential, and logarithmic functions using the Power, Product, Quotient, and Chain Rules.

• find the equation of the tangent line to a polynomial, rational, exponential, or logarithmic function, using derivatives.

• sketch the graph of functions using horizontal and vertical asymptotes, intercepts, first and second derivatives to determine intervals of increase and decrease, maximum and minimum values, intervals of concavity, and points of inflection.

• recognize and solve business applications that call for derivatives of single or multivariable functions including implicit differentiation, related rates, and optimization problems.

• find antiderivatives of various functions using substitution, integration by parts, and other methods.

• evaluate definite integrals using the Fundamental Theorem of Calculus.

• recognize and solve business applications that call for antiderivatives of single variable or multivariable functions.

MATH 342 Modern Business Mathematics

Units: 3
Hours: 54 hours LEC
Prerequisite: MATH 120, 129, or 133 with a grade of "C" or better, or placement through the assessment process.
Transferable: CSU; UC
General Education: AA/AS Area II(b); CSU Area B4; IGETC Area 2
Catalog Date: June 1, 2020

This course is designed around applications of mathematics in economic and business contexts. Specific topics include functions and related business formulas, tables and graphs, finance (interest and exponential models in economics), rates of change, applications and optimization, and linear programming.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• analyze formulas, tables, graphs, and data sets in order to form conclusions or make predictions.

• identify and graph linear, quadratic, rational, polynomial, exponential, and logarithmic functions.

• formulate and apply exponential growth or decay functions pertaining to business applications.

• calculate both present and future values involving simple interest, compound interest, and annuities.

• analyze applications of annuities involving loan amortization and sinking funds, applying necessary formulas.

• evaluate rates of change for a variety of elementary functions and apply them to marginal analysis.

• find and interpret optimum values related to business applications.
solve linear programming problems by the graphical approach.

MATH 355 Calculus for Biology and Medicine I

Units: 4
Hours: 72 hours LEC
Prerequisite: MATH 373 with a grade of "C" or better, or placement through the assessment process.
Advisory: MATH 370
Transferable: CSU; UC
General Education: AA/AS Area II(b); CSU Area B4; IGETC Area 2
Catalog Date: June 1, 2020

This course is an introduction to differential calculus and elementary differential equations via applications in biology and medicine. It covers limits, derivatives of polynomials, trigonometric and exponential functions, graphing, and applications of the derivative to biology and medicine. Topics include the Fundamental Theorem of Calculus and techniques of integration, including integral tables and numerical methods.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- differentiate polynomial, radical, trigonometric, logarithmic, and exponential functions.
- graph and analyze the curves of elementary functions.
- calculate maxima and minima of elementary functions.
- apply derivatives to applications in biology and medicine.
- integrate basic elementary functions.
- apply the Fundamental Theorem of Calculus to the evaluation of definite integrals.

MATH 356 Calculus for Biology and Medicine II

Units: 4
Hours: 72 hours LEC
Prerequisite: MATH 355 with a grade of "C" or better
Transferable: CSU; UC
General Education: AA/AS Area II(b); CSU Area B4; IGETC Area 2
Catalog Date: June 1, 2020

This course covers matrix algebra with eigenvalues and eigenvectors, systems of linear equations, functions of several variables, partial derivatives, systems of differential equations, and applications to biology and medicine. This course is a superset of MATH 351, treating additional topics and covering them in more depth.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- solve systems of linear equations with matrix techniques.
- compute eigenvalues and eigenvectors for square matrices.
- solve systems of linear differential equations.
- apply systems of linear differential equations to problems in biology and medicine.
- compute partial derivatives of functions of several variables.
- compute double integrals.
- identify absolute and local extrema of functions of two variables.
- calculate equations of tangent planes to graphs of functions of two variables.

MATH 370 Pre-Calculus Mathematics

Units: 5
This course provides foundational mathematics and problems that require critical thinking in preparation for the calculus sequence for science, technology, engineering, and mathematics (STEM) majors. Topics include rigorous treatment of polynomial, rational, logarithmic, exponential, and trigonometric functions, including graphing and applications, as well as systems of linear and non-linear equations and inequalities. This course also covers analytic geometry, conic sections, vectors, parametric equations, and polar equations.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply the basic concepts of the complex and real number systems to solve equations and inequalities
- perform operations of arithmetic and composition on various functions
- use analytic methods to determine roots, domain, and range, both with and without a graphing utility
- solve and apply equations involving linear, polynomial, rational, radical, exponential, logarithmic, trigonometric, and absolute value functions
- solve linear, nonlinear, and absolute value inequalities
- solve linear and nonlinear systems of equations and inequalities
- state and apply the Remainder Theorem, Factor Theorem, Rational Root Theorem, and the Fundamental Theorem of Algebra
- use analytic methods, including transformations, to graph polynomial, rational, exponential, logarithmic, and trigonometric functions, as well as relations without the aid of a graphing utility
- graph functions and relations in rectangular and polar coordinates
- recognize the relationship between functions and their inverses graphically and algebraically
- identify special triangles and their related angle and side measures
- evaluate the trigonometric function of an angle given in degree and radian measure
- graph the basic trigonometric functions and apply changes in period, phase, and amplitude to generate new graphs
- prove trigonometric identities
- state and appropriately apply the Law of Sines and the Law of Cosines to solve triangles in various applications
- analyze the geometry of lines and conic sections
- solve word problems using methods from algebra, analytical geometry, and trigonometry

### MATH 372 College Algebra for Calculus

**Units:** 4  
**Hours:** 90 hours LEC  
**Prerequisite:** MATH 373 with a grade of "C" or better, or placement through the assessment process.  
**Transferable:** CSU; UC  
**General Education:** AA/AS Area II(b); CSU Area B4; IGETC Area 2  
**Catalog Date:** June 1, 2020

This course provides a rigorous treatment of college-level algebra and its applications, with a particular focus on preparing students for the calculus sequence for Science, Technology, Engineering, and Mathematics (STEM) majors. Topics include polynomial, rational, radical, exponential, absolute value, and logarithmic functions, graphs, and equations; systems of equations; the theory of polynomial equations; analytic geometry including conics; and an introduction to sequences and series. Emphasis is given to analytical reasoning and problem-solving.

This course may be taken concurrently with MATH 373, Trigonometry for Calculus. Completion of both MATH 372 AND MATH 373 with grades of "C" or better meets the prerequisite for MATH 400, Calculus I.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze and investigate properties of functions.
- synthesize connections between equations of functions and their graphs, including asymptotic behavior, intercepts, and vertices.
apply transformations to the graphs of functions, including quadratic, absolute value, radical, rational, logarithmic, and exponential functions.

recognize the relationship between a function and its inverse both graphically and algebraically.

solve equations and applications involving rational, linear, polynomial, radical, absolute value, exponential, and logarithmic equations.

solve systems of equations and inequalities.

apply techniques for determining zeros of polynomials and roots of equations.

apply functions and other algebraic techniques to model real world STEM applications.

analyze conics algebraically and graphically.

use formulas to find the sum of both finite and infinite series.

MATH 373 Trigonometry for Calculus

Units: 4
Hours: 72 hours LEC
Prerequisite: MATH 120, 129, or 133 with a grade of "C" or better, or placement through the assessment process.
Advisory: MATH 110; or completion of high school geometry
Transferable: CSU
General Education: AA/AS Area I(b); CSU Area B4
Catalog Date: June 1, 2020

This course provides a rigorous treatment of trigonometry and its applications, with a particular focus on preparing students for the calculus sequence for science, technology, engineering, and mathematics (STEM) majors. Emphasis is given to the study of trigonometric functions from numerical, graphical, and algebraic descriptions. Topics include functions and their graphs, transformations of functions, geometric properties of circles and triangles, degree and radian measurements of angles, right triangle trigonometry, reference angle trigonometry, unit circle trigonometry, graphs and transformations of trigonometric functions, verifying and applying trigonometric identities, inverse trigonometric functions, solving trigonometric equations, solving triangles using the Law of Sines and the Law of Cosines, vectors, the polar coordinate system, and roots and powers of complex numbers including De Moivre's Theorem. This course may be taken concurrently with MATH 372, College Algebra for Calculus. Completion of both MATH 372 AND MATH 373 with grades of "C" or better meets the prerequisite for MATH 400, Calculus I.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- convert between degree measure and radian measure of angles
- graph angles in the coordinate plane and identify the reference angle
- define the six trigonometric functions in terms of right triangles, the rectangular coordinate system, and the unit circle
- apply the right triangle definitions of the six trigonometric functions to solve right triangles
- evaluate trigonometric functions of angles in both degrees and radians
- evaluate trigonometric functions of special angles in both degrees and radians without a calculator
- recognize and create the graphs of the basic trigonometric functions
- graph transformations of the basic trigonometric functions by thinking about amplitude, period, phase shift, and vertical shift
- simplify expressions using trigonometric identities
- find function values by making use of identities
- prove a variety of identities
- evaluate and graph inverse trigonometric functions
- evaluate compositions of trigonometric and inverse trigonometric functions
- solve a variety of trigonometric equations
- use the Laws of Sines and Cosines to solve oblique triangles
- solve application problems that involve right and oblique triangles
- represent a vector both graphically and in ai+bj form
- perform basic vector operations: addition, subtraction, and scalar multiplication, as well as represent these operations graphically and algebraically
- calculate powers and roots of complex numbers using De Moivre's Theorem
convert between polar and rectangular coordinates and equations
graph polar equations

MATH 400 Calculus I

Units: 5
Hours: 90 hours LEC
Prerequisite: MATH 370 (Pre-Calculus Mathematics), OR MATH 372 (College Algebra for Calculus) AND MATH 373 (Trigonometry for Calculus) with grades of "C" or better, or placement through the assessment process.
Transferable: CSU; UC (UC credit limitation: MATH 340, 350 & 400 combined: maximum credit, one course)
General Education: AA/AS Area II(b); CSU Area B4; IGETC Area 2
C-ID: C-ID MATH 210; Part of C-ID MATH 900S
Catalog Date: June 1, 2020

This course is an introduction to differential and integral calculus. It covers limits, continuity, differentiation and integration of algebraic, trigonometric, logarithmic, exponential, and other transcendental functions. Some applications are also covered.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- evaluate limits graphically, analytically, and by using L'Hopital's Rule.
- compute derivatives using the definition of derivative.
- apply differentiation rules to various types of functions.
- recognize and solve application problems that require use of derivatives.
- apply antiderivatives rules to various types of functions.
- compute definite integrals using the Fundamental Theorem of Calculus.
- recognize and solve application problems that require use of antiderivatives.

MATH 401 Calculus II

Units: 5
Hours: 90 hours LEC
Prerequisite: MATH 400 with a grade of "C" or better
Transferable: CSU; UC (UC credit limitation: MATH 351 & 401 combined: maximum credit, one course)
General Education: CSU Area B4; IGETC Area 2
C-ID: C-ID MATH 220; Part of C-ID MATH 900S
Catalog Date: June 1, 2020

This course is a continuation of MATH 400. It builds on the methods of integration learned in MATH 400, and also covers improper integrals, sequences, infinite series, power series, polar coordinates, and parametric and polar equations. Many calculus applications are also included.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify and use properties of logarithmic, exponential, and inverse trigonometric functions to evaluate integrals.
- evaluate integrals using the techniques of integration by parts, trig substitution, partial fractions, and rationalizing substitutions.
- recognize and evaluate limits in indeterminate forms and improper integrals.
- determine the convergence or divergence of sequences and series, find power series representations for certain transcendental functions, and apply appropriate Calculus techniques to evaluate derivatives and integrals of power series.
- rewrite, analyze and graph equations in three forms: rectangular, parametric, and polar; using appropriate calculus techniques.
- use various integration techniques to solve applications, including area, volume, and arc length.
- solve separable differential equations to determine growth and decay functions.
MATH 402 Calculus III

This course is a continuation of MATH 401. It extends the concepts of limits, derivatives, and integrals to vector-valued functions and multivariate functions. The topics include multivariate functions, partial derivatives, extrema of multivariate functions, iterated integrals, development of vector calculus, line integrals, three-dimensional analytic geometry, and Green's, Gauss' (Divergence), and Stokes' Theorems. Many applications of calculus are also covered.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze and graph two- and three-dimensional functions, vectors, vector-valued functions, and geometric surfaces and solids in order to solve for various geometric quantities and to represent motion in space.
- perform vector operations: addition, subtraction, scalar multiplication, dot products, and cross products.
- determine the equations of lines and planes in space, including tangent planes to a surface.
- find the limit of a multivariate function at a point and determine the differentiability of a multivariate function.
- evaluate partial derivatives and apply them to find local extrema and test for saddle points of multivariate functions.
- apply Lagrange multipliers to solve optimization problems with constraints.
- compute the arc length of a curve.
- set up and evaluate iterated integrals in rectangular, cylindrical, and spherical coordinates to calculate the area, volume, mass, and center of mass for a surface or solid.
- find the gradient of a scalar field and the divergence and curl of a vector field.
- set up and evaluate line and surface integrals using Green's, Gauss', and Stokes' Theorems and use results to solve application problems involving vector fields.

MATH 410 Introduction to Linear Algebra

This course provides an introduction to linear algebra including matrices, determinants, vector spaces, inner product spaces, linear transformations, and eigenvectors. It is intended for majors in mathematics, engineering, economics, science, and related fields. This course emphasizes cogent reasoning, mathematical proof, and problem solving.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- solve systems of linear equations by reducing an augmented matrix to row-echelon or reduced row-echelon form.
- determine whether a linear system is consistent or inconsistent; for consistent systems, characterize solutions as unique or infinitely many and write parametric solutions for systems with infinitely many solutions.
- evaluate matrix expressions using properties of matrix algebra.
- compute the transpose, determinant, adjoint, and inverse of matrices if defined for a given matrix.
- determine if a subset of a vector space is a vector space, and if so, prove that the subset is a subspace.
- determine if a given set of vectors is linearly independent, and if so, prove that this determination is correct.
determine if a given set of vectors is a basis for a vector space, and if so, prove that this determination is correct and find the basis and dimension of spaces such as those associated with matrices and linear transformations or the intersection of two subspaces.

calculate inner products, use properties of inner products to determine angle and orthogonality, and use an orthonormal basis to to find the projection of a vector on a space.

determine if a function that maps two vectors from a vector space to a scalar is an inner product on that vector space.

construct orthogonal and orthonormal bases using the Gram-Schmidt Process for a given basis.

construct the orthogonal diagonalization of a symmetric matrix.

determine the matrix for a linear transformation on Euclidean 2-space or 3-space, and for a given linear transformation, determine kernel, range, rank, nullity, and whether the linear transformation is an isomorphism.

compute the characteristic polynomial, eigenvalues, eigenvectors, and eigenspaces for both matrices and linear transformations.

use eigenvalues and eigenvectors in applications and diagonalization.

prove basic results in linear algebra using accepted proof-writing techniques including linear independence of vectors, properties of subspaces, linearity, injectivity, surjectivity, properties of eigenvectors, and properties of eigenvalues.

MATH 420 Differential Equations

Units: 4
Hours: 72 hours LEC
Prerequisite: MATH 401 with a grade of "C" or better
Advisory: MATH 402
Transferable: CSU; UC
General Education: CSU Area B4; IGETC Area 2
C-ID: C-ID MATH 240; Part of C-ID MATH 910S
Catalog Date: June 1, 2020

This course is a study of ordinary differential equations, including linear equations, systems of equations, equations with variable coefficients, existence and uniqueness of solutions, series solutions, singular points, transform methods, boundary value problems, and applications.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- formulate and analyze mathematical models using ordinary differential equations.
- categorize a given differential equation by type, order, and linearity.
- determine existence and uniqueness of solutions of an initial value problem for the first-order ordinary differential equation.
- solve elementary first-order and second-order ordinary differential equations (linear and nonlinear) using analytical methods.
- solve ordinary differential equations using power series.
- solve higher order ordinary differential equations with constant coefficients using analytical techniques.
- solve systems of linear ordinary differential equations with constant coefficients using analytical methods.
- assess situations in which a differential equation can be solved more efficiently with the Laplace Transform or the Inverse Laplace Transform and apply the transform to the equation when appropriate.

MATH 480 Honors Seminar in Mathematics

Units: 1
Hours: 18 hours LEC
Prerequisite: MATH 370 with a grade of "C" or better
Transferable: CSU; UC
Catalog Date: June 1, 2020

Honors Seminar in Mathematics is a one-unit intensive course. The course is taught in a seminar format where work is done independently in pursuit of solutions to challenging problems in mathematics in consultation with the instructor. Seminar participants will explore strategies and techniques for solving problems and present their solutions to the class.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- perform critical analysis and exploration when confronted with a nonstandard challenging mathematics problem by constructing models and developing cogent strategies to find a solution.
- demonstrate mastery and understanding of various mathematical topics from pre-calculus.
- present work in a seminar to a critical audience.
- explore and attack mathematics problems with depth and significance.

MATH 495 Independent Studies in Mathematics

| Units:     | 1 - 3 |
| Hours:     | 54 - 162 hours LAB |
| Prerequisite: | None. |
| Transferable: | CSU |
| Catalog Date: | June 1, 2020 |

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

Mathematics Support (MATHS)

MATHS 45 Support for Business Mathematics

| Units:     | 2 |
| Hours:     | 36 hours LEC |
| Prerequisite: | None. |
| Corequisite: | MATH 340 or 342 |
| Catalog Date: | June 1, 2020 |

This course provides intensive instruction and practice in the core mathematical skills, competencies, and concepts necessary for success in Calculus for Business and Economics (MATH 340) and Modern Business Mathematics (MATH 342). Students taking this course must be concurrently enrolled in the corresponding section of MATH 340 or MATH 342. The content of this course is designed to provide arithmetic and algebraic support to students as they learn related concepts in their corequisite course. Topics and homework assignments are often connected to students’ assignments in the corequisite course. This course is graded Pass/No Pass.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply learning strategies to achieve success in Calculus for Business and Economics or Modern Business Mathematics.
- use real numbers to perform arithmetic operations in the evaluation of algebraic functions.
- simplify expressions and solve equations involving polynomial, rational, radical, exponential, and logarithmic functions.
- analyze the structure of multivariable equations utilizing graphs, tables, and algebraic methods.
- utilize algebraic techniques and problem solving strategies to solve application problems.

MATHS 72 Support for College Algebra for Calculus

| Units:     | 2 |
| Hours:     | 36 hours LEC |
| Prerequisite: | None. |
| Corequisite: | MATH 372 |
| Catalog Date: | June 1, 2020 |

This course provides intensive instruction and practice in the core mathematical skills, competencies, and concepts necessary for success in MATH 372 (College Algebra for Calculus). Students taking this course must be concurrently enrolled in the corresponding section of MATH 372. The content of this course is designed to provide arithmetic and algebraic support to students as they learn related concepts in their corequisite course. Topics and homework assignments are often connected to assignments in the corequisite course. This course is graded Pass/No Pass.
Upon completion of this course, the student will be able to:

- use mathematics support skills to solve equations and inequalities and manipulate expressions.
- use mathematics support skills to solve systems of equations and inequalities.
- use mathematics support skills to demonstrate a deep understanding of functions and their properties.
- apply learning strategies to achieve success in College Algebra for Calculus.

**MATHS 73 Support Course for Trigonometry for Calculus**

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<td>Prerequisite:</td>
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<tr>
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<td>MATH 373</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
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</tbody>
</table>

This course provides intensive instruction and practice in the core mathematical skills, competencies, and concepts necessary for success in Trigonometry for Calculus (MATH 373). Students taking this course must be concurrently enrolled in the corresponding section MATH 373. The course content is designed to provide arithmetic, algebra, geometry and learning skills support to students as they learn related concepts in their corequisite course. Topics and homework assignments are often connected to students’ assignments in the corequisite course. This course is graded Pass/No Pass.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- recall the methods from arithmetic necessary to be successful in Trigonometry for Calculus
- review the methods from algebra necessary to be successful in Trigonometry for Calculus
- demonstrate an understanding of the methods from geometry necessary to be successful in Trigonometry for Calculus
- apply learning strategies to achieve success in Trigonometry for Calculus

**MATHS 95 Support for Introduction to Mathematical Ideas**

<table>
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<th>Units:</th>
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<tbody>
<tr>
<td>Hours:</td>
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<tr>
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<td>Corequisite:</td>
<td>MATH 300</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
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</table>

This course provides intensive instruction and practice in the core mathematical skills, competencies, and concepts necessary for success in MATH 300 (Introduction to Mathematical Ideas). Students taking this course must be concurrently enrolled in the corresponding section of MATH 300. The content of this course is designed to provide arithmetic and algebraic support to students as they learn related concepts in their corequisite course. Topics and homework assignments are often connected to assignments in the corequisite course. This course is graded Pass/No Pass.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- apply learning strategies to achieve success in Introduction to Mathematical Ideas (MATH 300).
- use support mathematics skills to identify appropriate procedures and solve exercises from selected mathematical topics.
- use support mathematics skills to apply critical thinking skills to solve exercises in new settings.
- use support mathematics skills to explain the process and results of several mathematical procedures.

**Statistics (STAT)***
STAT 10 Support for Introduction to Probability and Statistics

This course provides intensive instruction and practice in the core mathematical skills, competencies, and concepts necessary for success in STAT 300 (Introduction to Probability and Statistics). Students taking this course must be concurrently enrolled in the corresponding section of STAT 300. The content of this course is designed to help students develop effective learning strategies, and to provide arithmetic, algebraic, and geometric support as they learn concepts in the statistics course. Topics and homework assignments are often connected to assignments in the statistics course. Support using the required statistical technology package is also included. This course is graded Pass/No Pass.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply learning strategies to achieve success in statistics.
- use problem solving techniques in the context of data analysis and statistical methods.
- demonstrate relevant arithmetic, algebraic, and geometric skills in the context of statistics.
- apply mathematical and statistical skills in real-world settings and interpret the results in context.

STAT 105 Statway, Part I

This is the first semester of a two-semester course that introduces the concepts of probability and statistics with requisite arithmetic and algebraic topics integrated throughout. It is structured to serve students planning to transfer and continue studies in humanities or social sciences. Statistics topics emphasize data analysis and include methods for collecting data, graphical and numerical descriptive statistics, correlation, linear regression, simple exponential regression, and introduction to probability. Algebra topics include proportional relationships (including variation) with applications, expressions, linear equations and systems with applications, functions, quadratic and exponential equations, and linear and exponential models. Learning strategies for success with an emphasis on study skills, resource acquisition, and maintaining a positive perspective towards learning are also discussed and applied.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify methods of obtaining data and related advantages and disadvantages of each.
- organize and display data using appropriate tables and graphs.
- summarize a given data set using appropriate numerical summaries.
- analyze data by computing measures of central tendency, measures of dispersion, and measures of position.
- make meaningful and appropriate comparisons of distributions of data collected from two or more different groups.
- analyze bivariate data for linear trends using the least-squares regression model and the correlation coefficient.
- develop and apply the concept of numeracy to investigate and describe quantitative relationships and solve problems in a variety of contexts.
- solve problems that require the use of ratios, rates, proportions, and scaling.
- express real-world and quantitative situations with equations, inequalities, expressions, tables, verbal descriptions, symbols, and graphs.
- solve application problems involving equations, systems of equations, and inequalities and explain how results relate to the original context.
- apply functions as a way of modeling a correspondence between two variables in linear, quadratic, exponential, and logarithmic situations.
- solve problems involving exponential growth and decay in formulas, graphs, tables, and applications.
- calculate and interpret probabilities.
- estimate probabilities (including conditional probabilities) empirically and using simulation.
• use statistical software or graphing calculator to calculate single variable and analyze the results.
• apply learning strategies to achieve success in mathematics.

STAT 300 Introduction to Probability and Statistics

Units: 4
Hours: 72 hours LEC
Prerequisite: MATH 120, 125, 129, or 133 with a grade of "C" or better, or placement through the assessment process.
Transferrable: CSU; UC (UC credit limitation: STAT 300, 305, and PSYC 330 combined: maximum credit, one course)
General Education: AA/AS Area II(b); CSU Area B4; IGETC Area 2
C-ID: C-ID MATH 110
Catalog Date: June 1, 2020

This course is an introduction to probability and statistics. Topics include elementary principles and applications of descriptive statistics, counting principles, elementary probability principles, probability distributions, estimation of parameters, hypothesis testing, linear regression and correlation, and Analysis of Variance (ANOVA). Applications use data from various disciplines including business, social sciences, psychology, life and health sciences, and education. Statistical analysis using a computer statistics package or graphing calculator is required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• identify methods of obtaining data and related advantages and disadvantages of each.
• distinguish between types of data as well as their different scales of measurement and corresponding implications.
• organize and display data appropriately using tables and graphs.
• analyze data by computing measures of central tendency, measures of dispersion, and measures of position.
• analyze bivariate data for linear trends using the least-squares regression model and the correlation coefficient.
• distinguish between probability models appropriate to different chance events and calculate probability according to these methods.
• analyze both discrete and continuous probability distributions, including binomial probability, normal distributions, and t-distributions by examining and interpreting areas under the graph of a histogram or a normal curve.
• apply inferential statistical methods to compare population parameters, make predictions, and draw conclusions about hypotheses.
• select the appropriate hypothesis test, perform the necessary computations and comparisons for the test (including significance of p-values and type I/II errors), and explain the conclusion of the test.
• test the significance of correlation and make predictions based on linear trends using the least-squares regression model.
• create and interpret confidence interval estimates for population parameters based on appropriate probability models.
• analyze and interpret applications using data from various disciplines including business, social sciences, psychology, life sciences, health science, and education.

Student Learning Outcomes

STAT 305 Statway, Part II

Units: 6
Hours: 108 hours LEC
Prerequisite: STAT 105 with a grade of "C" or better
Transferrable: CSU; UC (UC credit limitation: STAT 300, 305, and PSYC 330 combined: maximum credit, one course; Maximum credit limitation: 4 semester/6 quarter units. STAT 105 and 305 must both be completed w/ "C" or better.)
General Education: AA/AS Area II(b); CSU Area B4; IGETC Area 2
Catalog Date: June 1, 2020

This is the second semester of a two-semester course that introduces the concepts of probability and statistics with requisite arithmetic and algebraic topics integrated throughout. It is structured to serve students planning to transfer and continue studies in humanities or social sciences. Statistics topics emphasize data analysis and include basic concepts of probability; confidence intervals; hypothesis tests for means, proportions, and variance; chi-squared tests; and ANOVA (Analysis of Variance). Algebra topics include proportional relationships (including variation) with applications, expressions, linear equations and systems with applications, functions, quadratic and exponential equations, and linear and exponential/logarithmic models. Learning strategies for success with an emphasis on study skills, resource acquisition, and maintaining a positive perspective towards learning are also discussed and applied. Both parts of Statway must be completed with a grade of "C" or better to receive credit for transfer-level statistics.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- identify methods of obtaining data and related advantages and disadvantages of each.
- distinguish between types of data as well as their different scales of measurement and corresponding implications.
- organize and display data appropriately using tables and graphs.
- analyze data by computing measures of central tendency, measures of dispersion, and measures of position.
- analyze bivariate data for linear trends using the least-squares regression model and the correlation coefficient.
- analyze both discrete and continuous probability distributions, including binomial probability and normal distribution, by examining and interpreting areas under the graph of a histogram or a normal curve.
- apply inferential statistical methods to compare population parameters, make predictions, and draw conclusions about hypothesis.
- apply the concept of numeracy to investigate and describe quantitative relationships and solve problems in a variety of contexts.
- select the appropriate hypothesis test, perform the necessary computations and comparisons for the test (including significance of p-values and type I/II errors), and explain the conclusion of the test.
- test the significance of correlation and make prediction based on linear trends using the least-squares regression model.
- create and interpret confidence interval estimates for population parameters based on appropriate probability models.
- analyze and interpret applications using data from various disciplines including business, social sciences, psychology, life sciences, health science, and education.
- use statistical software or graphing calculator to calculate single variable and two-variable statistics and analyze the results.
- make conjectures about the behavior of a function in a given context.
- apply learning strategies to achieve success in mathematics.

**STAT 480 Introduction to Probability and Statistics - Honors**

**Units:** 4  
**Hours:** 72 hours LEC  
**Prerequisite:** MATH 120, 125, 129, or 133 with a grade of "C" or better, or placement through the assessment process.  
**Advisory:** Placement into ENGWR 300.  
**Transferable:** CSU; UC  
**General Education:** AA/AS Area I(b); CSU Area B4  
**C-ID:** C-ID MATH 110  
**Catalog Date:** June 1, 2020

This course is an introduction to probability and statistics designed for students in the honors program. Topics include elementary principles and applications of descriptive statistics, counting principles, elementary probability principles, probability distributions, estimation of parameters, hypothesis testing, linear regression and correlation, and Analysis of Variance (ANOVA). Applications use data from various disciplines including business, social sciences, psychology, life sciences, health science, and education. Statistical analysis using a computer statistics package is required. This honors section uses an intensive instructional methodology designed to challenge motivated students, and includes a capstone project. This course is not open to students who have completed STAT 300.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- identify methods of obtaining data and related advantages and disadvantages of each.
- distinguish between types of data as well as their different scales of measurement and corresponding implications.
- organize and display data appropriately using tables and graphs.
- analyze data by computing measures of central tendency, measures of dispersion, and measures of position.
- analyze bivariate data for linear trends using the least-squares regression model and the correlation coefficient.
- distinguish between probability models appropriate to different chance events and calculate probability according to these methods.
- analyze both discrete and continuous probability distributions, including binomial probability, normal distributions, and t-distributions by examining and interpreting areas under the graph of a histogram or a normal curve.
- apply inferential statistical methods to compare population parameters, make predictions, and draw conclusions about hypotheses.
- select the appropriate hypothesis test, perform the necessary computations and comparisons for the test (including significance of p-values and type I/II errors), and explain the conclusion of the test.
- test the significance of correlation and make predictions based on linear trends using the least-squares regression model.
- create and interpret confidence interval estimates for population parameters based on appropriate probability models.
- analyze and interpret applications using data from various disciplines including business, social sciences, psychology, life sciences, health science, and education.
- use statistical software or graphing calculator to calculate single-variable and two-variable statistics and analyze the results.

STAT 495 Independent Studies in Statistics

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.
Music | American River College

The Music Degree program is designed to provide students with a rich foundation and core curriculum for the development of the professional musician through music theory, history, performance, and production. Associate of Arts degrees are offered in both traditional and jazz studies with an emphasis in either instrumental or vocal performance.

The Commercial Music program is designed to serve as a springboard for a career in the music business. The program offers Associate of Arts degrees and certificates in audio recording or music business. Students study with industry professionals and learn in ARC’s state-of-the-art equipped recording studios and facilities. (/academics/arc-program-road-maps)

Division Dean  Angela Milano
Department Chairs  Dyne Eifertsen

Associate Degrees for Transfer

A.A.-T. in Music

Completion of this degree provides a foundation in music. Program offerings include course work in music theory and aural skills, applied composition, instrumental and vocal instruction, and ensemble performance.

The Associate in Arts in Music for Transfer provides students with a major that fulfills the general requirements of the California State University for transfer. Students with this degree will receive priority admission with junior status to the California State University system.

The Associate in Arts in Music for Transfer (A.A.-T.) may be obtained by the completion of 60 transferable, semester units with a minimum of a 2.0 GPA, including (a) the major or area of emphasis described in the Required Program outlined below (earning a C or better in these courses), and (b) the Intersegmental General Education Transfer Curriculum (IGETC).

Catalog Date: June 1, 2020

Degree Requirements

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<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>MUFHL 400</td>
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<tr>
<td>MUFHL 401</td>
<td>Music Theory and Musicianship II</td>
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<td>MUFHL 410</td>
<td>Music Theory and Musicianship III</td>
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Guitarists/Pianists/Composers

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<tr>
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<td>Advanced Orchestra (1 - 2)</td>
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<td>Jazz Band (2)</td>
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<td>Concert Band (2)</td>
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<td>MUP 331</td>
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<tr>
<td>MUP 340</td>
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<td>MUP 341</td>
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<td>MUP 350</td>
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Guitarists/Pianists/Composers

Units: 8
Total Units: 28

**Instrumentalists**

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<td>MUP 341</td>
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Instrumentalists Units:

Units: 8
Total Units: 28

**Vocalists**

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<td>COURSE CODE</td>
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<td>UNITS</td>
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<tr>
<td>MUP 324</td>
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<td>MUP 350</td>
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<td>MUP 401</td>
<td>Advanced Vocal Jazz Ensemble (1 - 2)</td>
<td></td>
</tr>
</tbody>
</table>

Vocalists Units: 8
Total Units: 28

The Associate in Arts in Music for Transfer (AA-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) the Intersegmental General Education Transfer Curriculum (IGETC).

### Student Learning Outcomes

Upon completion of this program, the student will be able to:

- analyze musical scores and compositions
- critique personal music performances and those of other musicians
- analyze and perform the elements of music (rhythm, melody, harmony, and form)
- create derivative or original music at a level appropriate to the area of specialization

### Career Information

Individuals with four-year degrees in music may be placed in the K-12 educational field as well as performers in professional music ensembles, directors for religious and community music groups, private music studio instructors, composers for media and publishing, music therapists, and administrative staff for music organizations. Advanced degrees in music may lead to careers as educators at the college or university level, performers, music directors, and music editors and journalists.

### Associate Degrees

#### A.A. in Commercial Music: Business

This degree explores the inner workings of the music industry in areas such as publishing, entertainment, distribution, and music law. Course work addresses industry-specific issues such as copyright, record contracts, publishing agreements, artist management, promotion, and marketing.

Catalog Date: June 1, 2020

### Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 300</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS 340</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>BUS 350</td>
<td>Small Business Management/Entrepreneurship</td>
<td>3</td>
</tr>
<tr>
<td>MUFHL 321</td>
<td>Basic Musicianship</td>
<td>3</td>
</tr>
<tr>
<td>MUFHL 330</td>
<td>World Music</td>
<td>3</td>
</tr>
<tr>
<td>MUSM 110</td>
<td>The Business of Music</td>
<td>3</td>
</tr>
<tr>
<td>MUSM 111</td>
<td>The Business of Music</td>
<td>3</td>
</tr>
<tr>
<td>MUSM 112</td>
<td>The Business of Music/Artist Management</td>
<td>3</td>
</tr>
<tr>
<td>MUSM 113</td>
<td>The Business of Music/Promotion</td>
<td>3</td>
</tr>
<tr>
<td>MUSM 120</td>
<td>Contemporary Songwriting</td>
<td>3</td>
</tr>
</tbody>
</table>
A minimum of 3 units from the following:

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 210</td>
<td>The Business Plan (1)</td>
<td>1</td>
</tr>
<tr>
<td>BUS 212</td>
<td>Marketing for Small Businesses (1)</td>
<td>1</td>
</tr>
<tr>
<td>BUS 214</td>
<td>Financing a Small Business (1)</td>
<td>1</td>
</tr>
<tr>
<td>BUS 216</td>
<td>Essential Records for the Small Business (1)</td>
<td>1</td>
</tr>
<tr>
<td>BUS 218</td>
<td>Management Skills for the Small Business (1)</td>
<td>1</td>
</tr>
<tr>
<td>BUS 220</td>
<td>Retailing and Merchandising for the Small Business (1)</td>
<td>1</td>
</tr>
<tr>
<td>BUS 224</td>
<td>Customer Service (1)</td>
<td>1</td>
</tr>
<tr>
<td>BUS 228</td>
<td>Selling Techniques for the Small Business (1)</td>
<td>1</td>
</tr>
</tbody>
</table>

Total Units: 33

The Commercial Music: Business Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- create a music business and marketing plan
- organize an artist tour, assemble a promotional packet, create a publicity campaign, and develop media, industry, and fan lists
- evaluate and implement recordkeeping systems for financial, employment, and tax records
- demonstrate a basic knowledge of music fundamentals, cross-cultural influences from diverse geographical regions, and song composition/arranging techniques
- analyze case problems and apply legal principles to interpret regulations, laws, and statutes related to the music industry
- compare the job descriptions and duties of attorneys, publishers, merchandisers, record company personnel, agents, managers, and producers
- assess record contract points, publisher-writer exclusive agreements, attorney-client contracts, as well as management and touring agreements

Career Information

Typical career options include booking agent, personal manager, business manager, concert promotion, studio owner/manager, music legal services, publicity writer/public relations, tour management, music retail, music publishing and distribution, and music licensing. The degree also prepares students for transfer to a four-year institution.

A.A. in Commercial Music: Recording

This degree provides students the core skills needed to enter a career in audio engineering. Foundational classes in the theory and art of recording are coupled with significant laboratory experiences in order to prepare the student for further study at a four-year institution or for an entry-level career position.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ET 302</td>
<td>Principles of Electricity and Electronics</td>
<td>4</td>
</tr>
<tr>
<td>MUFHL 321</td>
<td>Basic Musicianship</td>
<td>3</td>
</tr>
<tr>
<td>MUFHL 330</td>
<td>World Music</td>
<td>3</td>
</tr>
<tr>
<td>MUJVI 340</td>
<td>Beginning Piano</td>
<td>2</td>
</tr>
<tr>
<td>MUSM 110</td>
<td>The Business of Music</td>
<td>3</td>
</tr>
<tr>
<td>MUSM 120</td>
<td>Contemporary Songwriting</td>
<td>3</td>
</tr>
<tr>
<td>MUSM 140</td>
<td>Concert Sound Reinforcement</td>
<td>2</td>
</tr>
</tbody>
</table>
The Commercial Music: Recording Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- analyze the signal flow and understand the operation of electrical components found in a typical recording studio
- set up and employ the use of mixing consoles, multi-track recorders, Digital Audio Workstations (DAWs), and sound reinforcement systems
- select and set up outboard signal processing hardware and software plug-ins for audio enhancement
- explain music fundamentals, cross-cultural influences from diverse geographical regions, and song composition/arranging techniques
- create Musical Instrument Digital Interface (MIDI) sequencing and notation projects utilizing music keyboard input devices and various software packages
- design and equip a fully-functioning and acoustically-sound recording studio
- formulate and implement effective musical and technical recording session techniques

Career Information

Typical career paths include recording engineer, broadcast engineer, live sound reinforcement, post-production audio, sound effects editor, multi-media/internet audio, and audio/music education.

A.A. in Jazz Studies

The Jazz Studies degree provides a rigorous curriculum of jazz theory, history, performance groups, improvisation, piano, and individual applied instruction.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUFHL 315</td>
<td>Jazz History</td>
<td>3</td>
</tr>
<tr>
<td>MUFHL 400</td>
<td>Music Theory and Musicianship I</td>
<td>4</td>
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<tr>
<td>MUFHL 401</td>
<td>Music Theory and Musicianship II</td>
<td>4</td>
</tr>
<tr>
<td>MUFHL 410</td>
<td>Music Theory and Musicianship III</td>
<td>4</td>
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<tr>
<td>MUFHL 420</td>
<td>Beginning Jazz Theory</td>
<td>2</td>
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<tr>
<td>MUIVI 385</td>
<td>Jazz Styles and Improvisation (2)</td>
<td>2</td>
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<tr>
<td>or MUIVI 390</td>
<td>Jazz and Popular Vocal Styles and Improvisation I (2)</td>
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<tr>
<td>MUIVI 400</td>
<td>Beginning Jazz Piano</td>
<td>2</td>
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<tr>
<td>MUIVI 420</td>
<td>Applied Music</td>
<td>1</td>
</tr>
</tbody>
</table>
The Jazz Studies Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- analyze musical scores and compositions from the jazz idiom
- critique personal music performances and those of other musicians
- analyze and perform the basic elements of music (rhythm, melody, harmony, and form)
- create (compose and improvise) jazz music appropriate to the area of specialization
- compare and contrast the characteristics of various historical periods of jazz
- arrange compositions and assemble musicians for a performance

Career Information

This degree prepares a student for careers in performance (concert and studio), education, arranging/composing, and in the music industry. It also prepares students for transfer to a four-year institution.

A.A. in Music

The Music degree includes vocal and instrumental components, as well as courses in music, history, and theory. The general program is designed to provide students with a foundation in music theory and history. Performance opportunities in both vocal and instrumental music enhance a student's understanding and skill levels.

Catalog Date: June 1, 2020

Degree Requirements
COURSE CODE | COURSE TITLE | UNITS
--- | --- | ---
Subtotal Units: | | 26

**Guitarists/Pianists/Composers**

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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</thead>
<tbody>
<tr>
<td>A minimum of 8 units from the following:</td>
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<td>8</td>
</tr>
<tr>
<td>MUP 310</td>
<td>Orchestra (2)</td>
<td></td>
</tr>
<tr>
<td>MUP 330</td>
<td>Concert Band (2)</td>
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<tr>
<td>MUP 340</td>
<td>Symphonic Band (2)</td>
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<tr>
<td>MUP 350</td>
<td>Concert Choir I (2)</td>
<td></td>
</tr>
<tr>
<td>MUP 360</td>
<td>Chamber Singers (2)</td>
<td></td>
</tr>
</tbody>
</table>

Guitarists/Pianists/Composers Units: 8
Total Units: 34

**Instrumentalists**

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>A minimum of 8 units from the following:</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>MUP 310</td>
<td>Orchestra (2)</td>
<td></td>
</tr>
<tr>
<td>MUP 330</td>
<td>Concert Band (2)</td>
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</tr>
<tr>
<td>MUP 340</td>
<td>Symphonic Band (2)</td>
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</tbody>
</table>

Instrumentalists Units: 8
Total Units: 34

**Vocalists**

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>A minimum of 8 units from the following:</td>
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<td>8</td>
</tr>
<tr>
<td>MUP 350</td>
<td>Concert Choir I (2)</td>
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</tr>
<tr>
<td>MUP 360</td>
<td>Chamber Singers (2)</td>
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</tr>
</tbody>
</table>

Vocalists Units: 8
Total Units: 34

The Music Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- analyze musical scores and compositions
- critique personal music performances and those of other musicians
- analyze and perform the elements of music (rhythm, melody, harmony, and form)
- create derivative or original music at a level appropriate to the area of specialization
• compare and contrast the characteristics of various musical cultures and historical periods from the origin of music history to the present

Career Information

The Music degree prepares students for careers in music performance, education, composition, conducting, retail music industry, music publishing, and music therapy. The degree also prepares students for further study at a four-year institution.

Certificates of Achievement

Commercial Music: Business Certificate

This certificate explores the inner workings of the music industry in areas such as publishing, entertainment, distribution, and music law. Course work addresses industry-specific issues such as copyright, record contracts, publishing agreements, artist management, promotion, and marketing.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 300</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS 340</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>BUS 350</td>
<td>Small Business Management/Entrepreneurship</td>
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</tr>
<tr>
<td>MUFHL 321</td>
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<td>World Music</td>
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<td>MUSM 110</td>
<td>The Business of Music</td>
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<td>The Business of Music</td>
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<tr>
<td>MUSM 112</td>
<td>The Business of Music/Artist Management</td>
<td>3</td>
</tr>
<tr>
<td>MUSM 113</td>
<td>The Business of Music/Promotion</td>
<td>3</td>
</tr>
<tr>
<td>MUSM 120</td>
<td>Contemporary Songwriting</td>
<td>3</td>
</tr>
<tr>
<td>BUS 210</td>
<td>The Business Plan (1)</td>
<td></td>
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<tr>
<td>BUS 212</td>
<td>Marketing for Small Businesses (1)</td>
<td></td>
</tr>
<tr>
<td>BUS 214</td>
<td>Financing a Small Business (1)</td>
<td></td>
</tr>
<tr>
<td>BUS 216</td>
<td>Essential Records for the Small Business (1)</td>
<td></td>
</tr>
<tr>
<td>BUS 218</td>
<td>Management Skills for the Small Business (1)</td>
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</tr>
<tr>
<td>BUS 220</td>
<td>Retailing and Merchandising for the Small Business (1)</td>
<td></td>
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<tr>
<td>BUS 224</td>
<td>Customer Service (1)</td>
<td></td>
</tr>
<tr>
<td>BUS 228</td>
<td>Selling Techniques for the Small Business (1)</td>
<td></td>
</tr>
</tbody>
</table>

A minimum of 3 units from the following:

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 210</td>
<td>The Business Plan (1)</td>
<td></td>
</tr>
<tr>
<td>BUS 212</td>
<td>Marketing for Small Businesses (1)</td>
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</tr>
<tr>
<td>BUS 214</td>
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<td></td>
</tr>
<tr>
<td>BUS 216</td>
<td>Essential Records for the Small Business (1)</td>
<td></td>
</tr>
<tr>
<td>BUS 218</td>
<td>Management Skills for the Small Business (1)</td>
<td></td>
</tr>
<tr>
<td>BUS 220</td>
<td>Retailing and Merchandising for the Small Business (1)</td>
<td></td>
</tr>
<tr>
<td>BUS 224</td>
<td>Customer Service (1)</td>
<td></td>
</tr>
<tr>
<td>BUS 228</td>
<td>Selling Techniques for the Small Business (1)</td>
<td></td>
</tr>
</tbody>
</table>

Total Units: 33

Student Learning Outcomes

Upon completion of this program, the student will be able to:

• create a music business and marketing plan
• organize an artist tour, assemble a promotional packet, create a publicity campaign, and develop media, industry, and fan lists
• evaluate and implement recordkeeping systems for financial, employment, and tax records
• demonstrate a basic knowledge of music fundamentals, cross-cultural influences from diverse geographical regions, and song composition/arranging techniques
• analyze case problems and apply legal principles to interpret regulations, laws, and statutes related to the music industry
• compare the job descriptions and duties of attorneys, publishers, merchandisers, record company personnel, agents, managers, and producers
• assess record contract points, publisher-writer exclusive agreements, attorney-client contracts, as well as management and touring agreements

Career Information

Typical career options include booking agent, personal manager, business manager, concert promotion, studio owner/manager, music legal services, publicity writer/public relations, tour management, music retail, music publishing and distribution, and music licensing.

Commercial Music: Recording Certificate

This certificate provides the core skills needed to enter a career in audio engineering. Foundational classes in the theory and art of recording are coupled with significant laboratory experiences in order to prepare the student for further study at a four-year institution or for an entry-level career position.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ET 302</td>
<td>Principles of Electricity and Electronics</td>
<td>4</td>
</tr>
<tr>
<td>MUFHL 321</td>
<td>Basic Musicianship</td>
<td>3</td>
</tr>
<tr>
<td>MUFHL 330</td>
<td>World Music</td>
<td>3</td>
</tr>
<tr>
<td>MUIVI 340</td>
<td>Beginning Piano</td>
<td>2</td>
</tr>
<tr>
<td>MUSM 110</td>
<td>The Business of Music</td>
<td>3</td>
</tr>
<tr>
<td>MUSM 120</td>
<td>Contemporary Songwriting</td>
<td>3</td>
</tr>
<tr>
<td>MUSM 140</td>
<td>Concert Sound Reinforcement</td>
<td>2</td>
</tr>
<tr>
<td>MUSM 334</td>
<td>Introduction to Musical Instrument Digital Interface (MIDI)</td>
<td>2</td>
</tr>
<tr>
<td>MUSM 342</td>
<td>Recording Studio Techniques I</td>
<td>3</td>
</tr>
<tr>
<td>MUSM 344</td>
<td>Recording Studio Techniques II</td>
<td>3</td>
</tr>
<tr>
<td>MUSM 350</td>
<td>Recording Studio Techniques III</td>
<td>3</td>
</tr>
<tr>
<td>MUSM 352</td>
<td>Recording Studio Techniques IV</td>
<td>3</td>
</tr>
<tr>
<td>MUSM 356</td>
<td>Pro Tools 101, Introduction to Pro Tools</td>
<td>1.5</td>
</tr>
<tr>
<td>MUSM 357</td>
<td>Pro Tools 110 Intermediate Pro Tools</td>
<td>1.5</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>37</td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

• analyze the signal flow and understand the operation of electrical components found in a typical recording studio
• set up and employ the use of mixing consoles, multi-track recorders, Digital Audio Workstations (DAWs), and sound reinforcement systems
• select and set up outboard signal processing hardware and software plug-ins for audio enhancement
• explain music fundamentals, cross-cultural influences from diverse geographical regions, and song composition/arranging techniques
• create Musical Instrument Digital Interface (MIDI) sequencing and notation projects utilizing music keyboard input devices and various software packages
• design and equip a fully-functioning and acoustically-sound recording studio
• formulate and implement effective musical and technical recording session techniques

Career Information
Typical career paths include recording engineer, broadcast engineer, live sound reinforcement, post-production audio, sound effects editor, multi-media/internet audio, and audio/music education.

**Digital Audio Production Certificate**

This certificate is intended to provide a practical foundation in audio production skills, provide suitable preparation to begin work in the recording and sound production industry, or to serve as a foundation for further study. It also enables people currently employed in the field of audio recording and other associated fields a means to upgrade and expand their skills.

Catalog Date: June 1, 2020

**Certificate Requirements**

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSM 334</td>
<td>Introduction to Musical Instrument Digital Interface (MIDI)</td>
<td>2</td>
</tr>
<tr>
<td>MUSM 342</td>
<td>Recording Studio Techniques I</td>
<td>3</td>
</tr>
<tr>
<td>MUSM 344</td>
<td>Recording Studio Techniques II</td>
<td>3</td>
</tr>
<tr>
<td>MUSM 356</td>
<td>Pro Tools 101, Introduction to Pro Tools</td>
<td>1.5</td>
</tr>
<tr>
<td>MUSM 357</td>
<td>Pro Tools 110 Intermediate Pro Tools</td>
<td>1.5</td>
</tr>
<tr>
<td>MUSM 366</td>
<td>Pro Tools 201, Advanced Pro Tools (1.5)</td>
<td>1.5 - 3</td>
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<tr>
<td>or MUSM 350</td>
<td>Recording Studio Techniques III (3)</td>
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</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>12.5 - 14</td>
</tr>
</tbody>
</table>

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- create, arrange, and notate music using standard Musical Instrument Digital Interface (MIDI) software
- produce audio recordings, music mixes, and audio post-production projects using a Digital Audio Workstation (DAW)
- evaluate various formats and platforms of digital audio recording hardware and software
- integrate outboard signal processing equipment and plug-ins into the audio signal path for audio enhancement
- formulate and implement effective recording session techniques
- analyze the fundamental process and sequence involved in the production of digital audio

**Career Information**

Typical career paths include post-production audio, broadcast engineer, sound effects editor, multimedia/Internet audio, professional recording studio engineer, and owner/engineer of a smaller demo production studio.

**Music Management and Promotion Certificate**

This certificate offers an overview of the core skills essential to enter the music industry in careers such as artist and music facility management, concert promotion, marketing, and publishing. It also assists those who wish to pursue a career as an independent artist, set up their own record label, or manage their own career.

Catalog Date: June 1, 2020

**Certificate Requirements**

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
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<td>MUSM 110</td>
<td>The Business of Music</td>
<td>3</td>
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<td>MUSM 111</td>
<td>The Business of Music</td>
<td>3</td>
</tr>
<tr>
<td>MUSM 112</td>
<td>The Business of Music/Artist Management</td>
<td>3</td>
</tr>
</tbody>
</table>
COURSE CODE | COURSE TITLE | UNITS
--- | --- | ---
MUSM 113 | The Business of Music/Promotion | 3

Total Units: 12

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- evaluate and critique recording, management, publishing, and other music industry contracts
- propose and employ networking skills and tools to develop contacts in the music industry
- compare and contrast traditional and alternative music distribution channels
- research merchandising considerations including design, pricing, manufacturing, and distribution
- create marketing and business plans
- describe emerging trends, models, and entrepreneurial opportunities in the music industry
- assess promotion tools such as radio, television, and new media, such as YouTube, social networking, and viral campaigns

Career Information

Typical career options include booking agent, personal manager, business manager, concert promotion, studio owner/manager, music legal services, publicity writer/public relations, tour management, music retail, music publishing and distribution, and music licensing.

Certificates

Music Instructional Assistant Certificate

The certificate is an introductory program for students planning careers in music education for grades K-12

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>MUFHL 400</td>
<td>Music Theory and Musicianship I</td>
<td>4</td>
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<tr>
<td>MUIVI 200</td>
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<tr>
<td>MUIVI 340</td>
<td>Beginning Piano</td>
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</tr>
<tr>
<td>MUIVI 420</td>
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A minimum of 1 unit from the following:

<table>
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<tr>
<th>COURSE CODE</th>
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<tbody>
<tr>
<td>MUIVI 298</td>
<td>Work Experience in Instrumental/Voice Instruction (1 - 4)</td>
<td></td>
</tr>
<tr>
<td>MUIVI 498</td>
<td>Work Experience in Instrumental/Voice Instruction (1 - 4)</td>
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Subtotal Units: 8.5

Guitarists/Pianists/Composers

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<thead>
<tr>
<th>COURSE CODE</th>
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A minimum of 2 units from the following:

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<tr>
<td>MUP 310</td>
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<tr>
<td>MUP 320</td>
<td>Jazz Band (2)</td>
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<tr>
<td>MUP 323</td>
<td>Latin Jazz Ensemble (2)</td>
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<td>COURSE CODE</td>
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</tr>
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<td></td>
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**Instrumentalists**

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<tr>
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<tr>
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<td>MUP 330</td>
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<td><strong>Instrumentalists</strong></td>
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<td><strong>Units:</strong></td>
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<td><strong>Total Units:</strong></td>
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**Vocalists**

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<td>MUP 360</td>
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<tr>
<td>MUP 400</td>
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<td><strong>Vocalists</strong></td>
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<td></td>
<td><strong>Total Units:</strong></td>
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**Enrollment Eligibility**

To be eligible for enrollment in the program, the student must meet the following criteria:

- three years of experience in any band or choir

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- interpret a music score and play a melody with accompanying block chords (I, IV, V7)
- evaluate the playing of others
- recommend and demonstrate good practice habits
- formulate practice routines specific to an instrument
• create basic lesson plans for beginning instrumental or choral ensembles
• evaluate and critique performance ensembles
• select appropriate teaching materials for beginning band or choral ensembles
• compose for various instrumental and vocal combinations
• apply effective leadership styles at work, with consideration to group dynamics, team and individual decision making, and workforce diversity

Career Information
This certificate prepares a student for careers in music education, grades K-12, in paraprofessional roles such as a docent, tutor, or instructional assistant.

Studio Jazz/Pop Voice Instructor Certificate
This certificate offers an overview of the skills essential to enter the studio jazz/pop voice teaching profession as either a member of a retail studio or as an independent voice instructor, coach, consultant, or tutor.

Catalog Date: June 1, 2020

Certificate Requirements

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<tr>
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<td>Voice Class II</td>
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<td>Jazz and Popular Vocal Styles and Improvisation I</td>
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<td>Jazz and Popular Vocal Styles and Improvisation II</td>
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<td>or MUIVI 370</td>
<td>Beginning Guitar (2)</td>
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Total Units: 12 - 13

Student Learning Outcomes
Upon completion of this program, the student will be able to:

• diagnose poor vocal habits.
• formulate a pedagogical plan to resolve poor vocal habits.
• evaluate a voice student’s vocal skills.
• devise a pedagogical plan to develop or improve basic vocal skills.
• devise a pedagogical plan to develop or improve jazz/pop style.
• assess a vocalist’s ability to maintain independence in a harmonic setting.
• devise and implement a pedagogical plan to develop or improve a vocalist’s ability to maintain independence in a harmonic setting.
• demonstrate the basic skills necessary to sing with appropriate breath support and jazz/pop tone quality.
• demonstrate the basic skills necessary to expand the vocal range and flexibility.
Career Information

Typical career options include employment as owner or employee of a private voice studio and vocal consultant to local recording studios, bands, and music troupes.

Studio Music Instructor Certificate

This certificate focuses on studio music teaching and prepares students for employment as an owner or employee of a private or public music studio. It includes tutoring and coaching students/clients in basic instrumental/vocal technique with an emphasis on performance pedagogy.

Catalog Date: June 1, 2020

Certificate Requirements

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<th>COURSE CODE</th>
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<td>Work Experience in Instrumental/Voice Instruction (1 - 4)</td>
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<td>MUIVI 498</td>
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Guitarists/Pianist/Composers

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<td>Advanced Jazz Band (1 - 2)</td>
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<tr>
<td>MUP 324</td>
<td>Advanced Latin Jazz Ensemble (1 - 2)</td>
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<tr>
<td>MUP 331</td>
<td>Advanced Concert Band (1 - 2)</td>
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<tr>
<td>MUP 341</td>
<td>Advanced Symphonic Band (1 - 2)</td>
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<tr>
<td>MUP 352</td>
<td>Advanced Concert Choir (2)</td>
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<td>MUP 361</td>
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Instrumentalists

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Vocalists

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<td>MUP 361</td>
<td>Advanced Chamber Singers (2)</td>
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<td>Vocalists Units:</td>
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<tr>
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<td>10.5</td>
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</tbody>
</table>

Enrollment Eligibility

To be eligible for enrollment in the program, the student must meet the following criteria:

- three years of experience in either band or choir.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- apply effective leadership styles at work, with consideration to group dynamics, team and individual decision making, and workforce diversity
- design and implement an effective practice routine
- interpret a music score and play a melody with accompanying block chords (I, IV, V7)
- compare and contrast music from different musical eras written for instrument/voice
- analyze music performance skills
- demonstrate the skills needed to play simultaneously with other pianists/musicians
- demonstrate individual musical skills commensurate with the Level I & II National Association of Schools of Music (NASM) guidelines
- analyze basic music form and structure
- construct scales, chords, harmonic progressions and rhythms

Career Information

This certificate offers an overview of the skills essential to enter the music teaching profession as either a member of a retail studio or as an independent music instructor, coach, consultant, or tutor.

Studio Voice Instructor Certificate

This certificate offers an overview of the skills essential to enter the studio voice teaching profession as either a member of a retail studio or as an independent voice instructor, coach, consultant, or tutor.

Catalog Date: June 1, 2020
Music - Fundamentals, History, and Literature (MUFHL)

MUFHL 300 Introduction to Music

This course is an introductory examination of how composers and songwriters apply the various elements of music to heighten the expressive impact of a composition. Aspects of melody, rhythm, harmony, tone, and structure are studied through focused listening of works from the Renaissance to contemporary styles of avant-garde and popular music. This course requires no previous musical study.

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<tr>
<td>MUIVI 310</td>
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<td>MUIVI 311</td>
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<td>MUIVI 320</td>
<td>Voice Class III</td>
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<td>MUIVI 321</td>
<td>Voice Class IV</td>
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<td>or MUIVI 340</td>
<td>Beginning Piano (2)</td>
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<td>or MUIVI 370</td>
<td>Beginning Guitar (2)</td>
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<td>MUP 350</td>
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<td>Total Units:</td>
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<td>12 - 13</td>
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</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- diagnose poor vocal habits.
- formulate a pedagogical plan to resolve poor vocal habits.
- evaluate a voice student’s vocal skills.
- devise a pedagogical plan to develop or improve basic vocal skills.
- classify voice types based upon range.
- assess a vocalist’s ability to maintain independence in a harmonic setting.
- devise and implement a pedagogical plan to develop or improve a vocalist’s ability to maintain independence in a harmonic setting.
- demonstrate the basic skills necessary to sing with appropriate breath support and tone quality.
- demonstrate the basic skills necessary to expand the vocal range and flexibility.

Career Information

The Studio Voice Instructor will find employment as owner or employee of a private voice studio. This position will include coaching students/clients in basic vocal technique with an emphasis on traditional vocal pedagogy.

Music - Fundamentals, History, and Literature (MUFHL)
Upon completion of this course, the student will be able to:

- define terms regarding sound, music, notation and history of music
- compare and contrast various forms and styles of music
- critique musical performances utilizing course concepts
- compare styles and ensembles from the Renaissance to the present
- identify specific masterworks and composers

MUFHL 308 Introduction to Music: Rock & Roll

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ELSLW 340.
Transferable: CSU; UC
General Education: AA/AS Area I; CSU Area C1; IGETC Area 3A
Catalog Date: June 1, 2020

This course examines social, political, cultural, and economic issues as they relate to the history of Rock & Roll music. It includes guided listening and video presentations to show the evolution of Rock from its roots to current stylistic trends. This course requires no previous musical study.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- compare and contrast substyles of the Rock & Roll genre.
- analyze the national and international historical events of past decades and the influence of these events on the Rock & Roll idiom.
- identify the influences of social, political, ethnic, and gender issues on Rock & Roll.
- describe the influence of world cultures (e.g. England, Africa, Ireland, Eastern India, South America, Mexico) on Rock & Roll.
- evaluate musical examples by applying techniques of analytical listening.

MUFHL 310 Survey of Music History and Literature (Greek Antiquity to 1750)

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: MUFHL 321 and 400; AND eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ELSLW 340.
Transferable: CSU; UC
General Education: AA/AS Area I; CSU Area C1; IGETC Area 3A
Catalog Date: June 1, 2020

This is part of a two-course series that offers a survey of the history of music, including the most significant composers and works from antiquity to 1750. It provides background on medieval, renaissance, and baroque music, thus increasing understanding of modern styles derived from these early periods of music.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- assess and describe various musical styles from Late Antiquity through the Baroque period.
- analyze and aurally identify significant music from the medieval era through the Baroque period.
- evaluate the contributions of important composers of various time periods.
- relate early music to its historical and social context.
- critique and differentiate musical instruments through the history of early music to 1750.
MUFHL 311 Survey of Music History and Literature (1750 to the present)

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: MUFHL 321 and 400; Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC
General Education: AA/AS Area I; CSU Area C1; IGETC Area 3A
Catalog Date: June 1, 2020

This is part of a two-course series that offers a survey of the history of music including the most significant composers and works from the Classical period to the present. It provides background on Classical, Romantic, Impressionistic, and 20th century music, thus increasing understanding of modern styles derived from these periods of music.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- evaluate and describe the major eras and stylistic differences in music history since 1750.
- differentiate diverse musical examples by applying techniques of analytical listening skills.
- critique the various historical events that contributed to the evolution of music.
- compare various composers from the Classical, Romantic, and Modern periods of music.
- classify and catalogue instruments and instrumental music from 1750 to present.

MUFHL 315 Jazz History

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC
General Education: AA/AS Area I; AA/AS Area VI; CSU Area C1; IGETC Area 3A
Catalog Date: June 1, 2020

This course introduces the history of jazz. Topics include ethnicity, ethnocentrism, racism, ageism, class differences, and gender issues. Guided listening presentations show how African and early African American musical traditions have led to the development of various improvisational forms and styles including ragtime, swing, bebop, free jazz, fusion, and acid jazz.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- compare and contrast traditions of jazz music throughout the world
- recognize and distinguish between diverse musical styles and musical traditions
- identify and evaluate the historical and social content of the world's cultures through musical expression
- compare and contrast ethnicity, ethnocentrism, racism, ageism, class differences, and multicultural gender issues through the study of traditions of jazz music throughout the world
- evaluate stylistic and formulaic traits of jazz music through analytical listening

MUFHL 321 Basic Musicianship

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC (UC credit limitation: No credit if taken after MUFHL 400)
General Education: AA/AS Area I; CSU Area C1; IGETC Area 3A
C-ID: C-ID MUS 110
Catalog Date: June 1, 2020

This course introduces the elements of music including scales, chords, aural skills, harmonic progression, form, notation, and composition. No previous musical study is required.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- play, sing, or identify major, minor, augmented, diminished, and dominant seventh chords.
- construct all key signatures in both treble and bass clef.
- construct all major scales in both treble and bass clef using accidentals.
- play, sing, or identify basic diatonic root motions.
- discuss the relationship between a major scale and its relative minor.
- demonstrate the intervallic relationship between the notes in the natural, harmonic, and melodic minor scales.

MUFHL 330 World Music

Units: 3  
Hours: 54 hours LEC  
Prerequisite: None.  
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.  
Transferable: CSU; UC  
General Education: AA/AS Area I; AA/AS Area VI; CSU Area C1; IGETC Area 3A  
Catalog Date: June 1, 2020

This course is an introduction to folk, dance, ceremonial, and popular music from around the world. Guided listening presentations show how traditional forms and styles have led to the urban, professional music popular in many countries today known as "World Beat." Concepts of ethnicity, ethnocentrism, racism, ageism, class differences, and gender issues are addressed. Music of the Americas, Africa, Asia, India, Europe, and the Middle East are compared. No previous musical experience is required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- compare and contrast traditions of music throughout the world.
- critique and differentiate diverse musical styles and musical instruments.
- describe the historical and social content of the world's cultures through musical expression.
- assess concepts of ethnicity, ethnocentrism, racism, ageism, class differences, and gender issues of various cultures through the study of traditions of music throughout the world.
- evaluate musical examples by applying techniques of analytical listening skills.

MUFHL 400 Music Theory and Musicianship I

Units: 4  
Hours: 54 hours LEC; 54 hours LAB  
Prerequisite: None.  
Advisory: MUIVI 340 (Beginning Piano) or knowledge of musical notation  
Transferable: CSU; UC  
General Education: AA/AS Area I; CSU Area C1; IGETC Area 3A  
C-ID: C-ID MUS 125; C-ID MUS 120  
Catalog Date: June 1, 2020

This course is a study of scales, intervals, triads, diatonic harmonies, part writing, rhythms, sight singing, ear training, dictation, history, and performance. Short creative assignments are included to provide experience in the application of materials learned in class. It includes analysis and composition and is required for music majors.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze major, minor, modal, chromatic, and whole tone scales and identify them when played or sung
- analyze components of melody and write a variety of melody types involving motive, phrase member, period, double period, and song forms
- distinguish voice ranges and instrumental ranges
- compose a four-part chorale primarily in root position and also in first- and second-inversions
- notate music for a variety of non-transposing and transposing instruments
- construct major, minor, augmented, and diminished triads and describe their function in tonal music
- assemble key signatures for all major and minor keys
- compose for various instrumental and vocal combinations

MUFHL 401 Music Theory and Musicianship II

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: MUFHL 400 with a grade of "C" or better
Advisory: MUIVI 341
Transferable: CSU; UC
General Education: CSU Area C1; IGETC Area 3A
C-ID: C-ID MUS 130; C-ID MUS 135
Catalog Date: June 1, 2020

This course is a continuation of MUFHL 400. It provides a more in-depth study of scales, triads, diatonic harmonies, part writing, rhythms, sight singing, ear training, dictation, form, history, and performance. It also includes the study of harmonic progression, dominant and non-dominant seventh chords, modulation, secondary function chords, and binary and ternary form. It includes analysis and composition and is required for music majors.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze and sing major, minor, modal, chromatic, and whole-tone scales and identify them when played or sung
- create and interpret components of melody through analysis and composition
- apply a variety of melody types to idiomatic chord progressions
- distinguish voice ranges and instrumental ranges of both non-transposing and transposing instruments
- compose music in four-part chorale style using primarily root-position chords with limited use of first- and second-inversion chords
- demonstrate an understanding of the use of functional harmony by analysis and composition of music which incorporates modulation to closely related key centers
- illustrate knowledge of the chord symbols used in classic Western music, American popular song, blues, boogie, and jazz
- write and analyze music in simple binary and ternary forms
- analyze and compose music which includes major-minor dominant seventh chords, leading-tone seventh chords, and non-dominant seventh chords
- analyze and compose music which utilizes secondary dominant chords and secondary leading-tone chords
- score music for various instrumental and vocal combinations

MUFHL 410 Music Theory and Musicianship III

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: MUFHL 401 with a grade of "C" or better
Advisory: MUIVI 350
Transferable: CSU; UC
General Education: CSU Area C1; IGETC Area 3A
C-ID: C-ID MUS 140; C-ID MUS 145
Catalog Date: June 1, 2020

This course is a continuation of MUFHL 401. It includes the study of 16th- and 18th-century counterpoint, fugue, variation, altered chords, sonata allegro, and rondo forms, and late 19th-century writing techniques; practice in rhythmic, melodic, harmonic, and contrapuntal sight singing; ear training, and dictation. This course is required for music majors.

Student Learning Outcomes

 Upon completion of this course, the student will be able to:
analyze successful compositions from the 16th century through the 19th century

compose, critique, and discuss music using 16th- and 18th-century polyphony

recognize, analyze, and synthesize musical concepts through composition, performance, and arrangements of music using harmonic structures that include borrowed chords, Neapolitan 6th chords, and augmented 6th chords

evaluate, compose, and analyze music in theme and variation, sonata, and rondo forms

incorporate common practice period part-writing techniques and Roman numeral analysis symbols in music analysis and composition

recognize and analyze music using 9th, 11th, 13th, and altered dominant chords

demonstrate aural skills related to sight singing and musical dictation using increasingly complex melodies, rhythms, intervals, and harmonic structures

MUFHL 411 Music Theory and Musicianship IV

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: MUFHL 410 with a grade of "C" or better
Advisory: MUIVI 351
Transferable: CSU; UC
General Education: CSU Area C1; IGETC Area 3A
C-ID: C-ID MUS 150; C-ID MUS 155
Catalog Date: June 1, 2020

This course is a continuation of MUFHL 410. It includes a more in-depth study of altered chords and late 19th- and 20th-century writing techniques including: 9th, 11th and 13th chords; altered dominants; chromatic harmony; dodecaphony; set theory; aleatory; minimalism; and analysis techniques. It includes practice in rhythmic, melodic, harmonic and contrapuntal sight-singing, ear-training and dictation. This course is required for music majors.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze and evaluate compositions from the 19th to the 21st Century
- compose music using 19th-, 20th-, and 21st-century techniques such as whole-tone, synthetic, and pentatonic scales, 9th, 11th, and 13th chords, neomodality, pandiatonicism, polytonality, non-accidental rhythm, pitch sets, dodecaphony, and aleatory
- apply aural skills to dictate more complex melodies, harmonies and rhythms as implemented in 19th- through 21st-century compositions
- recognize, analyze, and employ harmonic circle progressions
- diagram and analyze dodecaphonic music using a pitch-set matrix

MUFHL 420 Beginning Jazz Theory

Units: 2
Hours: 36 hours LEC; 18 hours LAB
Prerequisite: MUFHL 400 with a grade of "C" or better
Advisory: MUIVI 385 and 400
Transferable: CSU; UC
Catalog Date: June 1, 2020

This course introduces the elements of jazz theory including harmonic, melodic, and form elements of the jazz idiom. It includes analysis and composition and is required for jazz majors.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- build the blues scale, the bebop scale, the diatonic modes, the pentatonic scale, all triads, 7th, 9th, 11th, and 13th chords, and II-V-I progressions in all keys
- apply chord symbol notation in written form
- apply melodic and harmonic techniques to an instrument or voice
- analyze melodic, harmonic, and formal elements of jazz compositions, including modulation, secondary function, modal interchange, and tonicization
- synthesize melodic, harmonic, and formal elements of jazz into original compositions
distinguish common formal, rhythmic, melodic, and harmonic techniques used in the jazz idiom through ear-training exercises

MUFHL 421 Advanced Jazz Theory

Units: 2
Hours: 36 hours LEC; 18 hours LAB
Prerequisite: MUFHL 420 with a grade of "C" or better
Advisory: MUIVI 386 and 400
Transferable: CSU
Catalog Date: June 1, 2020

This course presents a continuation of jazz concepts presented in MUFHL 420. It emphasizes advanced elements of jazz theory including composition and arranging, as well as harmonic, melodic, and formal analysis in the jazz idiom.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply reharmonization concepts to jazz compositions
- apply melodic and harmonic techniques to an instrument
- analyze advanced melodic, harmonic, and formal elements of jazz compositions
- synthesize melodic, harmonic, and formal elements of jazz into original compositions and arrangements
- investigate advanced melodic and harmonic techniques used in the jazz idiom through ear-training exercises

MUFHL 495 Independent Studies in Music Fundamentals/History and Literature

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None
Transferable: CSU
Catalog Date: June 1, 2020

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

Music - Instrumental/Voice Instruction (MUIVI)

MUIVI 200 Introduction to Music Education

Units: 0.5
Hours: 9 hours LEC
Prerequisite: MUFHL 321 (Basic Musicianship) with a grade of "C" or better, or equivalent, AND three years of experience in either band or choir.
Catalog Date: June 1, 2020

This course is a survey of the resources used in the music education profession as a band or choir teacher. It introduces the basic skills necessary to teach beginning band or choir. Topics include creating lesson plans, classroom management, and basic conducting patterns.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- communicate with school administration to address scheduling, facility, and recruitment needs.
- create basic lesson plans for beginning instrumental or choral ensembles.
- select appropriate teaching materials for beginning band or choral ensembles.
- use basic instructional technology in the classroom.
• employ basic methods of classroom management.
• prepare basic methods of recruitment for ensembles.
• make basic repairs on band instruments.
• demonstrate basic conducting patterns.

MUIVI 298 Work Experience in Instrumental/Voice Instruction

Units: 1 - 4
Hours: 60 - 300 hours LAB
Prerequisite: None.
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position, or job related to the instrumental/voice instruction field with a cooperating site supervisor. Students are advised to consult with the Music Department faculty to review specific certificate and degree work experience requirements.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Catalog Date: June 1, 2020

This course provides students with opportunities to develop marketable skills in preparation for employment or advancement within the instrumental/voice instruction field. It is designed for students interested in work experience and/or internships in associate degree level or certificate occupational programs. Course content includes understanding the application of education to the workforce, completion of Title 5 required forms which document the student’s progress and hours spent at the work site, and developing workplace skills and competencies.

During the semester, the student is required to complete 75 hours of related paid work experience, or 60 hours of related unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. All students are required to attend the first class meeting, a mid-semester meeting, and a final meeting. Additionally, students who have not already successfully completed a Work Experience course will be required to attend weekly orientations while returning participants may meet individually with the instructor as needed. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• demonstrate mastery of specific job skills in the instrumental/voice instruction field related to an associate degree or certificate occupational program level career as written in the minimum three (3) learning objectives created by the student and his/her employer or work site supervisor at the start of the course.

• make effective decisions, use workforce information, and manage his/her personal career plans.

• behave professionally, ethically, and legally at work, consistent with applicable laws, regulations, and organizational norms.

• behave responsibly at work, exhibiting initiative and self-management in situations where it is needed.

• develop effective leadership skills at work, with consideration to group dynamics, team and individual decision making, and workforce diversity.

• communicate in oral, written, and other formats, as needed, in a variety of contexts at work.

• locate, organize, evaluate, and reference information at work.

• demonstrate originality and inventiveness at work by combining ideas or information in new ways, making connections between seemingly unrelated ideas, and reshaping goals in ways that reveal new possibilities using critical and creative thinking skills such as logical reasoning, analytical thinking, and problem-solving.

MUIVI 310 Voice Class I

Units: 2
Hours: 36 hours LEC; 18 hours LAB
Course Family: Traditional Voice Fundamentals (http://arc.losrios.edu/course-families#id_100049)
Prerequisite: MUFHL 321
Advisory: CSU; UC
Transferable: CSU Area C1
General Education: None.
Catalog Date: June 1, 2020

This course is the study of solo singing. Topics include basic vocal technique, breathing, mouth position, and solo repertoire.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• differentiate between and choose the mouth positions needed to create stylistically appropriate vowel timbre
- evaluate and demonstrate correct singing posture and breathing technique
- manage an even timbre throughout the vocal registers and across the passagio
- differentiate between syllabic and neumatic text setting and scalar and arpeggiated melodies
- perform songs in English, Italian, Spanish, and German
- demonstrate appropriate stage presence

MUIVI 311 Voice Class II

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<td>Prerequisite:</td>
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<td>Advisory:</td>
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<td>Catalog Date:</td>
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This course is the continued study of solo singing. Topics include vocal technique, breathing, mouth positions and vowel formation, the International Phonetic Alphabet, and solo repertoire.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify melismatic text setting
- sing a melisma with consistent timbre, flexibility, and breath intensity
- diagnose basic vocal issues in others including incorrect register choice, improper placement, and poor breathing skills
- extend both the upper and lower range
- differentiate breath intensity from volume
- produce an intensified tone at all dynamic levels

MUIVI 320 Voice Class III

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<td>Course Family:</td>
<td>Traditional Voice Technique and Repertoire (<a href="http://arc.losrios.edu/course-families#id_100050">http://arc.losrios.edu/course-families#id_100050</a>)</td>
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<td>Prerequisite:</td>
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This course is the continued study of solo singing. Topics include tone placement, register balance, vocal health, and solo repertoire.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze the results of a laryngoscopy for evidence of poor vocal habits
- demonstrate healthy singing habits
- schedule and utilize efficient rehearsal habits
- choose a practice regimen consisting of various long tone, agility, and range exercises
- assemble a song set based upon range, tessitura, agility requirements, and phrase length

MUIVI 321 Voice Class IV
This course is the continued study of solo singing. Topics include bel canto technique, Italian and German solo repertoire, tone placement, register balance, and vocal health.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- integrate methods of non-verbal communication of tempi, tempo rubato, fermatas, and dynamics into a song performance
- demonstrate correct vocalization of Italian consonant combinations
- research historical, cultural, and stylistic considerations for song interpretation
- differentiate between portamento, sforzando, trill, and turn

### MUIVI 340 Beginning Piano

Units: 2  
Hours: 36 hours LEC; 18 hours LAB  
Course Family: [Traditional Piano Fundamentals](http://arc.losrios.edu/course-families#id_100051)  
Prerequisite: None.  
Transferable: CSU; UC  
General Education: CSU Area C1  
Catalog Date: June 1, 2020

This course introduces piano/keyboard skills. Beginning concepts of music theory, music notation, and harmonizing simple melodies are presented. This course is open to all students and is recommended for music majors who do not demonstrate equivalent piano proficiency.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify and define a three-octave range of notes and the notation used to express them
- demonstrate coordination of the hands playing together
- interpret a music score and play a melody with accompanying block chords (I, IV, V7)
- demonstrate the skills needed to play simultaneously with other pianists/musicians
- analyze a simple melody and transpose to another key
- sightread an eight-measure composition with a single line in each hand
- evaluate the playing of others
- recommend and demonstrate good practice habits

### MUIVI 341 Piano II

Units: 2  
Hours: 36 hours LEC; 18 hours LAB  
Course Family: [Traditional Piano Fundamentals](http://arc.losrios.edu/course-families#id_100051)  
Prerequisite: MUIVI 340 with a grade of "C" or better  
Transferable: CSU; UC  
Catalog Date: June 1, 2020

This continuation of MUIVI 340 is designed for students interested in piano as a medium of expression and enjoyment, as well as for prospective preschool, kindergarten and elementary-school teachers. This course covers major and minor scales and chords, bass styles, chromatic scales, and literature with greater rhythmic and harmonic complexity. It is the second semester of a four-semester sequence for music majors who need to demonstrate piano proficiency.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify and define a five-octave range of notes and the notation used to express them
- demonstrate coordination of the hands playing together
- interpret a music score and play a melody with varying accompaniment styles using I, IV, V7 chords and their minor variants
- demonstrate the skills needed to play in an ensemble setting
- sightread an eight-measure composition with a single line in each hand or a melody with accompanying chords
- evaluate the playing of others
- cite and demonstrate good practice habits

MUIVI 350 Intermediate Piano

Units: 2
Hours: 36 hours LEC; 18 hours LAB
Course Family: Traditional Piano Technique and Repertoire (http://arc.losrios.edu/course-families#id_100054)
Prerequisite: MUIVI 341 with a grade of "C" or better; or the ability to play major scales (one octave, hands together C, G, F, D, A, and E-major) and the ability to play a simple melody with basic chordal accompaniment in a major or minor key.
Transferable: CSU; UC
Catalog Date: June 1, 2020

This course expands on the foundations of piano playing studied in MUIVI 341 and includes further study of the harmonization of melodies, major and minor scales, and repertoire.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- perform numerous repertoire selections representing several style periods
- analyze and improvise simple melodies with chordal harmonizations
- identify, define, and play major and minor triads as well as their inversions
- interpret a music score and play a melody with varying accompaniment styles (i.e. Latin, Alberti Bass, Waltz, Boogie)
- identify and play major and minor scales (all major keys and harmonic minor in A, E, B, F, D, and G, 3 octaves, hands together)
- play in an ensemble setting
- transpose a simple melody in all keys
- sight read an eight-measure composition with a single line in each hand or a melody with accompanying chords
- perform pieces written in simple 4-part harmony (chorales, hymns)
- evaluate the piano playing of others
- employ good practice habits

MUIVI 351 Piano IV

Units: 2
Hours: 36 hours LEC; 18 hours LAB
Prerequisite: MUIVI 350 with a grade of "C" or better, or the ability to play all major scales, hands together, two octaves and harmonic minor in A, E, B, F, D, and G.
Transferable: CSU; UC
Catalog Date: June 1, 2020

This course is the second year of piano study. It is a continuation of MUIVI 350. The course includes the further development of insight into music as an artistic means of communication through the study of scales, chords, melodic harmonization and repertoire. The course also serves to develop the fundamental skills for the non-keyboard music major.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Perform numerous repertoire selections
- Analyze and improvise simple melodies with choral harmonizations
- Identify, define and play major and minor triads and their inversions
- Identify and play major and minor scales and arpeggios for two octaves
- Demonstrate transposition of a simple melody in all keys
- Demonstrate simple melodies with different styles of accompaniment (i.e., Latin, Alberti Bass, Waltz, Boogie)
- Employ sight reading skills
- Evaluate the playing of other pianists

MUIVI 370 Beginning Guitar

Upon completion of this course, the student will be able to:

- Incorporate and identify a 3-octave range of notes and the notation used to express them
- Demonstrate hand coordination while playing the guitar
- Analyze notated music at a beginning level
- Critique the guitar playing of others
- Structure good practice habits
- Demonstrate the basic skills of guitar playing

MUIVI 371 Intermediate Guitar

Upon completion of this course, the student will be able to:

- Analyze music for the guitar from a variety of historical eras
- Read melodic lines with conventional notation and guitar tablature
- Express a theoretical knowledge of guitar playing

This course is a continuation of MUIVI 370 with emphasis on increased skills in note reading, improvisation, accompanying, and development of personal style.
incorporate creative musical expression
demonstrate increased dexterity in strumming and chording
demonstrate finger picking abilities

MUIVI 385 Jazz Styles and Improvisation

Units: 2
Hours: 36 hours LEC; 18 hours LAB
Course Family: Jazz Instrumental (http://arc.losrios.edu/course-families#id_100056)
Prerequisite: None.
Enrollment Limitation: Ability to play a melodic instrument or ability to sight sing; ability to read music in the treble or bass clef.
Advisory: MUFHL 400
Transferable: CSU; UC
General Education: CSU Area C1
Catalog Date: June 1, 2020

This course is the study of instrumental and vocal applications of jazz improvisation. It includes analysis and composition and is required for jazz studies majors.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- build the blues scale, the bebop scale, the diatonic modes, the pentatonic scale, all triads, 7th, 9th, 11th, and 13th chords, and ii-V-I progressions in all keys
- identify and apply call and response, melodic embellishment, and neighbor tones in a jazz improvisation
- develop a motive in an improvised melody
- compose a jazz melody incorporating techniques such as the blues scale, the bebop scale, the diatonic modes, the pentatonic scale, call and response, melodic embellishment, and neighbor tones
- create a spontaneous jazz improvisation incorporating techniques such as the blues scale, the bebop scale, the diatonic modes, the pentatonic scale, 7th, 9th, 11th, and 13th chords, and ii-V-I progression, call and response, melodic embellishment, and neighbor tones

MUIVI 386 Jazz Styles and Improvisation

Units: 2
Hours: 36 hours LEC; 18 hours LAB
Course Family: Jazz Instrumental (http://arc.losrios.edu/course-families#id_100056)
Prerequisite: MUIVI 385 with a grade of "C" or better
Advisory: MUFHL 420
Transferable: CSU; UC
Catalog Date: June 1, 2020

This course is the study of advanced instrumental and vocal applications of jazz improvisation. It includes analysis and is a continuation of the concepts covered in MUIVI 385.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- build idiomatic jazz vocabulary on the Blues, Standard, Modal, Post-bop, ballad, and Funk compositions
- identify and apply idiomatic phrases such as ii-V-I, diatonic patterns, ballad patterns, sequences, neighboring tones, and Blues devices in a chord progression
- compose a jazz melody incorporating the techniques listed above
- create a spontaneous jazz improvisation incorporating the techniques listed above

MUIVI 390 Jazz and Popular Vocal Styles and Improvisation I

Units: 2
Hours: 36 hours LEC; 18 hours LAB
Course Family: Jazz Voice (http://arc.losrios.edu/course-families#id_100057)
Prerequisite: MUIVI 310 with a grade of "C" or better
This course is a study of popular and jazz solo singing styles and improvisation. Topics include jazz and pop styles, microphone technique, basic improvisation, and vocal technique.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- critique stylistic articulations, tone, and vibrato type relevant to specific jazz and popular vocal styles
- express appropriate stylistic articulations, tone, and vibrato type relevant to specific jazz and popular vocal styles
- analyze and evaluate various stylistic interpretations of lyrics
- express, through vocal nuance, an emotional response to lyrics
- create a comprehensive set of songs either within a specific style or including several styles
- build and sing the blues scale, the bebop scale, the diatonic modes, the pentatonic scale, triads, 7th, 9th, 11th and 13th chords, and II-V-I progressions in several keys
- create a spontaneous jazz improvisation incorporating techniques such as the blues, the bebop scale, the diatonic modes, the pentatonic scale, triads, 7th, 9th, 11th and 13th chords, and II-V-I progressions in several keys

**MUIVI 391 Jazz and Popular Vocal Styles and Improvisation II**

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<tr>
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<tr>
<td>Prerequisite:</td>
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<td>C-ID:</td>
<td>C-ID MUS 160</td>
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<td>Catalog Date:</td>
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This course is the continued study of popular and jazz singing styles and improvisation. Topics include rhythm section rehearsal techniques for singers, funk styles, pentatonic scales, Lydian dominant improvisation, and transposition.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- analyze stylistic articulations, tone, and vibrato relevant to Latin jazz
- build the Lydian dominant scale and the pentatonic scale and utilize them in a Latin jazz ballad
- transpose a song several times then choose the appropriate key and write a lead sheet
- develop the skills to rehearse the jazz rhythm section
- create a comprehensive set of songs including several styles of jazz (blues, swing, bebop, Latin, funk) and popular music

**MUIVI 400 Beginning Jazz Piano**

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<td>Prerequisite:</td>
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<td>Advisory:</td>
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This course is an introduction to the fundamentals of jazz piano. Topics include blues, left-hand voicings, two-hand voicings, and scale theory applications to the keyboard.

**Student Learning Outcomes**
Upon completion of this course, the student will be able to:

- build triads, seventh chords, shell voicings, and rootless voicings at the keyboard
- apply chord symbol notation to root position chords, shell voicings, four-note voicings for the left hand, and four-note voicings for both hands
- apply the blues scale and diatonic modes to chord symbols at the keyboard
- produce a simple jazz piano arrangement from a lead sheet
- evaluate the efforts of others to solve musical and technical problems

MUIVI 401 Intermediate Jazz Piano

Units: 2
Hours: 36 hours LEC; 18 hours LAB
Course Family: Jazz Piano
Prerequisite: MUIVI 400 with a grade of "C" or better
Advisory: MUFHL 420
Transferable: CSU; UC
Catalog Date: June 1, 2020

This course covers intermediate studies in jazz piano. Topics include arranging jazz harmonies at the keyboard using techniques such as three- and four-note rootless voicings, five-note mixed-modal voicings, "Drop 2," Red Garland voicings, and the "So What" chord.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- build three- and four-note rootless voicings for the left hand at the keyboard
- apply chord symbol notation to "Drop 2," Red Garland style, five-note mixed-modal, and "So What" chord voicings for both hands at the keyboard
- produce an intermediate jazz piano arrangement from a lead sheet
- evaluate the efforts of others to solve musical and technical problems

MUIVI 411 Applied Music-Group

Units: 1
Hours: 18 hours LEC
Prerequisite: None.
Corequisite: Enrolled in one of the following: MUIVI 340, MUFHL 321, 400, 401, 410, 411, 420, or 421; AND Enrolled in one of the following: MUP 310, 320, 323, 330, 340, 350, 360, or 400.
Enrollment Limitation: Performance assessment
Transferable: CSU; UC
Catalog Date: June 1, 2020

This course focuses on the development of individual performance skills and repertoire. It includes instrumental, composition, or vocal instruction in a group setting. It also includes solo performance, recital participation, masterclasses, and a final juried performance.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate individual musical skills commensurate with the National Association of Schools of Music (NASM) guidelines
- interpret solo repertoire for an instrument/voice
- design and implement an effective practice routine
- analyze musical performance skills
- compare and contrast music from different musical eras written for an instrument/voice

MUIVI 420 Applied Music
This is the first course in a four-part series which focuses on the development of individual performance skills and solo and ensemble repertoire. It includes one-on-one instrumental, composition, or vocal instruction for a total of seven hours per semester. It also includes six hours per semester of solo performance, recital participation, masterclasses, and a final juried performance. It also includes one-and-one-half hours documented practice time per week. This course is required for all traditional performance and jazz music majors. Students must be concurrently enrolled in a large performance ensemble appropriate for their concentration. Students should also be enrolled in or have completed MUFHL 400.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate individual musical skills commensurate with the Level I National Association of Schools of Music (NASM) guidelines
- interpret solo repertoire for an instrument/voice
- design and implement an effective practice routine
- analyze musical performance skills
- compare and contrast music from different musical eras written for an instrument/voice

MUIVI 421 Applied Music II

This is the second course in a four-part series which focuses on the development of individual performance skills and solo and ensemble repertoire. It includes one-on-one or small-group instrumental, composition, or vocal instruction for a total of seven hours per semester. It also includes six hours per semester of solo performance, recital participation, masterclasses, and a final juried performance. It also includes one-and-one-half hours documented practice time per week. This course is required for all traditional performance and jazz music majors. Students must be concurrently enrolled in a large performance ensemble appropriate for their concentration. Students should also be enrolled in or have completed MUFHL 400.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate individual musical skills commensurate with the Level II National Association of Schools of Music (NASM) guidelines
- interpret solo repertoire for an instrument/voice
- design and implement an effective practice routine
- analyze musical performance skills
- compare and contrast music from different musical eras written for an instrument/voice

MUIVI 422 Applied Music III

This is the third course in a four-part series which focuses on the development of individual performance skills and solo and ensemble repertoire. It includes one-on-one or small-group instrumental, composition, or vocal instruction for a total of seven hours per semester. It also includes six hours per semester of solo performance, recital participation, masterclasses, and a final juried performance. It also includes one-and-one-half hours documented practice time per week. This course is required for all traditional performance and jazz music majors. Students must be concurrently enrolled in a large performance ensemble appropriate for their concentration. Students should also be enrolled in or have completed MUFHL 400.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate individual musical skills commensurate with the Level III National Association of Schools of Music (NASM) guidelines
- interpret solo repertoire for an instrument/voice
- design and implement an effective practice routine
- analyze musical performance skills
- compare and contrast music from different musical eras written for an instrument/voice
This is the third course in a four-part series which focuses on the development of individual performance skills and solo and ensemble repertoire. It includes one-on-one or small group instrumental, composition, or vocal instruction for a total of seven hours per semester. It also includes seven hours per semester of solo performance, recital attendance, masterclasses, and a final juried performance. It also includes one-and-one-half hours documented practice time per week. This course is required for all traditional performance and composition majors. Students must be concurrently enrolled in a traditional large performance ensemble appropriate to their concentration. Students should also be enrolled in or have completed music theory course MUFHL 410.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate individual musical skills commensurate with the Level III National Association of Schools of Music (NASM) guidelines
- interpret solo repertoire for an instrument/voice
- design and implement an effective practice routine
- analyze musical performance skills
- compare and contrast music from different musical eras written for an instrument/voice

MUIVI 423 Applied Music IV

Units: 1
Hours: 7 hours LEC; 33 hours LAB
Course Family: Traditional Applied Music Technique and Repertoire (http://arc.losrios.edu/course-families#id_100062)
Prerequisite: MUIVI 422 with a grade of "C" or better
Corequisite: MUFHL 411, AND one of the following: MUP 310, 330, 340, 350, or 360
Enrollment Limitation: Audition
Transferable: CSU; UC
C-ID: C-ID MUS 160
Catalog Date: June 1, 2020

This is the final course in a four-part series which focuses on the development of individual performance skills and solo and ensemble repertoire. It includes one-on-one instrumental, composition, or vocal instruction for a total of seven hours per semester. It also includes seven hours per semester of solo performance, recital attendance, masterclasses, and a final juried performance. It also includes one-and-one-half hours documented practice time per week. This course is required for all traditional performance majors. Students must be concurrently enrolled in a large performance ensemble appropriate for their concentration. Students should also be enrolled in or have completed music theory course MUFHL 411.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate individual musical skills commensurate with the Level IV National Association of Schools of Music (NASM) guidelines
- interpret solo repertoire for an instrument/voice
- design and implement an effective practice routine
- analyze musical performance skills
- compare and contrast music from different musical eras written for an instrument/voice

MUIVI 425 Applied Music - Jazz I

Units: 1
Hours: 7 hours LEC; 33 hours LAB
Course Family: Jazz Applied Music (http://arc.losrios.edu/course-families#id_100063)
Prerequisite: MUIVI 421 with a grade of "C" or better
Corequisite: MUFHL 410 or 420; AND MUP 320 or 400.
Enrollment Limitation: Audition
Transferable: CSU; UC
C-ID: C-ID MUS 160
Catalog Date: June 1, 2020

This is the third course in a four-part series which focuses on the development of individual performance skills and solo and ensemble repertoire in the jazz idiom. It
includes one-on-one instrumental or vocal instruction for a total of seven hours per semester. It also includes seven hours per semester of solo performance, recital attendance, masterclasses, and a final juried performance. It also includes one-and-one-half hours documented practice time per week. This course is required for all jazz studies majors. Students must be concurrently enrolled in a large performance jazz ensemble appropriate for their concentration. Students should also be enrolled in or have completed either music theory course MUFHL 410 or MUFHL 420.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate individual musical skills commensurate with the Level III National Association of Schools of Music (NASM) guidelines
- interpret solo jazz repertoire for an instrument/voice
- design and implement an effective practice routine
- evaluate musical performance skills
- compare and contrast jazz music from different stylistic periods for an instrument/voice
- incorporate improvisation concepts into a jazz ensemble

MUIVI 426 Applied Music - Jazz II

This is the final course in a four-part series which focuses on the development of individual performance skills and solo and ensemble repertoire in the jazz idiom. It includes one-on-one instrumental or vocal instruction for a total of seven hours per semester. It also includes seven hours per semester of solo performance, recital attendance, masterclasses, and a final juried performance. It also includes one-and-one-half hours documented practice time per week. This course is required for all jazz performance majors. Students must be concurrently enrolled in a large performance jazz ensemble appropriate for their concentration. Students should also be enrolled in or have completed music theory course MUFHL 410 or MUFHL 420.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate individual musical skills commensurate with the Level IV National Association of Schools of Music (NASM) guidelines
- interpret solo jazz repertoire for an instrument/voice
- design and implement an effective practice routine
- evaluate musical performance skills
- compare and contrast jazz music from different stylistic periods for an instrument/voice
- incorporate improvisation concepts into a jazz ensemble

MUIVI 495 Independent Studies in Music Instrumental/Voice Instruction

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.
MUIVI 498 Work Experience in Instrumental/Voice Instruction

This course provides students with opportunities to develop marketable skills in preparation for employment or advancement within the instrumental/voice instruction field. It is designed for students interested in work experience and/or internships in transfer-level degree occupational programs. Course content includes understanding the application of education to the workforce, completion of Title 5 required forms which document the student's progress and hours spent at the work site, and developing workplace skills and competencies. During the semester, the student is required to complete 75 hours of related paid work experience, or 60 hours of unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit.

First-time participants are also required to attend a weekly orientation, the first class meeting, a mid-semester meeting and a final meeting. Returning participants are required to attend the first class meeting, a mid-semester meeting, and a final meeting and may meet individually with the instructor as needed to complete a work site observation and all program forms, receive updates, and assignments.

Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate mastery of specific job skills in the instrumental/voice instruction field related to a transfer degree level career as written in the minimum three (3) learning objectives created by the student and his/her employer or work site supervisor at the start of the course.
- make effective decisions, use workforce information, and manage his/her personal career plans.
- behave professionally, ethically, and legally at work, consistent with applicable laws, regulations, and organizational norms.
- behave responsibly at work, exhibiting initiative and self-management in situations where it is needed.
- develop effective leadership skills at work, with consideration to group dynamics, team and individual decision making, and workforce diversity.
- communicate in oral, written, and multimedia formats in a variety of contexts at work.
- locate, organize, evaluate, and reference information at work.
- demonstrate originality and inventiveness at work by combining ideas or information in new ways, making connections between seemingly unrelated ideas, and reshaping goals in ways that reveal new possibilities using critical and creative thinking skills such as logical reasoning, analytical thinking, and problem-solving.

Music - Performance (MUP)

MUP 310 Orchestra

This course is the study and performance of orchestral repertoire. It is open to those who play an orchestral instrument. Public performances and/or field trips are required. This course may be taken up to four times for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- prepare and perform orchestral repertoire in various styles
- compare musical and aesthetic values of a wide variety of orchestral styles
demonstrate the interpersonal skills necessary to work within an ensemble
formulate practice routines specific to an instrument
evaluate and critique performance ensembles

MUP 311 Advanced Orchestra

Units: 1 - 2
Hours: 9 - 18 hours LEC; 27 - 54 hours LAB
Prerequisite: MUP 310 with a grade of "C" or better; or an audition.
Transferable: CSU; UC
C-ID: C-ID MUS 180
Catalog Date: June 1, 2020

This course is the continuing study and performance of orchestral repertoire. Additional topics include experience in conducting, rehearsal techniques, and section leading. Public performances and/or field trips are required. This course may be taken up to four times for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:
- prepare and perform advanced orchestral repertoire in various styles
- analyze rehearsal techniques and apply those techniques to new sections of orchestral music
- demonstrate the interpersonal skills necessary to work within and lead an ensemble in rehearsal
- formulate and maintain practice routines specific to an instrument
- evaluate and critique performance ensembles

MUP 320 Jazz Band

Units: 2
Hours: 18 hours LEC; 54 hours LAB
Prerequisite: None.
Enrollment Limitation: Ability to play at least one instrument commonly used in jazz ensemble; audition required.
Transferable: CSU; UC
C-ID: C-ID MUS 180
Catalog Date: June 1, 2020

This course is the study and performance of jazz band repertoire encompassing a wide variety of music in the jazz style. Public performances and field trips are required. This course may be taken four times for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:
- prepare and perform jazz band repertoire in various jazz styles
- compare and contrast jazz band performance styles
- critique musicianship
- perform beginning analysis of jazz band repertoire
- evaluate and critique other performance ensembles
- incorporate jazz styles into performance practice

MUP 321 Advanced Jazz Band

Units: 1 - 2
Hours: 9 - 18 hours LEC; 27 - 54 hours LAB
Prerequisite: Completion of 8 units of MUP 320 with a grade of "C" or better
This course is the continuing study and performance of jazz band repertoire and techniques. Additional topics include improvising, conducting, rehearsal technique, and section leading. Public performances, recording sessions, and field trips may be required. This course may be taken four times for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze advanced jazz band repertoire
- organize and manage sectionals
- compare and contrast jazz band performance styles
- critique musicianship
- evaluate and critique other performance ensembles

MUP 323 Latin Jazz Ensemble

Units: 2
Hours: 18 hours LEC; 54 hours LAB
Prerequisite: None.
Enrollment Limitation: Ability to play at least one instrument commonly used in jazz ensemble; audition required.
Transferable: CSU; UC
C-ID: C-ID MUS 180
Catalog Date: June 1, 2020

This course is the study and performance of Latin jazz repertoire encompassing a wide variety of Latin American and Afro-Cuban jazz styles. Public performance and field trips are required. This course may be taken up to four times for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- prepare and perform Latin jazz repertoire in various styles
- compare and contrast Latin jazz performance styles
- critique musicianship
- analyze beginning Latin jazz repertoire
- evaluate and critique other performance ensembles
- incorporate Latin jazz into performance practice

MUP 324 Advanced Latin Jazz Ensemble

Units: 1 - 2
Hours: 9 - 18 hours LEC; 27 - 54 hours LAB
Prerequisite: Completion of 8 units of MUP 323 with a grade of "C" or better
Transferable: CSU; UC
C-ID: C-ID MUS 180
Catalog Date: June 1, 2020

This course is the further study and performance of Latin jazz repertoire encompassing a wide variety of Latin American and Afro-Cuban jazz styles. Public performance and field trips are required. This course may be taken up to four times for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze advanced Latin jazz repertoire
- organize and manage sectionals
• compare and contrast Latin jazz performance styles
• critique musicianship
• evaluate and critique other performance ensembles

MUP 327 Chamber Jazz Ensemble

Units: 2
Hours: 18 hours LEC; 54 hours LAB
Prerequisite: None.
Enrollment Limitation: Ability to play at least one instrument commonly found in a jazz ensemble; audition required.
Transferable: CSU; UC
C-ID: C-ID MUS 180
Catalog Date: June 1, 2020

This course examines and evaluates techniques of chamber jazz group organization, jazz arranging, and jazz improvisation. Chamber jazz recording techniques are analyzed focusing on studio etiquette, microphone setup, headphone mix, and playback critique. Public performance and field trips are required. This course may be taken four times for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• compare jazz styles.
• compare and contrast rehearsal and performance components of small and large jazz ensembles.
• evaluate technical skills through ensemble practice and performance.
• construct and evaluate jazz improvisations.
• create and prepare a program of songs for performance.
• demonstrate professional demeanor in a chamber jazz ensemble.

MUP 328 Advanced Chamber Jazz Ensemble

Units: 2
Hours: 18 hours LEC; 54 hours LAB
Prerequisite: Completion of 8 units of MUP 327 with a grade of "C" or better
Transferable: CSU; UC
C-ID: C-ID MUS 180
Catalog Date: June 1, 2020

This course examines and evaluates advanced techniques of chamber jazz ensemble organization. Ensemble members select music, formulate rehearsal strategy, conduct rehearsals, and set up and evaluate group performances. Public performances and field trips are required. This course may be taken four times for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• examine modern jazz styles
• organize and assemble a contemporary small jazz ensemble
• evaluate advanced technical skills through ensemble practice and performance
• construct and evaluate jazz improvisations on advanced chord progressions
• arrange contemporary jazz songs for a small jazz ensemble
• create and prepare a program of songs for performance
• apply conducting and rehearsal techniques
MUP 330 Concert Band

This course is the study and performance of concert band repertoire. It is open to those who play a concert band instrument. Public performances and/or field trips are required. This course may be taken up to four times for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- prepare and perform concert band repertoire in various styles with artistic expression
- apply basic techniques (tone, projection, support, posture) and formulate specific practice routines
- identify balance, intonation, and tempo within the section and across the ensemble to produce an artistic performance
- evaluate and critique music performance ensembles
- demonstrate the interpersonal skills necessary to work within an ensemble

MUP 331 Advanced Concert Band

This course is the continuing study and performance of concert band literature. Additional topics include conducting, rehearsal techniques, and section leading. Public performances and/or field trips are required. This course may be taken up to four times for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- prepare and perform advanced concert band repertoire in various styles with artistic expression
- analyze rehearsal techniques and apply those techniques to new sections of concert band music
- organize and manage sectionals
- critique musicianship, including balance, intonation, and tempo within the section and across the ensemble
- evaluate and critique performance ensembles
- analyze and/or demonstrate basic conducting patterns and gestures
- demonstrate the interpersonal skills necessary to learn and work within an ensemble in rehearsal

MUP 340 Symphonic Band

This course is the study and performance of symphonic band repertoire. It is open to those who play a symphonic band instrument. Public performances and/or field trips are required. This course may be taken up to four times for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- prepare and perform symphonic band repertoire in various styles with artistic expression
- analyze and critique symphonic performance ensembles
- analyze and/or demonstrate basic conducting patterns and gestures
- demonstrate the interpersonal skills necessary to learn and work within an ensemble in rehearsal
This course is the study and performance of symphonic band repertoire. It is open to those who play a symphonic band instrument. Public performances and/or field trips are required. This course may be taken up to four times for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- prepare and perform symphonic band repertoire in various styles with artistic expression
- formulate specific practice routines and apply basic techniques (tone, projection, support, posture)
- critique musicianship, including balance, intonation, and tempo within the section and across the ensemble to produce an artistic performance
- evaluate and critique performance ensembles
- demonstrate the interpersonal skills necessary to work within an ensemble

MUP 341 Advanced Symphonic Band

Units: 1 - 2  
Hours: 9 - 18 hours LEC; 27 - 54 hours LAB  
Prerequisite: MUP 340 (Symphonic Band) with a grade of "C" or better; or audition.  
Transferable: CSU; UC  
C-ID: C-ID MUS 180  
Catalog Date: June 1, 2020

This course is the continuing study and performance of advanced symphonic band literature. Additional topics include conducting, rehearsal techniques, and section leading. Public performances and/or field trips are required. This course may be taken up to four times for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- prepare and perform advanced symphonic band repertoire in various styles with artistic expression
- analyze rehearsal techniques and apply those techniques to new sections of symphonic band music
- critique musicianship including balance, intonation, and tempo within the section and across the ensemble
- organize and manage sectionals
- evaluate and critique performance ensembles
- analyze and/or demonstrate conducting patterns and gestures
- demonstrate the interpersonal skills necessary to work within and lead an ensemble in rehearsal

MUP 350 Concert Choir I

Units: 2  
Hours: 18 hours LEC; 54 hours LAB  
Prerequisite: None.  
Enrollment Limitation: Ability to match pitch and produce a good tone demonstrated in the audition  
Transferable: CSU; UC  
General Education: CSU Area C1  
C-ID: C-ID MUS 180  
Catalog Date: June 1, 2020

This course is the study and performance of choir literature including classical works, contemporary pieces, and music of many diverse cultures. Public performances, festivals, and field trips may be required. This course may be taken up to four times for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze and perform choral pieces and masterworks of various styles and cultures
- demonstrate musical, historical and aesthetic understanding of various styles of choral music
• demonstrate the interpersonal skills necessary to work within an ensemble
• formulate appropriate practice habits
• evaluate and critique other performance ensembles
• incorporate appropriate facial expression to enhance the song's poetry/lyrics

MUP 352 Advanced Concert Choir

Units: 2
Hours: 18 hours LEC; 54 hours LAB
Prerequisite: MUP 350 with a grade of "C" or better
Transferable: CSU; UC
C-ID: C-ID MUS 180
Catalog Date: June 1, 2020

This course provides continued study and performance of advanced choir literature including classical works, contemporary pieces, and music of many diverse cultures. Advanced ensemble members may conduct pieces and lead sectionals. Public performances, festivals, and field trips are required. This course may be taken four times for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• demonstrate proper basic vocal technique (posture, breathing, diction, resonance, and stage deportment) for ensemble singing
• incorporate appropriate facial expression to enhance the song's poetry/lyrics
• formulate and maintain appropriate practice habits
• demonstrate the interpersonal skills necessary to work within an ensemble and lead an ensemble in rehearsal and sectional
• recognize various musical style periods
• evaluate and critique other performance ensembles
• describe the musical, historical and aesthetic elements of various style periods of choral music
• analyze rehearsal techniques and apply those techniques to new sections of music or new pieces

MUP 360 Chamber Singers

Units: 2
Hours: 18 hours LEC; 54 hours LAB
Prerequisite: None.
Enrollment Limitation: Audition required. Auditions generally occur the first week of class. The audition includes sight singing, the preparation of a short musical excerpt, and an aural skills assessment.
Transferable: CSU; UC
General Education: CSU Area C1
C-ID: C-ID MUS 180
Catalog Date: June 1, 2020

This course is an advanced choral ensemble of limited size performing a wide variety of music—classical, world music, folksong arrangements, and contemporary compositions. Audition required. Public performances, festivals, and field trips may be required. This course may be taken up to four times for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• compare and contrast various choral music styles
• analyze and perform choral pieces and masterworks of various styles and cultures appropriate for a chamber choir
• formulate and apply good rehearsal practice habits
• demonstrate the interpersonal skills necessary to work within an ensemble
• evaluate and constructively critique other performance ensembles
MUP 361 Advanced Chamber Singers

Units: 2
Hours: 18 hours LEC; 54 hours LAB
Prerequisite: 8 units of MUP 360 with a grade of "C" or better
Enrollment Limitation: Audition required. Auditions generally occur the first week of class. The audition includes sight singing, the preparation of a short musical excerpt, and an aural skills assessment.
Transferable: CSU; UC
C-ID: C-ID MUS 180
Catalog Date: June 1, 2020

This course is an advanced choral ensemble of limited size performing a wide variety of music—classical, world music, folksong arrangements, and contemporary compositions. Advanced ensemble members may conduct pieces and lead sectionals. Public performances, festivals, and field trips are required. This course may be taken four times for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- compare and contrast various choral music styles
- analyze and perform choral pieces and masterworks of various styles and cultures appropriate for a chamber choir
- formulate and apply good rehearsal practice habits
- demonstrate the interpersonal skills necessary to work within an ensemble
- evaluate and critique other performance ensembles
- incorporate appropriate facial expression and interact with fellow singers during the performance
- apply conducting, rehearsal technique and section leading concepts as deemed appropriate by the instructor

MUP 370 Rehearsal and Performance - Musical Ensemble

Same As: TA 466
Units: 0.5 - 3
Hours: 27 - 162 hours LAB
Course Family: Musical Performance and Technical Production
Prerequisite: None.
Enrollment Limitation: Audition/Interview
Transferable: CSU; UC
Catalog Date: June 1, 2020

This course provides a workshop training experience in the preparation and performance of musical theatre ensemble productions. A different production is presented each semester the course is offered. Students interested in singing/acting roles audition with the director. Students interested in instrumental positions audition with the musical director. Students interested in technical work interview with the technical director. Field trips may be required. A portion of this course may be offered in a TBA component of 27-162 hours which may include acting, singing, dancing, musical, or technical rehearsals and preparation. It is not open to students who have completed TA 466.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- practice and perform a musical production.
- evaluate the professional responsibilities of an actor, singer, musician, or technician in a production as appropriate.
- analyze the evolution of a participant's role in a production from rehearsal to performance.
- integrate acting, singing, and/or dancing skills in an intensive rehearsal/performance environment (if participating as an actor/singer).
- integrate musical skills in an intensive rehearsal/performance environment (if participating as a musician).
- incorporate basic technical skills in the creation or manipulation of sets, props, costumes, lighting, or sound as appropriate (if participating as a technician).
- analyze and solve problems associated with the creation and presentation of acting, musical, and technical challenges.
- analyze the differences in producing musical theatre from other styles of theatre.
MUP 400 Vocal Jazz Ensemble

This course is a vocal jazz ensemble of limited size performing a wide variety of music in the jazz style. Public performance, festival and field trips are required. This course may be taken up to four times for credit.

Upon completion of this course, the student will be able to:

- prepare and perform vocal jazz repertoire in various jazz styles
- demonstrate musical, historical and aesthetic understanding of a wide variety of jazz styles
- demonstrate the interpersonal skills necessary to work within an ensemble
- demonstrate appropriate practice habits
- evaluate and critique other performance ensembles

MUP 401 Advanced Vocal Jazz Ensemble

This course is the continuing study of vocal jazz ensemble repertoire and techniques. Additional topics include experiences in scat singing, conducting, rehearsal technique and section leading. Public performance, festivals, recording sessions and field trips are required. This course may be taken up to four times for credit.

Upon completion of this course, the student will be able to:

- prepare and perform vocal jazz repertoire in various jazz styles including, but not limited to, singing one on a part in complex 4- to 5-part harmony
- demonstrate musical, historical and aesthetic understanding of a wide variety of jazz styles
- demonstrate the interpersonal skills necessary to work and lead an ensemble in rehearsal and sectional
- set up and maintain appropriate practice habits
- evaluate and critique other performance ensembles
- evaluate his/her own conducting abilities

MUP 420 Special Ensemble Participation

This course allows students to participate in various special music ensembles. There are no prerequisites or enrollment limitations. This course is transferable to CSU and UC. The course satisfies the CSU Area C1 and General Education C-ID MUS 180 requirements.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- prepare and perform vocal jazz repertoire in various jazz styles
- demonstrate musical, historical and aesthetic understanding of a wide variety of jazz styles
- demonstrate the interpersonal skills necessary to work within an ensemble
- demonstrate appropriate practice habits
- evaluate and critique other performance ensembles
This course is open to all students who sing or play musical instruments. Studies are designed for instrumental and vocal groups of various combinations. Students may explore chamber music, large ensemble, or solo repertoire. Public performances and field trips are required. This course may be taken up to four times for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- prepare and perform repertoire in various musical styles
- compare musical, historical, and aesthetic values of a wide variety of musical styles
- demonstrate the interpersonal skills necessary to work within an ensemble
- formulate and maintain practice routines specific to an instrument
- evaluate and critique other performance ensembles

MUP 495 Independent Studies in Music Performance

Units: 1 - 3  
Hours: 54 - 162 hours LAB  
Prerequisite: None  
Transferable: CSU  
Catalog Date: June 1, 2020

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

Music - Specializations in Music (MUSM)

MUSM 110 The Business of Music

Units: 3  
Hours: 54 hours LEC  
Prerequisite: None  
C-ID: CMUS 140X  
Catalog Date: June 1, 2020

This course gives an overview of the processes of the music industry. This includes record contracts as well as the duties and responsibilities of record producers, agents, managers, and performing artists.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- critique key points of a recording agreement
- compare and contrast job descriptions of record company personnel, agents, managers, and producers
- evaluate the duties and responsibilities of a recording artist
- assess options of music licensing and artist royalties for new technologies
- design an artist career ladder

MUSM 111 The Business of Music

Units: 3  
Hours: 54 hours LEC  
Prerequisite: MUSM 110 with a grade of "C" or better  
Catalog Date: June 1, 2020

The course gives an in-depth view of the fundamentals and organization of the music business. This includes the duties of attorneys, publishers, and radio stations regarding musical and financial matters. The course also defines and analyzes publishing agreements, merchandising contracts, trademark, and service mark points.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- research the components needed to complete a service mark and trademark application
- assess and analyze a publisher/writer exclusive agreement and an attorney/client contract
- prioritize the duties of attorneys, publishers, merchandisers, and radio staff
- evaluate a merchandising agreement
- differentiate terrestrial, satellite, and Internet radio formats

MUSM 112 The Business of Music/Artist Management

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020

This course covers the definitions, duties, and agreements of artist management. Topics include the functions of a personal manager, guidelines to career planning, choosing managers and clients, record company negotiations, and selecting other team players. It also analyzes the personal manager agreement and how to organize an artist's tour.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- critique management and touring agreements
- organize a two-week artist tour
- prioritize and classify management roles and duties
- recommend and evaluate an artist career plan
- assess strategies for networking in the entertainment industry

MUSM 113 The Business of Music/Promotion

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020

This course covers the process of music promotion. Topics include definitions of promotion, developing media/industry fan lists, and assembling a promotion packet. This course also discusses current Internet strategies and new technologies developed for promotion. In addition, a campaign for album release and distribution is discussed and planned. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- choose effective methods for creating a promotional packet for an artist
- recommend a five-week campaign plan for releasing and distributing an album
- critique strategies for developing media as well as industry and fan lists
- construct alternate avenues of distribution using various technologies
- produce an effective press release and artist bio

MUSM 120 Contemporary Songwriting
This course examines the processes of the songwriting industry in popular music today, including instrumental and vocal arrangements in jazz, pop, and rock musical styles. Other related topics such as lyrics, formation of melodies and harmonies, popular music form, and musical notation are covered.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- evaluate and create rhythm and chord patterns
- compose a lead sheet for a piece of music
- choose effective lyrics for pop music formats
- coordinate musical and lyrical elements
- evaluate melodic development in song sections

### MUSM 121 Contemporary Songwriting

Units: 3  
Hours: 54 hours LEC  
Prerequisite: MUSM 120 with a grade of "C" or better  
Catalog Date: June 1, 2020

This course covers the processes of writing popular songs, including lyric evaluation, song forms, and music styles. Production techniques, publishing, and marketing strategies are also included.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- compose music in different popular music styles
- evaluate and critique lyrical content
- recommend production techniques to record and perform songs
- research and register original song material
- structure a song collaboration agreement

### MUSM 140 Concert Sound Reinforcement

Units: 2  
Hours: 36 hours LEC; 18 hours LAB  
Prerequisite: MUSM 342 with a grade of "C" or better  
C-ID: CMUS 120X  
Catalog Date: June 1, 2020

This course is an overview of live concert sound reinforcement. Topics include basic sound system theory and its application. It also covers individual sound system component operation, including microphones, mixers, effects, power amplifiers, and speaker systems. This course offers opportunities for hands-on experiences in troubleshooting, sound checking, and mixing sound for live performance and touring. Field trips may be required.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- distinguish the principles of room acoustics that relate to speaker setup and calibration to achieve even coverage throughout the room
- assess basic concert sound system design principles, safety concepts, and procedures
- assemble and operate a basic concert sound system for various live audio applications
• operate and program digital audio consoles and their associated software applications
• diagnose, troubleshoot, and solve problems that commonly occur in sound reinforcement systems
• set up and program Digital Signal Processing (DSP) based speaker management hardware and software

MUSM 295 Independent Studies in Music Specializations in Music

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

MUSM 334 Introduction to Musical Instrument Digital Interface (MIDI)

Units: 2
Hours: 18 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: MUFHL 321 or MUIVI 340
Transferable: CSU
C-ID: C-ID CMUS 100X
Catalog Date: June 1, 2020

This introductory course examines the terminology, hardware, software, techniques, and concepts related to using Musical Instrument Digital Interface (MIDI) and associated music technology. It surveys the principles and practices of sound, MIDI, synthesis, notation, and audio recording, as well as hardware and software platforms.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• explain the history, terminology, and theoretical concepts associated with MIDI technology
• demonstrate a conceptual and practical understanding of MIDI hardware and software
• construct, edit, and output music using music sequencing software
• produce a score of music using music notation software
• describe the properties and components of an audio recording workstation
• integrate a fundamental knowledge of sound, including waveforms, frequency, amplitude, and harmonics into music projects
• differentiate between fundamental synthesis techniques such as subtractive, digital, additive, wavetable, and sampling

MUSM 335 Intermediate Musical Instrument Digital Interface (MIDI)

Units: 2
Hours: 18 hours LEC; 54 hours LAB
Prerequisite: MUSM 334 with a grade of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This course builds on skills learned in MUSM 334 and introduces intermediate techniques in MIDI composition and arranging for various styles of music. Topics include integrating MIDI and digital audio, film and video scoring, and the use of sound editing software.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• produce music using intermediate MIDI workstation techniques
create recordings which incorporate both MIDI and digital audio
incorporate synchronized media within the computer workstation environment
compose and record audio and MIDI scores in varying styles for film and video
evaluate and propose appropriate compositional devices for specific musical styles

MUSM 342 Recording Studio Techniques I

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Transferable: CSU
General Education: CSU Area C1
C-ID: C-ID CMUS 130X
Catalog Date: June 1, 2020

This is the first course in a four-part series of Recording Studio Techniques. It covers entry-level techniques in audio/music production, microphone fundamentals and applications, studio equipment, recording console functions, and multitrack recording procedures. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate a basic understanding of the equipment used in audio recording
- create recordings on a multitrack recorder and mixing console
- evaluate proper signal flow connections between recording components
- analyze, select, and place microphones for various instrumental and vocal music applications
- research and plan the equipment for a multitrack recording studio

MUSM 344 Recording Studio Techniques II

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: MUSM 342 with a grade of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This is the second course in a four-part series of Recording Studio Techniques. It covers intermediate techniques of audio and music production, and introduces mixdown session techniques, outboard gear application, remote recording, and studio design. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- plan and engineer a recording session with acoustic and electronic instruments
- choose and apply appropriate mixdown session techniques
- create recordings of live concerts
- assess and implement effective microphone techniques
- analyze signal flow block diagrams
- design and equip a complete recording facility

MUSM 350 Recording Studio Techniques III

Units: 3
Hours: 36 hours LEC; 54 hours LAB

36 hours LEC; 54 hours LAB
This is the third course in a four-part series of Recording Studio Techniques. Topics include studio design and management principles, managing and organizing sessions, and recording, editing, and mixing in a Digital Audio Workstation (DAW) environment. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- organize, manage, and create productive studio sessions that deliver a finished product
- utilize DAW and server-based file management protocols
- apply business and management principles associated with a recording studio
- choose specific advanced outboard processing to achieve artistic and musical goals
- set up, operate, and maintain a large-format, analog, multitrack recorder
- record, edit, and mix sessions within a DAW environment

MUSM 352 Recording Studio Techniques IV

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: MUSM 350 and 356 with grades of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This is the fourth course in a four-part series on Recording Studio Techniques. It covers advanced techniques of audio engineering and is designed for recording engineers seeking careers in audio and post production. It includes advanced concepts of analog and digital recording, mixdown, surround sound, synchronizing audio to video, and mastering. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- generate and integrate Foley, sound effects, and voice-overs that are synced to video
- organize and facilitate a multitrack recording of a live concert
- create a 5.1 music mix and create a Digital Theater System (DTS) encoded surround file
- perform audio restoration using advanced plug-in and editing techniques
- utilize final mastering techniques by creating a multi-song production master that conforms to industry specifications
- create a music mix using advanced automation and plug-ins, as well as utilizing digital and analog processing

MUSM 356 Pro Tools 101, Introduction to Pro Tools

Units: 1.5
Hours: 27 hours LEC
Prerequisite: MUSM 342 with a grade of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This course is an introduction to Avid’s Pro Tools digital audio workstation software application. Basic Pro Tools principles, including how to complete a Pro Tools project from initial set up to final mixdown are covered. Topics also include how to record, edit, and mix music and Musical Instrument Digital Interface (MIDI) tracks within the Pro Tools application. This course is the first in a series of courses leading to multiple Avid Pro Tools certifications.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- create a Pro Tools session capable of accomplishing common audio production tasks.
MUSM 357 Pro Tools 110 Intermediate Pro Tools

This is an intermediate-level course in Avid’s Pro Tools digital audio workstation hardware and software application. Concepts and skills needed to operate large sessions in a project studio environment are covered. Topics also include managing large track counts, multiple channels of simultaneous inputs and outputs, and the use of specialized plug-ins for specific music and post-production tasks. This course is the second in a series of courses leading to multiple Avid Pro Tools certifications.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- manage large track counts and multiple channels of simultaneous inputs and outputs during a session.
- create appropriate Pro Tools hardware settings.
- set up troubleshoot input/output (I/O) functions.
- assess and integrate virtual instruments and specialized plug-ins for specific music and post-production tasks.
- incorporate automated mixing techniques into the work flow.
- analyze Elastic Audio methods to select appropriate techniques yielding the desired tempo and/or rhythmic outcome.
- apply clip-based editing techniques to audio and Musical Instrument Digital Interface (MIDI) tracks.

MUSM 366 Pro Tools 201, Advanced Pro Tools

This is an advanced-level course in Avid’s Pro Tools digital audio workstation hardware and software application. Topics include the core concepts and skills needed to operate a Pro Tools HD system in a professional studio environment. Advanced recording, editing, and mixing techniques are presented. This course is the third in a series of courses leading to multiple Avid Pro Tools certifications.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- assess the differences between a standard Pro Tools environment and Pro Tools HD systems.
- set up and operate the necessary hardware components of a Pro Tools HD system.
- structure and customize Pro Tools HD software to meet advanced session requirements.
- choose and implement advanced Pro Tools HD editing and mixing techniques.

MUSM 495 Independent Studies in Music Specializations

This course offers opportunities for students to explore music specializations in greater depth. Students can design a coursework program that aligns with their interests and career goals. This flexible course is ideal for students seeking personalized learning experiences within the field of music.

Student Learning Outcomes

- **1 - 3 Units:** Students can accumulate up to 162 hours of lab work to further develop their musical skills.
- **54 - 162 Hours LAB:** The course offers extensive hands-on learning experiences.
- **None.** The prerequisite for this course is set to accommodate students of varied backgrounds.
- **CSU Transferable:** Credits earned in this course are transferable to other institutions.
- **June 1, 2020 Catalog Date:** The course was cataloged on June 1, 2020.
Independent Study is an opportunity for students to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.
Environmental Conservation is an interdisciplinary program that advances understanding of ecological systems and their interrelationships, including those with human society. Core study involves plant and animal ecology and natural history, field methods and study design, and conservation and management of ecosystems and natural resources. Students are able to focus their studies in conservation and sustainability; plant ecology, conservation and management; and/or vertebrate ecology, conservation and management. This program covers a wide range of environmental studies, provides many unique opportunities for hands-on and real-world field experience, and prepares students for a variety of careers as well as transfer at the upper division level to academic programs involving environmental sciences.

Division Dean
Dr. Rina Roy

Department Chairs
Jennifer Neale

(916) 484-8107

Associate Degrees

A.S. in Environmental Conservation

Environmental Conservation is an interdisciplinary program that advances the understanding of ecological systems and their interrelationships, including those with human society. Core study involves plant and animal ecology and natural history, field methods and study design, and conservation and management of ecosystems and natural resources. Students have the opportunity to choose among courses in the areas of conservation and sustainability; plant ecology, conservation, and management; and vertebrate ecology, conservation and management. This program covers a wide range of environmental studies, provides many unique opportunities for hands-on and real-world field experience, and prepares students for a variety of careers as well as transfer at the upper division level to academic programs involving environmental sciences.

Catalog Date: June 1, 2020

Degree Requirements

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<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>BIOL 300</td>
<td>The Foundations of Biology (3)</td>
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<td>or BIOL 301</td>
<td>Evolution (3)</td>
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<tr>
<td>or BIOL 303</td>
<td>Survey of Biology (4)</td>
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<tr>
<td>or BIOL 310</td>
<td>General Biology (4)</td>
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<tr>
<td>or BIOL 400</td>
<td>Principles of Biology (5)</td>
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<tr>
<td>NATR 300</td>
<td>Introduction to Natural Resource Conservation and Policy</td>
<td>4</td>
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<tr>
<td>NATR 310</td>
<td>Study Design and Field Methods</td>
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<td>NATR 320</td>
<td>Principles of Ecology</td>
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<td>A minimum of 16 units from the following:</td>
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<tr>
<td>BIOL 305</td>
<td>Natural History (4)</td>
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<tr>
<td>BIOL 332</td>
<td>Introduction to Ornithology (4)</td>
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<td>BIOL 352</td>
<td>Conservation Biology (3)</td>
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<tr>
<td>BIOL 370</td>
<td>Marine Biology (4)</td>
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<td>GEOG 300</td>
<td>Physical Geography: Exploring Earth's Environmental Systems (3)</td>
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<tr>
<td>GEOG 330</td>
<td>Introduction to Geographic Information Systems (3)</td>
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<tr>
<td>GEOL 300</td>
<td>Physical Geology (3)</td>
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</table>
At least 10 of the 16 units must come from NATR courses.

The Environmental Conservation Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- apply scientific methodologies and critical analysis to environmental investigations
- evaluate natural resource systems, including their past and present use and management, and future sustainability
- analyze social, ethical, and biological implications of environmental management alternatives
- identify ecological phenomena in one's everyday experiences and apply ecological principles to understand local, national, and global environmental issues
- assess the relationships of plants and animals to their environment and to each other
- measure, analyze, and monitor biological and physical components of the environment
- evaluate basic land survey, water quality, soils, vegetation, and wildlife data
- examine the significance of biodiversity conservation

Career Information

An increasing number of sectors of the labor market in California, the U.S., and beyond, require knowledge and skills emphasizing conservation and management of plant and animal populations and their habitats, sustainable resource use, and an enhanced understanding of the environment. This program prepares students for entry-level work in a variety of industries and settings, including private firms, nonprofit organizations, and government agencies at the local, state, and federal levels. Students receive not only rigorous instruction in the theory and application of environmental sciences, but also unique hands-on training.

A.S. in General Science

This program provides a broad study in the fields of biological and physical sciences in preparation for transfer to a four-year program and continuation of studies in upper division science courses.

Catalog Date: June 1, 2020
A minimum of 18 units from the following:

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tr>
<td>ASTR 300</td>
<td>Introduction to Astronomy</td>
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<td>ASTR 310</td>
<td>The Solar System</td>
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<tr>
<td>ASTR 320</td>
<td>Stars, Galaxies, and Cosmology</td>
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<td>ASTR 330</td>
<td>Introduction to Astrobiology</td>
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<td>ASTR 481</td>
<td>Honors Astronomy: Stars, Galaxies, and Cosmology</td>
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<td>ASTR 495</td>
<td>Independent Studies in Astronomy</td>
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<td>ASTR 499</td>
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<tr>
<td>CHEM 305</td>
<td>Introduction to Chemistry</td>
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<td>CHEM 306</td>
<td>Introduction to Organic and Biological Chemistry</td>
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<td>CHEM 309</td>
<td>Integrated General, Organic, and Biological Chemistry</td>
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<td>CHEM 310</td>
<td>Chemical Calculations</td>
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<td>Organic Chemistry - Short Survey</td>
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<td>Physical Geography: Exploring Earth's Environmental Systems</td>
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<td>GEOG 305</td>
<td>Global Climate Change</td>
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<td>GEOG 306</td>
<td>Weather and Climate</td>
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<td>GEOG 307</td>
<td>Environmental Hazards and Natural Disasters</td>
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<td>GEOG 308</td>
<td>Introduction to Oceanography</td>
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<td>GEOG 309</td>
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<td>GEOG 391</td>
<td>Field Studies in Geography: Mountain Landscapes</td>
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<td>Field Studies in Geography: Coastal Landscapes</td>
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<td>Field Studies in Geography: Arid Landscapes</td>
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<td>Field Studies in Geography: Volcanic Landscapes</td>
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<td>Heat, Waves, Light and Modern Physics (4)</td>
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<td><strong>Biological Science Courses</strong></td>
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<td>NATR 324</td>
<td>Field Studies: Birds and Plants of the High Sierra (1.5)</td>
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<td>Native Trees and Shrubs of California (4)</td>
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</table>

*must be transfer-level and must include one laboratory course in a physical science and one laboratory course in a biological science

*The General Science Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- evaluate new and accepted ideas about the natural universe using scientific methods.
- analyze a wide variety of natural phenomena using basic definitions and fundamental theories of biological or physical sciences.
- apply appropriate quantitative and qualitative methods to interpret and analyze pertinent data.
- outline the basic concepts and fundamental theories of a natural science.
Certificate of Achievement

Environmental Conservation Certificate

Environmental Conservation is an interdisciplinary program that advances the understanding of ecological systems and their interrelationships, including those with human society. Core study involves plant and animal ecology and natural history, field methods and study design, and conservation and management of ecosystems and natural resources. Students have the opportunity to choose among courses in the areas of conservation and sustainability; plant ecology, conservation, and management; and vertebrate ecology, conservation, and management. This program covers a wide range of environmental studies, provides many unique opportunities for hands-on and real-world field experience, and prepares students for a variety of entry-level positions in the area of environmental sciences and natural resources as well as transfer at the upper division level to academic programs involving environmental sciences.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
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<td>NATR 300</td>
<td>Introduction to Natural Resource Conservation and Policy</td>
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<td>NATR 310</td>
<td>Study Design and Field Methods</td>
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<td>Principles of Ecology</td>
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<td>NATR 302</td>
<td>Introduction to Wildlife Biology (4)</td>
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<td>The Forest Environment (3)</td>
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<td>NATR 305</td>
<td>Fisheries Ecology and Management (4)</td>
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<td>Introduction to Rangeland Ecology and Management (3)</td>
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<tr>
<td>NATR 322</td>
<td>Environmental Restoration (2)</td>
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<tr>
<td>NATR 324</td>
<td>Field Studies: Birds and Plants of the High Sierra (1.5)</td>
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<td>NATR 330</td>
<td>Native Trees and Shrubs of California (4)</td>
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<td>NATR 332</td>
<td>Wildflowers of California (3)</td>
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<td>NATR 346</td>
<td>Water Resources and Conservation (3)</td>
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<td>NATR 498</td>
<td>Work Experience in Natural Resources (1 - 4)</td>
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Total Units: 22

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- articulate orally and/or in writing the importance of continuous examination and modification of accepted ideas as a fundamental element in the progress of science.
- discuss ethical components of scientific decision making and apply personal and social values within the process of decision making in scientific endeavors.
- apply scientific methodologies and critical analysis to environmental investigations
- evaluate natural resource systems, including their past and present use and management, and future sustainability
- analyze social, ethical, and biological implications of environmental management alternatives
- identify ecological phenomena in one's everyday experiences and apply ecological principles to understand local, national and global environmental issues
- assess the relationships of plants and animals to their environment and to each other
- measure, analyze, and monitor biological and physical components of the environment
- evaluate basic land survey, water quality, soils, vegetation, and wildlife data
- examine the significance of biodiversity conservation
An increasing number of sectors of the labor market in California, the U.S., and beyond, require knowledge and skills emphasizing conservation and management of plant and animal populations and their habitats, sustainable resource use, and an enhanced understanding of the environment. This program prepares students for entry-level work in a variety of industries and settings, including private firms, nonprofit organizations, and government agencies at the local, state, and federal levels. Students receive not only rigorous instruction in the theory and application of environmental sciences, but also unique hands-on training.

Certificates

Environmental Conservation Technician (Conservation/Restoration) Certificate

This certificate advances the understanding of ecological systems and their interrelationships, including those with human society. It focuses on ecology, field methods and study design, and conservation and management of ecosystems and natural resources, with an emphasis on environmental restoration theory and practice and global and emerging environmental and conservation issues. Topics include both the causes of ecological degradation and biodiversity loss, as well as the science of development, management, monitoring, and sustainability of restored environments. Conservation priorities and emerging environmental concerns are investigated, such as climate change, energy production, socioeconomic systems, human population, disease dynamics, species extinctions, invasive species, stresses on water resources and food-producing systems, and over-exploitation of natural resources. Emphasis is placed on development of strategies for the establishment of protected areas, monitoring and adaptive management, and conservation outside of protected areas, as well as an understanding of biodiversity at genetic, species, and community/ecosystem levels.

Catalog Date: June 1, 2020

Certificate Requirements

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<th>COURSE CODE</th>
<th>COURSE TITLE</th>
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<td>Study Design and Field Methods</td>
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Student Learning Outcomes

Upon completion of this program, the student will be able to:

- apply the scientific method and critical analysis to environmental investigations
- evaluate natural resource systems, including their past and present use and management and future sustainability
- analyze social, ethical, and biological implications of environmental management alternatives
- identify ecological phenomena in one’s everyday experiences and apply ecological principles to understand local, national and global environmental issues
- assess the relationships of plants and animals to their environment and to each other
- measure and analyze the physical environment of plant and animal populations
- evaluate basic land survey, water quality, vegetation, and vertebrate wildlife data
- investigate restoration ecology theory and assess and apply restoration practices to real-world environmental restoration problems
- identify global and emerging environmental issues and evaluate potential impacts and possible solutions
- examine biodiversity in terms of biological structure, composition, and function at the genetic, species, ecosystem and landscape levels
- apply fundamental biological and ecological concepts to the examination of critical biological conservation issues

Career Information

This program prepares students for entry-level conservation/restoration aide/technician positions in a variety of industries and settings, including private firms, nonprofit organizations, educational institutions, and government agencies at the local, state, and federal levels. Students receive not only rigorous instruction in the theory and application of environmental sciences but also unique hands-on training in conservation and restoration. Potential job opportunities include work in the areas of...
Environmental Conservation Technician (Fisheries) Certificate

This certificate advances the understanding of ecological systems and their interrelationships, including those with human society. It focuses on ecology, field methods and study design, and conservation and management of ecosystems and natural resources, with an emphasis on fish evolution, ecology, conservation and management. Marine and freshwater fisheries, their impacts on society and the environment, and sustainability issues are investigated, including environmental, ecological, economic, and social aspects. Commercial and recreational fisheries management and aquaculture are also explored.

Catalog Date: June 1, 2020

Certificate Requirements

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<td>NATR 305</td>
<td>Fisheries Ecology and Management</td>
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<td>NATR 310</td>
<td>Study Design and Field Methods</td>
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Student Learning Outcomes

Upon completion of this program, the student will be able to:

- apply the scientific method and critical analysis to environmental investigations
- evaluate natural resource systems, including their past and present use and management and future sustainability
- analyze social, ethical, and biological implications of environmental management alternatives
- identify ecological phenomena in one's everyday experiences and apply ecological principles to understand local, national and global environmental issues
- assess the relationships of plants and animals to their environment and to each other
- measure and analyze the physical environment of plant and animal populations
- evaluate basic land survey, water quality, vegetation, and wildlife data
- examine the significance of biodiversity conservation
- analyze aspects of fish evolution and ecology important to their management and synthesize basic parameters of fish population dynamics in terms of rate functions and limiting factors
- analyze function and dynamics of freshwater and marine communities, emphasizing those in temperate North America, and their associated fisheries management issues
- interpret fisheries management data, define management problems and stakeholders involved, and suggest appropriate strategies to reach management objectives

Career Information

This program prepares students for entry-level fisheries ecologist aide/technician positions in a variety of industries and settings, including private firms, nonprofit organizations, educational institutions, and government agencies at the local, state, and federal levels. Students receive not only rigorous instruction in the theory and application of environmental sciences but also unique hands-on training in fisheries ecology, conservation, and management. Students prepare for positions in areas such as fisheries conservation and management, basic fish biology research, and aquatic habitat restoration.

Environmental Conservation Technician (Forest/Rangeland) Certificate

This certificate advances the understanding of ecological systems and their interrelationships, including those with human society. It focuses on ecology, field methods and study design, and conservation and management of ecosystems and natural resources, with an emphasis on forests and rangelands. Basic biological and physical science concepts important to a general understanding of forest and rangeland/grassland ecology, forestry, and grazing by native herbivores and livestock are investigated. History of use and management, taxonomy and ecology of plant communities, soils, pests and diseases, and disturbance regimes of forested landscapes and rangelands are explored. Classes assess current policies, multiple-use management, and emerging threats related to forest and rangeland conservation.
Certificate Requirements

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Student Learning Outcomes

Upon completion of this program, the student will be able to:

- apply the scientific method and critical analysis to environmental investigations
- evaluate natural resource systems, including their past and present use and management and future sustainability
- analyze social, ethical, and biological implications of environmental management alternatives
- identify ecological phenomena in one's everyday experiences and apply ecological principles to understand local, national and global environmental issues
- assess the relationships of plants and animals to their environment and to each other
- measure and analyze the physical environment of plant and animal populations
- evaluate basic land survey, water quality, vegetation, and wildlife data
- examine the significance of biodiversity conservation
- analyze important characteristics, processes, and stressors of population, community, and ecosystem dynamics of forest/rangeland environments
- evaluate social, ethical, and biological implications of forest/rangeland conservation and management alternatives, including impacts of grazing and forestry

Career Information

This program prepares students for entry-level forest/rangeland ecologist aide/technician positions in a variety of industries and settings, including private firms, nonprofit organizations, educational institutions, and government agencies at the local, state, and federal levels. Students receive not only rigorous instruction in the theory and application of environmental sciences but also unique hands-on training in forest/rangeland ecology, conservation, and management. This program prepares students for work in forestry, conservation, land management, grassland and forest ecological research, and other fields.

Environmental Conservation Technician (Sustainability) Certificate

This certificate advances the understanding of ecological systems and their interrelationships, including those with human society. It focuses on ecology, field methods and study design, and conservation and management of ecosystems and natural resources, with an emphasis on sustainability. Theoretical and practical aspects of sustainability are explored including social, economic, and environmental dimensions. Sustainable principles and practices are examined in the context of energy production and consumption, transportation systems, food production, water resources, industry, and the built environment. Environmental as well as social and cultural impacts of industrialization, capitalism, and globalization are addressed at various scales, and potential solutions to current problems are discussed.

Certificate Requirements

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<td>NATR 310</td>
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Upon completion of this program, the student will be able to:

- apply the scientific method and critical analysis to environmental investigations
- evaluate natural resource systems, including their past and present use and management and future sustainability
- analyze social, ethical, and biological implications of environmental management alternatives
- identify ecological phenomena in one's everyday experiences and apply ecological principles to understand local, national, and global environmental issues
- assess the relationships of plants and animals to their environment and to each other
- measure and analyze the physical environment of plant and animal populations
- evaluate basic land survey, water quality, vegetation, and wildlife data
- examine the significance of biodiversity conservation
- examine technological, geographic, socioeconomic, cultural, and environmental considerations of alternative forms of energy production
- investigate theoretical and practical aspects of sustainability in the context of energy consumption, transportation systems, food production, water resources, industry, the built environment, and socio-cultural institutions and practices

Career Information

This program prepares students for entry-level sustainability consultant/technician positions in a variety of industries and settings, including private firms, nonprofit organizations, educational institutions, and government agencies at the local, state, and federal levels. Work opportunities for program graduates include positions in environmental economics, sustainable business practices, green building, as well as sustainable communities, food systems, energy, and transportation.

Environmental Conservation Technician (Vegetation) Certificate

This certificate advances the understanding of ecological systems and their interrelationships, including those with human society. It focuses on ecology, field methods and study design, and conservation and management of ecosystems and natural resources, with an emphasis on woody and herbaceous vegetation. Major topics include plant taxonomy, natural history and life cycle, physiology, evolution, human uses of—and threats to—California native plant communities and their component species.

Catalog Date: June 1, 2020

Certificate Requirements

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<td>Wildflowers of California (3)</td>
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<td>Total Units:</td>
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Student Learning Outcomes

Upon completion of this program, the student will be able to:

- apply the scientific method and critical analysis to environmental investigations
- evaluate natural resource systems, including their past and present use and management and future sustainability
• analyze social, ethical, and biological implications of environmental management alternatives
• identify ecological phenomena in one's everyday experiences and apply ecological principles to understand local, national and global environmental issues
• assess the relationships of plants and animals to their environment and to each other
• measure and analyze the physical environment of plant and animal populations
• evaluate basic land survey, water quality, vegetation, and wildlife data
• examine the significance of biodiversity conservation
• assess the structure and function of vegetative communities of California
• interpret plant keys and develop skills in their use in plant identification
• collect and prepare a plant collection of representative native California plants
• analyze plant adaptations and environmental gradients in a variety of ecosystems
• investigate the implications of plant conservation, restoration, and community management alternatives

Career Information
This program prepares students for entry-level plant ecologist aide/technician positions in a variety of industries and settings, including private firms, nonprofit organizations, educational institutions, and government agencies at the local, state, and federal levels. Students receive not only rigorous instruction in the theory and application of environmental sciences but also unique hands-on training in plant identification, ecology, conservation, and management. Skills developed support student preparation for positions related to plant taxonomy, dendrology, research and management (e.g., of California endemics, unique environments such as vernal pools, invasive species, etc.) and environmental restoration.

Environmental Conservation Technician (Water Resources) Certificate
This certificate advances the understanding of ecological systems and their interrelationships, including those with human society. It focuses on ecology, field methods and study design, and conservation and management of ecosystems and natural resources, with an emphasis on water resources. It provides a historical perspective on water development and explores current and projected water issues. Surface water and groundwater systems are considered, with an emphasis on the interdisciplinary nature of sustainable water resource management that balances urban, agricultural, industrial, and environmental water needs. The implications of water rights and key water policies are considered in evaluating how water is used and exploited.

Catalog Date: June 1, 2020

Certificate Requirements

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<td>NATR 346</td>
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Student Learning Outcomes
Upon completion of this program, the student will be able to:

• apply the scientific method and critical analysis to environmental investigations
• evaluate natural resource systems, including their past and present use and management and future sustainability
• analyze social, ethical, and biological implications of environmental management alternatives
• identify ecological phenomena in one's everyday experiences and apply ecological principles to understand local, national and global environmental issues
• assess the relationships of plants and animals to their environment and to each other
• measure and analyze the physical environment of plant and animal populations
• evaluate basic land survey, water quality, vegetation, and wildlife data
• examine the significance of biodiversity conservation
• describe the hydrologic cycle in both natural and urban environments, including key characteristics of surface water and groundwater resources and the interactions between these
• investigate the components of integrated water resources planning and management, including evaluation of water policy initiatives and determination of water rights
• analyze future water sustainability scenarios under uncertain conditions, including impacts of drought and climate change

Career Information

This program prepares students for entry-level water resources aide/technician positions in a variety of industries and settings, including private firms, nonprofit organizations, educational institutions, and government agencies at the local, state, and federal levels. Students receive not only rigorous instruction in the theory and application of environmental sciences but also unique hands-on training in water resources conservation and management, preparing them for positions in environmental consulting and planning, water conservation, hydrological research, and other fields.

Environmental Conservation Technician (Wildlife) Certificate

This certificate advances the understanding of ecological systems and their interrelationships, including those with human society. It focuses on ecology, field methods and study design, and conservation and management of ecosystems and natural resources, with an emphasis on vertebrate wildlife. Major topics include population ecology; community dynamics; wildlife habitat; management of game, invasive, and non-game species; conservation of threatened and endangered wildlife; and theoretical and practical tools and methods for studying wildlife, such as sampling techniques, population modeling, habitat assessment, radiotelemetry, and remote sensing.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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</thead>
<tbody>
<tr>
<td>NATR 300</td>
<td>Introduction to Natural Resource Conservation and Policy</td>
<td>4</td>
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<tr>
<td>NATR 302</td>
<td>Introduction to Wildlife Biology</td>
<td>4</td>
</tr>
<tr>
<td>NATR 310</td>
<td>Study Design and Field Methods</td>
<td>4</td>
</tr>
<tr>
<td>NATR 320</td>
<td>Principles of Ecology</td>
<td>4</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>16</td>
</tr>
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</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

• apply the scientific method and critical analysis to environmental investigations
• evaluate natural resource systems, including their past and present use and management and future sustainability
• analyze social, ethical, and biological implications of environmental management alternatives
• identify ecological phenomena in one's everyday experiences and apply ecological principles to understand local, national and global environmental issues
• assess the relationships of plants and animals to their environment and to each other
• measure and analyze the physical environment of plant and animal populations
• evaluate basic land survey, water quality, vegetation, and wildlife data
• examine the significance of biodiversity conservation
• apply and compare various wildlife habitat and population assessment techniques across a variety of environmental settings
• interpret wildlife population data and construct a population model, evaluating alternative wildlife management decisions based on computer-simulation results
• evaluate alternative wildlife management decisions in the context of ecosystem dynamics as well as and social/cultural and economic considerations

Career Information

This program prepares students for entry-level wildlife biologist aide/technician positions in a variety of industries and settings, including private firms, nonprofit organizations, educational institutions, and government agencies at the local, state, and federal levels. Students receive not only rigorous instruction in the theory and
Current topics in natural resources conservation and management not covered by regular catalog offerings are examined. Topics and field locations vary, including advanced subjects related to wildlife, fisheries, soil and water resources, conservation biology, forest resources and management, restoration ecology and aquatic ecology. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- evaluate current issues and management alternatives in natural resource systems
- apply hands-on experience using current techniques of natural resource management
- examine natural resource issues that affect daily lives

NATR 300 Introduction to Natural Resource Conservation and Policy

This course provides a survey of concepts, issues, laws and regulations relevant to natural resources, such as soils, water, wildlife, fisheries, rangelands, and forests, with a focus on their sustainable management and conservation. Overexploitation, pollution, land use, and waste issues are integrated throughout the course. Principles, problems, and solutions are explored in the context of economics, ethics, and past, present, and future natural resource issues. Critical thinking and ecological dynamics are stressed. Sustainability, global environmental problems, and energy are major themes. It also examines the environmental regulatory process in California. Federal and California environmental laws are studied and discussed. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- evaluate natural resource systems, including their past and present use and management
- analyze social, ethical, and biological implications of natural resource management alternatives
- examine natural resource issues that affect one's life
- investigate careers in natural resource conservation and management
- assess sustainability of natural resource systems under various scenarios
- explain the background, requirements, and implementation of environmental regulations
- evaluate the policies of various governmental agencies as they pertain to environmental laws enacted by Congress and by the State

NATR 302 Introduction to Wildlife Biology

This course provides an application of environmental sciences but also unique hands-on training in wildlife ecology, conservation, and management. Participants develop skills appropriate for positions dealing with aspects of wildlife such as population sampling and monitoring, data analysis, and management/conservation of threatened, endangered, and invasive species of wildlife.
This course is an introduction to the science of wildlife biology and the basic principles and techniques involved in wildlife research, conservation, and management. It emphasizes ecological aspects of wildlife populations and communities such as predator-prey relationships, population dynamics, diseases and parasites of wildlife, and wildlife habitat. Animal behavior, nutritional ecology, and other aspects of wildlife biology are also explored. Human dimensions of wildlife management including wildlife restoration and conservation, human-wildlife conflicts, hunting, invasive species, impacts of global climate change, and other relevant issues are examined. Social, economic, and ecological implications of management alternatives are investigated. Additionally, this course provides hands-on experience with habitat and population sampling, data analysis and interpretation; radio telemetry; wildlife capture and handling; and critical analysis of wildlife management policies and the development of a wildlife management plan. Field trips are required.

Upon completion of this course, the student will be able to:

- apply the scientific method to wildlife investigations
- assess the relationships of plants and animals to their environment and to one another
- analyze the physical environment and apply wildlife inventory techniques
- apply ecological principles to understand local, national, and global wildlife issues
- explain the significance of biodiversity to wildlife management and conservation
- interpret wildlife population data, use actual data to construct a population model, and evaluate alternative wildlife management decisions based on computer-simulated model results
- evaluate alternative wildlife resource management decisions in the context of ecosystem dynamics as well as social/cultural and economic considerations

NATR 303 Energy and Sustainability

Upon completion of this course, the student will be able to:

- examine the concept of sustainability as it relates to energy
- examine geographic, socioeconomic, cultural, and environmental considerations of energy production and consumption
- explain technologies involved in solar thermal, solar photovoltaic, hydroelectric (large and small scale), nuclear fission, wave/current/tidal, geothermal, biomass, and wind (onshore and offshore) energy systems
- compare conventional fossil-fuel based energy systems with current alternatives
- examine the relationships between energy production and consumption scenarios and their contributions to atmospheric greenhouse gas concentrations and air, water, and soil pollution
- evaluate alternative energy policies for North America, Europe, and the world
- interpret the results of a residential energy audit and recommend actions
- critically evaluate more sustainable approaches and practices in energy use for heating, lighting, food systems, the built environment/transportation/infrastructure, manufacturing, and public services
- examine strategies for dealing with production and consumption fluctuations and energy storage issues
understand considerations for energy systems related to temporal and spatial scale and connectivity, including potential for distributed energy systems, aging of the electrical grid, land use conflicts, and timelines for taking newer technologies to scale

evaluate the potential for emerging opportunities in nanotechnology and biomimicry with respect to energy systems

NATR 304 The Forest Environment

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: (1) MATH 120 or higher; (2) eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC
General Education: AA/AS Area IV
Catalog Date: June 1, 2020

This course covers basic biological and physical science concepts important to a general understanding of forest ecology and forestry. It investigates tree anatomy and basic physiology, forest types and distributions across the World, ecological processes and species adaptations, forests of the United States and the history of their use, California forests and major tree species, soils, fire ecology and natural selection, and pests and diseases of forest trees. Additional topics include the role of fire in forest management, the science of silviculture and forestry, forest management and harvest techniques, history of the forest conservation movement, and current issues and policies related to forest resource use. Field trips are required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze forest ecosystem structure, function, and management
- evaluate social, ethical, and biological implications of forest management alternatives
- examine forest resource issues that affect one's life
- explore careers in forestry and natural resources management
- identify commercial tree species in California

NATR 305 Fisheries Ecology and Management

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340; AND eligible for transfer-level math.
Transferable: CSU
General Education: AA/AS Area IV; CSU Area B2; CSU Area B3
Catalog Date: June 1, 2020

This course covers the fundamentals of marine and freshwater fisheries, ecosystems, and their impacts on society and the environment. Fish life history, ecology, habitats, and population dynamics are examined. Fisheries' sustainability issues are investigated, including environmental, ecological, economic, and social aspects. Commercial and recreational fisheries management and aquaculture are covered. Field trips are required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- examine basic aspects of fisheries management, including general objectives and limitations
- investigate basic aspects of fish biology, including taxonomy, anatomy, and ecology, as each relates to fisheries management
- investigate basic types of aquatic communities and their associated fisheries management problems
- analyze function and dynamics of freshwater and marine communities, emphasizing those in temperate North America
- assess principles of fisheries management as applied to historical and current recreational and commercial fisheries
- analyze fish population dynamics in terms of rate functions and limiting factors
- interpret fisheries management data, define management problems, and suggest appropriate strategies to reach management objectives
- evaluate basic principles of aquaculture practices
- synthesize and evaluate the economic, environmental, and social issues related to fisheries management and the stakeholders involved
NATR 306 Introduction to Rangeland Ecology and Management

This course introduces the science of range ecology and management. It covers ecological principles that apply to rangeland ecosystems and their conservation and management, as well as the history of rangelands and their management. This course focuses on the interactions among the different components of rangelands: soils, plants, non-human animals, and people. The effects of different management systems on ecosystem services provided by rangelands are studied, including food, fiber, fuel, water, habitat, and carbon sequestration. In addition, it explores current issues and research surrounding rangeland conservation, sustainability, restoration, and climate change. Field trips are required.

Upon completion of this course, the student will be able to:

- apply ecological principles to rangeland management decisions
- explain structure-function relationships of various rangeland ecosystems
- identify the different ecosystem services that rangelands provide
- analyze socio-economic and biological implications of range management alternatives
- evaluate various management strategies and their impact on rangelands
- describe current issues in rangeland conservation

NATR 307 Principles of Sustainability

Theoretical and practical aspects of sustainability are explored including social, economic, and environmental dimensions. Sustainable principles and practices are examined in the context of energy production and consumption, transportation systems, food production, water resources, industry, and the built environment. The environmental as well as social and cultural impact of industrialization is addressed, and solutions to current problems are discussed. Field trips may be required.

Upon completion of this course, the student will be able to:

- define and explain sustainability (including underlying ecological concepts) and sustainable development
- analyze current global food production systems and assess shortcomings and successes in meeting present and future global food demands
- evaluate the sustainability of current global energy consumption patterns and discuss proposed solutions
- investigate the causes and consequences of global climate change and loss of biodiversity and compare proposed technological and economic solutions
- critique the role of economic institutions and policies in promoting or hindering sustainable development practices
- explain the role of social, cultural, religious, economic, and gender issues in promoting sustainable development and stabilizing global population growth
- assess problems with current patterns of urban and suburban development and transportation systems and propose effective alternatives
- describe the cultural, social, and political history of the sustainability movement
- identify key issues related to sustainability and propose and communicate solutions
NATR 310 Study Design and Field Methods

This course addresses study design and field methods important to the field of natural resources. It covers basic statistical approaches and sampling designs, and introduces a variety of sampling and monitoring protocols and techniques. Field labs provide practice with a variety of hands-on methods for vertebrate study, vegetation assessment, land survey, and aquatic studies. Specific portions of the course focus on (1) survey skills including distance and direction measurement, topographic map reading, and Geographic Information Systems (GIS); (2) woody and herbaceous vegetation sampling strategies such as transect and quadrat, and habitat assessment; (3) methods used in terrestrial vertebrate wildlife studies, such as radio telemetry, remote cameras, and live-trapping; and (4) techniques specific to aquatic ecology and water quality measurements. It also includes applications of GIS and Global Positioning Systems (GPS). Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- investigate advantages and limitations of a variety of environmental study designs, including field (descriptive) study, field experiment, natural experiment, and laboratory experiment.
- gather basic land survey, water quality, vegetation, and vertebrate wildlife data.
- manage, analyze, and interpret field data using different methods.
- compare and contrast various population sampling techniques.
- apply techniques for sampling and monitoring vertebrate wildlife, including capture and marking methodologies, radiotelemetry, remote cameras, and tracks and scat ID and analysis.
- evaluate protocols for and issues surrounding animal handling and chemical restraint.
- sample a variety of vegetation types using circular plot, quadrat, and transect techniques.
- interpret habitat suitability data.
- collect and analyze water quality data and relate to stream health.
- compare, contrast, and apply standard protocols for field investigation of common as well as special status species of plants and animals.
- use and create paper and digital maps of study areas by measuring horizontal and vertical distances and georeferencing sampling locations.

NATR 320 Principles of Ecology

This course covers basic principles of ecology, including the physical and biological factors of different environments in relation to the distribution and abundance of plants and animals. Emphasis is on the management of ecosystems using ecological principles and the understanding of current ecological issues. Field trips are required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- assess the relationship of plants and animals to their environment and to each other
- measure and analyze the physical environment of plants and animals
- integrate ecological principles with ecological issues that affect the human condition
- identify ecological phenomena in one's everyday experiences
NATR 322 Environmental Restoration

This course covers fundamental principles and practices of environmental restoration—the process in which a damaged resource is renewed biologically, structurally, and functionally. Topics include both the causes of ecological degradation and biodiversity loss, as well as the science of development, management, monitoring, and sustainability of restored environments. Ecological principles, ecosystem processes, and biological interactions are covered in the context of restoration of wildlands and more urbanized areas. The course emphasizes hands-on experience with a variety of restoration techniques and materials in diverse habitats. Previously restored habitats in the Sacramento region are explored and current restoration sites are evaluated. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze basic principles of ecology and ecosystem science in the context of restored environments
- assess methods and materials for restoration of plant and animal populations and habitats
- analyze the causes of ecological degradation and biodiversity loss
- propose the methodologies involved in the development of a restoration plan for the creation/enhancement of an ecosystem
- apply techniques and materials used in environmental remediation/restoration
- evaluate environmental policies, laws, and regulations related to environmental restoration
- describe the significant challenges and priorities for wetland, woodland, and grassland restoration
- assess soil and water characteristics relevant to environmental restoration

NATR 324 Field Studies: Birds and Plants of the High Sierra

This field study course focuses on identification, distribution, abundance, ecological relationships, and conservation of bird and plant communities of the High Sierra. Primary environments explored include montane chaparral, riparian woodland, coniferous forest, montane bog and fen, rocky outcrop, montane meadow, subalpine woodland, and alpine tundra. Emphasis is placed on the natural history and life history characteristics of common birds and plants, as well as rare and endangered species and their conservation challenges. Field trips are required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify common species of birds and plants in High Sierra environments
- analyze species composition and community structure of High Sierra bird and plant communities
- demonstrate proficiency in the use of current identification and monitoring tools and techniques for bird and plant populations and communities
- critically analyze past, present, and future/predicted conservation and management issues for biological communities of the High Sierra

NATR 330 Native Trees and Shrubs of California

This course covers described trees and shrubs of California. Topics include identification, distribution, abundance, and ecological relationships. The course emphasizes the natural history and life history characteristics of common trees and shrubs, as well as rare and endangered species and their conservation challenges. Field trips are required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify common species of trees and shrubs in California environments
- analyze species composition and community structure of California tree and shrub communities
- demonstrate proficiency in the use of current identification and monitoring tools and techniques for tree and shrub populations and communities
- critically analyze past, present, and future/predicted conservation and management issues for biological communities of California
This dendrology course covers classification and ecology of major natural plant communities of California and their component tree and shrub species. Emphasis is placed on biotic and abiotic factors of native woody plant distribution and abundance in northern California, focusing on characterization of the dominant vegetation types and identification of native woody species. Major topics include plant adaptation, evolution, and diversity in time and space; morphology and physiology; life history; soils, climate, and topography; endemism; interspecific and intraspecific interactions; invasive species; disease; anthropogenic and natural environmental change; human uses of native plants; and native plant restoration and conservation. This course involves the creation of a plant collection including at least 60 representative native woody species. Field trips are required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- assess the structure and function of vegetative communities of California
- interpret plant keys and develop skills in their use in plant identification
- collect and prepare a plant collection of representative native California plants
- identify (to species level) over 75 common native woody plants by sight
- analyze plant adaptations and environmental gradients in a variety of ecosystems
- apply ecological principles to observed phenomena at the species, population, and community levels of organization
- examine the structure and function of various morphological and physiological characteristics of plants
- investigate the implications of plant conservation, restoration, and community management alternatives

NATR 332 Wildflowers of California

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: NATR 330
Transferable: CSU; UC
General Education: AA/AS Area IV
Catalog Date: June 1, 2020

This course investigates biology, ecology, conservation, and management in the context of California wildflowers. Field labs focus on the California Floristic Province. The identification, distribution, and interrelationships of herbaceous plants in their natural environment, physical and biological influences, ecological relationships, and representative plant communities are examined. Special emphasis is given to the study of plant families in our local grasslands, vernal pools, oak woodlands, and foothills. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply scientific approaches to the investigation of herbaceous terrestrial plants
- identify the common herbaceous flowering plants of our local grasslands, vernal pools, oak woodlands, and foothills
- investigate physical and biological factors that influence representative plant communities of California’s foothill, valley, coast, mountain, and desert domains
- analyze factors influencing the distribution and abundance of wildflower species
- assess the structure and function of basic vegetative and reproductive anatomy including leaves, stems, roots, flowers, and fruits
- evaluate, through comparative analysis, the distinguishing characteristics of dominant herbaceous plant families of the Greater Sacramento area
- recognize at least 20 flowering plant families by sight
- analyze the ecological significance of California’s diverse herbaceous plant communities

NATR 346 Water Resources and Conservation

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: MATH 120, 125, 129, 133 or higher; NATR 300, or an equivalent transferable life science course; and eligible for ENGRD 310 or ENGRD 312 AND ENGRD 390 AND ESLR 340 OR ESLR 340 AND ESLW 340.
Transferable: CSU
This course provides an introduction to water resource management with an emphasis on water issues in California. It provides a historical perspective on water development and explores current and projected water issues. Surface water and groundwater systems are considered, with an emphasis on the interdisciplinary nature of sustainable water resource management that balances urban, agricultural, industrial, and environmental water needs. The implications of water rights and key water policies are considered in evaluating how water is used and exploited. Field trips may be required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- describe the hydrologic cycle in both natural and urban environments
- describe the key characteristics of surface water and groundwater resources
- explain the interactions between surface water and groundwater resources
- describe the components of integrated water resources planning and management
- evaluate water policy initiatives and determination of water rights
- analyze future water sustainability scenarios under uncertain conditions, including climate change

**NATR 495 Independent Studies in Natural Resources**

| Units:  | 1 - 3 |
| Hours:  | 54 - 162 hours LAB |
| Prerequisite: | None. |
| Transferable: | CSU |
| Catalog Date: | June 1, 2020 |

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

**NATR 498 Work Experience in Natural Resources**

| Units:  | 1 - 4 |
| Hours:  | 60 - 300 hours LAB |
| Prerequisite: | None. |
| Enrollment Limitation: | Students must be in a paid or unpaid internship, volunteer position, or job related to natural resources with a cooperating site supervisor. Students are advised to consult with the Natural Resources Department faculty to review specific certificate and degree work experience requirements. |
| Advisory: | Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340. |
| Transferable: | CSU |
| General Education: | AA/AS Area III(b) |
| Catalog Date: | June 1, 2020 |

This course provides students with opportunities to develop marketable skills in preparation for employment or advancement within the field of natural resources. It is designed for students interested in work experience and/or internships in transfer-level degree occupational programs. Course content includes understanding the application of education to the workforce, completion of Title 5 required forms which document the student's progress and hours spent at the work site, and developing workplace skills and competencies.

During the semester, the student is required to complete 75 hours of related paid work experience, or 60 hours of related unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. All students are required to attend the first class meeting, a mid-semester meeting, and a final meeting. Additionally, students who have not already successfully completed a Work Experience course will be required to attend weekly orientations while returning participants may meet individually with the instructor as needed. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- demonstrate application of industry knowledge and theoretical concepts in the field of natural resources related to a transfer degree level career as written in the minimum three (3) learning objectives created by the student and his/her employer or work site supervisor at the start of the course
- make effective decisions, use workforce information, and manage his/her personal career plans.
- behave professionally, ethically, and legally at work, consistent with applicable laws, regulations, and organizational norms.
• behave responsibly at work, exhibiting initiative and self-management in situations where it is needed.
• apply effective leadership styles at work, with consideration to group dynamics, team and individual decision making, and workforce diversity.
• communicate in oral, written, and other formats, as needed, in a variety of contexts at work.
• locate, organize, evaluate, and reference information at work.
• demonstrate originality and inventiveness at work by combining ideas or information in new ways, making connections between seemingly unrelated ideas, and reshaping goals in ways that reveal new possibilities using critical and creative thinking skills such as logical reasoning, analytical thinking, and problem-solving.
Associate Degrees

A.S. in LVN to RN Career Mobility

Nursing is a health care profession that draws on nursing science, natural physical and biological sciences, as well as the social sciences and humanities. The Nursing Program consists of general education and nursing courses designed to prepare an entry-level registered nurse, who can function effectively in the rapidly changing healthcare environment. Simulated and actual patient centered learning experiences provide for application of concepts. Each semester of education builds upon previous learning.

This degree is designed for the California Licensed Vocational Nurse (LVN) who is admitted for advanced placement into the second year of the Registered Nursing (Associate Degree) Program. The graduate of the Associate Degree Nursing program at American River College demonstrates entry-level competencies and meets the educational requirements necessary to take the National Council Licensure Examination (NCLEX-RN) to become licensed as a Registered Nurse and eligible for employment.

A grade of "C" or better is required in each nursing course for progression in the program. Clinical experiences may change with limited notice and occur morning, afternoon, evening, and weekends. Students are responsible for their own transportation. Students are required to pay for uniforms, necessary equipment, malpractice insurance, background checks, drug testing, and health requirements.

Note: The California Board of Registered Nursing (BRN) protects the public by screening applicants for licensure in order to identify potentially unsafe practitioners. The law provides for denial of licensure for crimes or acts, which are substantially related to nursing qualifications, functions, or duties. At time of licensure application, all convictions must be reported except for minor traffic violation. (Business and Professions Code §480 and Nurse Practice Act ARTICLE 3 §2761)

Note: Providing a Social Security Number (SSN) OR Individual Taxpayer Identification Number (ITIN): Pursuant to Business and Professions Code §30(c) the BRN will not process any application for licensure unless the applicant provides a SSN or ITIN. The Nursing Practice Act provides for a unified examination and licensing application. Once an applicant passes the examination, a license is automatically issued. Under these circumstances the BRN cannot accept applications for the examination and licensure without a SSN/ITIN.

Catalog Date: June 1, 2020

Degree Requirements

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<th>COURSE CODE</th>
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<tr>
<td>ANTH 310</td>
<td>Cultural Anthropology (3)</td>
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<td>or ANTH 481</td>
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<td>or SOC 300</td>
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<td>or SOC 480</td>
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<td>ENGWR 300</td>
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Positive Credit after LVN Transcript Evaluation:

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1st Semester - Summer Session:

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<td>NURSE 420</td>
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<td>NURSE 430</td>
<td>Nursing, Patient, and Healthcare Concepts IV</td>
<td>10.5</td>
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</tbody>
</table>

Total Units: 76 - 77

¹BIOL 430, 440, and 442 have prerequisites. Please check catalog course descriptions.
²Credit for NURSE 400 will be given after evaluation of LVN program transcripts.
³Credit for NURSE 410 will be given after evaluation of LVN program transcripts.

The LVN to RN Career Mobility Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

**Enrollment Eligibility**

To be eligible for enrollment in the program, the student must meet the following criteria:

- Possession of a current clear and active California Licensed Vocational Nurse (LVN) license at the time of application and through program completion.
- A grade of "C" or better and a cumulative G.P.A. of 3.0 in the following science prerequisites: BIOL 430, BIOL 431, and BIOL 440 or 442.
- A grade of "C" or better and a cumulative G.P.A. of 2.5 in the following prerequisite courses: ANTH 310, ANTH 481, SOC 300, or SOC 480; ENGWR 300 or ENGWR 480; NUTRI 300; PSYC 300 or PSYC 480; and SPEECH 301.
- Completion of the latest edition of the Test of Essential Academic Skills (TEAS), developed by the Assessment Technologies Institute, LLC (ATI). A minimum composite score is necessary to be eligible for application to the program. Additional information is available from the ARC Nursing website: http://www.arc.losrios.edu/~nursing/
- Note: In-progress grades are not accepted for prerequisite courses.
- Note: The Nursing Admissions Committee will determine acceptance of pre-nursing courses taken outside the Los Rios Community College District.
- Note: The American River College Nursing Program reserves the right to make changes in the enrollment criteria, academic requirements, grading standards and other processes without notice at any time.

**Enrollment Process**

Eligible students are selected for the program according to the following steps:

- Applicants must obtain a Los Rios Community College District student identification number in order to access the online application.
- Detailed information about program requirements, enrollment criteria, enrollment applications and deadlines are available on the ARC Nursing website at www.arc.losrios.edu/ARC_Majors/Health_And_Education/Nursing.htm.
- Applications for enrollment, transcripts, and all other supporting documents must be submitted by the posted due date for the candidate’s application to be reviewed, and potentially placed into the pool for random selection. Only students who meet the educational and pre-nursing requirements and follow the enrollment procedures will be considered for the program. Meeting all these requirements does not guarantee acceptance into the program.
Only students who meet the educational and pre-nursing requirements and follow the pre-enrollment procedures will be considered for the program. Meeting all these requirements does not guarantee acceptance into the program.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- use clinical reasoning and knowledge based on the nursing program of study, evidence-based practice outcomes, and research-based policies and procedures as the basis for decision-making and delivery of comprehensive, safe, patient-centered care.
- use information and technology to communicate, manage knowledge, and mitigate error.
- participate in quality improvement activities to measure patient outcomes, identify hazards and errors, and to improve care.
- coordinate, collaborate, and communicate with diverse patients, families, and the interdisciplinary healthcare team to plan, deliver, and evaluate care that promotes quality of life.
- demonstrate delegation, management, and leadership skills that integrate systems thinking, communication, and change processes.
- demonstrate behavior that reflects the values of the nursing profession including self-awareness, a spirit of inquiry, leadership, ethical comportment, effective communication, clinical judgment, and competence, and mentorship.
- adhere to standards of practice within legal, ethical, and regulatory frameworks of the professional nurse.

Career Information

“Employment of registered nurses is projected to grow 16 percent from 2014 to 2024, much faster than the average for all occupations. Growth will occur for a number of reasons, including an increased emphasis on preventive care; growing rates of chronic conditions, such as diabetes and obesity; and demand for healthcare services from the baby-boom population, as they live longer and more active lives” (Bureau of Labor Statistics, Dec. 2015. Job Outlook Registered Nurse. Retrieved from www.bls.gov/ooh/healthcare/registered-nurses.htm).

A.S. in Registered Nursing

Nursing is a health care profession that draws on nursing science, natural physical and biological sciences, as well as the social sciences and humanities. The Nursing Program consists of general education and nursing courses designed to prepare an entry-level registered nurse, who can function effectively in the rapidly changing healthcare environment. Simulated and actual patient-centered learning experiences provide for application of concepts. Each semester of education builds upon previous learning. The graduate of the Associate Degree Nursing program at American River College demonstrates entry-level competencies and meets the educational requirements necessary to take the National Council Licensure Examination (NCLEX-RN) to become licensed as a Registered Nurse and eligible for employment.

A grade of "C" or better is required in each nursing course for progression in the program. Clinical experiences may change with limited notice and occur morning, afternoon, evening, and weekends. Students are responsible for their own transportation. Students are required to pay for uniforms, necessary equipment, malpractice insurance, background checks, drug testing, and health requirements.

Note: The California Board of Registered Nursing (BRN) protects the public by screening applicants for licensure in order to identify potentially unsafe practitioners. The law provides for denial of licensure for crimes or acts, which are substantially related to nursing qualifications, functions, or duties. At time of licensure application, all convictions must be reported except for minor traffic violation. (Business and Professions Code §480 and Nurse Practice Act ARTICLE 3 §2761)

Note: Providing a Social Security Number (SSN) OR Individual Taxpayer Identification Number (ITIN): Pursuant to Business and Professions Code §30(c) the BRN will not process any application for licensure unless the applicant provides a SSN or ITIN. The Nursing Practice Act provides for a unified examination and licensing application. Once an applicant passes the examination, a license is automatically issued. Under these circumstances the BRN cannot accept applications for the examination and licensure without a SSN/ITIN.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
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<td>Prerequisites for Nursing:</td>
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<td>BIOL 430</td>
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<tr>
<td>or ENGWR 480</td>
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<td>NUTRI 300</td>
<td>Nutrition</td>
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<tr>
<td>PSYC 300</td>
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1st Semester:

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<tbody>
<tr>
<td>NURSE 400</td>
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<td>SPEECH 301</td>
<td>Public Speaking (3)</td>
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<td>Nursing, Patient, and Healthcare Concepts II</td>
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<tr>
<td>ANTH 310</td>
<td>Cultural Anthropology (3)</td>
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<td>or ANTH 481</td>
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<tr>
<td>or SOC 300</td>
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3rd Semester:

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4th Semester:

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<tr>
<td>NURSE 430</td>
<td>Nursing, Patient, and Healthcare Concepts IV</td>
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</table>

Total Units: 71 - 72

1BIOL 430, 440, and 442 have prerequisites. Please check catalog course descriptions.

2SPEECH 301 must be taken either prior to or concurrently with NURSE 400.

3ANTH or SOC must be taken either prior to or concurrently with NURSE 410.

The Registered Nursing Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

### Enrollment Eligibility

To be eligible for enrollment in the program, the student must meet the following criteria:

- Graduation from an accredited high school or successful completion of General Education Development (GED) or California High School Proficiency Exam (CHSPE). Graduates from outside the United States must have transcripts evaluated by an approved independent agency. These requirements are defined by the Nurse Practice Act, California Code of Regulations, Title 16, Division 14, ARTICLE 1, §1412.

- A grade of "C" or better and a cumulative G.P.A. of 3.0 in the following science prerequisites: BIOL 430, BIOL 431, and BIOL 440 or BIOL 442.

- A grade of "C" or better and a cumulative college GPA of 2.5 in the following courses: ENGWR 300 or ENGWR 480, NUTRI 300, and PSYC 300 or PSYC 480.

- Completion of the latest edition of the Test of Essential Academic Skills (TEAS), developed by the Assessment Technologies Institute, LLC (ATI). A minimum composite score is necessary to be eligible for application to the program.

- Note: In-progress grades are not accepted for prerequisite courses.

- Note: The Nursing Admissions Committee will determine acceptance of pre-nursing courses taken outside the Los Rios Community College District.

- Note: The American River College Nursing Program reserves the right to make changes in the enrollment criteria, academic requirements, grading standards and other processes without notice at any time.

### Enrollment Process

Eligible students are selected for the program according to the following steps:

- The Associate in Science Degree Registered Nursing Program at American River College uses a multi-criteria enrollment process. Students must reapply each semester. There is no waiting list.

- Detailed information about program requirements, enrollment criteria, enrollment applications and deadlines are available on the ARC Nursing website at
Applicants must obtain a Los Rios Community College District student identification number in order to access the online application.

Applications for enrollment, OFFICIAL transcripts, and all other supporting documents must be submitted by the posted due date for the candidate’s application to be reviewed, and potentially placed into the pool for random selection. Only students who meet the educational and pre-nursing requirements and follow the enrollment procedures will be considered for the program. Meeting all these requirements does not guarantee acceptance into the program.

Students wishing to transfer into the second, third, or fourth semester of the nursing program must contact the department office at (916) 484-8254. The office will provide a transfer packet and current information on space availability.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- use clinical reasoning and knowledge based on the nursing program of study, evidence based practice outcomes, and research based policies and procedures as the basis for decision-making and delivery of comprehensive, safe, patient centered care.
- use information and technology to communicate, manage knowledge, and mitigate error.
- participate in quality improvement activities to measure patient outcomes, identify hazards and errors, and to improve care.
- coordinate, collaborate, and communicate with diverse patients, families, and the interdisciplinary healthcare team to plan, deliver, and evaluate care that promotes quality of life.
- demonstrate delegation, management, and leadership skills that integrate systems thinking, communication, and change processes.
- demonstrate behavior that reflects the values of the nursing profession including self-awareness, a spirit of inquiry, leadership, ethical comportment, effective communication, clinical judgment and competence, and mentorship.
- adhere to standards of practice within legal, ethical, and regulatory frameworks of the professional nurse.

Career Information

“Employment of registered nurses is projected to grow 16 percent from 2014 to 2024, much faster than the average for all occupations. Growth will occur for a number of reasons, including an increased emphasis on preventive care; growing rates of chronic conditions, such as diabetes and obesity; and demand for healthcare services from the baby-boom population, as they live longer and more active lives” (Bureau of Labor Statistics, Dec. 2015. Job Outlook Registered Nurse. Retrieved from www.bls.gov/ooh/healthcare/registered-nurses.htm).

Certificate of Achievement

Licensed Vocational Nurse (LVN) 30-unit option Certificate

The LVN 30-unit option program, which is required by the Board of Registered Nursing (California Code of Regulations §1429), provides the Licensed Vocational Nurse (LVN) the opportunity to take the National Council Licensure Examination (NCLEX-RN) once the registered nursing course requirements have been met and without meeting the degree requirements for the Associate in Science Degree. This option does not satisfy American River College's Nursing Program requirements nor lead to an Associate of Science Degree in Nursing.

A grade of "C" or better is required in each nursing course for progression in the program. Clinical experiences may change with limited notice and occur morning, afternoon, evening, and weekends. Students are responsible for their own transportation. Students are required to pay for uniforms, necessary equipment, malpractice insurance, background checks, drug testing, and health requirements.

Note: The California Board of Registered Nursing (BRN) protects the public by screening applicants for licensure in order to identify potentially unsafe practitioners. The law provides for denial of licensure for crimes or acts, which are substantially related to nursing qualifications, functions, or duties. At time of licensure application, all convictions must be reported except for minor traffic violation. (Business and Professions Code §480 and Nurse Practice Act ARTICLE 3 §2761).

Note: Providing a Social Security Number (SSN) OR Individual Taxpayer Identification Number (ITIN): Pursuant to Business and Professions Code §30(c) the BRN will not process any application for licensure unless the applicant provides a SSN or ITIN. The Nursing Practice Act provides for a unified examination and licensing application. Once an applicant passes the examination, a license is automatically issued. Under these circumstances the BRN cannot accept applications for the examination and licensure without a SSN/ITIN.

Catalog Date: June 1, 2020

Certificate Requirements

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<tr>
<th>COURSE CODE</th>
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<tbody>
<tr>
<td>BIOL 431</td>
<td>Anatomy and Physiology</td>
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<td>BIOL 440</td>
<td>General Microbiology</td>
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<td>COURSE CODE</td>
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</tr>
<tr>
<td>NURSE 420</td>
<td>Nursing, Patient, and Healthcare Concepts III</td>
<td>10.5</td>
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<tr>
<td>NURSE 430</td>
<td>Nursing, Patient, and Healthcare Concepts IV</td>
<td>10.5</td>
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</tbody>
</table>

Total Units: 30

1BIOL 430, 440, and 442 have prerequisites. Please check catalog course descriptions.

Enrollment Eligibility

To be eligible for enrollment in the program, the student must meet the following criteria:

- Possession of a current clear and active California Licensed Vocational Nurse (LVN) license at the time of application and through program completion.
- Completion of a minimum of six months recent LVN work experience.
- A grade of "C" or better and a cumulative G.P.A. of 3.0 in the following science prerequisites: BIOL 430, BIOL 431, and BIOL 440 or BIOL 442.
- Note: In-progress grades are not accepted for prerequisite courses.
- Note: The Nursing Admissions Committee will determine acceptance of pre-nursing courses taken outside the Los Rios Community College District.
- Note: The American River College Nursing Program reserves the right to make changes in the enrollment criteria, academic requirements, grading standards and other processes without notice at any time.

Enrollment Process

Eligible students are selected for the program according to the following steps:

- Contact the Nursing Department at 916-484-8254 for an appointment with the Program Director. Objective counseling of this option and individual evaluation will occur at the appointment.
- Provide unofficial transcripts and course descriptions of physiology, microbiology, and previous LVN program at the appointment.
- Meeting these requirements does not guarantee acceptance into the program. Entry is subject to space availability.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- use clinical reasoning and knowledge based on the nursing program of study, evidence based practice outcomes, and research based policies and procedures as the basis for decision-making and delivery of comprehensive, safe, patient centered care.
- use information and technology to communicate, manage knowledge, and mitigate error.
- participate in quality improvement activities to measure patient outcomes, identify hazards and errors, and to improve care.
- coordinate, collaborate, and communicate with diverse patients, families, and the interdisciplinary healthcare team to plan, deliver, and evaluate care that promotes quality of life.
- demonstrate delegation, management, and leadership skills that integrate systems thinking, communication, and change processes.
- demonstrate behavior that reflects the values of the nursing profession including self-awareness, a spirit of inquiry, leadership, ethical comportment, effective communication, clinical judgment and competence, and mentorship.
- adhere to standards of practice within legal, ethical, and regulatory frameworks of the professional nurse.

Career Information

The State of California provides the LVN with an option to take the National Council Licensure Examination (NCLEX-RN) after completing 30 college semester units. The LVN seeking this path to RN licensure will not receive a degree and this may impact employment opportunities. Additionally, reciprocal RN licensure in other states may be affected. LVNs considering moving out-of-state are encouraged to consult with that state's board of nursing for RN licensure requirements before committing to the 30-unit option.

Certificates
Certified Nurse Assistant Certificate

The Certified Nurse Assistant (CNA) certificate program provides instruction in the holistic care and health needs of people over 65 years of age, who live in long-term care facilities. Students who successfully complete the program receive a certificate of course completion and become eligible to take the California state exam to become a certified nurse assistant.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>AH 110</td>
<td>Medical Language for Health-Care Providers</td>
<td>3</td>
</tr>
<tr>
<td>NURSE 100</td>
<td>Nurse Assistant</td>
<td>7</td>
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<td>Total Units:</td>
<td></td>
<td>10</td>
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Enrollment Eligibility

To be eligible for enrollment in the program, the student must meet the following criteria:

- The program reserves the right to make changes in the enrollment criteria, academic requirements, grading standards, and other processes without notice at any time.
- Students must complete course AH 110 with a "C" or better.
- Student will be required to submit a negative TB skin test completed within 90 days prior to class entrance or a negative chest x-ray completed within 90 days prior to class entrance.
- Spring semester student must submit proof of having a current influenza vaccine to participate in clinical experiences. Fall semester student must obtain an influenza vaccine when the vaccine becomes available.
- Student must submit a completed health history and physical exam completed within 90-days prior to class entrance. Physical exam must clear student to fully participate in clinical labs. Student must use and submit the ARC Nurse Assistant Medical Form.
- Student must meet the California Department of Public Health (CDPH) regulation that requires the student be able to listen, comprehend, and respond appropriately, both verbally and in action, to the English language at a minimum sixth grade level.
- CNA student-applicants must obtain a criminal screening prior to acceptance into the course.

Enrollment Process

Eligible students are selected for the program according to the following steps:

- Read the application process located at the ARC Nursing Department website and follow the directions.
- Admission to the course is by department consent only and determined after review of the applications.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- explain the California Administrative Code, Title XXII, Section 72527, as it relates to the role and responsibilities of the Certified Nursing Assistant regarding professionalism, ethics, and confidentiality.
- discuss resident rights, appropriate interaction with residents, families, and other members of the health care team.
- describe and demonstrate rehabilitation and restorative care with proper and safe body mechanics.
- explain what constitutes an emergency and the basics of emergency care required of a Certified Nurse Assistant.
- discuss and practice basic restraint use and associated safety measures and alternatives to restraints.
- differentiate common therapeutic diets.
- discuss and demonstrate basic care procedures required of a Certified Nurse Assistant.
- state and demonstrate protective measures to prevent the spread of infection.
Career Information

Certified Nurse Assistants (CNA) have a wide variety of work opportunities. The most common work placement is in long-term care facilities. Additionally, CNA work may be found in acute care settings, assisted care facilities, and rehabilitation care centers.

Baby Friendly Hospital Staff Certificate

This program fulfills the criteria for staff education as set by the Baby Friendly Hospital Initiative. It focuses on the physiology of attachment, bonding, and breastfeeding and the short- and long-term impacts of perinatal care practices on the mother-baby dyad. It grapples with the challenges of applying best-practice guidelines and model hospital policies to alleviate barriers for mothers choosing exclusive breastfeeding and to create environments that support maternal-infant biology and the newborn’s natural capabilities, allowing improved outcomes with less time and effort.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
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<tr>
<td>HLACT 301</td>
<td>Supporting the Mother-Baby Connection: Evidence-Based Practices for Perinatal Care (1)</td>
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<tr>
<td>or NURSE 391</td>
<td>Supporting the Mother-Baby Connection: Evidence-Based Practices for Perinatal Care (1)</td>
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Total Units: 1

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- examine and explain the rationale for professional, national, and international policies that promote, protect, and support breastfeeding as a public health goal.
- identify human species-specific norms for growth and development and disease resistance based on the exclusively breastfeeding mother-baby dyad and explain the risks to the mother and infant of early introduction of artificial milk.
- communicate effectively about infant feeding, identifying teaching points appropriate for prenatal and postpartum women regarding breastfeeding and when educating or counseling parents who are using bottles and/or formula.
- evaluate current hospital practices in terms of barriers to maintaining mother-baby connectedness.
- devise solutions to alleviate common barriers to exclusive breastfeeding in the hospital setting, integrating concepts of system change.
- create an environment that supports the newborn’s natural capabilities.
- integrate concepts of the neurobiology of breastfeeding to address initiation and problem remediation and to support milk-supply maintenance issues.
- demonstrate techniques and skills to transition the newborn from one state of alertness to another and to help families perceive and understand the language and patterns of the newborn.
- describe essential components of community support for mothers to sustain breastfeeding beyond the early weeks.
- discuss contraindications to breastfeeding in the United States and identify acceptable medical reasons for supplementation of breastfed babies based on national and international authorities.
- uncover and explore personal values and attitudes related to the birthing and breastfeeding experience.

Career Information

Hospital staff require upgraded education to meet Joint Commission accreditation standards for lactation competency and support services. SB 402, signed into law in 2013, requires all perinatal hospitals in California to implement all Ten Steps to Successful Breastfeeding as adopted by Baby Friendly USA, or an equivalent evidence-based process recognized by the California Department of Public Health, by January 1, 2025. An expanding number of local hospitals, including all those within Sacramento County, have signed letters of intent and are in the process of meeting, or have already met, Baby Friendly Hospital Initiative standards, requiring all staff to obtain this level of preparation. This means that registered nurses, particularly those in the perinatal field, will require this preparation to maintain their career. This preparation will be of significant benefit to the new nursing graduate when competing for jobs in this field.
Home Health Aide Certificate

This certificate expands on previously learned Certified Nurse Assistant (CNA) theory to incorporate the holistic care and health needs of the elderly homebound person. This program introduces the student to the roles and responsibilities of the home health aide. Students who successfully complete the course will receive a Certificate of Completion from the instructor. The State of California will certify the CNA as a Home Health Aide after successful course completion and without further testing.

Note: More information is available about NURSE 101 at the ARC nursing website in the NURSE 101 course information packet.

Catalog Date: June 1, 2020

Certificate Requirements

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<td>NURSE 101</td>
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Enrollment Eligibility

To be eligible for enrollment in the program, the student must meet the following criteria:

- Student must submit one of the following items prior to the start of class: (A.) A copy of Certified Nurse Assistant (CNA) course completion certificate from a California Department of Public Health approved CNA program. Certificate must be signed and dated by the course instructor; OR (B.) A copy of unofficial program or college transcript denoting CNA course and date of completion; OR (C.) A copy of active status, California CNA certificate.

- Student must meet the English prerequisite: (A.) A student who received a CA state CNA certificate prior to 2005 must complete and submit the NURSE 101 English prerequisite. The English prerequisite is ESLW 50, ESLR 50, and ESLL 50; OR ENGWR 51 and ENGRD 15; OR evaluation through assessment at the ARC assessment center. Further information about the English prerequisite and the ARC assessment center can be found at the ARC Nursing website in the NURSE 101 course information packet; OR (B.) A student who received a CA state certified nurse assistant certificate in 2005, or after 2005, has already met the California state English requirement. It was required prior to entering a CNA program. Therefore, no English prerequisite submission is needed for NURSE 101.

- Student must submit completed health history and physical exam done within the last one year prior to the start of class. The health history and physical exam must be signed by the student and the health care provider. Physical exam must clear student to fully participate in clinical labs. Student must use the ARC Nurse Assistant Medical form provided in the NURSE 101 online information packet.

- Student must submit Tuberculin [TB] skin clearance test within the past six months prior to start of class. Or student must submit a TB clearance chest x-ray within one year prior to start of class.

- Student must submit proof of current influenza vaccine.

- Student must review the list of penal codes that determine automatic HHA certification denial. If student has been convicted of any crime on the list that student can not be enrolled in the NURSE 101 class. The California Department of Public Health (CDPH) automatic denial penal code list can be found at the ARC Nursing website in the NURSE 101 course information packet. If student has been convicted of any crime that is not listed on the automatic denial penal code list, the student must submit to CDPH the required forms for criminal clearance review. The student must have proof of criminal clearance before entering the NURSE 101 class. Information about conviction review and required review forms can be found at the ARC Nursing web site in the NURSE 101 information packet.

Enrollment Process

Eligible students are selected for the program according to the following steps:

- Student must submit completed, time-sensitive prerequisites. Student must refer to the the ARC Nursing website, NURSE 101 information packet, for complete information about course prerequisites and prerequisite submission deadline.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- explain and discuss the roles and responsibilities of the Home Health Aide (HHA).

- discuss and demonstrate documentation requirements of the HHA.

- describe how culture, religious/spiritual needs, lifestyle, and life experiences of the client and family can influence care provided by the HHA.

- describe and discuss the signs and symptoms of common diseases and disorders of the homebound client.

- provide basic personal care needs and a clean, safe, and healthy environment for the homebound client.
Allied Health (AH)

AH 110 Medical Language for Health-Care Providers

This course is an orientation to medical language. It covers the basic structure of medical terms and their components: prefixes, suffixes, roots, and combining forms with emphasis on meaning, spelling, and pronunciation. This course also builds a medical vocabulary applicable to the specialties of medicine, the systems of the body, names of major diseases, and terms used in physical examination, diagnosis, and treatment.

Upon completion of this course, the student will be able to:

- demonstrate a workable knowledge of medical terminology.
- analyze the structural design of medical terms.
- compare the meanings of terms with combinations of word elements.
- compose medical words with correct spelling and pronunciation.
- utilize medical terms as they apply to the systems of the body, including anatomy, physiology, disease, diagnosis, and treatment.
- compare and contrast the meanings of medical abbreviations and descriptive terms.
- translate health care reports/records accurately into clear, non-medical terms.

AH 112 Strategies for Student Success in Health Occupations

This course provides realistic and useful strategies to enhance success in reaching career goals associated with health occupations. It covers the necessary skills to determine a career path based on a realistic understanding of specific health occupations and associated aptitudes. Field trips may be required.

Upon completion of this course, the student will be able to:

- describe the evolution of health care beliefs and causes and treatments of disease from the inception of organized healthcare systems to care delivery models today.
- identify at least five current trends or projections related to the delivery of health care for the next several years.
- distinguish between the different types of health care facilities and insurance options available in the United States.
- identify the personal and professional characteristics, attitudes, and rules of appearance that apply to all health care professionals.
- compare and contrast the roles and responsibilities, scope of practice, educational requirements, personal characteristics, and employment opportunities for at least five different health care providers.
- research in depth at least one health care career that is of interest to him/her.
- identify and apply legal, ethical, and professional principles to common situations encountered in the health occupations.
- list the commonly recognized learning styles, assess his/her individual learning style, and develop strategies to maximize learning by utilizing that style.
- utilize professional verbal and non-verbal communication skills to establish and enhance the therapeutic/helping relationship inherent in health occupations.
- formulate a plan by identifying necessary resources to support college success including self-care, time management, peer and instructor support, study skills, and financial resources.
- investigate and apply the relationship between personal, cultural, and societal values with those of current and evolving trends in health care.
- accurately spell and pronounce common medical terms and abbreviations used in health occupations.
- apply basic math calculation to measures and calculations used in health care.

Nursing (NURSE)

NURSE 100 Nurse Assistant

<table>
<thead>
<tr>
<th>Units:</th>
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<tbody>
<tr>
<td>Hours:</td>
<td>86 hours LEC; 120 hours LAB</td>
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<tr>
<td>Prerequisite:</td>
<td>AH 110 with a grade of &quot;C&quot; or better</td>
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<tr>
<td>Enrollment Limitation:</td>
<td>Acceptance into the CNA Program.</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
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</table>

This course leads to the nurse assistant certification exam. It emphasizes the gerontological nursing assistant's role and responsibilities as a healthcare team member. It also covers principles of asepsis, infection control, resident care skills, and emotional, social, and spiritual needs of the resident.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify and discuss Title 22 relative to the role and responsibilities of the Certified Nurse Assistant with regards to professionalism, ethics, and confidentiality.
- list and discuss patient rights.
- demonstrate medical asepsis for infection control.
- demonstrate emergency procedures and routine resident care skills.
- identify appropriate basic restraints and resident safety precautions.
- differentiate among common therapeutic diets.
- utilize proper body mechanics in resident moving, transfers, rehabilitation, and restorative care.
- effectively interact with clients, families, and other members of the healthcare team.
- integrate effective communication skills for the client with mental illness and decreased mental capacity.

NURSE 101 Home Health Aide

<table>
<thead>
<tr>
<th>Units:</th>
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<tbody>
<tr>
<td>Hours:</td>
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<tr>
<td>Prerequisite:</td>
<td>Proof of having completed a CA approved nurse assistant course or proof of current California nurse assistant certification</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
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</table>

This course focuses on home health nurse aide responsibilities: personal and rehabilitation nursing care in the home, skills of maintaining a safe home environment, meal planning and preparation, emotional care of the homebound, and home emergency procedures. NURSE 101 course information packet is available on-line at the ARC Nursing Program website.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe and discuss the expanded responsibilities of the certified nurse assistant in the role of home health aide.
- discuss and demonstrate documentation requirements of the home health aide.
- list body systems and their normal function.
- prioritize and describe changes in a client's function that would necessitate reporting to nurse supervisor.
- describe and discuss signs and symptoms of common diseases and disorders of the home client.
- describe how culture, lifestyle and life experience of the client and family can influence care provided.
- analyze the dietary requirements of the client and describe personal preferences and cultural and religious practices influencing nutritional status.
- discuss how the home health aide provides a clean, safe, and healthy environment for the home client.
- demonstrate sensitivity to the spiritual needs of the home client.

NURSE 305 Transition to Nursing, Patient, and Healthcare Concepts for the Associate Degree Nurse

**Units:** 5
**Hours:** 54 hours LEC; 108 hours LAB
**Prerequisite:** None.
**Enrollment Limitation:** Acceptance into the career mobility track of the Associate Degree Nursing Program.
**Transferable:** CSU
**Catalog Date:** June 1, 2020

This bridge course is designed for the California Licensed Vocational Nurse (LVN) who is admitted for advanced placement into the second year of the Associate Degree Nursing (Registered Nursing) Program. It introduces the concept based curriculum and the knowledge, skills, and attitudes essential to nursing. It focuses on nursing management of the patient's response to health alterations as well as health promotion through the application of nursing knowledge, nursing process, and evidence based practice. The clinical laboratory experience is designed to facilitate the development of the core competencies of clinical practice: communication, leadership, patient centered care, professionalism, safety, teamwork and collaboration, evidence based practice, informatics and technology, and quality improvement. Emphasis is placed on health assessment across the lifespan, family communication, patient education, teamwork and collaboration, role transition, clinical judgment, and management of care.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- identify best current evidence from scientific and other credible sources as a basis for nursing practice and clinical decision-making.
- use information technology in the provision of patient care.
- participate in the implementation of quality improvement strategies to improve patient care.
- collaborate and communicate with diverse patients, families, and the interdisciplinary healthcare team to plan, deliver, and evaluate care.
- use leadership skills in the provision of safe, quality patient care.
- participate in behavior that reflects the values of the nursing profession including self-awareness, a spirit of inquiry, ethical comportment, effective communication, and clinical judgment and competence.
- adhere to standards of practice within legal, ethical, and regulatory frameworks of the professional nurse.

NURSE 310 Pharmacology and Implications for Health Care Practitioners

**Units:** 3
**Hours:** 54 hours LEC
**Prerequisite:** None.
**Transferable:** CSU
**Catalog Date:** June 1, 2020

This course presents the principles of drug therapy as they apply to treating disease and maintaining health. It covers the metabolism and action of drugs, absorption, duration of action, distribution in the body, and adverse drug reactions. Major drug classes are included, as well as their related implications for people receiving these drugs. How these drugs affect the body systems are also covered. Administration of the medications according to nursing professional standards and health care professionals are discussed.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- differentiate between pharmacokinetics, pharmacodynamics, and pharmacotherapeutics.
- utilize pharmacology concepts and their application to patient care in the treatment of disease and the promotion of health in the major body systems.
- integrate a knowledge of pharmacology and its application to patient care as it applies to fluid, electrolyte and nutritional imbalance, control of inflammation, allergy and organ rejection, prevention and treatment of infection, and treatment of malignant neoplasms.
- evaluate how client lifespan considerations and other factors affect drug absorption, distribution, metabolism, and excretion.
• analyze how drug forms affect drug absorption, distribution, metabolism, and excretion.

• assess how the major drug classifications affect the body and recognize the implications to the health care practitioner with each classification.

NURSE 320 Medical Dosage Calculations

Units: 1.5
Hours: 27 hours LEC
Prerequisite: None.
Advisory: MATH 25 and 41
Transferable: CSU
Catalog Date: June 1, 2020

This course prepares health professionals to calculate oral and parenteral drug dosages with a focus on safety and accuracy. Three systems of measurement and conversion are practiced. This course also provides experience in understanding drug orders and drug labels. Calculation accuracy is emphasized by clinical scenarios and case study assignments.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• evaluate problems using addition, subtraction, multiplication, and division of whole numbers, fractions, and decimals.

• assess drug label and package inserts accurately.

• calculate drug doses using conversion methods, which include: ratio/proportion, formula method, and dimensional analysis.

• verify appropriate equipment for medication administration.

• write and interpret a list of common abbreviations used in drug orders and dispensing.

• evaluate written drug orders and explain how to administer medication utilizing the three checks and the six patient rights.

NURSE 341 Introduction to the Childbirth Support Profession: A DONA-Approved Birth Doula Workshop

Units: 1.5
Hours: 27 hours LEC
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

This course prepares individuals to become professional labor support providers (birth doulas) and meets the didactic requirements for certification as a birth doula through DONA (Doulas of North America) International. Course content is also beneficial for current healthcare providers and those preparing for professions in the perinatal field. This course provides a foundation in reproductive anatomy and physiology, fetal development, perinatal care practices, and clinical terminology. It covers professional standards and ethics, business practices, values clarification, and communication skills. It introduces techniques for providing comfort, examines methods for facilitating the labor process and supporting the mother-baby dyad, and focuses on the emotional and psychological aspects of the birth experience with its significance for women's future self-concept and self-efficacy.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• explain common terms, processes, and procedures related to reproductive anatomy and physiology, fetal development, and perinatal care.

• investigate the long-term effects of the birth experience on women's sense of self.

• evaluate the purposes and benefits of continuous labor support in relation to the sources of stress in labor and effects on outcomes.

• distinguish the role of the doula from that of other perinatal care providers and significant others.

• analyze life impacts and commitments inherent in the doula vocation.

• apply described methods for obtaining clients, adjusting fees, and maintaining business records.

• design a personalized plan for prenatal contact and postpartum closure that develops the tone of the supporting relationship.

• demonstrate reflective listening, therapeutic communication skills, and measures for establishing professional relationships, and describe the doula's role in care provider-client communications.
• assess criteria for responding to values differences with clients.
• apply appropriate supportive interventions based on the physiology and psychology in each stage and phase of labor including specific techniques for selected difficult labor situations.
• employ physiologic methods of support in the immediate postpartum-newborn period with recognition of maternal and newborn needs and the necessary and usual elements of medical and nursing care provision.
• evaluate the worth of professional organization membership for the practicing doula.
• support the importance of scope-of-practice and professional-ethics standards.

NURSE 370 Focused Learning in the First Year of the ARC Nursing Program

Units: 1.5
Hours: 27 hours LEC
Prerequisite: None.
Corequisite: NURSE 400 or 410
Transferable: CSU
Catalog Date: June 1, 2020

This course offers strategies to enhance student success in the first year of the Associate Degree Nursing (ADN) program. It provides an assessment of personal aptitudes, learning styles, strengths, and weaknesses in written and verbal communication, and potential barriers to successful completion of the nursing program. It also provides the development of personal and professional support systems and development of a purposeful analytic process that supports reasoned decisions and judgments as a health care professional. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• prioritize factors which promote and inhibit success in a nursing program.
• identify personal learning style and determine effective learning strategies.
• incorporate critical thinking skills into nursing clinical and theory practice appropriate to the semester of enrollment in the nursing program.
• utilize specific Assessment Technologies Institute (ATI) materials to strengthen understanding of course content.
• evaluate current level of clinical performance and compare with Registered Nurse standards of competent performance according to the Department of Consumer Affairs Business and Professions Code.
• utilize medical terminology and medical abbreviations to read medical documents.
• prioritize the qualities/behaviors of a successful registered nurse.
• apply strategies for utilizing the NURSE 400 or NURSE 410 worksheet to successfully manage a clinical workload.
• explain the rationale for clinical tips/tools/timesavers for clinical success.
• analyze common laboratory and diagnostic tests ordered in the hospital setting, including causes of increased and decreased values.
• utilize basic math skills to safely calculate drug dosages.

NURSE 372 Focused Learning in the Second Year of the ARC Nursing Program

Units: 1.5
Hours: 27 hours LEC
Prerequisite: None.
Corequisite: NURSE 420 or 430
Transferable: CSU
Catalog Date: June 1, 2020

This course offers strategies to enhance student success in the second year of the Associate Degree Nursing (ADN) program. This course reviews personal aptitudes, learning styles, strengths, and weaknesses in written and verbal communication as well as potential barriers to completion of the nursing program. Course content addresses the specific theory and clinical needs of NURSE 420 and NURSE 430 while focusing on the development of critical thinking skills used when managing a group of patients in the clinical setting. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:
• evaluate factors which promoted or inhibited success in prior Associate Degree Nursing courses.
• identify personal learning style and determine effective learning strategies.
• incorporate critical thinking skills into nursing theory and clinical practice appropriate to semester of enrollment in the nursing program.
• utilize specific Assessment Technologies Institute (ATI) and Elsevier/Evolve materials to strengthen understanding of specific semester enrollment course content.
• evaluate current level of clinical performance and compare with Registered Nurse standards of competent performance according to the Department of Consumer Affairs.
• evaluate potential for successful RN licensure.
• utilize advanced math skills to safely calculate intravenous infusion drug doses.

NURSE 391 Supporting the Mother-Baby Connection: Evidence-Based Practices for Perinatal Care

Same As: HLACT 301
Units: 1
Hours: 18 hours LEC
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

This course is designed for practicing health care professionals as well as students preparing to enter the fields of nursing, nutrition, health education, or early childhood development. It focuses on the physiology of attachment, bonding, and breastfeeding and the short- and long-term impacts of perinatal care practices on the mother-baby dyad. It grapples with the challenges of applying best-practice guidelines and model hospital policies to alleviate barriers for mothers choosing exclusive breastfeeding and creating environments that support maternal-infant biology and the newborn’s natural capabilities, allowing improved outcomes with less time and effort. This course meets Board of Registered Nursing continuing education requirements and, when combined with requisite supervised clinical experience, fulfills all criteria for staff education as set by the Baby Friendly Hospital Initiative. This course is not open to students who have completed HLACT 301.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• examine and explain the rationale for professional, national, and international policies that promote, protect, and support breastfeeding as a public health goal.


• identify human species-specific norms for growth and development and disease resistance based on the exclusively breastfeeding mother-baby dyad and explain the risks to the mother and infant of early introduction of artificial milk.

• communicate effectively about infant feeding, identifying teaching points appropriate for prenatal and postpartum women regarding breastfeeding and when educating or counseling parents who are using bottles and/or formula.

• evaluate current hospital practices in terms of barriers to maintaining mother-baby connectedness.

• devise solutions to alleviate common barriers to exclusive breastfeeding in the hospital setting, integrating concepts of system change.

• create an environment that supports the newborn’s natural capabilities.

• integrate concepts of the neurobiology of breastfeeding to address initiation and problem remediation and to support milk-supply maintenance issues.

• demonstrate techniques and skills to transition the newborn from one state of alertness to another and to help families perceive and understand the language and patterns of the newborn.

• describe essential components of community support for mothers to sustain breastfeeding beyond the early weeks.

• discuss contraindications to breastfeeding in the United States and identify acceptable medical reasons for supplementation of breastfed babies based on national and international authorities.

• uncover and explore personal values and attitudes related to the birthing and breastfeeding experience.

NURSE 400 Nursing, Patient, and Healthcare Concepts I

Units: 10.5
Hours: 81 hours LEC; 324 hours LAB
This course introduces essential concepts of safe and effective nursing care for patients across the lifespan, utilizing the nursing process and evidence based practice. It focuses on the introduction of the wellness/illness continuum and the core competencies of clinical practice. The competencies include communication, leadership, patient centered care, professionalism, safety, teamwork and collaboration, evidence based practice, informatics and technology, and quality improvement. The clinical laboratory experience is designed to facilitate the fundamental acquisition of the core competencies of clinical practice. Emphasis is placed on health assessment across the lifespan, recognition of alterations from the norm, safety for patients and providers of care, interpersonal communication, patient centered care, ethics, and safe, evidence based technical skill interventions.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify best current evidence from scientific and other credible sources as a basis for nursing practice and clinical decision-making.
- use information technology in the provision of patient care.
- participate in the implementation of quality improvement strategies to improve patient care.
- collaborate and communicate with diverse patients, families, and the interdisciplinary healthcare team to plan, deliver, and evaluate care.
- use leadership skills in the provision of safe, quality patient care.
- participate in behavior that reflects the values of the nursing profession including self-awareness, a spirit of inquiry, ethical comportment, effective communication, clinical judgment, and competence.
- adhere to standards of practice within legal, ethical, and regulatory frameworks of the professional nurse.

NURSE 410 Nursing, Patient, and Healthcare Concepts II

This course applies concepts of safe and effective nursing care for children, adults, and families, concentrating on healthcare needs on the wellness/illness continuum across the lifespan. It focuses on nursing management of the patient's response to health alterations as well as health promotion for childbearing and childrearing families through the application of nursing knowledge, nursing process, and evidence based practice. The clinical laboratory experience is designed to facilitate the development of the core competencies of clinical practice: communication, leadership, patient centered care, professionalism, safety, teamwork and collaboration, evidence based practice, informatics and technology, and quality improvement. Emphasis is placed on family communication, patient education, teamwork and collaboration, clinical judgment, and management of care.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify best current evidence from scientific and other credible sources as a basis for nursing practice and clinical decision-making.
- use information technology in the provision of patient care.
- participate in the implementation of quality improvement strategies to improve patient care.
- collaborate and communicate with diverse patients, families, and the interdisciplinary healthcare team to plan, deliver, and evaluate care.
- use leadership skills in the provision of safe, quality patient care.
- participate in behavior that reflects the values of the nursing profession including self-awareness, a spirit of inquiry, ethical comportment, effective communication, and clinical judgment and competence.
- adhere to standards of practice within legal, ethical, and regulatory frameworks of the professional nurse.

NURSE 420 Nursing, Patient, and Healthcare Concepts III

This course introduces essential concepts of safe and effective nursing care for patients across the lifespan, utilizing the nursing process and evidence based practice. It focuses on the introduction of the wellness/illness continuum and the core competencies of clinical practice. The competencies include communication, leadership, patient centered care, professionalism, safety, teamwork and collaboration, evidence based practice, informatics and technology, and quality improvement. The clinical laboratory experience is designed to facilitate the fundamental acquisition of the core competencies of clinical practice. Emphasis is placed on health assessment across the lifespan, recognition of alterations from the norm, safety for patients and providers of care, interpersonal communication, patient centered care, ethics, and safe, evidence based technical skill interventions.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify best current evidence from scientific and other credible sources as a basis for nursing practice and clinical decision-making.
- use information technology in the provision of patient care.
- participate in the implementation of quality improvement strategies to improve patient care.
- collaborate and communicate with diverse patients, families, and the interdisciplinary healthcare team to plan, deliver, and evaluate care.
- use leadership skills in the provision of safe, quality patient care.
- participate in behavior that reflects the values of the nursing profession including self-awareness, a spirit of inquiry, ethical comportment, effective communication, and clinical judgment and competence.
- adhere to standards of practice within legal, ethical, and regulatory frameworks of the professional nurse.
This course adapts concepts of safe and effective nursing care for adults experiencing acute and chronic alterations across the wellness/illness continuum. It focuses on nursing management of the adult patient's response to physical and mental health alterations through the application of nursing knowledge, nursing process, and evidence-based practice. The clinical laboratory experience is designed to facilitate the development of the core competencies of clinical practice: communication, leadership, patient-centered care, professionalism, safety, teamwork and collaboration, evidence-based practice, informatics and technology, and quality improvement. Emphasis is placed on clinical judgment, inter-professional communication, patient-centered care, safety, and team collaboration.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- use clinical reasoning and knowledge based on the nursing program of study, evidence-based practice outcomes, and research-based policies and procedures as the basis for decision-making and delivery of comprehensive, safe, patient centered care.

- use information and technology to communicate, manage knowledge, and mitigate error.

- participate in quality improvement activities to measure patient outcomes, identify hazards and errors, and to improve care.

- coordinate, collaborate, and communicate with diverse patients, families, and the interdisciplinary healthcare team to plan, deliver, and evaluate care that promotes quality of life.

- demonstrate delegation, management, and leadership skills that integrate systems thinking, communication, and change processes.

- demonstrate behavior that reflects the values of the nursing profession including self-awareness, a spirit of inquiry, leadership, ethical comportment, effective communication, clinical judgment and competence, and mentorship.

- adhere to standards of practice within legal, ethical, and regulatory frameworks of the professional nurse.

NURSE 430 Nursing, Patient, and Healthcare Concepts IV

Units: 10.5
Hours: 81 hours LEC; 324 hours LAB
Prerequisite: NURSE 420 with a grade of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This course integrates concepts of safe and effective nursing care for individuals and groups of patients across the lifespan. It is designed to facilitate integration of knowledge, evidence based practice, and clinical judgment in the management of patients with complex healthcare needs, and to facilitate the student's transition into the profession of nursing. Clinical judgment skills are enhanced through advanced clinical experiences and role transition opportunities. The clinical laboratory experience is designed to facilitate the development and demonstration of the core competencies of clinical practice: communication, leadership, patient centered care, professionalism, safety, teamwork and collaboration, evidence based practice, informatics and technology, and quality improvement. Emphasis is placed on evidence based practice, quality improvement, team collaboration concepts, managing care for groups of patients, the role of the nurse in a systems based practice, inter-professional collaboration, legal precepts, and health policy.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- use clinical reasoning and knowledge based on the nursing program of study, evidence based practice outcomes, and research based policies and procedures as the basis for decision-making and delivery of comprehensive, safe, patient centered care.

- use information and technology to communicate, manage knowledge, and mitigate error.

- participate in quality improvement activities to measure patient outcomes, identify hazards and errors, and to improve care.

- coordinate, collaborate, and communicate with diverse patients, families, and the interdisciplinary healthcare team to plan, deliver, and evaluate care that promotes quality of life.

- demonstrate delegation, management, and leadership skills that integrate systems thinking, communication, and change processes.

- demonstrate behavior that reflects the values of the nursing profession including self-awareness, a spirit of inquiry, leadership, ethical comportment, effective communication, clinical judgment and competence, and mentorship.

- adhere to standards of practice within legal, ethical, and regulatory frameworks of the professional nurse.
Nutrition & Foods | American River College

Division Dean: Jan DeLapp  
Department Chairs: Susan Chou  
 (916) 484-8902

Associate Degree for Transfer

A.S.-T. in Nutrition and Dietetics

The Associate in Science in Nutrition and Dietetics for Transfer degree provides students with a major that fulfills the general requirements of the California State University for transfer. Students with this degree will receive priority admission with junior status to the California State University system. The Associate in Science in Nutrition and Dietetics for Transfer (AS-T) degree may be obtained by the completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program outlined below (earning a C or better in these courses) and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education Breadth Requirements.

Catalog Date: June 1, 2020

Degree Requirements

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<tr>
<th>COURSE CODE</th>
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<tr>
<td>BIOL 440</td>
<td>General Microbiology</td>
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<tr>
<td>CHEM 400</td>
<td>General Chemistry I</td>
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</tr>
<tr>
<td>NUTRI 300</td>
<td>Nutrition</td>
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<tr>
<td>PSYC 300</td>
<td>General Principles (3)</td>
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<tr>
<td>or PSYC 480</td>
<td>Honors General Principles (3)</td>
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A minimum of 8 units from the following: 8

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<tbody>
<tr>
<td>CHEM 401</td>
<td>General Chemistry II (5)</td>
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<tr>
<td>CHEM 423</td>
<td>Organic Chemistry - Short Survey (5)</td>
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<tr>
<td>or CHEM 420</td>
<td>Organic Chemistry I (5)</td>
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<tr>
<td>STAT 300</td>
<td>Introduction to Probability and Statistics (4)</td>
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<tr>
<td>or PSYC 330</td>
<td>Introductory Statistics for the Behavioral Sciences (3)</td>
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A minimum of 3 units from the following: 3

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<td>ACCT 301</td>
<td>Financial Accounting (4)</td>
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<tr>
<td>CHEM 423</td>
<td>Organic Chemistry - Short Survey (5)</td>
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<tr>
<td>HM 310</td>
<td>Sanitation, Safety and Equipment (3)</td>
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<td>HM 315</td>
<td>Food Theory and Preparation (4)</td>
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<tr>
<td>NUTRI 310</td>
<td>Cultural Foods of the World (3)</td>
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<tr>
<td>POLS 301</td>
<td>Introduction to Government: United States (3)</td>
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<tr>
<td>POLS 481</td>
<td>Introduction to Government: United States - Honors (3)</td>
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<tr>
<td>SOC 300</td>
<td>Introductory Sociology (3)</td>
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</table>
The Associate in Science in Nutrition and Dietetics for Transfer (AS-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

### Student Learning Outcomes

Upon completion of this program, the student will be able to:

- explain the principles of nutrition and their effects on overall health status and chronic disease risk.
- analyze nutritional adequacy of a diet and recommend dietary changes to meet nutrition guidelines.
- demonstrate an understanding of the relationships between chemistry, biology, and nutrition.
- assess the validity of sources of nutrition information.
- interpret the findings of current nutrition research.

### Career Information

This degree is designed to facilitate students' successful transfer to four-year colleges that prepare them to become registered dietitians. Organizations or companies that employ registered dietitians include hospitals, nursing homes, school food services, other health related facilities, college food service departments, restaurants, public health agencies, nutrition programs, WIC programs, Meals on Wheels, health clubs, weight management clinics, community wellness centers, food companies, contract food management companies, and food distribution companies.

### Certificate of Achievement

#### Dietary Manager/Dietary Service Supervisor Certificate

The Dietary Manager/Dietary Service Supervisor Certificate provides certification for employment in nutritional care and dietary management within a health-care facility, such as a skilled nursing facility. This certificate program meets the California State Department of Health Service’s requirements for certification.

#### Catalog Date: June 1, 2020

### Certificate Requirements

<table>
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<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>HM 310</td>
<td>Sanitation, Safety and Equipment</td>
<td>3</td>
</tr>
<tr>
<td>HM 315</td>
<td>Food Theory and Preparation</td>
<td>4</td>
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<tr>
<td>NUTRI 130</td>
<td>Introduction to Dietary Management</td>
<td>2</td>
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<tr>
<td>NUTRI 132</td>
<td>Management of the Dietary Department in Health Care Facilities</td>
<td>3</td>
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<tr>
<td>NUTRI 133</td>
<td>Clinical Experience in Health Care Facilities</td>
<td>2.5</td>
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<tr>
<td>NUTRI 134</td>
<td>Nutritional Care Management</td>
<td>3</td>
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<tr>
<td>NUTRI 135</td>
<td>Clinical Experience in Nutritional Care Management</td>
<td>2.5</td>
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</tbody>
</table>

Total Units: 20

### Student Learning Outcomes

Upon completion of this program, the student will be able to:

- identify the location of applicable laws and regulations and determine compliance to regulatory requirements (state and federal), and determine acceptable standards of care in dietary services.
This course provides an introduction to the profession of dietetics, with emphasis on a career as a dietary services supervisor (DSS). It examines current public policy and legislation related to the profession. It also includes the fundamentals of basic nutrition, individual's nutritional needs throughout the life cycle, health promotion, and disease prevention.

Upon completion of this course, the student will be able to:

- identify the role and limitations (no scope of practice) of the Dietary Service Supervisor under law (Title 22) for the Operation of Food Service.
- participate with the Registered Dietitian (RD) in the timely review and revision of the facility's policies and procedures to ensure that they are in compliance with regulations and standards of practice.
- assist in the development of Quality Assurance Programs to monitor staff practices for compliance, to determine training needs, and to evaluate resident/patient satisfaction.
- assist in the development of planned and disaster menus to meet the nutritional needs of resident/patient in accordance with the Recommended Dietary Allowances (RDAs).
- ensure that therapeutic menus and standardized recipes are followed, served and consumed in their appropriate form, as approved by RD.
- ensure that food is served by methods that conserve nutritive value, flavor and appearance. Ensure that food is prepared in a form designed to meet individual needs and substitutions are of similar nutritive value.
- maintain current profile cards, and provide assistive devices as needed.
- ensure that food is stored, prepared, distributed, and served under sanitary conditions to prevent food borne illness. This includes the sanitation oversight of equipment such as internal components of the ice machine, nurse pantry refrigerators and trash disposal systems.
- ensure that the food department runs smoothly, including food ordering and storage, according to applicable state requirements, staffing schedules, employee health, labor relations, safety programs and other duties as assigned by administration.

Career Information

Certified Dietary Manager in a Long Term Care Facility.

Nutrition (NUTRI)

NUTRI 130 Introduction to Dietary Management

Units: 2
Hours: 36 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Catalog Date: June 1, 2020

This course provides an introduction to the profession of dietetics, with emphasis on a career as a dietary services supervisor (DSS). It examines current public policy and legislation related to the profession. It also includes the fundamentals of basic nutrition, individual's nutritional needs throughout the life cycle, health promotion, and disease prevention.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain the roles that dietetic professionals play in the health care setting
- describe the role and limitations of the dietary service supervisor under law (Title 22 and Omnibus Budget Reconciliation Act (OBRA))
- determine acceptable standards of care in dietary services and evaluate compliance to regulatory requirements (county, state, and federal)
- describe the relationship of food service and nutrition care to the operation of the total facility
- categorize the known nutrients, their functions and food sources, and apply this knowledge to individual needs
- distinguish between the various requirements and recommendations of nutrients for individuals during various stages of the life cycle
- identify food patterns as related to religious practices, cultural customs, psychological and family structure, and health beliefs
- identify reliable sources of nutrition information

NUTRI 132 Management of the Dietary Department in Health Care Facilities

Units: 3
This course reviews the standards of management and food preparation as they apply to the quantity of food production in health care facilities. Topics include types and components of food production systems, work flow, menu implementation, emergency planning, maintenance of equipment, food production procedures, dietary staff schedules, and management.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the organization of the food service department, including management principles and responsibilities
- develop employee schedules according to menu needs, preparation work, and meal hours
- describe methods of effective verbal and written communication
- assist in the development of training techniques and evaluation of staff
- describe a total food production system, including a convenience food system and a combination of systems, and compare advantages and disadvantages of each
- develop production guides, complete production records, and requisition food according to menu needs
- formulate policies and procedures for buying, receiving, storing, and managing inventory with respect to budget
- develop standardized recipes, determine yields and costs, and apply appropriate terminology
- supervise quantity production of meals that meet nutrition guidelines, cost parameters, and consumer acceptance

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### NUTRI 133 Clinical Experience in Health Care Facilities

This course offers clinical experience in health care facilities and is performed under professional supervision. Topics include residents’ rights in food service, disaster relief feeding programs, getting ready for state inspection, and injury and illness prevention programs. A portion of this course may be offered in a TBA component of 90 hours which will include professionally supervised clinical experience in dietary departments of acute care hospitals and long term care facilities.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- chart the flow of food from receiving to service in a health care facility
- write a clear, inclusive job description of each staff member within a facility
- assign duties for each staff member and schedule hours of work for one week
- implement an in-service training session for a specific task
- identify local markets and purveyors
- demonstrate ability to receive, weigh, count, store, locate, and inventory food and supplies received
- analyze cost of food through waste studies, convenience foods versus foods made from basic ingredients, avoiding repetition of leftovers
- develop standardized recipes to prepare food requisite for one day’s menu, including cost
- demonstrate the operation, care, and cleaning of standard commercial kitchen equipment to meet federal, state and local regulations
- prepare time sheets, payroll records, and other employee records
- demonstrate the procedure for handling accidents and complete an accident report form
- determine vulnerable aspects in terms of microbial or other contamination in a food service operation
- develop techniques for attractive presentation of food
plan menus and manage resources during emergencies and/or crisis situations

NUTRI 134 Nutritional Care Management

Units: 3
Hours: 54 hours LEC
Prerequisite: NUTRI 130 with a grade of "C" or better
Corequisite: NUTRI 135
Catalog Date: June 1, 2020

This course is a study of nutrition therapeutic diets used in health care facilities. It emphasizes the modification of diets for various dietary needs of the long-term care resident.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply appropriate nutrition care regulations for long-term care (LTC) residents
- assess food needs related to registered dietitians' (RD) assessment
- compare various therapeutic diets
- assist in the implementation of planned and disaster menus to meet the nutritional needs of residents/patients in accordance with recommended dietary allowances (RDA)
- accurately follow a physician's diet order
- maintain patient dietary files and complete minimum data set (MDS) forms
- choose nutritionally appropriate food substitutes in menus for residents representing diverse cultures and/or religious beliefs

NUTRI 135 Clinical Experience in Nutritional Care Management

Units: 2.5
Hours: 18 hours LEC; 90 hours LAB
Prerequisite: NUTRI 130 with a grade of "C" or better
Corequisite: NUTRI 134
Enrollment Limitation: Current TB clearance and other immunizations required by clinical facility.
Catalog Date: June 1, 2020

This course provides clinical experience in nutritional care management. Topics include disorders of the gastrointestinal tract, diabetes, wasting disorders, nutrition, and mental health. A portion of this course may be offered in a TBA component of 90 hours which will include professionally supervised clinical experience in dietary departments of acute care hospitals and long term care facilities.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- assist registered dietitians (RD) in the development of regular and therapeutic diets according to the recommended dietary allowances (RDA)
- accurately follow a physician's diet order and provide appropriate support
- maintain patients dietary files, and complete minimum data set (MDS) forms
- develop effective interviewing skills to gather information on patients' food preferences
- recognize potential problems that need to be reported immediately to RD
- serve food by methods that conserve nutritive value, flavor, and appearance
- ensure that foods are consumed in the appropriate form as prescribed by a clinical professional
- select nutritionally appropriate food substitutes
- modify diet texture and consistency to meet resident/patients' needs and food preferences
- compare administrative policies and procedures from various health care facilities
- implement an in-service training session
NUTRI 294 Topics in Nutrition and Foods

This course provides opportunities to study current, controversial topics in nutrition which are either not included in current offerings or require emphasis beyond that offered in existing courses. A portion of this course may be offered in a TBA component of 4.5-27 hours which may include reading peer-reviewed research studies regarding a particular nutrition issue and formulating conclusions based upon study results and/or evaluating the scientific validity of a supplement claim.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Apply basic nutrition concepts to gain a greater understanding of contemporary nutrition issues
- Analyze nutrition topics from various perspectives
- Discriminate among various nutrition research findings
- Develop conclusions regarding particular nutrition issues

NUTRI 295 Independent Studies in Nutrition and Foods

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

NUTRI 300 Nutrition

This course is an in-depth study of the essential nutrients and their functions, and the chemical compositions of foods and their utilization in the body. It includes discussion of the nutritional values of foods, current topics in nutrition, and an individual's nutrition needs throughout the life cycle.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain the physiological function of the gastrointestinal tract including how the digestive system breaks down food, absorbs and transports the nutrients, and excretes undigested material.
- describe the metabolic functions of the six classes of nutrients and the physiological complications resulting from dietary deficiencies or toxicities.
- identify nutrient-dense food sources for the six classes of nutrients.
- explain how nutrients and non-nutrients interact to influence digestion, absorption, metabolism, and excretion.
- distinguish between the changes in nutrient requirements and dietary recommendations from infancy through old age, including pregnancy and lactation.
- explain the components of an individual’s energy/calorie needs and the effects of energy/calorie imbalance on body weight.
- analyze nutritional adequacy of a diet and make changes to meet nutrition guidelines.
• utilize the claims, nutrition facts, and the ingredient list on food packages to make healthier food choices.

• apply scientific principles to analyze and evaluate nutrition information available in print and electronic media, the Internet, dietary supplements, and weight loss programs to distinguish between reliable and unreliable sources.

• discuss the relationship between food intake and nutrition, weight management, human physiology, athletic performance, overall health, and chronic disease risk.

NUTRI 302 Nutrition for Physical Performance

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU
General Education: AA/AS Area III(b); AA/AS Area IV
Catalog Date: June 1, 2020

This course presents a comprehensive study of nutrition and fitness as they apply to fitness, sport skill training, and athletic performance. It includes an in-depth study of essential nutrients and functions, chemical compositions of foods and their use in the body as they relate to physical performance, muscle strength development, cardiovascular fitness, and body composition.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• describe the interrelationship of nutrition, fitness, and the physiological effects of exercise.

• explain how progressive fitness training is influenced by nutritional intake and alters nutritional requirements.

• identify the known nutrients, their functions, and food sources.

• identify food sources of energy-yielding nutrients used as fuels by the human body and estimate the energy requirements for various sports and activities.

• explain how anaerobic and aerobic energy systems are utilized during exercise and affected by fitness training.

• explain the special nutritional requirements pre-exercise, during exercise, and post-exercise.

• analyze the importance of proper water intake, hydration status, and electrolyte balance in physical activities.

• analyze the diet in terms of nutrient and energy content, and using accepted scientific nutrition principles design a diet recommended for an individual’s optimal physical performance.

• evaluate sources of information for validity and reliability in relation to nutrition and exercise.

• evaluate the effectiveness and recognize the safety concerns of various nutritional supplements.

• apply nutrition knowledge to individual needs as they relate to both the recreational and competitive athlete.

NUTRI 305 Nutrition for Health

Units: 2
Hours: 36 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300: OR ESLR 340 AND ESLW 340.
Transferable: CSU
General Education: AA/AS Area III(b)
Catalog Date: June 1, 2020

This course presents a study of nutrition and fitness designed to increase an awareness of food, nutrition, and physical activity and their interrelationships. Topics include diet selection and food preparation. This course is designed for those interested in general wellness.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• list the six major nutrients and their relationship to the U.S.D.A. Dietary Guidelines for Americans.

• analyze individual dietary intake and identify areas of excess or deficiency.

• compare intake of specific nutrients with the current Dietary Reference Intakes (DRIs) and correlate dietary intake with recommendations for optimal health.
apply principles of food selection and preparation for planning healthy diets.

evaluate the relationships between nutrition and fitness.

NUTRI 307 Nutrition for Fitness

Same As: KINES 402
Units: 2
Hours: 36 hours LEC
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

This course covers the basic principles of nutrition and the interactions between nutrition and fitness training. Topics include dietary practices and nutrient intake modifications that affect physical performance, including intake of energy nutrients, vitamins, water, electrolytes, and dietary supplements. It also covers the study of body weight and body composition, as well as factors that affect body weight and the effect of body composition on physical performance. This course is not open to students who have completed KINES 402.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the basic principles of nutrition, including classification of essential nutrients and identification of key nutrients of various foods.
- explain the role of nutrients for achieving optimal fuel and energy utilization for physical performance.
- critique dietary programs for weight control.
- evaluate the effectiveness and recognize the safety concerns of various dietary supplements.
- explain how nutrient intake relates to health status and the development of chronic disease.
- incorporate current dietary recommendations into planning healthy diets for physically active persons.
- describe the importance of proper water and electrolyte regulation in terms of safety, health, and exercise performance.
- explain the causes and symptoms of nutrient deficiency and toxicity.

NUTRI 310 Cultural Foods of the World

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC
General Education: AA/AS Area V(b); AA/AS Area VI; CSU Area D7; IGETC Area 4G
Catalog Date: June 1, 2020

This course offers an anthropological perspective of traditional and contemporary food customs and cultures. Western and non-western food customs are compared including their social, religious, economic, and aesthetic significance. Included are ethnocentrism, gender-related stereotypes, and racism as they relate to the availability, distribution, and preparation of food throughout the world. The nutritional status of various cultures as it relates to geographic, agricultural and socioeconomic factors is studied. This course is not open to students who have completed NUTRI 481.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- compare the traditional food habits, common foods, meal patterns, special occasion foods, food taboos, and the role of food from various regions of the world.
- identify food species important to geographic areas of the world.
- compare traditional food habits with contemporary food habits of the major cultural groups in the United States.
- analyze similarities and differences in the nutritional contributions from comparative ethnic foods.
- identify food patterns as related to religious practices, cultural customs, and health beliefs.
- research other cultures' beliefs and food practices.
- compare regional food in the United States to migration routes and food from around the world.
analyze development of personal food habits and health beliefs derived from one's cultural background.

analyze nutritional contributions from comparative cultural foods and their relationships to health and disease.

examine food practices of various cultural groups and relate those to personal beliefs and practices.

NUTRI 320 Children's Health, Safety and Nutrition

Same As: ECE 415
Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU
C-ID: C-ID ECE 220
Catalog Date: June 1, 2020

This course examines basic nutrition, health, and safety needs of children from the prenatal period through school age. Topics include introduction to early childhood curriculum, laws, regulations, standards, policies, and procedures related to child health, safety, and nutrition. It emphasizes integrating and maintaining the optimal health, safety, and nutritional concepts in everyday planning and program development for all children, along with the importance of collaboration with families and health professionals. This course is not open to students who have taken ECE 415.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze the interrelationship between health, safety, and nutrition as it relates to the well-being of children.
- develop various methods of collaboration with families and teachers that promote the health, safety, and nutrition of children.
- identify community resources that promote the health, safety, and nutrition of children.
- evaluate assessment tools and policies that protect the health, safety, and nutrition of children in child care settings.
- employ safe food handling techniques for preventing food-borne illnesses.
- assess the general symptoms and management of common infectious diseases that may occur in childhood.
- identify potential hazards in children's environments and describe how to make them safer.
- identify nutrient needs during fetal development, infancy, and childhood.
- identify and explain the major nutrients and their food sources.
- evaluate a child's nutrient intake by comparing it with current nutrition standards and recommendations.
- compare nutrition, health, and safety practices from the perspective of culturally diverse communities.

NUTRI 321 Nutrition and Biochemistry of Human Lactation

Same As: HLACT 322
Units: 1
Hours: 18 hours LEC
Prerequisite: NUTRI 300 with a grade of "C" or better
Advisory: BIOL 102
Transferable: CSU
Catalog Date: June 1, 2020

This course addresses dietary recommendations for lactating women and for infants and young children with an emphasis on breastfeeding as the evidence-based norm. It also covers cultural and physiologic weaning practices and appropriate complementary foods. Primary topics include comparison of human milk with milks of other mammals and with other products and artificial baby milks, the array of individual biochemical and biological components in human milk, and their multiple nutritional and bioactive functions with a focus on immunologic components. Toxicology and pharmacology related to human milk and lactation are addressed. This course is not open to students who have completed HLACT 322.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- recommend dietary choices for lactating women with consideration of health status and cultural or lifestyle preferences and evaluate the need for further lactational or nutritional services.
• evaluate infant and young child intake based on international standards for best practices with reference to caloric and volume requirements and adequacy of key nutrients and determine the need for further lactational or nutritional services.

• explain the rationale for current breastfeeding recommendations and the health and nutritional effects for both mother and child.

• correlate maternal dietary intake with the possible effects on milk volume and composition and describe the adaptive nature of human milk as well as the range of causes for variability.

• describe the detrimental effects of unclear definitions of breastfeeding on development of a sound evidence base for infant and young child feeding recommendations.

• compare human milk with milks of other mammals and with other products and artificial baby milks, discuss the array of individual components in human milk, and explain their multiple nutritional and bioactive functions.

• discuss principles of lactational pharmacology and toxicology as they relate to medications, vaccination, environmental chemicals, and drugs of abuse.

NUTRI 324 Nutrition for Healthy Aging

Same As: GERON 340
Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGRWR 300; OR ESLR 340 AND ELSLW 340.
Transferable: CSU
Catalog Date: June 1, 2020

This course focuses on the nutrition of older adults. Topics include the effects of nutrition on health and well-being and the physiologic changes in aging, the effects of smell and taste on nutritional status, age-related changes in the gastrointestinal tract, risk factors for cardiovascular disease, and cancer and nutrition. This course is not open to students who have completed GERON 340.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• explain the role of nutrition in the health and well-being of older adults.

• discuss strategies for the prevention of disease and chronic conditions in older adults.

• describe the physiological changes to the body that may occur as a result of the aging process.

• list and describe the major food-assistance programs for older adults.

• discuss the purpose and objectives of nutrition screening methods.

• outline the benefits, list the necessary components, and list the nutritional considerations of an exercise regimen for an older adult.

• illustrate how cultural values influence food choices made by older adults.

• discuss the nutrient needs of older adults as a result of physiological changes.

NUTRI 481 Honors - Cultural Foods of the World

Units: 3
Hours: 54 hours LEC
Prerequisite: Placement into ENGWR 480 through the assessment process.
Transferable: CSU; UC
General Education: AA/AS Area V(b); AA/AS Area VI; CSU Area D; IGETC Area 4
Catalog Date: June 1, 2020

This seminar-style course offers an in-depth anthropological perspective of traditional and contemporary food customs and cultures. Western and non-western food customs are compared including their social, religious, economic, and aesthetic significance. Included are ethnocentrism, gender-related stereotypes, and racism as they relate to the availability, distribution, and preparation of food throughout the world. The nutritional status of various cultures as it relates to geographic, agricultural, and socioeconomic factors is studied. The specific cultural groups included are driven by student interests. This course is not open to students who have completed NUTRI 310.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• compare the traditional food habits, common foods, meal patterns, special-occasion foods, food taboos, and the roles of food from various regions of the world.
NUTRI 495 Independent Studies in Nutrition and Foods

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.
Paramedicine is an allied health specialty whose practitioners respond to emergencies before a patient reaches a hospital, rendering basic and advanced medical treatment before and during transport to a medical facility. Classroom, clinical and field internship training prepares paramedics to assess and treat a wide variety of medical emergencies. The knowledge, skills and experience gained through the paramedic program allows students to meet the responsibilities outlined in the Department of Transportation’s Emergency Medical Services Education Standards.

Catalog Date: June 1, 2020

Degree Requirements

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<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tr>
<td>BIOL 102</td>
<td>Essentials of Human Anatomy and Physiology (4)</td>
<td>4 - 10</td>
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<tr>
<td>or [ BIOL 430</td>
<td>Anatomy and Physiology (5)</td>
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<tr>
<td>and BIOL 431 ]</td>
<td>Anatomy and Physiology (5)</td>
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<tr>
<td>PMED 105</td>
<td>Prehospital Pharmacology (0.5)</td>
<td>0.5 - 1.5</td>
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<tr>
<td>or NURSE 320</td>
<td>Medical Dosage Calculations (1.5)</td>
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<tr>
<td>PMED 110</td>
<td>Introduction to Advanced Prehospital Care</td>
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<td>Prehospital Field Internship</td>
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<td>Total Units:</td>
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<td>37.5 - 44.5</td>
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The Paramedic Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Enrollment Eligibility

To be eligible for enrollment in the program, the student must meet the following criteria:

- Graduation from an accredited high school in the United States, or successful completion of General Education Development (GED) or the California High School Proficiency Exam (CHSPE).
- Students with a high school diploma from a school outside the United States must have transcripts evaluated by an approved independent agency. Such cases will be evaluated on an individual basis.
- A cumulative college GPA of 2.0 and a grade of "C" or better in BIOL 102, or BIOL 430 and BIOL 431, or other college human anatomy and physiology course with a lab which includes all human systems; a grade of "C" or better in NURSE 320 or PMED 105 or equivalent course covering basic pharmacology and drug calculations.
- Current curriculum planning summary sheet within the semester in which the pre-enrollment packet is being submitted.
- Completion of the program application (pre-enrollment packet) and submittal prior to the deadline.
• Current certification as an Emergency Medical Technician-Basic and approximately one year verified EMS experience or a minimum of 280 verifiable EMS patient encounters acting as a team lead. See program website for examples of commonly acceptable experience and a patient encounter tracking form.

Enrollment Process

Eligible students are selected for the program according to the following steps:

• Pre-enrollment applications to the program may be obtained from the Health and Education Division office or at http://arc.losrios.edu/edhealth/paramed.html. Applications for Spring admission will be available in September and must be submitted to the division office no later than the first Friday in December by 4:00 p.m. Please refer to the Paramedic Information Sheet for the most current information.

• Only students who meet the educational requirements and follow the pre-enrollment procedures will be considered for the program. Meeting all of these requirements does not guarantee enrollment in the program.

• Class size is limited. If the pre-enrollment pool is greater than the program can accept, students are chosen based on a computerized random selection process from among the qualified candidates.

• Students accepted into the Paramedic program are required to have a physical examination, approved immunizations, drug screen, background check, program uniform, required learning materials, and malpractice insurance prior to deadlines set by the program.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

• synthesize pre-arrival information and initial assessment findings to classify patient acuity.

• utilize support personnel and equipment to maximize scene and patient management.

• diagnose patient conditions using auditory, tactile and visual senses.

• correlate signs and symptoms of common diseases to emergency patients and their primary complaint.

• formulate competent treatment plans for medical or trauma patients.

• report assessment findings, diagnosis, and treatment plans to appropriate health professionals.

• develop and implement strategies to strengthen personal empathy and sympathy for prehospital patients.

• apply ethical practices during all phases of an emergency medical response.

• demonstrate advanced life support skills competency as set by the National Registry of Emergency Medical Technicians.

• assess scene and personal safety before, during and after each emergency response.

• compose accurate, timely and specific patient care reports in accordance with local, regional and state documentation standards.

Career Information

The ARC Paramedic program is designed to prepare the student for licensure as a paramedic, working for a fire department, rescue squad, private provider, industry, clinic or hospital.

Certificate of Achievement

Paramedic Certificate

Paramedicine is an allied health specialty whose practitioners respond to emergencies before a patient reaches a hospital, rendering basic and advanced medical treatment before and during transport to a medical facility. Classroom, clinical and field internship training prepares paramedics to assess and treat a wide variety of medical emergencies. The knowledge, skills and experience gained through the paramedic program allows students to meet the responsibilities outlined in the Department of Transportation's Emergency Medical Services Education Standards.

Catalog Date: June 1, 2020

Certificate Requirements

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**Enrollment Eligibility**

To be eligible for enrollment in the program, the student must meet the following criteria:

- Graduation from an accredited high school in the United States, or successful completion of the General Education Development (GED or the California High School Proficiency Exam (CHSPE).
- Students with a high school diploma from a school outside the United States must have transcripts evaluated by an approved independent agency. Such cases will be evaluated on an individual basis.
- A cumulative college GPA of 2.0 and a grade of "C" or better in BIOL 102, or BIOL 430 and BIOL 431, or other college human anatomy and physiology course with a lab which includes all human systems; a grade of "C" or better in NURSE 320 or PMED 105 or equivalent course covering basic pharmacology and drug calculations.
- Current curriculum planning summary sheet within the semester in which the pre-enrollment packet is being submitted.
- Completion of the program application (pre-enrollment packet) and submittal prior to the deadline.
- Current certification as an Emergency Medical Technician-Basic and approximately one year verified EMS experience or a minimum of 280 verifiable EMS patient encounters acting as a team lead. See program website for examples of commonly acceptable experience and a patient encounter tracking form.

**Enrollment Process**

Eligible students are selected for the program according to the following steps:

- Pre-enrollment applications to the program may be obtained from the Health and Education Division office or at http://arc.losrios.edu/edhealth/paramed.html. Applications for Spring admission will be available in September and must be submitted to the division office no later than the first Friday in December by 4:00 p.m. Please refer to the Paramedic Information Sheet for the most current information.
- Only students who meet the educational requirements and follow the pre-enrollment procedures will be considered for the program. Meeting all of these requirements does not guarantee enrollment in the program.
- Class size is limited. If the pre-enrollment pool is greater than the program can accept, students are chosen based on a computerized random selection process from among the qualified candidates.
- Students accepted into the Paramedic program are required to have a physical examination, approved immunizations, drug screen, background check, program uniform, required learning materials, and malpractice insurance prior to deadlines set by the program.

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- synthesize pre-arrival information and initial assessment findings to classify patient acuity.
- utilize support personnel and equipment to maximize scene and patient management.
- diagnose patient conditions using auditory, tactile and visual senses.
- correlate signs and symptoms of common diseases to emergency patients and their primary complaint.
- formulate competent treatment plans for medical or trauma patients.
- report assessment findings, diagnosis, and treatment plans to appropriate health professionals.
- develop and implement strategies to strengthen personal empathy and sympathy for prehospital patients.
- apply ethical practices during all phases of an emergency medical response.
demonstrate advanced life support skills competency as set by the National Registry of Emergency Medical Technicians.

- assess scene and personal safety before, during and after each emergency response.
- compose accurate, timely and specific patient care reports in accordance with local, regional and state documentation standards.

Career Information
The ARC Paramedic program is designed to prepare students for licensure as a paramedic, working for a fire department, rescue squad, private provider, industry, clinic, or hospital.

Certificate

Emergency Medical Technician (EMT) Certificate

This program prepares students to function as certified Emergency Medical Technicians. Training topics include the skills necessary to provide emergency medical care at a basic life support level with a fire, ambulance, or other specialized service. This program is conducted in compliance with Title 22, Division 9, Chapter 2 of the California Code of Regulations and Emergency Medical Technician (EMT). A "C" or better is required to obtain a course completion certificate.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
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<tr>
<td>EMT 110</td>
<td>Emergency Medical Technician (EMT) Didactic</td>
<td>6</td>
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<tr>
<td>EMT 111</td>
<td>Emergency Medical Technician (EMT) Practicum</td>
<td>1</td>
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<tr>
<td>Total Units:</td>
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<td>7</td>
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</tbody>
</table>

Enrollment Eligibility

To be eligible for enrollment in the program, the student must meet the following criteria:

- Documentation of current American Heart Association CPR Basic Life Support certification. No other form of CPR certification is accepted. Students must be present and provide a copy of the AHA CPR certification on the first day of the course. Not open to students with current NREMT or California State certification or licensure as an EMT, EMT-Basic, Advanced EMT or paramedic.

Enrollment Process

Eligible students are selected for the program according to the following steps:

- Verification of current American Heart Association Basic Life Support CPR certification. No other form of CPR certification is accepted. Students must be present and provide a copy of the AHA CPR certification on the first day of the course. Not open to students with current NREMT or California State certification or licensure as an EMT, EMT-Basic, Advanced EMT or paramedic.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- evaluate the nature and seriousness of the patient's condition or extent of injuries.
- apply emergency medical care based on assessments and findings.
- demonstrate proper procedures in lifting, moving, and positioning a patient to minimize discomfort and prevent further injury.
- utilize communicating, transporting, and record keeping skills.

Career Information

Emergency Medical Technicians operate in a variety of settings from public emergency services, private industry and health care facilities. EMT employment varies from community to community and is considered a growing occupation within the Allied Health professions.
PMED 105 Prehospital Pharmacology

Units: 0.5  
Hours: 9 hours LEC  
Prerequisite: None.  
Advisory: MATH 32 or 42 with a grade of "C" or better AND ENGRD 116 or ESLR 320 with a grade of "C" or better.  
Catalog Date: June 1, 2020

This course provides basic instruction in prehospital pharmacology and calculating medication dosages.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify specific anatomy and physiology pertinent to medication administration.
- identify basic mathematical principles as they relate to drug dose calculations and administration.
- calculate drug dosages accurately using commonly accepted formulas and devices.
- identify drug classifications and their specific physiological effects.
- list various routes for drug administration in the prehospital setting.
- process drug orders using protocols.

PMED 106 Emergency Medical Technician Pre-hospital Practices and Internship

Units: 6.5  
Hours: 36 hours LEC; 243 hours LAB  
Prerequisite: Current California State Emergency Medical Technician certification.  
Corequisite: NURSE 320 or PMED 105  
Enrollment Limitation: A background check, drug screening, proof of current immunizations and malpractice insurance are required. Current California State Emergency Medical Technician (EMT) Certification and Professional BLS CPR certification from the American Heart Association. Only AHA BLS CPR certification will be accepted.  
Advisory: AH 110, BIOL 102, ENGRD 116, ENGWR 101, and MATH 32  
Catalog Date: June 1, 2020

This course provides expanded education in Emergency Medical Services (EMS) related topics, including assisting with Advanced Life Support (ALS) procedures as well as patient assessment and management training through patient simulation, clinical observation, and field experience. It can also serve as partial preparation for application to the American River College Paramedic Program.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- utilize medical terminology necessary for therapeutic communications in pre-hospital care and with other healthcare providers.
- demonstrate the consistent ability to perform basic life support assessment and patient management skills.
- assist paramedics and other advanced life support providers during patient care.
- identify medications commonly prescribed to patients encountered in pre-hospital care.
- describe the roles and responsibilities of the various types of responders during patient resuscitation.
- differentiate between acutely and chronically ill patients.
- correlate medical history information, vital sign data, and subjective patient complaints with the appropriate differential diagnoses.

PMED 108 Emergency Medical Response

Units: 3  
Prerequisite: MATH 32 or 42 with a grade of "C" or better AND ENGRD 116 or ESLR 320 with a grade of "C" or better.  
Advisory: June 1, 2020  
Catalog Date: June 1, 2020

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify specific anatomy and physiology pertinent to medication administration.
- identify basic mathematical principles as they relate to drug dose calculations and administration.
- calculate drug dosages accurately using commonly accepted formulas and devices.
- identify drug classifications and their specific physiological effects.
- list various routes for drug administration in the prehospital setting.
- process drug orders using protocols.
This course is an introduction to the principles and practices of the Emergency Medical Services (EMS). It provides the knowledge and skills needed to integrate the care provided through the EMS system. A certificate of completion is available upon successful completion of this course.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- describe the pathophysiology of human disease and trauma, given a patient scenario.
- demonstrate life support skills for patients with specific medical and trauma airway conditions.
- utilize effective communication techniques with patients, bystanders, and other emergency responders in the EMS setting.

**PMED 110 Introduction to Advanced Prehospital Care**

**Units:** 12  
**Hours:** 144 hours LEC; 216 hours LAB  
**Prerequisite:** BIOL 102 and PMED 105 with grades of "C" or better  
**Enrollment Limitation:** Acceptance into the Paramedic Program  
**Advisory:** AH 110, ENGRD 116, ENGWR 101, HCD 114, and MATH 32  
**Catalog Date:** June 1, 2020

This course covers the didactic material and the related skills necessary to establish a foundation for subsequent prehospital patient assessment and management. Topics include preparatory, human body and human systems, pharmacology, patient assessment, airway management, trauma management, and respiratory and cardiac emergencies.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- identify the roles and responsibilities of Emergency Medical Services (EMS) personnel within the allied health system
- evaluate and interpret pathophysiological findings in prehospital patients
- appraise and identify patient criticality
- integrate legal and ethical concepts into patient management experiences
- identify principles of prehospital pharmacology including medication administration
- integrate prehospital emergency medications into patient care and management
- recognize, prioritize, and manage critical traumatic injuries
- properly diagnosis and manage patients with cardiac and respiratory chief complaints
- apply critical thinking and clinical decision making concepts during prehospital patient encounters
- integrate proper communication, documentation, and workplace safety methods during field practice
- recognize and apply local, state, and national treatment standards to sick or injured patients
- validate the importance of professionalism and continued medical education

**PMED 120 Clinical Internship**

**Units:** 7  
**Hours:** 54 hours LEC; 216 hours LAB  
**Prerequisite:** PMED 110 with a grade of "B" or better.  
**Enrollment Limitation:** Current Emergency Medical Technician certification. Current student enrolled in the Paramedic program.  
**Catalog Date:** June 1, 2020

This course provides an opportunity to apply the cognitive knowledge and psychomotor skills gained in PMED 110 to patient care in a hospital or other approved clinical setting. This course provides for increasing assessment techniques and advanced prehospital skills. Field trips may be required. A portion of this course may be offered in a TBA component of 216 hours which may include direct patient care in a clinical setting.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate use of verbal/non-verbal skills in clinical situations
- perform, complete, and organize patient assessment for both trauma and medical patients
- intervene and initiate appropriate action at an emergency site
- perform a physical exam relevant to the patient's complaints
- identify and report all pertinent information in a systematic, concise manner to the preceptor and or the receiving facility staff
- recall and perform all patient safety considerations before, during, and after patient management
- demonstrate the integration of appropriate affective skills during high-fidelity patient simulations
- perform and manage team leadership responsibilities during all phases of a clinical patient encounter
- analyze pathophysiological concerns while managing clinical patients
- recognize pertinent pathophysiologies in complicated medical patient encounters
- differentially diagnosis prehospital patients with common medical and traumatic complaints
- recognize, develop, and apply appropriate treatment plans for special patient populations

PMED 130 Prehospital Field Internship

Units: 14
Hours: 54 hours LEC; 600 hours LAB
Prerequisite: PMED 120 with a grade of "B" or better.
Enrollment Limitation: Current EMT certification. Current student enrolled in the Paramedic program.
Catalog Date: June 1, 2020

This course provides paramedic students with hands-on prehospital experiences and is the final course in the series preparing for a California paramedic license. Under the direct supervision and evaluation of a licensed paramedic or a mobile intensive care nurse, interns complete a prehospital field experience.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate use of established treatment protocols and procedures in providing prehospital emergency care
- apply minimum competency in evaluation and leadership of an emergency scene, extrication procedures, patient assessment, radio communications, and use of prehospital equipment and drugs
- interpret scientific findings and their operational impact on prehospital emergency medicine
- specify the legal and ethical responsibilities inherent in the emergency medical services (EMS) profession
- implement competent treatment plans during high-fidelity patient simulations
- generate patient care documentation accurately reflecting all aspects of an emergency response
- employ leadership skills appropriate for the patient condition, resources available on scene, and local EMS system constraints

PMED 140 Pediatric Advanced Life Support Certification

Units: 0.5
Hours: 6 hours LEC; 12 hours LAB
Prerequisite: None.
Enrollment Limitation: Current Provider C Basic Cardiac Life Support card or county-approved equivalent certificate. Current licensure as a paramedic, nurse, physician, or allied health professional, or current enrollment in the last semester of an allied health program.
Catalog Date: June 1, 2020

This course provides education modules specific to pediatric emergencies for health care professionals. Certification in Pediatric Advanced Life Support (PALS) is granted to students who successfully complete the course.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- assess ill and injured pediatric patients using medically acceptable standards
- evaluate and interpret pathophysiological findings in pediatric patients
- assess and identify patient criticality, as well as provide life-saving interventions according to PALS standards
- implement communication skills with patients, family, and allied health professionals
- complete the examination process required by PALS

PMED 142 Advanced Cardiac Life Support Certification

Units: 0.5
Hours: 6 hours LEC; 12 hours LAB
Prerequisite: None.
Enrollment Limitation: Current Provider C Basic Cardiac Life Support Card, equivalent licensure as a paramedic, nurse, physician, or allied health professional, or current enrollment in an allied health program.
Catalog Date: June 1, 2020

This course provides education modules specific to adult cardiac emergencies for health care professionals. Certification in Advanced Cardiac Life Support (ACLS) is granted to students who successfully complete the course.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- assess ill and injured adult cardiac patients using the latest medically acceptable standards
- evaluate and interpret pathophysiological findings in adult cardiac patients
- assess and identify patient criticality and provide life-saving interventions according to the most recent ACLS standards
- implement communication skills with patients, family, and allied health professionals
- complete the examination process required by ACLS

PMED 160 Introductory Wilderness Medicine

Units: 2
Hours: 27 hours LEC; 27 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

This course provides the didactic material and related skills necessary to establish a foundation of medical care in the wilderness setting. Topics include anatomy and physiology, care of traumatic injuries, patient assessment, environmental injuries, medical emergencies, common simple wilderness medical problems, basic wilderness survival for the initial responder, improvised bleeding control in the field setting, and selecting and caring for wilderness medical equipment and supplies. This course emphasizes improvised care options and long-term care in field settings.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify common wilderness medical problems
- assess patients in extreme environmental conditions, such as severe heat, cold, altitude, and rugged terrain
- identify resources for further learning in wilderness medicine
- demonstrate proper use of personal protective equipment
- correlate signs and symptoms of common diseases to patients and their primary complaint
- report assessment findings, diagnosis, and treatment plans to appropriate health professionals
PMED 161 Advanced Wilderness Medicine

This course provides the didactic material and related skills necessary to establish an advanced level of medical care in the wilderness setting. Topics include anatomy and physiology, improvised airway control, principles of musculoskeletal care, synthesis of wilderness medicine and urban care, and common simple wilderness medical problems. Additionally, basic wilderness survival for the wilderness responder, and selecting and caring for wilderness medical equipment and supplies are covered. This course emphasizes improvised care options and long-term care in remote field settings.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify common wilderness medical problems
- assess patients in extreme environmental conditions, such as severe heat, cold, altitude, and rugged terrain
- demonstrate use of personal protective equipment from biohazards and other objective hazards of wilderness medicine, such as extremes of heat and cold, lack of water, altitude, and other hazards
- demonstrate improvised treatments for common wilderness medical injuries, using minimal equipment
- identify and refine a lightweight survival and medical kit for specific bioregions, such as desert, snow, water, or high altitude
- differentiate between patients with mild, moderate, or severe disease in the wilderness setting
- identify resources for further learning in wilderness medicine

PMED 165 EMS Search and Technical Rescue

This course provides a foundation in several technical rescue disciplines. Practical applications of water rescue, low angle and high angle rescue, and urban search and rescue are covered. Additionally, basic survival skills in rescue environments for the Emergency Medical Technician-Paramedic (EMT-P), and selecting and caring for rescue equipment and supplies are covered. This course emphasizes scenario-based learning in safely assessing, managing, and pre-planning for the technical rescue environment.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify common environments and situations
- assess safety hazards in the covered rescue environment
- identify the rescue gear necessary for a given rescue environment
- improvise rescue gear and techniques as necessary
- complete a mock rescue

PMED 295 Independent Studies in Paramedic

Course description:
PMED 295 is an opportunity for the student to extend classroom experience in this subject area, while working independently of a formal classroom situation. PMED 295 is an extension of work offered in a specific class in the college catalog. To be eligible for PMED 295, students must have completed the basic regular catalog course at American River College. They must also discuss the study project with a professor in this subject area and secure prior approval. Only one independent study for each catalog course will be allowed.

Student Learning Outcomes

1 - 3

Units:
None.

Prerequisite:
None.

Catalog Date: June 1, 2020
PMED 298 Work Experience in Paramedic

This course provides students with opportunities to develop marketable skills in preparation for employment or advancement within the paramedic field. It is designed for students interested in work experience and/or internships in associate degree level or certificate occupational programs. Course content includes understanding the application of education to the workforce, completion of Title 5 required forms which document the student's progress and hours spent at the work site, and developing workplace skills and competencies.

During the semester, the student is required to complete 75 hours of related paid work experience, or 60 hours of related unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. All students are required to attend the first class meeting, a mid-semester meeting, and a final meeting. Additionally, students who have not already successfully completed a Work Experience course will be required to attend weekly orientations while returning participants may meet individually with the instructor as needed. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate mastery of specific job skills in the paramedic field related to an associate degree or certificate occupational program level career as written in the minimum three (3) learning objectives created by the student and his/her employer or work site supervisor at the start of the course.
- make effective decisions, use workforce information, and manage his/her personal career plans.
- behave professionally, ethically, and legally at work, consistent with applicable laws, regulations, and organizational norms.
- behave responsibly at work, exhibiting initiative and self-management in situations where it is needed.
- develop effective leadership skills at work, with consideration to group dynamics, team and individual decision making, and workforce diversity.
- communicate in oral, written, and other formats, as needed, in a variety of contexts at work.
- locate, organize, evaluate, and reference information at work.
- demonstrate originality and inventiveness at work by combining ideas or information in new ways, making connections between seemingly unrelated ideas, and reshaping goals in ways that reveal new possibilities using critical and creative thinking skills such as logical reasoning, analytical thinking, and problem-solving.

PMED 1000 Emergency Medical Technician: Refresher

This course provides continuing education and skills verification modules for current Emergency Medical Technicians (EMTs) certified at the Basic Life Support (BLS) level. It satisfies most of the refresher requirements of local, state, and national Emergency Medical Services (EMS) certifying organizations. EMS-related topics include airway management and ventilation, cardiac care and resuscitation, patient assessment, injury management, legal and ethical issues, vital signs monitoring, and assisting with medication administration. This course does not provide preparation for the National Registry of Emergency Medical Technicians (NREMT) entry or recertification exam. Completion of this course provides currently certified EMTs, wanting to recertify with the NREMT, with the 24 hours of required course content as well as the verification of required skills competency.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- assess ill and injured patients using standards promulgated by regional and national certifying organizations.
- effectively obtain, evaluate, and interpret physiological data and assessment findings in the out-of-hospital setting.
- assess and identify the level of acuity of a patient's condition.
• provide interventions that preserve life and reduce suffering that are within the EMT current scope of practice.
• establish and maintain effective communication with patients, family members, rescuers and other health care professionals.
• recognize the indications and demonstrate the techniques for administering medications that are within the EMT scope of practice.
• demonstrate minimum competency in Professional Rescuer level CPR, patient assessment/management and ventilator management skills, and knowledge.
• demonstrate minimum competency in cardiac arrest management, hemorrhage control, and splinting procedures.
• demonstrate minimum competency in spinal immobilization, obstetrics and gynecological emergencies, radio communications, and report writing and documentation.
Philosophy is the critical, rational examination of fundamental questions that people have pondered for more than 2500 years. These include, but are not limited to, questions such as: What is reality? What is the nature of the self? Does God exist? What is good and just? What ought I to do? Philosophy courses are directed towards an understanding of these and other fundamental questions, often through reading and studying philosophers who have addressed these questions in the past, with appreciation of the historical and cultural contexts in which these questions are raised and answered. Philosophy courses help students to develop good logical and critical reasoning skills, expose hidden preconceptions, encourage open debate and independent thought, and provide opportunity to apply valuable insights gained to contemporary life.

Division Dean   Diana Hicks
Department Chairs   Dennis Holden
(916) 484-8653

Associate Degree for Transfer

A.A.-T. in Philosophy

This program provides lower-division preparation for students interested in transferring into baccalaureate philosophy programs.

The Associate in Arts degree in Philosophy for Transfer provides students with a major that fulfills the general requirements of the California State University for transfer. Students with this degree will receive priority admission with junior status to the California State University system. The Associate in Arts degree in Philosophy for Transfer (AA-T) may be obtained by the completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program outlined below (earning a C or better in these courses) and (b) either the Inter-segmental General Education Transfer Curriculum (IGETC) or the California State University General Education Breadth Requirements.

Catalog Date: June 1, 2020

Degree Requirements

<table>
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<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>PHIL 300</td>
<td>Introduction to Philosophy</td>
<td>3</td>
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<tr>
<td>PHIL 310</td>
<td>Introduction to Ethics</td>
<td>3</td>
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<tr>
<td>PHIL 320</td>
<td>Logic and Critical Reasoning</td>
<td>3</td>
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<tr>
<td>PHIL 324</td>
<td>Symbolic Logic (3)</td>
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<tr>
<td>or MATH 320</td>
<td>Symbolic Logic (3)</td>
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<td>A minimum of 6 units from the following:</td>
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<tr>
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<td>Select 3 units from Philosophy Electives and 3 units from either Philosophy Electives or Humanities Electives.</td>
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<tr>
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<td>Philosophy Electives</td>
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<tr>
<td>PHIL 315</td>
<td>Contemporary Moral Issues (3)</td>
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<td>PHIL 330</td>
<td>History of Classical Philosophy (3)</td>
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<td>PHIL 331</td>
<td>History of Modern Philosophy (3)</td>
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<td>PHIL 350</td>
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<td>PHIL 360</td>
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<td>Humanities Electives</td>
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<tr>
<td>ENGLT 310</td>
<td>English Literature I (3)</td>
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Catalog Date: June 1, 2020
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<td>HUM 302</td>
<td>Global Humanities: Atheism in Creativity, Thought, and Inspiration Traditions (3)</td>
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<td>HUM 320</td>
<td>Asian Humanities (3)</td>
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<td>HUM 326</td>
<td>Middle Eastern Humanities (3)</td>
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<td>HUM 330</td>
<td>Humanities of the Americas (3)</td>
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<tr>
<td>HUM 355</td>
<td>Introduction to World Religions (3)</td>
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<tr>
<td>HUM 360</td>
<td>Introduction to the Old Testament (The Hebrew Bible) (3)</td>
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<tr>
<td>HUM 365</td>
<td>Introduction to the New Testament (3)</td>
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<td><strong>Total Units:</strong></td>
<td><strong>18</strong></td>
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The Associate in Arts in Philosophy for Transfer (AA-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- identify and express arguments found in philosophical and non-philosophical sources.
- analyze arguments from philosophical and non-philosophical sources into their constituent premises and conclusions.
- evaluate the cogency of arguments from philosophical and non-philosophical sources with respect to structure and content.
- critically discuss and evaluate important concepts and theories in ethics, metaphysics, and epistemology.
- develop and defend personal views concerning important philosophical issues.

**Career Information**

Because of continuing social and technological changes, today's graduates are more likely to change their jobs/careers than ever before. Job skills learned today for a
Philosophy (PHIL)

PHIL 300 Introduction to Philosophy

This course examines some of the perennial questions that have been addressed in the history of philosophy. Some of these include: Do we have free will? Is there a God? What is knowledge? What is the fundamental nature of reality? What makes actions right or wrong? This examination includes a critical analysis of fundamental concepts involved in the issues addressed by these questions, as well as an evaluation of reasoning used to defend various answers to them.

Upon completion of this course, the student will be able to:

- critically evaluate views concerning free will, the existence of God, the fundamental nature of reality, or other ideas addressed in the course.
- compare and contrast differing theories concerning free will, the existence of God, the fundamental nature of reality, or other ideas addressed in the course.
- analyze and evaluate arguments from primary sources concerning free will, the existence of God, the fundamental nature of reality, or other ideas addressed in the course.
- assess presuppositions underlying various views concerning free will, the existence of God, the fundamental nature of reality, or other ideas addressed in the course.
- formulate reasons to justify one’s beliefs concerning free will, the existence of God, the fundamental nature of reality, or other ideas addressed in the course.

PHIL 310 Introduction to Ethics

This course is an introduction to ethics and moral philosophy. It includes a survey of various normative ethical theories including Aristotle’s Virtue Ethics, Utilitarianism, and Kant’s Deontological Ethics. It may also cover various meta-ethical issues such as ethical relativism vs. ethical objectivism, as well as questions of knowledge and justification of moral claims. It may also include the application of normative ethical theories to contemporary moral issues.

Upon completion of this course, the student will be able to:

- define and critically analyze arguments from primary sources in defense of various normative ethical theories such as Aristotle’s Virtue Ethics, Kant’s Deontological Ethics, and Utilitarianism.
- compare and contrast differing ethical theories concerning good, evil, right, and wrong.
- identify and analyze the reasoning underlying moral arguments and their components.
- determine and critically assess presuppositions underlying various views about moral right and wrong.
PHIL 315 Contemporary Moral Issues

This is an investigation into some of the moral issues our society presently faces. These issues may include abortion, euthanasia, genetic engineering, individual liberty and the collective good, sexuality/gender and society, war and terrorism, capital punishment, hunger/poverty and moral obligation, discrimination, and affirmative action.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- critically evaluate views concerning abortion, euthanasia, capital punishment, or other topics addressed in the course.
- compare and contrast differing theories concerning abortion, euthanasia, capital punishment, or other topics addressed in the course.
- analyze and evaluate arguments from primary sources concerning abortion, euthanasia, capital punishment, or other topics addressed in the course.
- assess presuppositions underlying various views concerning abortion, euthanasia, capital punishment, or other topics addressed in the course.
- formulate reasons to justify one’s beliefs concerning abortion, euthanasia, capital punishment, or other topics addressed in the course.

PHIL 320 Logic and Critical Reasoning

This course introduces basic principles of good reasoning. It focuses on recognizing arguments and identifying their premises and conclusions. It examines the distinction between inductive and deductive standards of evaluation and includes an overview of types of inductive reasoning, deductive argument patterns, use and misuse of language, and fallacious reasoning. Practical application to everyday life is emphasized.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify arguments in everyday contexts.
- analyze arguments into their constituent premises and conclusions.
- distinguish between good and poor reasoning.
- identify and explain a minimum of six common fallacies in reasoning.
- explain the nature of deductive reasoning, including the difference between deductively valid and invalid arguments.
- explain common types of inductive reasoning, including the difference between inductively strong and weak arguments.
- identify various ways the use of language affects reasoning.

PHIL 324 Symbolic Logic

Same As: MATH 320

Units: 3

Hours: 54 hours LEC

Prerequisite: MATH 120, 125, 129, or 133 with a grade of "C" or better, or placement through the assessment process.

Transferable: CSU; UC

General Education: AA/AS Area II(b)

C-ID: C-ID PHIL 210
This course is an introduction to symbolic logic. It includes a study of the logic of sentences (propositional logic) and the logic of classes and relations (predicate logic), together with an introduction to the nature of deductive systems. This course is not open to students who have completed MATH 320.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- represent statements of English in well-formed sentences of predicate logic.
- prove the validity of statements and arguments in predicate logic using formal proof techniques.
- apply truth table or truth tree methods to determine semantic properties such as invalidity and consistency.
- construct interpretations that satisfy statements and sets of statements.
- distinguish classical first order logical systems from other logical systems.

PHIL 330 History of Classical Philosophy

Units: 3  
Hours: 54 hours LEC  
Prerequisite: None.  
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.  
Transferable: CSU; UC  
General Education: AA/AS Area I; CSU Area C2; IGETC Area 3B  
C-ID: C-ID PHIL 130  
Catalog Date: June 1, 2020

This course is a survey of classical Greek philosophy. Through a careful examination of primary sources, it begins with an overview of Pre-Socratic thought and focuses primarily on the philosophical ideas of Socrates, Plato, and Aristotle. An overview of Hellenistic and Roman philosophy may be included.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- compare and contrast differing views expressed by ancient Greek philosophers—especially Plato and Aristotle—concerning the fundamental nature of reality, knowledge, and ethics.
- critically evaluate views expressed by ancient Greek philosophers concerning the fundamental nature of reality, knowledge, and ethics.
- analyze and evaluate arguments from ancient Greek primary sources concerning the fundamental nature of reality, knowledge, and ethics.
- formulate reasons to justify the student's beliefs about the theories expressed by Plato and Aristotle concerning the fundamental nature of reality, knowledge, and ethics.

PHIL 331 History of Modern Philosophy

Units: 3  
Hours: 54 hours LEC  
Prerequisite: None.  
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.  
Transferable: CSU; UC  
General Education: AA/AS Area I; CSU Area C2; IGETC Area 3B  
C-ID: C-ID PHIL 140  
Catalog Date: June 1, 2020

This course is an overview of important themes in the history of Western Philosophical thought from the Early Modern era to the turn of the nineteenth century. These themes may include the fundamental nature of reality, knowledge, values, society, God, and human nature.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- critically evaluate views concerning the fundamental nature of reality, knowledge, mind, ethics, language and meaning, logic and mathematics, or other ideas addressed in the course.
- compare and contrast differing theories concerning the fundamental nature of reality, knowledge, mind, ethics, language and meaning, logic and mathematics, or
other ideas addressed in the course.

- analyze and evaluate arguments from primary sources concerning the fundamental nature of reality, knowledge, mind, ethics, language and meaning, logic and mathematics, or other ideas addressed in the course.
- assess presuppositions underlying various views concerning the fundamental nature of reality, knowledge, mind, ethics, language and meaning, logic and mathematics, or other ideas addressed in the course.
- formulate reasons to justify one’s beliefs concerning the fundamental nature of reality, knowledge, mind, ethics, language and meaning, logic and mathematics, or other ideas addressed in the course.

PHIL 350 Philosophy of Religion

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC
General Education: AA/AS Area I; CSU Area C2; IGETC Area 3B
Catalog Date: June 1, 2020

This course is an introduction to a philosophical examination of religion. This examination typically includes an analysis of basic religious concepts such as God, the afterlife, the soul, faith, karma, religious experience, good, and evil. The rationality of religious belief and the relation of religion to science may also be covered.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- critically evaluate views concerning the existence of God, the afterlife, religious faith, or other ideas addressed in the course.
- compare and contrast differing theories concerning the existence of God, the afterlife, religious faith, or other ideas addressed in the course.
- analyze and evaluate arguments from primary sources concerning the existence of God, the afterlife, religious faith, or other ideas addressed in the course.
- assess presuppositions underlying various views concerning the existence of God, the afterlife, religious faith, or other ideas addressed in the course.
- formulate reasons to justify one’s beliefs concerning the existence of God, the afterlife, religious faith, or other ideas addressed in the course.

PHIL 360 Social/Political Philosophy

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC
General Education: AA/AS Area I; CSU Area C2; CSU Area D7; IGETC Area 4G
Catalog Date: June 1, 2020

This course is a historical and topical survey of significant themes of social/political philosophy from Plato to the present. Topics may include freedom, government, justice, law, rights, punishment, war, authority, and the state.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- critically examine personal views concerning justice, the nature of the state, or other ideas central to social/political thought.
- compare and contrast differing theories of freedom, justice, or other ideas central to social/political thought.
- distinguish between subjective certainty of a belief and justification for that belief.
- determine presuppositions underlying various views concerning society and politics.
- analyze and evaluate arguments from primary sources concerning social/political issues.

PHIL 495 Independent Studies in Philosophy
Units: 1 - 3
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020
Associate Degrees for Transfer

A.S.-T. in Physics

The Associate in Science in Physics for Transfer provides students with a major that fulfills the general requirements of the California State University for transfer. Students with this degree will receive priority admission with junior status to the California State University system.

The Associate in Science in Physics for Transfer (A.S.-T.) may be obtained by the completion of 60 transferable, semester units with a minimum of a 2.0 GPA, including (a) the major or area of emphasis described in the Required Program outlined below (earning a C or better in these courses), and (b) the Intersegmental General Education Transfer Curriculum (IGETC).

Students interested in transferring to a CSU campus to pursue a bachelor’s degree in physics should meet with a counselor to confirm the courses required for lower division preparation in the major. Although additional preparatory courses are not required for this degree, students will be better prepared if they complete differential equations, linear algebra, general chemistry, and at least one computer programming course prior to transferring.

Catalog Date: June 1, 2020

Degree Requirements

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<td>Total Units:</td>
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The Associate in Science in Physics for Transfer (AS-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) the Intersegmental General Education Transfer Curriculum (IGETC).

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- test the validity of a hypothesis using the scientific method.
- identify the basic physical principles that apply in a particular situation.
- solve problems requiring the application of physics and mathematics up through calculus.
- interpret the results of physics calculations.
- define common physics terms and physical laws.
compose a well-organized and complete lab report.

Career Information

This degree is designed to facilitate students’ successful transfer to four-year programs that prepare them for advanced study in physics and other related fields, including biophysics, physical chemistry, geophysics, and astrophysics. Physicists with undergraduate and graduate degrees have a broad range of employment opportunities, including high technology, computer programming, research, and teaching.

Associate Degrees

A.S. in General Science

This program provides a broad study in the fields of biological and physical sciences in preparation for transfer to a four-year program and continuation of studies in upper division science courses.

Catalog Date: June 1, 2020

Degree Requirements

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<tr>
<th>COURSE CODE</th>
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<td>A minimum of 18 units from the following:</td>
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**Physical Science Courses**

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<td>ASTR 310</td>
<td>The Solar System (3)</td>
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<td>Stars, Galaxies, and Cosmology (3)</td>
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<td>ASTR 400</td>
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<td>Honors Astronomy: Stars, Galaxies, and Cosmology (4)</td>
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<td>Physical Geography: Exploring Earth's Environmental Systems (3)</td>
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<td>GEOG 308</td>
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**Biological Science Courses**

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<td>NATR 305</td>
<td>Fisheries Ecology and Management (4)</td>
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<td>NATR 306</td>
<td>Introduction to Rangeland Ecology and Management (3)</td>
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<td>Principles of Sustainability (4)</td>
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<td>Field Studies: Birds and Plants of the High Sierra (1.5)</td>
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<td>NATR 330</td>
<td>Native Trees and Shrubs of California (4)</td>
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<td>NATR 332</td>
<td>Wildflowers of California (3)</td>
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<td>NATR 346</td>
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<tr>
<td>NATR 499</td>
<td>Experimental Offering in Natural Resources (0.5 - 4)</td>
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</tbody>
</table>
The General Science Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- evaluate new and accepted ideas about the natural universe using scientific methods.
- analyze a wide variety of natural phenomena using basic definitions and fundamental theories of biological or physical sciences.
- apply appropriate quantitative and qualitative methods to interpret and analyze pertinent data.
- outline the basic concepts and fundamental theories of a natural science.
- articulate orally and/or in writing the importance of continuous examination and modification of accepted ideas as a fundamental element in the progress of science.
- discuss ethical components of scientific decision making and apply personal and social values within the process of decision making in scientific endeavors.

A.S. in Physical Science/Mathematics

This degree provides a broad study in the fields of physical science and mathematics. It is a good foundation for transfer to a four-year program in science, technology, engineering, or mathematics (STEM).

Degree Requirements

<table>
<thead>
<tr>
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<tr>
<td>ASTR 310</td>
<td>The Solar System (3)</td>
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<td>ASTR 320</td>
<td>Stars, Galaxies, and Cosmology (3)</td>
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<td>ASTR 330</td>
<td>Introduction to Astrobiology (3)</td>
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<td>ASTR 400</td>
<td>Astronomy Laboratory (1)</td>
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<td>ASTR 481</td>
<td>Honors Astronomy: Stars, Galaxies, and Cosmology (4)</td>
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<td>ASTR 499</td>
<td>Experimental Offering in Astronomy (0.5 - 4)</td>
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<td>CHEM 305</td>
<td>Introduction to Chemistry (5)</td>
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<tr>
<td>CHEM 306</td>
<td>Introduction to Organic and Biological Chemistry (5)</td>
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<td>CHEM 309</td>
<td>Integrated General, Organic, and Biological Chemistry (5)</td>
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<td>CHEM 310</td>
<td>Chemical Calculations (4)</td>
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A minimum of 18 units from the following: 18
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<td>CHEM 421</td>
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<td>GEOG 300</td>
<td>Physical Geography: Exploring Earth's Environmental Systems (3)</td>
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<td>GEOG 305</td>
<td>Global Climate Change (3)</td>
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<td>GEOG 306</td>
<td>Weather and Climate (3)</td>
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<td>GEOG 307</td>
<td>Environmental Hazards and Natural Disasters (3)</td>
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<td>GEOG 308</td>
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<td>Field Studies in Geography: Mountain Landscapes (1 - 4)</td>
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<td>GEOG 392</td>
<td>Field Studies in Geography: Coastal Landscapes (1 - 4)</td>
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<td>GEOG 393</td>
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<td>GEOG 394</td>
<td>Field Studies in Geography: Volcanic Landscapes (1 - 4)</td>
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<td>Earth Science (3)</td>
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<td>GEOL 310</td>
<td>Historical Geology (3)</td>
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<td>GEOL 320</td>
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<td>GEOL 325</td>
<td>Environmental Hazards and Natural Disasters (3)</td>
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<td>Introduction to Oceanography (3)</td>
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<td>Introduction to Oceanography Lab (1)</td>
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<td>GEOL 345</td>
<td>Geology of California (3)</td>
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<td>GEOL 390</td>
<td>Field Studies in Geology (1 - 4)</td>
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<td>MATH 300</td>
<td>Introduction to Mathematical Ideas (3)</td>
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<td>MATH 310</td>
<td>Mathematical Discovery (3)</td>
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<tr>
<td>MATH 311</td>
<td>Mathematical Concepts for Elementary School Teachers - Number Systems (3)</td>
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<td>Symbolic Logic (3)</td>
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<td>MATH 325</td>
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<td>Calculus for Business and Economics (3)</td>
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<td>Modern Business Mathematics (3)</td>
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<td>College Algebra for Calculus (4)</td>
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<td>MATH 410</td>
<td>Introduction to Linear Algebra (3)</td>
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<td>MATH 420</td>
<td>Differential Equations (4)</td>
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<td>PHYS 310</td>
<td>Conceptual Physics (3)</td>
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<td>General Physics (4)</td>
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<td>PHYS 360</td>
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<td>PHYS 410</td>
<td>Mechanics of Solids and Fluids (5)</td>
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<td>PHYS 421</td>
<td>Electricity and Magnetism (4)</td>
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<td>PHYS 431</td>
<td>Heat, Waves, Light and Modern Physics (4)</td>
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<td>PHYS 495</td>
<td>Independent Studies in Physics (1 - 3)</td>
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<td>Experimental Offering in Physics (0.5 - 4)</td>
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<td>STAT 300</td>
<td>Introduction to Probability and Statistics (4)</td>
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<td>STAT 305</td>
<td>Statway, Part II (6)</td>
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<td>STAT 480</td>
<td>Introduction to Probability and Statistics - Honors (4)</td>
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<td>STAT 499</td>
<td>Experimental Offering in Statistics (0.5 - 4)</td>
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</table>

Total Units: 18

The Physical Science/Mathematics Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- recognize and correctly use the terminology of math, statistics, and/or science.
- analyze and interpret data, charts, and graphs using quantitative and qualitative methods.
Physics (PHYS)

PHYS 310 Conceptual Physics

This course covers selected topics in motion, gravity, heat, sound, electricity, magnetism, light, and atomic and nuclear physics. It is designed for non-science majors and students who have not taken a course in physics.

Upon completion of this course, the student will be able to:

- test the validity of a hypothesis using the scientific method.
- identify the basic physical principles that apply in a particular situation (such as Newton’s Laws, energy conservation, or momentum conservation).
- analyze conceptual problems that require the application of basic physics concepts.
- solve simple mathematical problems that require the application of basic physics concepts.
- define common physics terms and physical laws.
- evaluate the pros and cons of topics such as nuclear power, release of greenhouse gases, and humanity’s impact on the environment.

PHYS 311 Basic Physics

This survey course emphasizes problem solving in physics. Topics include motion in one and two dimensions, forces, energy, and momentum. It is designed for science majors who plan to continue with PHYS 350 or 410.

Upon completion of this course, the student will be able to:

- identify basic physical principles that apply in a particular situation (such as Newton’s laws, energy conservation, or momentum conservation).
- evaluate conceptual problems that require the application of basic physics.
- solve problems that require the application of basic physics and mathematics.
- interpret the results of physics calculations.
- define common physics terms and physical laws.

PHYS 312 Conceptual Physics Laboratory

- recognize and construct valid arguments using deductive and inductive reasoning.
- evaluate new and accepted ideas about the natural universe using testable methodology.
This laboratory course provides hands-on observation activities and interpretation of data in a variety of experimental situations. Topics include motion, sound, light, heat, electricity, and magnetism.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- collect, analyze, and present experimental data.
- tabulate, graph, and interpret various experimental measurements and calculated results.
- apply dimensions and units correctly for various physical quantities.
- use instruments such as a protractor, mass balance, timer, ammeter, and voltmeter.
- write a well organized and complete lab report.

PHYS 350 General Physics

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: MATH 373 with a grade of "C" or better
Advisory: PHYS 311; and eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC (UC credit limitation: PHYS 350, 360 & 410, 421, 431 combined: maximum credit, one series)
General Education: AA/AS Area IV; CSU Area B1; CSU Area B3; IGETC Area 5A; IGETC Area 5C
C-ID: C-ID PHYS 105; Part of C-ID PHYS 100S
Catalog Date: June 1, 2020

This trigonometry-based physics course covers the mechanics of particles, rigid bodies, and fluids. It also covers mechanical waves, sound, heat, and thermodynamics. The PHYS 350/360 series is designed for biological science students, including those in pre-medical, pre-dental, agricultural, and forestry programs.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- test the validity of a hypothesis using the scientific method.
- identify the basic physical principles that apply in a particular situation (such as Newton’s laws, energy conservation, or momentum conservation).
- analyze conceptual problems that require the application of physics.
- solve problems that require the application of physics and mathematics up through trigonometry.
- interpret the results of physics calculations.
- define common physics terms and physical laws.
- compose a well-organized and complete lab report.

PHYS 360 General Physics

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: PHYS 350 with a grade of "C" or better
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ELSW 340.
Transferable: CSU; UC (UC credit limitation: PHYS 350, 360 & 410, 421, 431 combined: maximum credit, one series)
General Education: CSU Area B1; CSU Area B3; IGETC Area 5A; IGETC Area 5C
C-ID: C-ID PHYS 110; Part of C-ID PHYS 100S
Catalog Date: June 1, 2020
This trigonometry-based physics course covers electricity, magnetism, basic electric circuit theory, optics, wave behavior, and modern physics. The PHYS 350/360 series is designed for biological science students, including those in pre-medical, pre-dental, agricultural, and forestry programs.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- test the validity of a hypothesis using the scientific method.
- identify the basic physical principles that apply in a particular situation (such as Coulomb’s law, Ohm’s law, or charge conservation).
- analyze conceptual problems that require the application of physics.
- solve problems that require the application of physics and mathematics up through trigonometry.
- interpret the results of physics calculations.
- define common physics terms and physical laws.
- compose a well-organized and complete lab report.

PHYS 410 Mechanics of Solids and Fluids

Units: 5
Hours: 72 hours LEC; 54 hours LAB
Prerequisite: MATH 400 with a grade of "C" or better
Corequisite: MATH 401
Advisory: PHYS 311; and eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ELSLW 340.
Transferable: CSU; UC (UC credit limitation: PHYS 350, 360 & 410, 421, 431 combined: maximum credit, one series)
General Education: AA/AS Area IV; CSU Area B1; CSU Area B3; IGETC Area 5A; IGETC Area 5C
C-ID: C-ID PHYS 205; Part of C-ID PHYS 200S
Catalog Date: June 1, 2020

This calculus-based physics course covers the mechanics of particles, rigid bodies, and fluids. The PHYS 410, 421, 431 sequence is required for majors in physics, chemistry, or engineering.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- test the validity of a hypothesis using the scientific method.
- identify the basic physical principles that apply in a particular situation (such as Newton’s laws, energy conservation and momentum conservation).
- evaluate conceptual problems requiring the application of mechanics.
- solve problems requiring the application of physics and mathematics up through calculus.
- interpret the results of physics calculations.
- define common physics terms and physical laws.
- compose a well-organized and complete lab report.

PHYS 421 Electricity and Magnetism

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: MATH 401 and PHYS 410 with grades of "C" or better
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ELSLW 340.
Transferable: CSU; UC (UC credit limitation: PHYS 350, 360 & 410, 421, 431 combined: maximum credit, one series)
C-ID: C-ID PHYS 210; Part of C-ID PHYS 200S
Catalog Date: June 1, 2020

This calculus-based physics course is an in-depth treatment of electricity and magnetism. It involves problem solving with an emphasis on physics problems that require integral calculus.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- test the validity of a hypothesis using the scientific method.
- identify the basic physical principles that apply in a particular situation (such as Coulomb's law, Ohm's law, and charge conservation).
- evaluate conceptual problems requiring the application of electricity and magnetism.
- solve problems requiring the application of physics and mathematics up through calculus.
- interpret the results of physics calculations.
- define basic physics terms and physical laws.
- compose a well-organized and complete lab report.

PHYS 431 Heat, Waves, Light and Modern Physics

| Units:  | 4 |
| Hours:  | 54 hours LEC; 54 hours LAB |
| Prerequisite: | MATH 401 and PHYS 410 with grades of "C" or better |
| Advisory: | Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ELSW 340. |
| Transferable: | CSU; UC (UC credit limitation: PHYS 350, 360 & 410, 421, 431 combined: maximum credit, one series) |
| C-ID: | C-ID PHYS 215; Part of C-ID PHYS 200S |
| Catalog Date: | June 1, 2020 |

This calculus-based physics course explores the fundamental theories of thermodynamics, waves, optics, and modern physics. Topics include heat, temperature, kinetic theory, waves, sound, light reflection and refraction, optics, interference, diffraction, atomic theory, and nuclear physics.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- test the validity of a hypothesis using the scientific method.
- identify the basic physical principles that apply in a particular situation (such as interference, diffraction, or energy conservation).
- analyze conceptual problems that require the application of thermodynamics, wave mechanics, optics, and modern physics.
- solve problems requiring the application of physics and mathematics up through calculus.
- interpret the results of physics calculations.
- define common physics terms and physical laws.
- compose a well-organized and complete lab report.

PHYS 495 Independent Studies in Physics

| Units: | 1 - 3 |
| Hours: | 54 - 162 hours LAB |
| Prerequisite: | None. |
| Transferable: | CSU |
| Catalog Date: | June 1, 2020 |

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.
Associate Degrees for Transfer

A.A.-T. in Political Science

The Associate in Arts degree in Political Science for Transfer provides a clearly articulated curricular track for students who wish to transfer to a CSU campus, while also serving the diverse needs of students interested in the breadth and depth of the field of Political Science. Additionally, this degree exposes students to the core principles and practices of the field in order to build a foundation for their future personal, academic, or vocational paths.

The Associate in Arts degree in Political Science for Transfer provides students with a major that fulfills the general requirements of the California State University for transfer. Students with this degree will receive priority admission with junior status to the California State University system. The Associate in Arts degree in Political Science for Transfer (AA-T) may be obtained by the completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program outlined below (earning a C or better in these courses) and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

Catalog Date: June 1, 2020

Degree Requirements

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<th>COURSE CODE</th>
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<td>POLS 301</td>
<td>Introduction to Government: United States (3)</td>
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<td>Introduction to Government: United States - Honors (3)</td>
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<tr>
<td>POLS 310</td>
<td>Introduction to International Relations (3)</td>
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<td>POLS 320</td>
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<tr>
<td>STAT 300</td>
<td>Introduction to Probability and Statistics (4)</td>
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<tr>
<td>IS 310</td>
<td>Peace and Conflict (3)</td>
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<tr>
<td>IS 312</td>
<td>Current Global Development Issues (3)</td>
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</tr>
<tr>
<td>POLS 304</td>
<td>Introduction to Government: California (3)</td>
<td></td>
</tr>
<tr>
<td>POLS 330</td>
<td>Constitutional Rights (3)</td>
<td></td>
</tr>
<tr>
<td>POLS 342</td>
<td>Women and Politics from a Global Perspective (3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Units:</td>
<td>18</td>
</tr>
</tbody>
</table>

The Associate in Arts in Political Science for Transfer (AA-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

Student Learning Outcomes
Upon completion of this program, the student will be able to:

- describe the fundamentals of political science and governance.
- compare and contrast contemporary comparative systems and governance.
- evaluate the relationship between the governing process and public policy.
- examine how citizen and interest group participation influence political systems.
- analyze the role of culture and its influence on politics.
- assess how the design of political institutions and processes affect policy and stability.
- analyze politics and diplomacy in the international system.
- apply basic research methods to political science.
- analyze political and public policy making processes, and relate these to current issues and problems, for evaluating political events and their role in the political system.
- compare and contrast various theories of justice and the just state.
- evaluate various theories of the purpose of government and apply to a critical analysis of current political events.

Career Information

Career opportunities in political science include, but are not limited to, advocate/organizer, campaign worker, diplomat, educator/teacher, events planner, foreign affairs specialist, lawyer, legislative aide (state and federal), lobbyist, political consultant, and public relations specialist.

Associate Degrees

A.A. in Political Science

This degree provides a comprehensive introduction to the field of political science. It stresses the systematic study of politics, political institutions and governmental processes, state and local government, public policy, foreign policy, international relations, comparative politics, and political theory.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>POLS 301</td>
<td>Introduction to Government: United States (3)</td>
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<td>or POLS 481</td>
<td>Introduction to Government: United States - Honors (3)</td>
<td>3</td>
</tr>
<tr>
<td>POLS 302</td>
<td>Comparative Politics</td>
<td>3</td>
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<tr>
<td>POLS 310</td>
<td>Introduction to International Relations (3)</td>
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<tr>
<td>or POLS 480</td>
<td>Introduction to International Relations - Honors (3)</td>
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<td>POLS 320</td>
<td>Introduction to Political Theory</td>
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<td>or HIST 310</td>
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<td>HIST 484</td>
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<tr>
<td>or HIST 311</td>
<td>History of the United States (3)</td>
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<td>IS 301</td>
<td>Introduction to Global Studies (3)</td>
<td></td>
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<tr>
<td>IS 302</td>
<td>Issues in Global Studies (3)</td>
<td></td>
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<tr>
<td>POLS 304</td>
<td>Introduction to Government: California (3)</td>
<td></td>
</tr>
<tr>
<td>POLS 330</td>
<td>Constitutional Rights (3)</td>
<td></td>
</tr>
<tr>
<td>POLS 342</td>
<td>Women and Politics from a Global Perspective (3)</td>
<td></td>
</tr>
</tbody>
</table>
This course analyzes the U.S. government's historic origins, philosophical and theoretical justification, federal structure, and constitutional structures. The course studies the rights and liberties of individuals as articulated in the U.S. Constitution and federal court decisions. Further, it examines and describes the procedural aspects of the U.S. and California political systems including amending the U.S. and California constitutions, holding elections, campaigning, legislating, executing and adjudicating law. The course examines individual and group political behavior in voting, interest groups, political parties, and the media. It provides an analysis of contemporary problems and issues and looks at factors that shape politics and policy-making including diversity, political culture, political socialization, political ideologies, and public opinion. Finally, it also describes California state and local governments’ constitutional base, structures and functions, political process, problems and issues, and federal-state relations. This course is not open to students who have completed POLS 481.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the nature of government and its theoretical foundations and functions.
- relate American political thought, the Constitution, and governing institutions to one another.
identify and explain the structures and functions of the United States and California governments prescribed by their respective constitutions.

compare and contrast the federal, state and local governments with respect to their political foundations, functions, and contemporary problems.

explain the civil liberties and civil rights of individuals as articulated in the United States Constitution and federal court decisions.

identify and evaluate political processes within the United States and California, including the development of political ideologies, voting behavior and other forms of political participation.

evaluate the relationship between the governing process and public policy at both the state and federal level.

discuss and analyze contemporary political issues and operations in the United States and California.

analyze the role of culture, diversity, and ideology in shaping public opinion and public policy in the United States and California.

POLS 302 Comparative Politics

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC
General Education: AA/AS Area V(b); CSU Area D8; IGETC Area 4H
C-ID: C-ID POLS 130
Catalog Date: June 1, 2020

This course is a comparative study and analysis of political systems, ideologies, institutions, policies, cultures, histories, and the development of government within various countries. It emphasizes the cultural and social dimensions of political behavior and attitudes in connection with governmental and political practices typical of particular geographical regions. It also covers an examination of selected developed and lesser developed nation-states from a global perspective.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• compare and contrast different political systems, regimes, and ideologies.
• evaluate patterns of political behavior and policy choice.
• assess how regime type and the design of political institutions and processes affect policy, economic development, and political stability.
• examine how citizen and interest group participation influence political systems.
• analyze the role of political culture and its influence on political institutions and political behavior.
• explain the origins of the modern state and evaluate characteristics necessary for state formation.
• identify different relationships between states and markets.
• construct questions, theories, and hypotheses of political behavior.
• assess the impact of the relationship between states and markets on economic development.

POLS 304 Introduction to Government: California

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340
Transferable: CSU; UC
General Education: AA/AS Area V(a); CSU Area D8; CSU Area F3; IGETC Area 4H
Catalog Date: June 1, 2020

This course covers the essential organization, institutions, and processes of California state and local government. It fulfills the California State University requirement for state and local government, but not the requirement for the U.S. Constitution.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• assess the relationship between citizens and the state of California with emphasis on the impacts of cultural, economic, political, and social diversity
• compare and contrast the structure of California government and the federal model

• describe the various institutions of California government and how each functions in the policymaking process

• analyze the effects of structural differences between the federal model and the structure of California government institutions on the policy making process and political behavior

• examine public financing in California and analyze the interconnectedness of federal, state, and local budgets

• compare and contrast the California and U.S. Constitutions and the effect of these differences on policy making, civil rights and liberties, and political behavior

• analyze public opinion and the political behavior of California citizens

POLS 310 Introduction to International Relations

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGRW 300, OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC
General Education: AA/AS Area V(b); CSU Area D8; IGETC Area 4H
C-ID: C-ID POLS 140
Catalog Date: June 1, 2020

This course introduces the academic field of International Relations. It surveys global issues as they relate to theories of international relations, the nation-state system, the role of state and nonstate actors, globalization, armed conflict and its causes, international law and conflict resolution, and international political economy. It emphasizes comparing global perspectives among developed and developing nations. This course is not open to students who have completed POLS 480.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• explain the field of international relations and methods associated with research in the field.

• compare and contrast different theoretical approaches to the study of international relations and the roles they play in understanding the international system.

• analyze the evolution of the nation-state system and issues associated with nation-state actors in the international system.

• identify the global south, its experiences, challenges, and responses to world powers.

• analyze the causes and trends of armed conflicts, their resolution, and the causes of international conflict in the 20th Century and 21st Century.

• assess the potential for international law and its use for preservation of world peace and stability.

• critique contending international political economic theories in a changing global economy.

• define key terms used in the study of International Relations.

• research topics related to International Relations issues and principles while demonstrating critical thinking.

POLS 320 Introduction to Political Theory

Units: 3
Hours: 54 hours LEC
Prerequisite: Eligible for ENGRD 310 or ENGRD 312 AND ENGRW 300; OR ESLR 340 AND ESLW 340.
Advisory: CSU; UC
Transferable: AA/AS Area V(b); CSU Area D8; IGETC Area 4H
C-ID: C-ID POLS 120
Catalog Date: June 1, 2020

This course is a survey of the ideas that have shaped Western political development, covering important thinkers from the ancient, medieval, and modern periods. Topics include theories of just and unjust societies, social contract theory, justifications for government authority, and the rights of citizens versus the responsibilities of citizenship.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• explain arguments made by political philosophers from different periods of history
assess the historical development of ideas regarding just and unjust regimes, government authority, the ends of civil society and the rights and responsibilities of citizens

critique arguments made by political philosophers from different periods of history

compare and contrast various conceptions of just and unjust regimes, justifications for government authority, the ends of civil society, and the rights and responsibilities of citizens

POLS 330 Constitutional Rights

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC
General Education: AA/AS Area V(b); CSU Area D8
Catalog Date: June 1, 2020

This course is a survey of American constitutional rights and civil liberties. Emphasis is placed on analysis of U.S. Supreme Court decisions and related materials dealing with issues arising under the Bill of Rights and the 14th Amendment to the U.S. Constitution.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• analyze the philosophical bases for constitutional protection of certain human rights

• compare and contrast various approaches to judicial interpretation of the U.S. Constitution

• evaluate the current status of constitutional rights as reflected in United States Supreme Court decisions interpreting the Fourteenth Amendment and U.S. law

• evaluate the current status of constitutional liberties as reflected in U.S. Supreme Court decisions interpreting the Bill of Rights and U.S. law

POLS 342 Women and Politics from a Global Perspective

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC
General Education: AA/AS Area V(b); CSU Area D4; CSU Area D8; IGETC Area 4D; IGETC Area 4H
Catalog Date: June 1, 2020

This course examines the impact of politics on women's lives and women's impact on politics from a global perspective. It explores past and current influences on the political and legal status of women as well as women's participation in the political process throughout the world.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• assess the impact women have had on political institutions, social movements, interest groups, and revolutions.

• evaluate the impact that public policy has on women's lives.

• explain the importance of studying the roles of women in politics globally.

• identify similarities and differences in women's reasons for political organizing, as well as their choice of tactics and methods.

• construct questions, theories, and hypotheses related to the impact of women on politics.

• explain the rationale for state public policies regarding women.

• analyze the current status of women in the developing world.

• compare the different issues that impact women in the developing world to those in the advanced industrial world.
POLS 480 Introduction to International Relations - Honors

Units: 3
Hours: 54 hours LEC
Prerequisite: Placement into ENGWR 480 through the assessment process.
Advisory: ENGWR 300 or 480
Transferable: CSU; UC
General Education: AA/AS Area V(b); CSU Area D; IGETC Area 4
C-ID: C-ID POLS 140
Catalog Date: June 1, 2020

This course examines global issues as they relate to theories of international relations, the nation-state system, the role of state and non-state actors, globalization, armed conflict and its causes, international law and conflict resolution, and international political economy. Emphasis is placed on the comparison of global perspectives among developed and developing nations. This seminar-style honors course approaches the topical material through class discussion which encourages problem-solving techniques focusing on current international relations issues. This course is not open to students who have completed POLS 310.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain the field of international relations and methods associated with research in the field.
- compare and contrast different theoretical approaches to the study of international relations and the roles they play in understanding the international system.
- analyze the evolution of the nation-state system and issues associated with nation-state actors in the international system.
- identify the developing world, its experiences, and challenges.
- analyze the causes and trends of armed conflicts, their resolution, and the causes of international conflict in the 20th Century and 21st Century.
- assess the potential for international law and its use for preservation of world peace and stability.
- critique contending international political economic theories in a changing global economy.
- define and compare key terms used in the study of International Relations.
- analyze complex readings and processes as they apply to contemporary issues in International Relations.
- hypothesize the conditions under which various international relations outcomes are likely to occur and provide theoretical explanations for said outcomes.

POLS 481 Introduction to Government: United States - Honors

Units: 3
Hours: 54 hours LEC
Prerequisite: Placement into ENGWR 300.
Transferable: CSU; UC
General Education: AA/AS Area V(a); CSU Area D8; CSU Area F2; CSU Area F3; IGETC Area 4H
Catalog Date: June 1, 2020

This course analyzes the U.S. government's historic origins, philosophical and theoretical justification, constitutional structures and how these institutions work. It examines and describes the procedural aspects of the political system including holding elections, campaigning, voting, lobbying, legislating, executing and adjudicating law. It provides an analysis of contemporary problems and issues. It also describes California state and local governments' institutional base, structures and functions, political process, problems and issues. Conducted in a seminar format, this course emphasizes participatory classroom styles of learning and the material used is more substantial and sophisticated. In addition, there are extensive research projects on American institutions, political processes, and political behavior designed to challenge and motivate. This course is not open to students who have completed POLS 301.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the nature of government and its theoretical foundations and functions.
- relate American political thought, the Constitution, and governing institutions to one another.
- identify and explain the structures and functions of the United States and California governments prescribed by their respective constitutions.
- compare and contrast the federal, state and local governments with respect to their political foundations, functions, and contemporary problems.
- explain the civil liberties and civil rights of individuals as articulated in the United States Constitution and federal court decisions.
- identify and evaluate political processes within the United States and California, including the development of political ideologies, voting behavior and other forms of political participation.
- evaluate the relationship between the governing process and public policy at both the state and federal level.
- discuss and analyze contemporary political issues and operations in the United States and California.
- analyze the role of culture, diversity, and ideology in shaping public opinion and public policy in the United States and California.
- analyze complex readings and processes as they apply to contemporary issues in American Politics.
- hypothesize the conditions under which various political outcomes are likely to occur and provide theoretical explanations for said outcomes.

POLS 494 Topics in Political Science

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<tr>
<th>Units:</th>
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<tr>
<td>Hours:</td>
<td>9 - 54 hours LEC</td>
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<tr>
<td>Prerequisite:</td>
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<tr>
<td>Advisory:</td>
<td>ENGRD 116, ESLR 320, and ESLW 320, or placement through the assessment process.; ENGWR 102 or 103, and ENGRD 116 with a grade of &quot;C&quot; or better; OR ESLR 320 and ESLW 320 with a grade of &quot;C&quot; or better; OR placement through assessment process.</td>
</tr>
<tr>
<td>Transferable:</td>
<td>CSU</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course provides the opportunity for concentrated study of specialized topics in Political Science. Each offering focuses on a discrete aspect of the Political Science discipline. Refer to class schedule for class topic. Individual field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify and explain key political processes covered in the course
- assess the relationship between individuals, governmental actors, and the topic covered
- evaluate the the relationship between the governing process and the topic covered
- analyze the impact of the topic covered on the political system under analysis

POLS 495 Independent Studies in Political Science

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<th>Units:</th>
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<td>Hours:</td>
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<tr>
<td>Prerequisite:</td>
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<td>Transferable:</td>
<td>CSU</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.
Associate Degrees for Transfer

A.A.-T. in Psychology

The Associate in Arts degree in Psychology for Transfer provides a clearly articulated curricular track for students who wish to transfer to a CSU campus, while also serving the diverse needs of students interested in the breadth and depth of the field of psychology. Additionally, this degree exposes students to the core principles and practices of the field in order to build a foundation for their future personal, academic, or vocational paths.

The degree was designed to facilitate students’ successful transfer to four-year programs that prepare them for advanced study in a variety of graduate programs, as well as a variety of careers such as nursing, sales and marketing, teaching, and law enforcement. Psychologists with graduate degrees and professional certificates have a broad range of employment opportunities including, but not limited to, clinical practice, research, and teaching. Clinical psychologists work in a variety of settings and with a wide range of clients. Research psychologists work in a range of fields associated with the study of human behavior, including biomedical, sports psychology, and cognitive neuroscience.

The Associate in Arts degree in Psychology for Transfer provides students with a major that fulfills the general requirements of the California State University for transfer. Students with this degree will receive priority admission with junior status to the California State University system.

The Associate in Arts degree in Psychology for Transfer (A.A.-T.) may be obtained by the completion of 60 transferable, semester units with a minimum of a 2.0 GPA, including (a) the major or area of emphasis described in the Required Program outlined below (earning a C or better in these courses), and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

Catalog Date: June 1, 2020

Degree Requirements

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<td>or PSYC 480</td>
<td>Honors General Principles (3)</td>
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<td>PSYC 310</td>
<td>Biological Psychology</td>
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<tr>
<td>PSYC 330</td>
<td>Introductory Statistics for the Behavioral Sciences</td>
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<td>PSYC 335</td>
<td>Research Methods in Psychology</td>
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<td>PSYC 320</td>
<td>Social Psychology (3)</td>
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<tr>
<td>PSYC 370</td>
<td>Human Development: A Life Span (3)</td>
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<tr>
<td>PSYC 373</td>
<td>Child Psychology (3)</td>
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<td>PSYC 305</td>
<td>Psychology Applied to Modern Life (3)</td>
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<tr>
<td>PSYC 320</td>
<td>Social Psychology (3)</td>
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<tr>
<td>PSYC 340</td>
<td>Abnormal Behavior (3)</td>
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<td>Honors Abnormal Behavior (3)</td>
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<tr>
<td>PSYC 342</td>
<td>Introduction to Applied Behavior Analysis (3)</td>
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<tr>
<td>PSYC 354</td>
<td>The Psychology of Family Life and Intimate Relationships in a Diverse Society (3)</td>
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<td>PSYC 356</td>
<td>Human Sexuality (3)</td>
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<td>PSYC 370</td>
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<td>PSYC 373</td>
<td>Child Psychology (3)</td>
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<tr>
<td>PSYC 390</td>
<td>Psychology of Death and Dying (3)</td>
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</table>

1Or any course not used previously

The Associate in Arts in Psychology for Transfer (AA-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- differentiate between scientifically derived knowledge versus pseudoscience within the field of psychology.
- compare and contrast the major theoretical perspectives in psychology.
- define basic psychological terminology regarding behavior, cognition, and emotion, and be able to express it clearly when writing or speaking about psychology.
- evaluate psychological data, use the scientific method, draw reasonable conclusions, recognize the ethical implications of these conclusions, and apply these to personal, community, and scientific problems.
- employ psychological principles that lay the foundation for life-long personal growth and development of interpersonal and social skills.
- demonstrate appropriate interpersonal and social skills in interactions with a diverse population using principles of equity, justice, and inclusion.

**Career Information**

The Psychology degree is designed to facilitate students’ successful transfer to four-year programs that prepare them for advanced study in a variety of graduate programs, as well as a variety of careers such as nursing, sales and marketing, teaching, and law enforcement. Psychologists with graduate degrees and professional certificates have a broad range of employment opportunities including, but not limited to, clinical practice, research, and teaching. Clinical psychologists work in a variety of settings and with a wide range of clients. Research psychologists work in a range of fields associated with the study of human behavior, including biomedical, sports psychology, and cognitive neuroscience.

**Associate Degrees**

**A.S. in General Science**

This program provides a broad study in the fields of biological and physical sciences in preparation for transfer to a four-year program and continuation of studies in upper division science courses.

Catalog Date: June 1, 2020

**Degree Requirements**

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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**Physical Science Courses**

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<th>COURSE CODE</th>
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<tbody>
<tr>
<td>ASTR 300</td>
<td>Introduction to Astronomy (3)</td>
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<tr>
<td>ASTR 310</td>
<td>The Solar System (3)</td>
</tr>
<tr>
<td>ASTR 320</td>
<td>Stars, Galaxies, and Cosmology (3)</td>
</tr>
<tr>
<td>ASTR 330</td>
<td>Introduction to Astrobiology (3)</td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
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<tr>
<td>ASTR 400</td>
<td>Astronomy Laboratory (1)</td>
</tr>
<tr>
<td>ASTR 481</td>
<td>Honors Astronomy: Stars, Galaxies, and Cosmology (4)</td>
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<tr>
<td>ASTR 495</td>
<td>Independent Studies in Astronomy (1 - 3)</td>
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<tr>
<td>ASTR 499</td>
<td>Experimental Offering in Astronomy (0.5 - 4)</td>
</tr>
<tr>
<td>CHEM 305</td>
<td>Introduction to Chemistry (5)</td>
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<td>GEOG 306</td>
<td>Weather and Climate (3)</td>
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<td>GEOG 391</td>
<td>Field Studies in Geography: Mountain Landscapes (1 - 4)</td>
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<td>PHYS 410</td>
<td>Mechanics of Solids and Fluids</td>
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<td>Electricity and Magnetism</td>
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<td>PHYS 431</td>
<td>Heat, Waves, Light and Modern Physics</td>
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**Biological Science Courses**

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<td>ANTH 303</td>
<td>Introduction to Forensic Anthropology</td>
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<td>ANTH 370</td>
<td>Primatology</td>
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<td>ANTH 372</td>
<td>Primatology Field Studies</td>
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<td>ANTH 480</td>
<td>Honors Biological Anthropology</td>
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<td>ANTH 495</td>
<td>Independent Studies in Anthropology</td>
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<td>BIOL 300</td>
<td>The Foundations of Biology</td>
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<td>BIOL 301</td>
<td>Evolution</td>
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<td>BIOL 303</td>
<td>Survey of Biology</td>
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<td>BIOL 305</td>
<td>Natural History</td>
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<td>BIOL 310</td>
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<td>BIOL 322</td>
<td>Ethnobotany</td>
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<td>Introduction to Ornithology</td>
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<td>BIOL 342</td>
<td>The New Plagues: New and Ancient Infectious Diseases Threatening World Health</td>
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<td>Introduction to Biology: Biodiversity, Evolution, and Ecology</td>
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<td>BIOL 440</td>
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<td>Biotechnology and Society (2)</td>
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<td>Biotechnology Laboratory Methods - Molecular Techniques (2)</td>
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<td>NATR 300</td>
<td>Introduction to Natural Resource Conservation and Policy (4)</td>
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<td>Introduction to Wildlife Biology (4)</td>
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<td>Energy and Sustainability (3)</td>
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<td>The Forest Environment (3)</td>
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<td>Fisheries Ecology and Management (4)</td>
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<td>Field Studies: Birds and Plants of the High Sierra (1.5)</td>
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Total Units: 18

*must be transfer-level and must include one laboratory course in a physical science and one laboratory course in a biological science

The General Science Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- evaluate new and accepted ideas about the natural universe using scientific methods.
- analyze a wide variety of natural phenomena using basic definitions and fundamental theories of biological or physical sciences.
- apply appropriate quantitative and qualitative methods to interpret and analyze pertinent data.
- outline the basic concepts and fundamental theories of a natural science.
- articulate orally and/or in writing the importance of continuous examination and modification of accepted ideas as a fundamental element in the progress of science.
- discuss ethical components of scientific decision making and apply personal and social values within the process of decision making in scientific endeavors.
A.A. in Psychology

Psychology focuses on the study of behavior of humans and other animals. It involves both pure and practical application of science to matters of everyday life.

Catalog Date: June 1, 2020

Degree Requirements

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<tr>
<th>COURSE CODE</th>
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<tr>
<td>PSYC 300</td>
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<td>Honors General Principles (3)</td>
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<td>PSYC 310</td>
<td>Biological Psychology</td>
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<tr>
<td>PSYC 330</td>
<td>Introductory Statistics for the Behavioral Sciences</td>
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<tr>
<td>PSYC 335</td>
<td>Research Methods in Psychology</td>
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<td>PSYC 320</td>
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<tr>
<td>PSYC 370</td>
<td>Human Development: A Life Span (3)</td>
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<tr>
<td>PSYC 373</td>
<td>Child Psychology (3)</td>
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<td>PSYC 481</td>
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<td>Introduction to Applied Behavior Analysis (3)</td>
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<td>PSYC 354</td>
<td>The Psychology of Family Life and Intimate Relationships in a Diverse Society (3)</td>
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<td>Principles of Interpersonal Relations (3)</td>
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Total Units: 18

1PSY 320, PSYC 370, and PSYC 373 may be used for this requirement if not used previously.

The Psychology Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes
Psychology (PSYC)

PSYC 300 General Principles

Upon completion of this program, the student will be able to:

• differentiate between scientifically derived knowledge versus myth and conjecture within the field of psychology.

• compare and contrast the major theoretical orientations in psychology.

• define basic psychological terminology regarding behavior, cognition, and emotion, and be able to express it clearly when writing or speaking about psychology.

• evaluate psychological data using the scientific method, draw reasonable conclusions, recognize the ethical implications of these conclusions, and apply these to personal, community, and scientific problems.

• employ psychological principles that lay the foundation for life-long personal growth and development of interpersonal and social skills.

• demonstrate appropriate interpersonal and social skills in interactions with a diverse population using principles of equity, justice, and inclusion.

Career Information

The Psychology degree is designed to facilitate students' successful transfer to four-year programs that prepare them for advanced study in a variety of graduate programs. Psychologists with graduate degrees and professional certificates have a broad range of employment opportunities including, but not limited to, clinical practice, research, and teaching. Clinical psychologists work in a variety of settings and with a wide range of clients. Research psychologists work in a range of fields associated with the study of human behavior, including biomedical, sports psychology, and cognitive neuroscience.

Psychology (PSYC)

PSYC 300 General Principles

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC (UC credit limitation: PSYC 300, 305, & 480 combined: maximum credit, one course)
General Education: AA/AS Area V(b); CSU Area D9; IGETC Area 4I
C-ID: C-ID PSY 110
Catalog Date: June 1, 2020

This course provides a broad overview of general principles of psychology. Topics include the scientific method, statistics, biological determinants, as well as general processes of behavior, such as development, learning, language, intelligence, perception, motivation, emotion, personality, and mental health. This course is not open to students who have taken PSYC 480.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• compare the major theoretical perspectives in psychology (e.g., behavioral, biological, cognitive, evolutionary, humanistic, psychodynamic, socio-cultural)

• describe the general subject areas of psychology (e.g., biological, sensation and perception, learning and memory, cognition, consciousness, individual differences, psychometrics, personality, social processes, developmental/lifespan, emotion, motivation)

• describe the applied areas of psychology (e.g., clinical, counseling, forensic, community, organizational, school health)

• differentiate between commonly used research methods in psychology and their applications

• apply psychological concepts, theories, and research findings to personal, interpersonal, occupational, and social/community contexts

• incorporate systematic critical thinking in arriving at conclusions about behavior and mental processes

• describe the roles that culture and diversity play in various aspects of human behavior and mental processes

• distinguish between the ethical implications of psychological research and the responsibility to pursue and use knowledge wisely

PSYC 305 Psychology Applied to Modern Life

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC (UC credit limitation: PSYC 300, 305, & 480 combined: maximum credit, one course)
This course explores human behavior, emphasizing the practical aspects of psychology in everyday life utilizing both psychological theory and research. Topics include personality, stress and coping, self-understanding, communication, interpersonal relationships, gender, sexuality, psychological disorders and their treatment, personality, personal values, and positive psychology.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- compare the major theoretical perspectives in psychology
- analyze the dimensions of effective behavior in an increasingly complex and culturally diverse world
- define and use basic biological, physiological, and psychological terminology to describe adjustment and psychosocial development across the lifespan
- describe specific research methods and the general principles of research ethics for the study of human beings, including the safeguards and the peer-review process in science
- describe the physical and psychological effects of stress
- evaluate the effectiveness of various coping strategies
- distinguish between the most common psychological disorders and evaluate various treatment options
- describe the principles involved in attraction, relationship maintenance, and interpersonal conflict
- apply principles of effective communication in interpersonal relationships
- evaluate the effects of detrimental behaviors (e.g., smoking, drinking, overeating, poor nutrition) on physical and psychological health
- identify key aspects of the self-concept and the determinants of self-esteem
- evaluate the contributions of family, peers, schools, religion, and the media on the formations of sexual attitudes and behavior
- summarize the current research on the origins of sexual orientation and the adjustment of those with non-heterosexual orientations
- evaluate research on gender similarities and differences

PSYC 310 Biological Psychology

Units: 3
Hours: 54 hours LEC
Prerequisite: PSYC 300 or 480 with a grade of "C" or better
Transferable: CSU; UC
General Education: AA/AS Area IV; CSU Area B2; IGETC Area 5B
C-ID: C-ID PSY 150
Catalog Date: June 1, 2020

This course examines the physiological determinants of behavior and cognition. The role of genetics, neural development, neural communication and pathways, brain structures, neurotransmitters, drugs, endocrine system, and sensory systems in typical and atypical behavior and cognition are addressed. Current theories related to the role of neural and biological processes in the etiology and treatment of psychological disorders, motor disorders, and other central nervous pathologies are presented. Ethical standards for human and animal research are discussed.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- relate behavior and mental processes to anatomical, biological, chemical, and genetic mechanisms
- describe processes of neural communication within a neuron and between neurons
- explain the endocrine system and the anatomy and physiology of the nervous system including their relationships to behavior
- evaluate current research findings related to neuroanatomical, biochemical, and genetic mechanisms of disorders
- compare and contrast proposed treatments for psychological disorders, motor disorders, and other central nervous system pathologies
- discriminate between the types of research methodologies which characterize the study of brain-behavior relationships and illustrate the scientific approach
- critique and evaluate current research in biological psychology
explain invasive vs. noninvasive research methods and the general principles of research ethics for the study of animals and human beings, including the research safeguards and the peer-review process in science

describe the brain-behavior relationships associated with motivation, addiction, sex, sleep, stress, learning, and memory

PSYC 311 Biological Psychology Laboratory

Units: 1
Hours: 54 hours LAB
Prerequisite: None.
Corequisite: PSYC 310
Transferable: CSU; UC
General Education: CSU Area B3; IGETC Area 5C
Catalog Date: June 1, 2020

This course involves the applied study of the nervous system focusing on its anatomy, physiology, biochemistry, and impact on behavioral and mental processes. It provides a foundation in the principles of the scientific method and practical experience in its application to the study of biological psychology. Specific topics include anatomy, physiology, and organization of the nervous system, with special emphasis on the brain; anatomy and physiology of the neuron; physiology of nerves and nerve conduction; the biochemistry of the synapse; anatomy and physiology of sensory systems; and psychophysical examination of sensation and perception. It utilizes brain dissection procedures, interactive computer simulations, and lab experiments with data collection and analysis.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the principles of the scientific method.
- plan and conduct basic dissection of neural tissue.
- discriminate the anatomical features of the central and peripheral nervous system, their functions, and connectivity.
- distinguish cortical from subcortical structures and discuss their connectivity.
- differentiate features of basic cellular anatomy.
- compare the primary features of neurons, glia, and synapses at the cellular level.
- compare the cellular structure, electrophysiology, and function of various types of neurons.
- demonstrate proficiency with primary equipment and techniques used to investigate both brain and neuronal structure and function.
- compare the basic processes of sensation and perception for the main sensory systems and the principles of psychophysics.
- conduct basic psychophysical data collection and analysis procedures and interpret results.
- compare various psychobiological research methods in terms of the type of information gained and their areas of application.

PSYC 320 Social Psychology

Units: 3
Hours: 54 hours LEC
Prerequisite: PSYC 300 with a grade of "C" or better
Transferable: CSU; UC
General Education: AA/AS Area V(b); CSU Area D9; IGETC Area 4I
C-ID: C-ID PSY 170
Catalog Date: June 1, 2020

This course analyzes human behavior in relation to the social environment, including the power of the situation, other individuals, and the social group. Topics include aggression, prejudice, attraction, altruism, attitude change, conformity, gender roles, cultural norms, person perception, and social cognition.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze the elements of a scientific approach to understanding human social behavior
- contrast the social influences with the biological or other influences on behavior
- explain the major scientific studies which form the basis for current theories of social psychology
PSYC 330 Introductory Statistics for the Behavioral Sciences

Units: 3
Hours: 54 hours LEC
Prerequisite: MATH 120, MATH 125, MATH 129, or MATH 133 with a grade of "C" or better.
Transferable: CSU; UC (UC credit limitation: STAT 300, 305, and PSYC 330 combined: maximum credit, one course)
General Education: AA/AS Area II(b); CSU Area B4; IGETC Area 2
C-ID: C-ID MATH 110
Catalog Date: June 1, 2020

This course focuses upon the concepts and applications of descriptive and inferential statistics in psychology and other behavioral sciences. Topics include descriptive statistics, probability and sampling distributions, parametric and nonparametric statistical methods, hypothesis testing, statistical inference and power, correlation and regression, chi-square, t-tests, and analysis of variance procedures. Application of both hand computation and statistical software to data in a social science context is emphasized to include the interpretation of the relevance of the statistical findings.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- compare and contrast statistical concepts relevant to research in the behavioral sciences.
- perform the following probability and statistical calculations by hand: sample spaces, factorial notation, counting rules, permutations and combinations, laws of probability, calculating probability of events using elementary, expected value probability principles; mean, median, mode, standard deviation – sample and best estimate, variance, range and interquartile ranges for discrete and continuous distributions; correlation, covariance, and regression analyses to test hypotheses of association; and, t-tests, ANOVAs, and other appropriate statistical analyses (Mann-Whitney U, Kruskal-Wallis H, Wilcoxon Signed-Ranks, and Friedman ANOVA) to test hypotheses of difference.
- calculate probabilities using t-distributions.
- use statistical software such as SPSS, Excel, Minitab or a graphing calculator to perform probability and statistical calculations.
- critique psychological literature that contains statistics.
- formulate a testable hypothesis; analyze data using an appropriate statistical procedure; determine and interpret the statistical significance and p value of results; reflect upon correctness of the hypothesis.
- analyze and appropriately interpret applications using data from various disciplines including business, social sciences, psychology, life sciences, health science, and education.
- examine research reported in the media.

PSYC 335 Research Methods in Psychology

Units: 3
Hours: 54 hours LEC
Prerequisite: PSYC 300 AND PSYC 330 or STAT 300 with a grade of "C" or better.
Advisory: ENGWR 300 or ESLW 340 with a grade of "C" or better.
Transferable: CSU; UC
C-ID: C-ID PSY 200
Catalog Date: June 1, 2020

This course introduces students to the various psychological research methods and to the critical evaluation of research. It emphasizes research design, experimental procedures, descriptive methods, instrumentation, and the collection, analysis, interpretation, and reporting of research data. Research design and methodology are investigated through a review of research in a variety of sub-disciplines in psychology. Students gain knowledge in scientific writing, including proficiency in APA style.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain the basic principles of the scientific method.
- assess the purposes and limitations of the various research methods.
critically evaluate research reports in psychology.
synthesize a body of research findings.
develop and test hypotheses.
demonstrate knowledge of general research designs, experimental and non-experimental methods, and standard research practices.
select appropriate research designs to test hypotheses.
extplain the ethical treatment of humans and animal participants in research and the institutional requirements for conducting research.
evaluate the generalizability of study results.
demonstrate proficiency in APA style.

PSYC 340 Abnormal Behavior

Units: 3
Hours: 54 hours LEC
Prerequisite: PSYC 300, 305, or 480 with a grade of "C" or better
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ELSR 340 AND ESLW 340.
Transferable: CSU; UC (UC credit limitation: PSYC 340 & 481 combined: maximum credit, one course)
General Education: AA/AS Area III(b); CSU Area D9; CSU Area E1; IGETC Area 4I
C-ID: C-ID PSY 120
Catalog Date: June 1, 2020

This course explores the broad questions of normality and abnormality. Topics include the investigation of specific mental, emotional, and behavioral difficulties and current approaches to psychological intervention including present community mental health practices. It considers the contribution of social, biological, and psychological factors to the development and persistence of behavior disorders. This class is not open to students who have taken PSYC 481.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- differentiate advanced theoretical aspects of "normal" and "abnormal" behavior
- describe specific mental, emotional, and behavioral difficulties
- analyze the mystery and prejudice that surrounds people experiencing severe problems in adaptive behavior
- compare and contrast the approaches to psychological intervention including present community health practices
- identify the contribution of social, biological, and psychological factors to the development and persistence of behavioral disorders

PSYC 342 Introduction to Applied Behavior Analysis

Units: 3
Hours: 54 hours LEC
Prerequisite: PSYC 300 or 305 with a grade of "C" or better
Transferable: CSU
General Education: AA/AS Area III(b); CSU Area E1
Catalog Date: June 1, 2020

This course focuses on basic behavioral principles that describe relations between operant behavior and the social and physical environment. Behavior is examined as a part of the natural world and in everyday situations. The primary focus is on principles of operant conditioning, such as reinforcement, extinction, differential reinforcement, and punishment, as they are related to naturally occurring events. Additional topics include experimental and intervention procedures of applied behavioral analysis. It also covers practical applications including self management, institutional settings, schools, child behavior management, as well as treatment of developmental disorders such as Autism and Asperger’s disorders.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the basic terminology and methodology of applied behavioral analysis and operant conditioning principles
- choose the appropriate research method to answer a specific question in applied behavioral analysis
- distinguish between the ethical implications of behavioral analysis research and the ethical applications of applied behavioral analysis interventions.
demonstrate principles of applied behavior analysis, including the conceptualization of individual or group behavior in terms of environmental determinants, identification of target behavior in a behavior modification plan, and ways to support contingencies of positive reinforcement, negative reinforcement, extinction and punishment.

propose a specific behavior modification program utilizing the principles of applied behavioral analysis.

PSYC 354 The Psychology of Family Life and Intimate Relationships in a Diverse Society

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU
General Education: AA/AS Area III(b); CSU Area E1
C-ID: C-ID SOCI 130
Catalog Date: June 1, 2020

This course is a study of family life and intimate relationships from historical, sociological, and psychological viewpoints. Topics include elements for building and maintaining intimate relationships, the structure and functions of the family, sexuality, parenting, gender roles, partner selection, conflict, crisis, divorce, and starting over.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- compare concepts from psychology, sociology, and related disciplines used to describe the establishment and maintenance of intimate relationships.
- evaluate research methods used to study intimate relationships, including marriage and the family.
- contrast various theoretical models used to understand intimate relationships and family dynamics.
- examine current research on courtship, cohabitation, mate selection, gender roles, marital stages, family planning, family diversity, child-rearing, conflict resolution, family disorganization, sexuality in intimate relationships, starting over, and trends shaping the family of the future.
- evaluate nonempirical conclusions about the present health of marriage and the family, particularly as represented in uncritical media accounts.
- apply key concepts to personal relationships and life experiences.

PSYC 356 Human Sexuality

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC
General Education: AA/AS Area III(b); AA/AS Area VI; CSU Area D4; CSU Area D9; CSU Area E1; IGETC Area 4D; IGETC Area 4I
C-ID: C-ID PSY 130
Catalog Date: June 1, 2020

This course offers a balanced scientific understanding of the biopsychosocial perspective on human sexual behavior from birth through adulthood. It provides factual, up-to-date, nonjudgmental information designed to dispel myths, and to facilitate problem identification and possible solutions. Sexuality is explored from historical, cultural, psychological, physiological, sociological, and legal viewpoints.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- examine sexual behavior from historical, cultural, religious, and legal points of view.
- demonstrate knowledge of the scientific method as it relates to key research findings pertaining to the diversity of human sexual behaviors.
- compare male and female anatomical structures and their functions.
- demonstrate awareness and skills to make healthy and responsible choices and decisions regarding relationships and sexuality.
- compare and contrast biological, psychological, and cultural similarities and diversity in human sexual behavior.
- examine, analyze, and compare the diverse experiences that influence human sexual behaviors with particular emphasis on historical and cultural practices of human sexual behaviors.
• examine, analyze, and contrast the factors that influence diverse human sexual behaviors including causes and the evaluation of possible solutions to multiple ethnocentric problems.

PSYC 358 Principles of Interpersonal Relations

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGRWR 300; OR ESLR 340 AND ESLW 340
Transferable: CSU
General Education: AA/AS Area III(b); CSU Area E1
Catalog Date: June 1, 2020

This course introduces the principles involved in effective interpersonal relationships. Topics include interpersonal feedback, self-disclosure, listening, the role of emotions, conflict resolution, personal values, and self-awareness. Emphasis is on methods to enhance relationships at home, work, and school.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• evaluate the relationship between self-awareness and interpersonal relationships, as well as demonstrate an increased self-awareness.
• examine components of effective communication and utilize effective communication skills (e.g., assertiveness, active listening, self-disclosure) in interpersonal relationships.
• compare and contrast features of health and unhealthy relationships.
• evaluate strengths and weaknesses of current relationships and apply skills for developing and enriching these relationships.
• compare and contrast the strengths and challenges faced by the different forms of the family.

PSYC 359 Stress Management and Health

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: AA/AS Area III(b); CSU Area E1
Catalog Date: June 1, 2020

This course examines the connection between stress, stress response, coping, and health. It covers various types of stressors, stress responses, and coping strategies, and the scientific research in these areas. Topics include the impact of stress on physical, cognitive, behavioral, and emotional health. This course focuses on developing healthy ways to cope with stress, including cognitive-behavioral techniques, mindfulness, and relaxation techniques.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• assess typical stressors and compile a list of the typical stressors that may be encountered, including both positive and negative stressors.
• compare and contrast different theories on the types of coping strategies for handling stressors and types of strategies for stress management.
• assess the types of coping and stress management strategies in terms of effectiveness and ineffectiveness.
• explain the physiological processes associated with stress and the potential health effects to physical, behavioral, cognitive, and emotional health of experiencing long-term chronic stress.
• evaluate media reports on suggestions to improve health and manage stress using current research based findings.

PSYC 361 Psychology of Women in a Multicultural Society

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: AA/AS Area V(b); AA/AS Area VI; CSU Area D3; CSU Area D4; CSU Area D9; IGETC Area 4C; IGETC Area 4D; IGETC Area 4I

Student Learning Outcomes

3
Units:
54 hours LEC
Hours:
None.
Prerequisite:
None.
Transferable:
CSU; UC
General Education:
AA/AS Area V(b); AA/AS Area VI; CSU Area D3; CSU Area D4; CSU Area D9; IGETC Area 4C; IGETC Area 4D; IGETC Area 4I
This course is a study of the psychological effects of society upon women. It emphasizes the exploration of gender roles, sex roles, and stereotypes, as well as the sociocultural, intrapersonal, and interpersonal factors in the development of women.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- compare and contrast the psychological influences of the effect of gender in the use of language
- compare and contrast the psychological influences of gender in the world of work
- analyze the differences and influences of personality and behavior as they contribute to the ethnic experience of women of color
- analyze the biopsychosocial aspects of sexuality
- describe the behavioral similarities and/or differences between Euro-American women and women of color

PSYC 365 Issues of Diverse Populations

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<thead>
<tr>
<th>Same As:</th>
<th>HSER 330</th>
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<tr>
<td>Units:</td>
<td>3</td>
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<tr>
<td>Hours:</td>
<td>54 hours LEC</td>
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<tr>
<td>Prerequisite:</td>
<td>None.</td>
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<tr>
<td>Advisory:</td>
<td>Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.</td>
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<td>Transferable:</td>
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<td>General Education:</td>
<td>AA/AS Area V(b); AA/AS Area VI; CSU Area D; CSU Area E1</td>
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This course is a study of the values, problems, issues, concerns and counseling needs of diverse populations by race, ethnicity, class, gender, sexual orientation, gender identity, physical/cognitive/emotional/developmental ability, and age. It also explores the cognitive and emotional aspects of prejudice as it relates to institutional and individual discrimination. This course is not open to students who have completed HSER 330.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify and examine specific values, beliefs, and practices of diverse populations by race, ethnicity, gender, sexual orientation, ability/disability, age, and socioeconomic class
- evaluate the impact of bias, stereotyped thinking, prejudice, and discrimination in working with diverse populations
- analyze the issues of racism, sexism, heterosexism, ableism, ageism, and classism as they relate to working with diverse populations
- develop culturally responsive prevention, intervention, and/or resolution to identified issues and problems affecting diverse populations
- assess one’s personal attitudes regarding diverse populations

PSYC 370 Human Development: A Life Span

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC
General Education: AA/AS Area V(b); AA/AS Area III(b); CSU Area D0; CSU Area E1; IGETC Area 4I
C-ID: C-ID PSY 180
Catalog Date: June 1, 2020

This course examines human development across the lifespan, from conception through death, by focusing on the main domains in developmental psychology (physical, cognitive, and socio-emotional) as well as the interaction among these domains. It emphasizes development as an on-going process, with an effort to encourage the practical application of the knowledge acquired. This course is designed to provide a foundation for careers in educational, social, psychological, and medical fields as well as a better understanding of one’s own developmental process.

Student Learning Outcomes

Upon completion of this course, the student will be able to:
examine how development evolves from conception through death
evaluate the various domains of development (cognitive, physical, socio-emotional) and the interconnection among them
examine how people are influenced by their genes, their families, and the world in which they live
compare and contrast different theoretical perspectives used in explaining human development and behavior
compare and contrast different scientific methods used to study human development and behavior
evaluate the concept of continuity of development throughout the lifespan by assessing how experiences at one time of life may affect future development
differentiate typical from atypical psychological development across the lifespan

PSYC 372 Child Development

This course is a study of the growth and development of children from the prenatal stage through adolescence. For each stage of development, the physical, cognitive, linguistic, social-moral, and emotional aspects of development, with attention to both typical as well as atypical development in each area, are discussed in reference to relevant research and theories. The course covers research methods and data collection approaches. The influences of culture, family, and the interaction of maturational and environmental factors are studied. The material in this course is designed as a foundation for early child care and education, teaching, and parenting. This course is not open to students who have completed ECE 312.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the main characteristics of physical, cognitive, and social emotional development from birth through adolescence
- identify the roles of genetic and environmental influence on development
- identify the characteristics that exemplify typical and atypical development from birth through adolescence
- describe current and prominent theories of child development
- compare and contrast diverse parenting approaches and educational experiences in reference to developmental outcomes throughout childhood and adolescence
- apply theories to teaching and child-rearing practices with a focus on current topics in education for children from diverse backgrounds
- identify typical behavior of children and their individual differences and special needs (physical, cognitive, emotional, and social development)
- analyze the influence of culture, race/ethnicity, socioeconomic status, family and society structure on a developing child from birth through adolescence

PSYC 373 Child Psychology

This course introduces the science of child psychology through the analysis of developmental theories and research. It examines key developmental events across the main domains in developmental psychology (physical, cognitive, socioemotional) are examined from conception through adolescence. Questions about development are investigated, with an emphasis on the role of the scientific method. It explores typical and atypical psychological development research is explored as well as the influences of culture, society, family, and physical environments on children’s behavior and mental processes. Additionally, this course provides a scientific foundation for future studies in social sciences, including psychology.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- evaluate key developmental events across the main domains in developmental psychology (physical, cognitive, socioemotional), from conception through adolescence.
- describe uses of the scientific method within developmental psychology.
- evaluate current and prominent developmental theories of child psychology.
- evaluate classic and current research in the area of child psychology.
- compare individual differences in typical behavior in children.
- differentiate typical from atypical psychological development in children.
- analyze the influences of culture, society, family, and physical environments on children’s behavior and mental processes.
- apply child psychology principles to one’s interactions with children (personal and/or professional).
- relate the connection between the study of child psychology to other disciplines.
- utilize critical thinking in arriving at conclusions about child psychology.

PSYC 374 Psychology of Aging: Adult Development and Aging

Same As: GERON 302
Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGW 300; OR ESLR 340 AND ESLW 340
Transferable: CSU; UC (UC credit limitation: PSYC 374, GERON 300, 302, & SOC 335 combined: maximum credit, one course)
General Education: AA/AS Area V(b); CSU Area D; CSU Area E1; IGETC Area 4
Catalog Date: June 1, 2020

This course covers the physical, psychological, and social aspects of the aging process including the interactions between the elderly and the rest of society. Topics include an analysis of stereotypes, social bonds, environmental factors, sexuality, physical health, mental health, death, and bereavement. This course is not open to students who have completed GERON 302.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify and explain the differences between gerontology and geriatrics and explain the changing age demographics both in the United States and globally.
- describe at least four commonly held myths, stereotypes, or ageist attitudes regarding older adults and explain the impact these attitudes have on the image of aging.
- analyze and predict three ways race, gender, and ethnicity might influence the aging process.
- analyze the concepts of successful aging and optimal aging and recognize the differences between at least three normal and three abnormal age changes.
- describe at least three biological and three social theories used to predict how an individual might respond to the aging process or to old age.
- discuss and incorporate the concept of family and intimate relationships in later life and the importance of convoys or networks in the individual process of aging.
- explain at least three of the financial costs associated with aging.
- describe the concept of “aging in place” using at least three local and national resources, two entitlements, and three healthcare options.
- identify an elder who is aging optimally and describe at least three lifestyle choices, based on gerontological theory, that the student feels altered his/her aging process.

PSYC 378 Communicating with and Validating Older Adults

Same As: GERON 330
Units: 3
Hours: 54 hours LEC
Prerequisite: GERON 302 or PSYC 374 with a grade of "C" or better
Enrollment Limitation: Current tuberculosis clearance
Advisory: ENGRD 116 with a grade of "C" or better; OR ESLR 320 and ESLW 320 with a grade of "C" or better;
Transferable: CSU
General Education: AA/AS Area III(b)
Catalog Date: June 1, 2020
This course introduces the basic theory, techniques, and experiences for communication with, validation of, and stimulation of the elderly at different cognitive levels in long-term care. After the first class session, this course is held off campus in a long-term care setting. This course is not open to students who have completed GERON 330.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- evaluate basic communication needs of seniors and utilize appropriate level of validation theory and techniques
- demonstrate skill, ease, confidence, rapport, and listening skills when communicating with the elderly at different cognitive levels
- assemble and use a kit of materials to facilitate sensory stimulation, validation, and reminiscence therapies

PSYC 379 Reminiscence Therapy

Same As: GERON 334
Units: 3
Hours: 54 hours LEC
Prerequisite: GERON 302 or PSYC 374 with a grade of "C" or better
Enrollment Limitation: Current tuberculosis clearance
Advisory: ENGRD 116 with a grade of "C" or better; OR ESLR 320 and ESLW 320 with a grade of "C" or better.
Transferable: CSU
General Education: AA/AS Area III(b)
Catalog Date: June 1, 2020

This course introduces the basic theory and techniques of reminiscence therapy and provides experience in planning, facilitating, and evaluating reminiscence groups with the elderly in an institutional setting. After the first class session, this course is held off campus in a long-term care setting. This class is not open to students who have completed GERON 334.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze basic group counseling theories and apply to reminiscence techniques used with the elderly
- analyze the effects of reminiscence therapy on the aging process
- evaluate participants' cognitive levels and interests and choose the appropriate subject for reminiscence
- detect and respond to individual needs within the group
- demonstrate skill, ease, confidence, rapport, and listening skills in facilitating reminiscence groups
- explain the basic process of memory construction
- analyze the staff-development benefits from engaging in reminiscence with older adults
- demonstrate social inclusion using reminiscence therapy
- demonstrate techniques used to encourage reminiscence with people who have dementia and live in a facility
- examine his/her individual boundaries and explain why they are important to maintain in reminiscence groups

PSYC 390 Psychology of Death and Dying

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC
General Education: AA/AS Area III(b); CSU Area D9; CSU Area E1; IGETC Area 4I
Catalog Date: June 1, 2020

This course investigates beliefs, attitudes, anxieties, and behaviors associated with dying and death. Information about suicide, life-threatening illnesses, bereavement, and euthanasia are presented.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- describe basic demographic information on death, grieving, and related experiences
- describe the psychological, social, philosophical, and legal issues related to death
- evaluate information regarding the practical, everyday procedures and practices involved in dealing with death in our own lives
- identify noted psychologists in the field of thanatology who address the stages and anxieties associated with death and dying
- compare and contrast the dynamics of grief, bereavement, and the tasks of adult's and children's mourning
- recognize the psychic pain of suicide, how one can help ameliorate the pain, and the various forms suicide can take, such as altruistic suicide and culturally-defined suicide
- assess personal attitudes and values concerning death

PSYC 400 Introduction to Chemical Dependency

Same As: HSER 340
Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU
General Education: AA/AS Area III(b); CSU Area E1
Catalog Date: June 1, 2020

This course examines the biopsychosociocultural effects of chemical dependency on the individual and the family. It includes an analysis of drug use; misuse and abuse across age, gender, race, ethnicity, and economic conditions contributing to substance abuse; and a description of community efforts at prevention and treatment. This course is not open to students who have completed HSER 340.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze the psychological, physiological, and sociocultural issues related to substance use, misuse, and abuse
- describe the psychological and physiological progression of substance abuse
- examine the dynamics of race, ethnicity, age, and gender inherent in substance use, misuse, and abuse situations including drug preferences and codependency
- compare and contrast the key components of assessment and recovery programs for alcoholism and drug abuse including Alcoholics Anonymous (AA), Narcotics Anonymous (NA), Al-Anon, American Counseling Association (ACA), private and public, inpatient and outpatient

PSYC 401 Physiology and Pharmacology: Alcohol & Other Drugs

Same As: HSER 341
Units: 3
Hours: 54 hours LEC
Prerequisite: ENGWR 102 or ESLW 320 and HSER 340 or PSYC 400 with a grade of "C" or better.
Transferable: CSU
Catalog Date: June 1, 2020

This course is a study of the chemical composition of alcohol and the mechanism of action of alcohol and other psychoactive drugs, including opiates, stimulants, depressants, psychotherapeutics, and psychedelics. It also includes the social and psychological implications of tolerance, habituation, and substance abuse of the user and abuser. This course is not open to students who have completed HSER 341.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze the psychological, physiological, and sociological issues related to substance abuse
- compare the effects of each class of psychoactive drugs upon the human body.
- define the biological, social, and psychological implications of psychoactive drug use, misuse, and abuse.
- describe the effects of psychoactive drugs on behavior.
analyze treatment issues and challenges.
compare intervention and treatment approaches.
examine alternatives to drug use.

PSYC 402 Alcoholism: Intervention, Treatment & Recovery

This course is a study and evaluation of techniques used in the treatment of chemical dependency. Topics include intervention, individual and group counseling, detoxification, twelve-step program, therapeutic communities, and aftercare programs. This course is not open to students who have completed HSER 342.

Student Learning Outcomes

Upon completion of this course, the student will be able to:
- analyze drug and alcohol use, misuse, abuse, and addiction
- compare various theories of drug and alcohol addiction
- differentiate treatment issues of drug and alcohol use, misuse, abuse, and addiction
- describe treatment methods and counseling approaches of drug and alcohol use, misuse, abuse, and addiction

PSYC 415 Studying in London: Psychological Elements of British Life and Culture

This course, offered in a London study abroad program, surveys elements in British history and culture that have influenced the science of psychology. It emphasizes the influences of Sigmund Freud, Charles Darwin, Sir Francis Galton, and the events of World War II to current psychological theories. Additionally, the course examines the social norms in English culture in comparison to other cultures. Field trips are required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:
- describe the basic elements of psychology as a scientific discipline, including its subject matter and methodology
- evaluate the ideas and theories of various historical British contributors to current western psychological models
- interpret the psychological background and implications of the art and historical sites of England
- identify basic psychological principles in everyday English culture, people, and events
- compare and contrast English culture with one's own culture in terms of various psychological models
- analyze the effects of culture on human thinking and behavior

PSYC 480 Honors General Principles

This course is limited to CSU; UC (UC credit limitation: PSYC 300, 305, & 480 combined: maximum credit, one course) Transferable:
AA/AS Area V(b); CSU Area D9; IGETC Area 4I
This honors course is for psychology majors, behavioral science majors, and other students who desire a challenging, issues-oriented introduction to the general principles of psychology. Topics include the scientific method, statistics, biological determinants, and general processes of behavior, such as development, learning, language, intelligence, perception, motivation, emotion, personality, and mental health. In comparison to PSYC 300, this honors course uses an intensive instructional methodology designed to challenge motivated students and cultivate advanced critical thinking skills. Instruction emphasizes critical thinking in a seminar style, where the focus is on analysis and evaluation of psychological theories and research studies as they relate to practical, everyday issues. Honor students will also develop proficiency in library and internet-based research, make oral and written presentations, and participate in student-led group discussions. An APA style research paper is also required. This course is not open to students who have completed PSYC 300.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- evaluate the major concepts, theoretical perspectives, empirical findings, and historical trends in psychology
- examine applications of psychological concepts, theories, and research findings to personal, interpersonal, occupational, and social/community contexts
- incorporate systematic critical thinking in arriving at conclusions about behavior and mental processes
- examine the role that culture and diversity play in the various aspects of human behavior and mental processes
- differentiate between the various psychological research methods and their applications
- distinguish between the ethical implications of psychological research and the responsibility to pursue and use knowledge appropriately

PSYC 481 Honors Abnormal Behavior

Units: 3
Hours: 54 hours LEC
Prerequisite: PSYC 300, 305, or 480 with a grade of "C" or better; Placement into ENGWR 480 through the assessment process.
Transferable: CSU; UC (UC credit limitation: PSYC 340 & 481 combined: maximum credit, one course))
General Education: AA/AS Area III(b); CSU Area D9; CSU Area E1; IGETC Area 4I
C-ID: C-ID PSY 120
Catalog Date: June 1, 2020

This course is for psychology majors, behavioral science majors, and others who desire a challenging, critical thinking, and issues-oriented exploration of normality and abnormality. It examines the origins, symptoms, and treatment of psychological disorders through first-person accounts, role of multicultural factors, and various theoretical stances. It focuses on thorough analysis and evaluation of biopsychosocial theories and research studies as they relate to the development and persistence of behavior disorders and treatment approaches. Field trips may be required. This course is not open to students who have taken PSYC 340.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- appraise various aspects of "normal" and "abnormal" behavior
- extrapolate theories of psychopathology from scientific data and critically analyze the implications of those theories
- differentiate specific psychological disorders
- evaluate current approaches to treatment of psychological disorders including psychosocial rehabilitation
- debate legal, ethical, and social issues in mental health
- develop researchable hypotheses regarding biological, psychological, and social factors to the development and persistence of behavioral disorders

PSYC 495 Independent Studies in Psychology

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.
Associate Degree

A.A. in Real Estate

This degree focuses on the practical application of concepts utilized in real estate markets and career fields. Course work includes real estate principles, legal aspects, practice, finance, economics, and appraisal.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 101</td>
<td>Fundamentals of College Accounting (3)</td>
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<tr>
<td>or ACCT 301</td>
<td>Financial Accounting (4)</td>
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<tr>
<td>BUS 300</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS 310</td>
<td>Business Communications (3)</td>
<td>3</td>
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<td>or MGMT 360</td>
<td>Management Communication (3)</td>
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<td>BUS 340</td>
<td>Business Law</td>
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<td>Principles of Marketing</td>
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<tr>
<td>RE 300</td>
<td>California Real Estate Principles</td>
<td>3</td>
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<tr>
<td>RE 310</td>
<td>Real Estate Practice</td>
<td>3</td>
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<tr>
<td>RE 320</td>
<td>Real Estate Finance</td>
<td>3</td>
</tr>
<tr>
<td>RE 330</td>
<td>Legal Aspects of Real Estate</td>
<td>3</td>
</tr>
<tr>
<td>RE 342</td>
<td>Real Estate Appraisal</td>
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<td>A minimum of 1 unit from the following:</td>
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<tr>
<td>BUS 210</td>
<td>The Business Plan (1)</td>
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<tr>
<td>BUS 212</td>
<td>Marketing for Small Businesses (1)</td>
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<tr>
<td>CISC 300</td>
<td>Computer Familiarization (1)</td>
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<td>CISC 305</td>
<td>Introduction to the Internet (1)</td>
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<td>A minimum of 3 units from the following:</td>
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<tr>
<td>BUS 320</td>
<td>Concepts in Personal Finance (3)</td>
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<tr>
<td>MKT 310</td>
<td>Selling Professionally (3)</td>
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</tr>
<tr>
<td>MKT 314</td>
<td>Advertising (3)</td>
<td></td>
</tr>
<tr>
<td>RE 360</td>
<td>Real Estate Economics (3)</td>
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</tbody>
</table>
The Real Estate Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- Identify and explain the major functional areas of real estate, including legal aspects, finance, economics, real estate practice, and appraisal.
- Demonstrate effective leadership skills in a real estate environment.
- Analyze practical real estate problems.
- Integrate real estate principles related to finance, law, products, services and information.
- Assess current real estate market conditions.
- Recommend appropriate sales strategies, based on market conditions.
- Qualify for the California Real Estate Brokers and Salesperson license examinations.
- Utilize research and critical thinking to evaluate and recommend alternative solutions to real estate problems.

**Career Information**

Real estate salesperson; real estate broker; real estate appraiser; small business owner

**Certificate of Achievement**

**Real Estate Certificate**

This certificate introduces the basic concepts of the real estate career field. Topics include the principles of real estate, law, economics, finance, practice and appraisal.

Catalog Date: June 1, 2020

**Certificate Requirements**

<table>
<thead>
<tr>
<th>COURSE CODE</th>
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<th>UNITS</th>
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</thead>
<tbody>
<tr>
<td>RE 300</td>
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<td>3</td>
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<td>BUS 110</td>
<td>Business Economics (3)</td>
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<td>ECON 302</td>
<td>Principles of Macroeconomics (3)</td>
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<tr>
<td>ECON 304</td>
<td>Principles of Microeconomics (3)</td>
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<tr>
<td>or ACCT 301</td>
<td>Financial Accounting (4)</td>
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</tbody>
</table>
### Real Estate Sales Certificate

This certificate introduces the basic concepts of the real estate career field, with a specific focus on sales. Topics include the principles of real estate, law, economics, finance, practice, and appraisal.

**Catalog Date:** June 1, 2020

### Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
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<tbody>
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<tr>
<td>RE 350</td>
<td>Real Property Management</td>
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<td>Real Estate Economics</td>
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<tbody>
<tr>
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<tr>
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</tr>
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<td>RE 360</td>
<td>Real Estate Economics</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Units: **9**

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### Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Apply a basic knowledge of the fundamental concepts of real estate.
- Define the technical terminology involved in the real estate field.
- Interpret and apply a knowledge of real estate transactions.
- Qualify for the California Real Estate Salesperson's License Examination.
- Analyze real estate situations and property, interpret the data, and properly complete deposit receipts.

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### Certificate

The Real Estate Sales Certificate program is designed for students who wish to work in the real estate field, with a specific focus on sales. This certificate provides a comprehensive understanding of real estate principles, law, economics, finance, practice, and appraisal. Students will gain the knowledge and skills necessary to succeed in the real estate career field.

**Catalog Date:** June 1, 2020

### Certificate Requirements

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</tr>
</tbody>
</table>

Total Units: **9**

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### Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Apply a basic knowledge of the fundamental concepts of real estate.
- Define the technical terminology involved in the real estate field.
- Interpret and apply a knowledge of real estate transactions.
- Qualify for the California Real Estate Salesperson's License Examination.
- Analyze real estate situations and property, interpret the data, and properly complete deposit receipts.
Upon completion of this program, the student will be able to:

- apply a basic knowledge of the fundamental concepts of real estate
- define the technical terminology involved in the real estate field
- interpret and apply a knowledge of real estate transactions
- qualify for the California Real Estate Salesperson's License Examination

Real Estate (RE)

RE 295 Independent Studies in Real Estate

| Units:     | 1 - 3  |
| Hours:     | 54 - 162 hours LAB |
| Prerequisite: | None. |
| Catalog Date: | June 1, 2020 |

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

RE 300 California Real Estate Principles

| Units:       | 3 |
| Hours:       | 54 hours LEC |
| Prerequisite: | None. |
| Transferable: | CSU |
| Catalog Date: | June 1, 2020 |

This course covers the basic laws and principles of California real estate. It provides the background and terminology necessary for advanced study in specialized courses. This course is required by the California Department of Real Estate prior to taking the real estate salesperson's examination.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain the fundamental concepts and principles of real estate.
- apply the technical terminology involved in the real estate field.
- understand real estate transactions.
- describe the requirements for the “California Real Estate Salesperson's” License Examination.

RE 310 Real Estate Practice

| Units:       | 3 |
| Hours:       | 54 hours LEC |
| Prerequisite: | None. |
| Transferable: | CSU |
| Catalog Date: | June 1, 2020 |

This course covers the daily operations in the role of real estate agent or broker. It includes listing, prospecting, advertising, financing, sales techniques, escrow, and ethics. This course also covers basic laws and practices of California real estate and provides background and terminology necessary for advanced study in more specialized courses. This course applies towards the educational requirements for the California State Broker's examination.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the responsibilities of a real estate professional.
• define the technical terminology involved in the real estate field.
• describe the requirements for the "California Real Estate Brokers and Salesperson" license examinations.
• analyze real estate situations and property, interpret the data, and properly complete deposit receipts.

RE 320 Real Estate Finance

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: RE 300; RE 300; ENGWR 102 or 103 and ENGRD 116 or ESLR 320 and ESLW 320; BUS 105
Transferable: CSU
Catalog Date: June 1, 2020

This course covers real estate financing, including lending policies and problems in financing transactions in residential apartments and commercial and special purpose properties. Methods of financing properties are emphasized. It meets one of the educational requirements to qualify for the California Department of Real Estate broker's examination.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• examine theoretical and practical applications of real estate financing.
• assess the process of financing various types of real estate.
• identify sources of funds and the various entities which affect qualifications and availability of funding.
• examine loan processes, appraisal for lenders, and foreclosures.
• evaluate secondary markets and construction loans.
• calculate real estate finance and alternative financing methods.

RE 330 Legal Aspects of Real Estate

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: RE 300; RE 300; ENGWR 102 or 103 and ENGRD 116 or ESLR 320 and ESLW 320; BUS 105
Transferable: CSU
Catalog Date: June 1, 2020

This course covers California real estate laws, including methods of ownership, estates, transfers, financing instruments, foreclosures, leasing, contracts, and agency. It meets one of the educational requirements to qualify for the California Department of Real Estate broker's examination.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• analyze the important legal aspects of real estate.
• apply real estate law principles.
• analyze real estate case law.
• diagram the organization and structure of the U.S. legal system and procedures.
• apply the ethical standards of the real estate profession.
• evaluate real estate legal issues before they arise.
• develop solutions to real estate legal issues.

RE 342 Real Estate Appraisal
This course covers entry-level education in the real estate appraisal field, concentrating on the appraisal of single-family residences (real property). It covers Basic Appraisal Principles (30 Hours) and Basic Appraisal Procedures (30 Hours) pursuant to the Appraiser Qualifications Board's (AQB) Real Property Appraiser Qualification Criteria (effective January 1, 2008). This course is designed to meet the California Bureau of Real Estate Appraisers (BREA) requirements for Basic Education (60 Hours). It also meets the California Bureau of Real Estate (BRE) college-level educational requirements (3 semester units) for the salesperson and broker examinations.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- define real property concepts, characteristics, and legal descriptions.
- distinguish between the different forms of ownership, types of leases, contracts, and public or private controls.
- describe the four influences on real estate values: government, economic, social, and physical.
- identify the different types of value: market value, insurable value, and salvage value.
- explain classical economic principles.
- analyze real estate market fundamentals and characteristics.
- interpret appraisal ethics and appraisal theory and practice.
- apply proper valuation procedures and techniques in developing a credible appraisal report.
- analyze real property descriptions, characteristics, and considerations for highest value and best use.
- evaluate and apply the market approach, cost approach, and basic income approach processes as appropriate.
- complete or review a residential appraisal (subject to practical experience and licensing) pursuant to current ethical standards and practices.

RE 350 Real Property Management

Upon completion of this course, the student will be able to:

- describe the major functions of property managers, including their legal and interpersonal concerns.
- detail specific practices and problems in management of various properties, such as retail property, office buildings, apartments, industrial property, and condominiums.
- define the technical terminology in the property management field.
- describe the requirements for the California Real Estate Broker's and Salesperson license examinations.
- demonstrate practical tools for property management.
- identify everyday issues regarding maintenance, accounting, administration, and other activities.

RE 360 Real Estate Economics
This course covers the nature and classification of real estate and real estate investments. Topics include economic development of real property, real estate cycles and market trends, and governmental and private sector influence on the economics of real estate. It is recommended that this course be taken last in the real estate series. This course meets one of the educational requirements to qualify for the California Bureau of Real Estate broker's examination.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- explain the fundamental concepts and principles of real estate economics
- evaluate economic impacts of income and property taxation on market value
- analyze national, regional, and community trends in terms of their effects on real estate
- formulate income processing scenarios through the use of break-even analysis, cash equivalents, capitalization theory, and internal/fair rates of return
- define the economic principles that govern real estate markets and buyer/seller behavioral patterns
- describe sound real estate investment strategies through an analysis of real estate economic trends

**RE 495 Independent Studies in Real Estate**

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.
Recreation | American River College

This degree provides training for an entry-level career in the field of recreation and leisure services. It explores the many career fields in recreation, including public service, private recreation, outdoor recreation, and leadership positions.

Division Dean
Dr. Derrick Booth

Department Chairs
Tim Finnecy

(916) 484-8201

Associate Degree

A.A. in Recreation

This degree provides training for an entry-level career in the field of recreation and leisure services. It explores the many career fields in recreation, including public service, private recreation, outdoor recreation, and leadership positions.

Catalog Date: June 1, 2020

Degree Requirements

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<thead>
<tr>
<th>COURSE CODE</th>
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<tbody>
<tr>
<td>ECE 312</td>
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<td>or PSYC 372</td>
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<td>GERON 302</td>
<td>Psychology of Aging: Adult Development and Aging (3)</td>
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<td>or PSYC 374</td>
<td>Psychology of Aging: Adult Development and Aging (3)</td>
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<td>RECR 300</td>
<td>Introduction to Recreation and Leisure Services</td>
<td>3</td>
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<td>RECR 310</td>
<td>Outdoor Recreation</td>
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<td>RECR 320</td>
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</table>

The Recreation Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- analyze community needs for parks and recreation programs.
- create recreation programs and supervise staff.
- demonstrate leadership skills in recreation programs.
• administer a wide variety of parks and community services.

Career Information

Careers in recreation include jobs in park facilities and services in federal, state, municipal, and voluntary nonprofit agencies. Commercial and private recreation also provide opportunities for employment. Travel and tourism, club management, resort recreation, food and beverage services, lodging, professional sports, entertainment, and cultural services are very much an integral part of the recreation and leisure services market.

Recreation (RECR)

RECR 300 Introduction to Recreation and Leisure Services

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

This course is an overview of recreation, park, and leisure services. It covers recreation as a form of community service, as well as the nature, scope, and significance of leisure and recreation as a social force in contemporary society. It emphasizes the role of the professional leader in organizing recreation programs and services, operations, facilities, and resources. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• describe philosophical foundations of leisure and recreation.
• explain the bases for growing interest in recreation and leisure activities.
• analyze recreation and leisure program components.
• identify the sociological, psychological, and economic implications of parks and recreation.
• define the functions and services of recreational agencies from local to federal levels.
• demonstrate face-to-face leadership skills in program planning and operations.
• identify the challenges, issues, programs, and trends in the recreation movement.

RECR 310 Outdoor Recreation

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 320 AND ESLW 320.
Transferable: CSU
Catalog Date: June 1, 2020

This course is an orientation to job opportunities in the outdoor recreation field. It includes an overview of different types of outdoor recreation, socio-economic factors in outdoor recreation, the role of government, the role of the private sector, management, and issues and trends in outdoor recreation. Philosophies and operating purposes of outdoor recreation facilities run by federal, state, and local governments are discussed. Field trips are required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• describe and identify job opportunities with outdoor recreation agencies and suppliers.
• distinguish between the operation of local, state, and federal recreation agencies.
• analyze and describe solutions to problems and issues facing outdoor recreation agencies.
• design a plan for an outdoor recreation facility.
• create and lead an outdoor recreation activity.
• identify risk management in outdoor programming.
• analyze the purpose and quality of outdoor recreational activities.

RECR 320 Recreation Activity Leadership

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND EESLW 340.
Transferable: CSU
Catalog Date: June 1, 2020

This is a basic course for recreation majors, involving a study of essential elements and basic principles of organization and leadership of various types of recreation programs. It covers the methods and materials used in planning and conducting organized recreation programs in public and private agencies. Special emphasis is placed on the role of the face-to-face leader in organizing recreational programs in a variety of settings. Field trips are required.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

• demonstrate a basic knowledge of program planning principles and activity leadership.
• plan, organize, promote, and lead organized recreation programs and special events.
• list, plan, and execute events for specific populations.
• interpret and apply the principles of planning and development of recreation programs.

RECR 498 Work Experience in Recreation

Units: 1 - 4
Hours: 60 - 300 hours LAB
Prerequisite: None.
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position, or job related to recreation with a cooperating site supervisor. Students are advised to consult with the Physical Education Department faculty to review specific certificate and degree work experience requirements.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND EESLW 340.
Transferable: CSU
General Education: AA/AS Area III(b)
Catalog Date: June 1, 2020

This course provides students with opportunities to develop marketable skills in preparation for employment or advancement within the field of recreation. It is designed for students interested in work experience and/or internships in transfer-level degree occupational programs. Course content includes understanding the application of education to the workforce, completion of Title 5 required forms which document the student's progress and hours spent at the work site, and developing workplace skills and competencies.

During the semester, the student is required to complete 75 hours of related paid work experience, or 60 hours of related unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. All students are required to attend the first class meeting, a mid-semester meeting, and a final meeting. Additionally, students who have not already successfully completed a Work Experience course will be required to attend weekly orientations while returning participants may meet individually with the instructor as needed. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

• demonstrate application of industry knowledge and theoretical concepts in the field of recreation related to a transfer degree level career as written in the minimum three (3) learning objectives created by the student and his/her employer or work site supervisor at the start of the course.
• make effective decisions, use workforce information, and manage his/her personal career plans.
• behave professionally, ethically, and legally at work, consistent with applicable laws, regulations, and organizational norms.
• behave responsibly at work, exhibiting initiative and self-management in situations where it is needed.
• apply effective leadership styles at work, with consideration to group dynamics, team and individual decision making, and workforce diversity.
• communicate in oral, written, and other formats, as needed, in a variety of contexts at work.
• locate, organize, evaluate, and reference information at work.
• demonstrate originality and inventiveness at work by combining ideas or information in new ways, making connections between seemingly unrelated ideas, and reshaping goals in ways that reveal new possibilities using critical and creative thinking skills such as logical reasoning, analytical thinking, and problem-solving.
Respiratory Care | American River College

This degree is preparation for licensure as a Respiratory Care Practitioner in the state of California as a Respiratory Care Practitioner at the Advanced Registered Respiratory Therapist level. It focuses on diagnostic procedures, treatment, and management of patients with conditions affecting the cardiopulmonary system. Course work includes physical assessment, medical gas therapies, mechanical life support, airway care, pharmacology, neonatal/pediatric therapy, and specialized cardiopulmonary procedures. All degree major courses require a grade of "C" or better to remain in the program.

Division Dean
Jan DeLapp

Department Chairs
Lisa Ilaga

(916) 484-8902

Associate Degree

A.S. in Respiratory Care

This degree is preparation for licensure as a Respiratory Care Practitioner in the state of California as a Respiratory Care Practitioner at the Advanced Registered Respiratory Therapist level. It focuses on diagnostic procedures, treatment, and management of patients with conditions affecting the cardiopulmonary system. Course work includes physical assessment, medical gas therapies, mechanical life support, airway care, pharmacology, neonatal/pediatric therapy, and specialized cardiopulmonary procedures. All degree major courses require a grade of "C" or better to remain in the program.

Catalog Date: June 1, 2020

Degree Requirements

<table>
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<tr>
<th>COURSE CODE</th>
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<tr>
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<tr>
<td>AH 110</td>
<td>Medical Language for Health-Care Providers</td>
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<td>BIOL 430</td>
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<td>BIOL 440</td>
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<td>or BIOL 442</td>
<td>General Microbiology and Public Health (5)</td>
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<td>PHYS 310</td>
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<td>or PHYS 350</td>
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<td>RC 110</td>
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<td>RC 111</td>
<td>Principles of Respiratory Care</td>
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<td>Second Semester:</td>
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<td>RC 121</td>
<td>Concepts of Airway Care &amp; Mechanical Ventilation</td>
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<td>RC 122</td>
<td>Airway Care &amp; Mechanical Ventilation Laboratory</td>
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<tr>
<td>RC 123</td>
<td>Clinical Externship I</td>
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<td>RC 124</td>
<td>Respiratory Care Pharmacology</td>
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<tr>
<td>RC 130</td>
<td>Respiratory Care in Neonatal and Pediatric Populations &amp; Diagnostic Studies</td>
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<tr>
<td>RC 131</td>
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<td>RC 132</td>
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**Fourth Semester:**

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<tr>
<td>RC 142</td>
<td>Clinical Externship III</td>
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**Any Semester:**

A minimum of 3 units from the following:

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<tr>
<td>ENGWR 300</td>
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<td>ENGWR 480</td>
<td>Honors College Composition (3)</td>
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<td>ESLW 340</td>
<td>Advanced Composition (4)</td>
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A minimum of 3 units from the following:

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<tr>
<td>ANTH 310</td>
<td>Cultural Anthropology (3)</td>
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<td>ANTH 481</td>
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<td>PSYC 300</td>
<td>General Principles (3)</td>
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<td>PSYC 320</td>
<td>Social Psychology (3)</td>
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<tr>
<td>PSYC 390</td>
<td>Psychology of Death and Dying (3)</td>
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</tr>
<tr>
<td>PSYC 480</td>
<td>Honors General Principles (3)</td>
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</table>

**Total Units:** 66 - 68

The Respiratory Care Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

**Enrollment Eligibility**

To be eligible for enrollment in the program, the student must meet the following criteria:

- Graduation from an accredited high school (graduates from outside the United States must have transcripts evaluated by an independent agency), or successful completion of the General Educational Development (GED) Test or California High School Proficiency Examination (CHSPE) as defined by the current requirements of the State of California and National Board for Respiratory Care.

- A GPA of 2.5 in all prerequisite courses.

- AH 110 with a grade of "C" or better.

- BIOL 430 and BIOL 431 with grades of "C" or better.

- BIOL 440 or BIOL 442 with a grade of "C" or better.

- PHYS 310 or PHYS 350 with a grade of "C" or better.

- Current college GPA of 2.0 or better.

- A Curriculum Planning Summary Sheet completed by an ARC counselor and dated within the year the enrollment application packet is submitted.

- A completed pre-enrollment application.

**Enrollment Process**

Eligible students are selected for the program according to the following steps:

- Applications to the program may be obtained online at http://www.arc.losrios.edu/Programs_of_Study/Health_and_Education/Respiratory_Care.htm. Please check the above website for application period and submission deadline.

- Only students who meet the pre-enrollment requirements and follow the pre-enrollment procedures will be considered for the program.

- Selection is based on a computerized random selection process from among the qualified applicants.
The student accepted into the Respiratory Care program is required to have a physical examination, inoculations, drug screen, background check, and malpractice insurance. The student is responsible for any cost incurred related to meeting the requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- discuss patient/client reports with members of the health care network.
- collect patient information relevant to the diagnosis and treatment of patients affected by pulmonary disease.
- recommend appropriate treatment plans based upon auditory, tactile, and visual feedback.
- record assessment findings, treatment plans, and recommendations for care in medical records.
- chart patient care in accordance with local, regional, and national standards.
- categorize patients affected by pulmonary disease as having acute or chronic conditions.
- define pulmonary disorders as restrictive or obstructive disease.
- comply with ethical standards of the profession.

Career Information

The Bureau of Labor Statistics states that faster than average employment growth is projected for respiratory therapists. The increasing demand will come from substantial increases in the middle aged and elderly populations. Greater demand will also result from the expanding role of respiratory therapist in case management, disease prevention, emergency care, and the early detection of pulmonary disorders. Career opportunities include positions in hospitals and other areas, especially in home health care services, physician’s offices, and medical equipment supply companies.

Respiratory Care (RC)

RC 110 Cardiopulmonary Pathologies for Respiratory Care

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Corequisite: RC 111
Enrollment Limitation: Acceptance into the Respiratory Care Program.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Catalog Date: June 1, 2020

This course introduces the common pathologies affecting the cardiopulmonary system and related pharmacological treatment. Topics include obstructive and restrictive airway diseases, early childhood respiratory diseases, infectious pulmonary diseases, and pulmonary vascular diseases.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify and relate common developmental pathologies.
- catalog pulmonary diseases as obstructive or restrictive.
- recommend diagnostic procedures for identification and staging of cardiopulmonary disease.
- analyze data collected from various diagnostic procedures including x-ray, arterial blood gases, and pulmonary function tests.
- compile data for development of therapist driven protocols.
- analyze disease states and pharmatherapeutic strategies.
- define categories of drugs and apply appropriate category to various cardiopulmonary disease states.
- recommend appropriate pharmacological intervention for cardiopulmonary pathologies.
This course introduces critical thinking skills necessary for entry into clinical practice in respiratory care. It includes a comprehensive overview of the cardiopulmonary system with emphasis on applied physiology. Additionally, it covers ventilation, gas transport, gas exchange, and acid-base balance, including interpretation of data and the relationship of therapeutics to physiological principles. Respiratory care equipment, patient assessment skills, safe practices, such as the Health Insurance Portability and Accountability Act (HIPAA), human rights and privacy, personal health and hygiene, and hospital orientations are introduced. This course is preparation for general practice as a respiratory care practitioner. It covers laboratory skills and procedures with emphasis on the application of theories and techniques related to assessment, evaluation, and interpretation of patients with cardiopulmonary illness. Included are concepts of Basic Life Support. Field trips may be required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- evaluate the difference between the mechanical and metabolic work involved in ventilation and perfusion and their significance in patient care.
- explain compensatory mechanisms of human physiology in the presence of disease.
- demonstrate patient assessment skills and related therapeutics.
- analyze information received from patients' records and tests.
- measure the mechanisms by which oxygen and carbon dioxide are transported in the blood and the factors affecting that transport to and from the tissues and apply the data to patient care situations.
- evaluate electrolyte and acid base regulation in relationship to kidney function.
- correlate acid-base regulation and the control of ventilation.
- analyze how the cardiovascular system coordinates its functions under normal and abnormal conditions.
- compare and contrast various respiratory care procedures and equipment.
- draft an appropriate plan for correction of various forms of cardiovascular disease.
- explain the role of HIPAA in the respiratory care field.
- identify two methods to ensure proper patient identification.
- explain the importance of the patient's right to privacy.
- recognize examples of inappropriate conversation topics.
- formulate an appropriate plan for safe practice and preventing spread of infection.
- demonstrate verbal, nonverbal, and written communications skills in patient interactions.
- recommend appropriate treatment modalities for patients affected by cardiopulmonary disease.
- create respiratory care treatment plans for patients affected by cardiopulmonary disease.
- identify and assemble respiratory care equipment for application in treating oxygen failure.
- assess patient responses to oxygen therapies.
- interpret cardiopulmonary diagnostic test results and recommend appropriate modifications to treatment plans.
- demonstrate appropriate blood gas draw procedure and knowledge to successfully obtain the blood gas certificate.
- cite drugs and preparation utilized in the management of respiratory disease.

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**RC 121 Concepts of Airway Care & Mechanical Ventilation**

- **Units:** 4
- **Hours:** 72 hours LEC
- **Prerequisite:** RC 110 and 111 with grades of "C" or better
- **Corequisite:** RC 122, 123, and 124
- **Catalog Date:** June 1, 2020
This course expands on the principles of respiratory failure, airway protective techniques, and advanced life support. Topics include mechanical ventilator theories and modes, invasive and noninvasive airway care, and Advanced Cardiac Life Support (ACLS) procedures.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify signs and symptoms of respiratory failure.
- demonstrate appropriate treatment of respiratory failure.
- clear an obstructed airway.
- compile a list of equipment utilized in the intubation process.
- list modes of mechanical ventilation.
- assess patients for weaning readiness from mechanical ventilation.
- analyze mechanical ventilator data and modify therapy.
- troubleshoot various mechanical ventilator problems.
- cite the basic parameters of ventilation.
- construct a ventilator record or flow sheet.

### RC 122 Airway Care & Mechanical Ventilation Laboratory

**Units:** 1  
**Hours:** 54 hours LAB  
**Prerequisite:** RC 110 and 111 with grades of "C" or better  
**Corequisite:** RC 121, 123, and 124  
**Catalog Date:** June 1, 2020

This course introduces higher levels of clinical practice including critical care. It covers Advanced Cardiac Life Support (ACLS), airway protective procedures, and mechanical ventilation. Field trips may be required.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify adjunctive airway and intubation equipment.
- establish effective airway techniques and perform intubations.
- select mechanical ventilators and assess for proper function.
- troubleshoot mechanical ventilators.
- interpret mechanical ventilator and hemodynamic wave forms.
- collect mechanical ventilator data and construct flow sheets.
- diagnose respiratory failure.
- differentiate types of artificial airways and mechanical ventilators.

### RC 123 Clinical Externship I

**Units:** 3  
**Hours:** 162 hours LAB  
**Prerequisite:** RC 110 and 111 with grades of "C" or better  
**Corequisite:** RC 121, 122, and 124  
**Enrollment Limitation:** Students must meet the health requirements of the Los Rios Community College District for Allied Health Programs and certification in Basic Life Support for the Health Care Provider.  
**Catalog Date:** June 1, 2020

This course presents the principles of medical gas delivery devices; humidity, aerosol and hyperinflation therapies, and chest physiotherapy. It also covers the application,
Patient assessment, patient monitoring, and evaluation of the efficacy of medical gas, humidity, aerosol and hyperinflation therapies, and chest physiotherapy. A portion of this course may be offered with a TBA component which may include working in clinical sites.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze information received from patients, records, and tests.
- select and recommend appropriate drugs and preparations utilized in the management of respiratory disease.
- adapt respiratory care equipment to meet a patient's oxygen therapy needs.
- apply evaluation skills to identification of various pathologies.
- explain the rationale for various respiratory care procedures.
- perform technical skills common to care of the critically ill.
- assess a patient's response to therapy.
- assemble appropriate equipment for therapeutic procedures.

RC 124 Respiratory Care Pharmacology

Units: 3
Hours: 54 hours LEC
Prerequisite: RC 110 and 111 with grades of "C" or better
Corequisite: RC 121, 122, and 123
Catalog Date: June 1, 2020

This course covers the concepts and principles of pharmacology required in the practice of respiratory care, including medications, actions, dosages, routes of administration, and adverse reactions. Topics include patient education of medication delivery devices, patient monitoring devices, utilization techniques, and the standards for therapeutic efficacy in relation to asthma, chronic obstructive pulmonary disease, and smoking cessation.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe principles of drug actions
- explain the pharmaceutical theory of drug therapy
- cite preferred methods of administration of drugs
- identify drugs utilized for prevention of pulmonary disease
- analyze disease states and pharmatherapeutic strategies
- recommend appropriate pharmacological intervention for various cardiopulmonary pathologies
- interpret the appropriateness of drug intervention

RC 130 Respiratory Care in Neonatal and Pediatric Populations & Diagnostic Studies

Units: 3
Hours: 54 hours LEC
Prerequisite: RC 121, 122, 123, and 124 with grades of "C" or better
Corequisite: RC 131 and 132
Catalog Date: June 1, 2020

This course prepares students to work in laboratories and special care areas of a hospital. Topics include perinatal and pediatric diseases, labor and delivery, rehabilitation, and advanced diagnostic studies performed by respiratory therapists. Additional topics include bronchoscopy, advanced pulmonary function studies, bronchial provocation testing, polyslonography, exercise stress tests, metabolic studies, hemodynamic measurements, advanced modalities of mechanical ventilation, and cardiovascular testing.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- differentiate the methods of assessing the newborn infant, including maternal and fetal factors.
- describe the hazards and indications for special equipment, application, and techniques applied to infants and children.
- describe the etiology, pathophysiology, clinical manifestations, and treatment of selected neonatal and pediatric diseases.
- analyze the process of cardiopulmonary rehabilitation including program form, content, and outcome evaluation, patient assessment for selection into a program, exercise evaluation, and preparation of a respiratory care plan.
- analyze the modalities and equipment available for cardiopulmonary rehabilitation, exercise, reconditioning, breathing retraining, as well as long term oxygen and ventilation care.
- select and evaluate the delivery of respiratory care in the home setting including assessment of the home environment, patient comprehension of treatment modalities, equipment, and infection control.
- recommend appropriate reconditioning exercises and rehabilitation programs for the outpatient client.
- analyze and recommend appropriate advanced mechanical ventilation strategies.

**RC 131 Respiratory Care in Neonatal and Pediatric Populations & Diagnostic Studies Laboratory**

### Units: 1
### Hours: 54 hours LAB
### Prerequisite: RC 121, 122, 123, and 124 with grades of "C" or better
### Corequisite: RC 130 and 132
### Catalog Date: June 1, 2020

This course prepares students for general practice as respiratory care practitioners. It provides laboratory practice in medical gas, humidity/aerosol, hyperinflation and bronchial hygiene therapies, airway management, and non-invasive and invasive mechanical ventilatory support as applied to neonatal and pediatric patients in specialized critical care units. Additionally, it covers pulmonary rehabilitation techniques, cardiopulmonary stress testing, sleep studies, and respiratory care techniques in the home setting. Field trips may be required. Students must successfully complete the National Board for Respiratory Care Self Assessment Examinations to receive a passing grade in this course. Students are responsible for fees associated with this examination.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- monitor hemodynamic values of patients undergoing special procedures.
- assess performance of patients before during and after special procedures.
- troubleshoot equipment malfunctions.
- analyze results of tests performed.
- discuss abnormal findings from examinations performed.
- chart patient progress.
- assemble equipment to perform various procedures.
- select and recommend drugs, gases, and preparations utilized in respiratory and diagnostic laboratories.
- assemble pediatric ventilators.
- apply pediatric ventilators.
- assess health status of newborn infants.
- develop appropriate care plans.
- coordinate rehabilitation activities.

**RC 132 Clinical Externship II**

### Units: 6
### Hours: 324 hours LAB
This is a preparatory course for advanced practice as respiratory care practitioners. Topics include clinical practice in the application of airway management, including intubation, suctioning, and bronchoscopy, to adult patients in critical care units. Additionally it includes clinical practice in application of non-invasive and invasive mechanical ventilatory support, ventilator settings/adjustments, monitoring, adjusting ventilators to improve oxygenation and/or ventilation and discontinuance from mechanical ventilatory support. Clinical experience is provided in regional hospitals and clinics. A portion of this course may be offered with a TBA component which may include working in clinical sites.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- monitor patient care in critical care units.
- evaluate patients in critical care units.
- assess ventilation disorders.
- troubleshoot mechanical ventilator problems.
- perform technical skills common to care of the critically ill.
- collect and analyze blood and tissue samples from critically ill patients.
- report on patient status to physicians and co-workers.
- record critical data in patient records.
- chart patient progress.
- collect and evaluate diagnostic data to include chest radiography, electrocardiography, pulmonary function testing, and laboratory studies.

RC 140 Professional Development in Respiratory Care

Units: 2
Hours: 36 hours LEC
Prerequisite: RC 130, 131, and 132 with grades of "C" or better
Corequisite: RC 142
Catalog Date: June 1, 2020

This course prepares students for transition into professional practice. Topics include ethical behaviors, resume writing, and professional attributes and dress for the respiratory care setting. Interviewing skills, professional test preparation for state and national licensing examinations, and practice examinations for the National Board of Respiratory Care's Therapist Multiple-Choice Examination and Clinical Simulation Self Assessment Examinations are also covered.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe appropriate business attire for respiratory care professionals working outside the hospital environment.
- write an effective resume for employment in respiratory care.
- compose a letter of introduction for future employment.
- schedule an interview with a potential employer.
- discuss interviewing principles in relation to employment in respiratory care.
- complete job and licensing applications for respiratory care practice.
- assess preparation for state and national testing standards.
- discuss appropriate business practices for respiratory care practitioners working in home care.
- explain the Respiratory Care Practice Act as it relates to delivery of respiratory home care.
- describe the advanced practice examination system for Registered Respiratory Therapist.
RC 142 Clinical Externship III

Units: 6
Hours: 324 hours LAB
Prerequisite: RC 130, 131, and 132 with grades of "C" or better
Corequisite: RC 140
Enrollment Limitation: Meet the health requirements of the Los Rios Community College District for Allied Health Programs and certification in Pediatric Advanced Life Support and Neonatal Resuscitation Program.
Catalog Date: June 1, 2020

This course prepares for advanced practice of respiratory care. Topics include labor and delivery, neonatal intensive care, cardiac and medical intensive care, medical trauma management, application of pulmonary rehabilitation techniques, cardiopulmonary stress testing, sleep studies, and respiratory care techniques in the home setting. Additional topics include case studies in medical management. Field trips are required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- monitor hemodynamic values of patients in critical care units.
- evaluate hemodynamic values of patients in critical care units.
- assess performance of mechanical ventilators.
- troubleshoot mechanical ventilation problems.
- perform technical skills common to care of the critically ill.
- collect blood and tissue samples from critically ill patients.
- analyze blood and tissue samples from critically ill patients.
- report on patient status to physicians and co-workers.
- record critical data in patient records.
- chart patient progress.
- demonstrate correct application of therapeutic procedures to neonatal and pediatric patients.
- evaluate, assess, and modify neonatal and pediatric airways and therapy.

RC 295 Independent Studies in Respiratory Care

Units: 1 - 3
Prerequisite: None.
Catalog Date: June 1, 2020
Associate Degrees for Transfer

A.A.-T. in Social Justice Studies: Race and Ethnicity

The Associate in Arts in Social Justice Studies: Race and Ethnicity for Transfer degree provides students with a major that fulfills the general requirements of the California State University for transfer. Students with this degree will receive priority admission with junior status to the California State University system. The Associate in Arts in Social Justice Studies: Race and Ethnicity for Transfer (AA-T) degree may be obtained by the completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program outlined below (earning a C or better in these courses) and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education Breadth Requirements.

The Associate in Arts in Social Justice Studies: Race and Ethnicity for Transfer (AA-T) degree provides a curricular track for students who wish to transfer into a variety of CSU majors related to race and ethnicity, such as Ethnic Studies, Chicano Studies, or African American Studies. This Transfer Model Curriculum is an “Area of Emphasis” (AOE), which allows for students to transfer into more than one CSU major related to Race and Ethnicity. Students interested in transferring to a CSU campus to pursue a bachelor’s degree in an Area of Emphasis should meet with a counselor to confirm the courses required for lower division preparation in the major. This degree exposes students to the core principles and practices of the Social Justice Studies field in order to build a foundation for their future personal, academic, or vocational paths.

Catalog Date: June 1, 2020

Degree Requirements

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<td>SJS 300</td>
<td>Introduction to Social Justice Studies</td>
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<td>SJS 310</td>
<td>Introduction to LGBTQ Studies</td>
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<td>SOC 320</td>
<td>Minorities in America</td>
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A minimum of 9 units from the following:

Select three courses from at least two of the following areas:

**Area 1: History or Government**

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<td>History of the United States: African-American Emphasis (3)</td>
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<td>HIST 323</td>
<td>History of the United States: The American Indian Experience (3)</td>
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<td>HIST 325</td>
<td>History of Asian/Pacific Americans (3)</td>
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<td>HIST 327</td>
<td>History of the Chicano/Mexican American (3)</td>
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**Area 2: Arts and Humanities**

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<td>Latino, Mexican-American, and Chicano Literature (3)</td>
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<td>ENGLT 338</td>
<td>Native American Literature (3)</td>
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<td>HUM 320</td>
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**Area 3: Social Sciences**

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</table>
The Associate in Arts in Social Justice Studies: Race and Ethnicity for Transfer (AA-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- research how theoretical perspectives and critical theories on social justice inform the social, political, economic, historical, and cultural circumstances surrounding justice as they relate to race and ethnicity as well as other intersectional aspects of life in society.
- define and analyze power and oppression to better understand how they operate at the individual, cultural, and institutional levels.
- explain how intersectional formations of social identity reflecting various levels of power and privilege impact social justice at the individual, cultural, and institutional levels.
- recognize the historical origins and similarities in struggles for social justice among different ethnic and racial groups.
- assess artistic works that examine oppression, power, and justice as they relate to race and ethnicity.

Career Information

The AA-T degree provides students with a solid foundation in Social Justice Studies as well as prerequisites for upper division coursework leading to the baccalaureate degree in a variety of Areas of Emphasis. The degree gives students a pathway to possibilities, options, and baccalaureate degrees focusing on social justice. In addition, a student can use the AA-T in Social Justice Studies to get into a CSU and then complete a graduate degree in a related field. Students with degrees in this field often assume careers as (or in) the following: activists, community organizers, political campaigners, human rights groups, religious organizations, international agencies, lobbyists, and mediators. This program is also an excellent starting point for students interested in a career in law, law enforcement, social work, clinical psychology, or any social science, politics, business, education, or public policy.

A.A.-T. in Social Justice Studies: Women, Gender, and LGBTQ Studies

The Associate in Arts in Social Justice Studies: Women, Gender, and LGBTQ Studies for Transfer degree provides students with a major that fulfills the general requirements of the California State University for transfer. Students with this degree will receive priority admission with junior status to the California State University system. The Associate in Arts in Social Justice Studies: Women, Gender, and LGBTQ Studies for Transfer (AA-T) degree may be obtained by the completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program outlined below (earning a C or better in these courses) and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education Breadth Requirements.

The Associate in Arts in Social Justice Studies: Women, Gender, LGBTQ Studies for Transfer (AA-T) degree provides a curricular track for students who wish to transfer into a variety of CSU majors related to Women, Gender, LGBTQ Studies, such as Women’s Studies, Gender Studies, or Queer Studies. This Transfer Model Curriculum is an “Area of Emphasis” (AOE), which allows for students to transfer into more than one CSU major related to Women, Gender, LGBTQ Studies. Students interested in transferring to a CSU campus to pursue a bachelor’s degree in an Area of Emphasis should meet with a counselor to confirm the courses required for lower division preparation in the major. This degree exposes students to the core principles and practices of the Social Justice Studies field in order to build a foundation for their future personal, academic, or vocational paths.

Catalog Date: June 1, 2020
The Associate in Arts in Social Justice Studies: Women, Gender, and LGBTQ Studies for Transfer (AA-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- research how theoretical perspectives and critical theories on social justice inform the social, political, economic, historical, and cultural circumstances surrounding justice as they relate to gender, sexuality, and race as well as other intersectional aspects of life in society.
- define and analyze power and oppression to better understand how they operate at the individual, cultural, and institutional levels.
- explain how intersectional formations of social identity reflecting various levels of power and privilege impact social justice at the individual, cultural, and institutional levels.
- recognize the historical origins and similarities in struggles for social justice among diverse groups.
- assess artistic works and political achievements that expose oppression and injustice as they relate to women, gender, or the LGBTQ community.
Social Justice Studies (SJS)

SJS 300 Introduction to Social Justice Studies

This interdisciplinary course introduces students to the theoretical and practical foundations of social justice and the social processes that create and resist oppression. It covers the sociology, history, and psychology of oppressions based upon race, ethnicity, class, gender, sexuality, and other group identities in the United States and the corresponding social justice movements for liberation. It investigates how creating and undoing asymmetrical power relations are linked to social structures, institutional processes, and culture. Additionally, it provides a basis for a better understanding of socioeconomic, political, and cultural conditions of key social groups in the United States. Topics include theoretical foundations of social justice and oppression, history and politics of group identity, culture and ideologies, forms of oppression, privilege, and forms of resistance. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- define the foundational theories within social justice studies.
- differentiate between oppression and other forms of mistreatment.
- explain power asymmetry as it is linked to social structure and institutional processes.
- analyze theories on how identity is created for groups in a society via power, economic, political, and cultural structures.
- summarize the modern histories and experiences of groups oppressed because of race, ethnicity, class, gender, and sexuality in the United States.
- compile contributions of oppressed groups to the development of American society.
- assess the complex intersections and relationships within and across race, ethnicity, socioeconomic class, gender, sexual orientation, and other identities.
- identify and analyze the role of culture in oppression and in empowerment, including art, film, literature, or music reflecting different groups.
- understand theories on how and why groups resist.
- identify struggles for social justice, liberation, and decolonization.
- apply how privilege and oppression operate in the major institutions of the United States, including education, health care, the economy, and the criminal justice system.

SJS 310 Introduction to LGBTQ Studies

This course introduces students to Lesbian, Gay, Bisexual, Transgender, and Queer (LGBTQ) studies. It explores how LGBTQ individuals and communities are impacted by various social, cultural, historical, and political factors. Topics include politics of sexuality and sexual identities; forms of oppression including heterosexism, homophobia,
and transphobia, as well as resistance to oppression, violence against LGBTQ individuals and communities, and queer activism. This course also includes contemporary issues in families, education, religion, and the law.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze the various ways people identify their sexual orientation and/or their gender identity and expression.
- explore the intersections of homophobia, sexism, heterosexism, transphobia, racism, classism, ageism, ableism and other intersecting identities within the context of LGBTQ political struggles in the United States.
- assess theories about sexual orientation and gender identity and expression within the context of feminist theory, gender theory, and queer theory.
- examine the continuous evolution of legal policies and societal views of LGBTQ people on a global level.
- examine sexual orientation and gender identity within Native American, African American, Chicano/a and Latino/a, Asian American, Pacific Islander, and recent immigrant communities in the United States.
- identify key individuals and describe their roles and contributions to domestic and international LGBTQ struggles for full human rights.
- assess the impact of hate crimes on LGBTQ individuals, the LGBTQ community, the community at large, and public policy.
- research the history of public health policy in the United States as well as internationally to explore the ways that LGBTQ people have consistently suffered under homophobic, biphobic, and transphobic policies.
- examine the evolution of LGBTQ culture in literature, the media, and the arts.
- explore the impact of our education system on the ability of LGBTQ individuals and communities to achieve social justice and equity.
Social Science | American River College

Division Dean       Kathy Sorensen (Interim)
Department Chairs   Pam Chao

(916) 484-8283

Associate Degree

A.A. in Social Science

The Social Science degree provides an interdisciplinary approach to academic studies. The purpose of the program is for students to gain an understanding of the interconnectedness of various scientific disciplines. The interdisciplinary approach enables students to understand how issues and events are shaped by diverse socio-economic, political, ecological, biological and geographical forces.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<td></td>
<td>A minimum of 18 units from the following:</td>
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<td>Transferable courses must be selected from four of the following areas:</td>
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<tr>
<td></td>
<td>anthropology, economics, geography, history, philosophy, political science,</td>
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<tr>
<td></td>
<td>psychology (except PSYC 335), and sociology. Courses used for General</td>
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</tr>
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<td></td>
<td>Education purposes cannot be used for this degree.</td>
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<td>Total Units:</td>
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The Social Science Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Research and analyze topics from an interdisciplinary perspective.
- Integrate various social-scientific perspectives into the understanding of the subject matter.
- Compare and contrast the relative contribution of courses offered in various disciplines to an overall understanding of issues and events.
- Develop a personal interpretation about issues and matters under study.
- Identify and explain various forces that interact to shape events and social occurrences.
- Define and describe issues and events within an interdisciplinary perspective.

Social Science (SOCSC)

SOCSC 495 Independent Studies in Social Science

Units: 1 - 3
| **Prerequisite:** | None. |
| **Transferable:** | CSU |
| **Catalog Date:** | June 1, 2020 |
Sociology is the study of human society in all its manifestations. Its aim is to discover the process and structure of human interaction, to identify the main forces that sustain or weaken social groups, and to determine the conditions that transform social life. Sociology, like any science, is a disciplined, intellectual quest for knowledge about the fundamental nature of things.

Division Dean
Kathy Sorensen (Interim)

Department Chairs
Pam Chao
(916) 484-8283

Associate Degree for Transfer

A.A.-T. in Sociology

This Associate in Arts in Sociology for Transfer provides a path to students who wish to transfer to a CSU campus in Sociology and serves the diverse needs of students who wish to obtain a broad and an in-depth understanding of the field. Additionally, this degree allows students to learn the fundamental principles and practices of Sociology in order to create a solid foundation for their future personal and academic endeavors.

The Associate in Arts in Sociology for Transfer provides students with a major that fulfills the general requirements of the California State University for transfer. Students with this degree will receive priority admission with junior status to the California State University system.

The Associate in Arts in Sociology for Transfer (A.A.-T.) may be obtained by the completion of 60 transferable, semester units with a minimum of a 2.0 GPA, including (a) the major or area of emphasis described in the Required Program outlined below (earning a C or better in these courses), and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

Catalog Date: June 1, 2020

Degree Requirements

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<tr>
<td>SOC 300</td>
<td>Introductory Sociology (3)</td>
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<tr>
<td>or SOC 480</td>
<td>Introductory Sociology - Honors (3)</td>
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<tr>
<td>SOC 301</td>
<td>Social Problems</td>
<td>3</td>
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<tr>
<td>PSYC 330</td>
<td>Introductory Statistics for the Behavioral Sciences</td>
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<td>PSYC 335</td>
<td>Research Methods in Psychology (3)</td>
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<td>SOC 318</td>
<td>Introduction to Crime, Deviance, and Social Control (3)</td>
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<tr>
<td>SOC 320</td>
<td>Minorities in America (3)</td>
<td></td>
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<tr>
<td>SOC 342</td>
<td>Gender Relations in American Society (3)</td>
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<td>ANTH 310</td>
<td>Cultural Anthropology (3)</td>
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<td>GEOG 310</td>
<td>Human Geography: Exploring Earth's Cultural Landscapes (3)</td>
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<td>PSYC 480</td>
<td>Honors General Principles (3)</td>
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<td>or PSYC 300</td>
<td>General Principles (3)</td>
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<tr>
<td>PSYC 354</td>
<td>The Psychology of Family Life and Intimate Relationships in a Diverse Society (3)</td>
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</table>
The Associate in Arts in Sociology for Transfer (AA-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- differentiate between scientifically-based sociological knowledge and hear-say, personal beliefs, and opinions.
- compare and contrast the major theoretical perspectives in sociology.
- define basic sociological terms and concepts regarding the nature of social life, social structures, socio-economic, political, and cultural institutions.
- analyze various sociological perspectives and their relevance to the understanding of social life in general and personal life in particular.
- construct and evaluate sociological data, utilize the scientific method, draw reasonable conclusions.
- identify and understand the ethical implications involved in research and their impact on social policy/public policies.
- apply sociological principles and theories to everyday life situations in regard to interaction with people from diverse backgrounds in a just, equitable, and inclusive manner.

Career Information

The Sociology degree is designed to facilitate students' successful transfer to four-year colleges that prepare them for advanced study in a variety of graduate programs as well as a variety of career opportunities in social work, law, criminology, law enforcement, teaching, health services, urban planning and development, and research.

Sociology (SOC)

SOC 300 Introductory Sociology

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340
Transferable: CSU; UC
General Education: AA/AS Area V(b); CSU Area D0; IGETC Area 4J
C-ID: C-ID SOCI 110
Catalog Date: June 1, 2020

This course examines principles and basic concepts in sociology. It includes the study of institutions, culture, social organization, group interaction, social stratification, economy, politics, social movements, and urbanization. This course is not open to students who have completed SOC 480.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- compare various sociological perspectives and their relevance to the understanding of social life.
- synthesize various sociological theories to enhance one’s understanding of everyday life events and social experiences.
- identify and discuss major issues facing the world today from a sociological standpoint.
- relate sociological theories to the workings of various institutions and analyze social issues and events from a sociological standpoint.
- define the role of human agency in shaping institutions and structures in society.
- research and evaluate various economic, political, and social institutions in society.
- apply the micro-sociological and interpersonal level analysis to social behavior.
apply macro-sociological and institutional and systemic analysis to social behavior.

SOC 301 Social Problems

This course examines contemporary social problems in the US within a theoretical and global context. It examines the role and the structure of power and ideology in shaping our understanding and approach to social problems. It includes a critical analysis of their causes, consequences as well as an evaluation of proposed solutions and methods of treatment. Attention is directed to poverty and inequality, race and gender inequalities, problems of the environment, unequal access to education as well as problems in the economic and political systems and the impact of globalization on these problems.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate understanding of major social problems in the US using sociological perspectives and concepts.
- place local, regional, and national social problems in a global context.
- examine and explain causes and consequences of social problems within a national and global context.
- discuss how causes of social problems are structurally connected to their solutions.
- define the role of various institutions, the structure of power, the role of ideology, and global forces as they pertain to the social construction of social problems, their causes and solutions.
- analyze and interpret qualitative and quantitative information and evidence about social problems and how they are impacted by domestic and global socio-economic, political, and cultural processes.

SOC 309 Self and Society

This course introduces concepts, social theories, and methods used to analyze how the sense of self is created in everyday life. It explores various theories of the development of self, the nature of human behavior, the importance of language for perception and thought, and reality as a social construction. Additionally, it examines how the self emerges and is maintained through social interaction and our involvement in social relationships. It includes the study of social identity, roles, socialization, identity change, and emotions.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- compare and contrast various sociological and other perspectives and their relevance to the understanding of self
- explain the relationship between broad structural changes and strategies of self-management in everyday life
- differentiate between various agents of socialization and their impact on the formation of self-identity
- interpret the relationships between physical self, social/emotional self, and self-perception
- analyze how social roles (obligations and expectations) are constructed and maintained through social interaction in everyday life
- explain how gender, race/ethnicity, and social class intersect to shape the perception and presentation of self
- evaluate impression management and emotion management as they apply to various institutional settings
SOC 318 Introduction to Crime, Deviance, and Social Control

This course introduces various sociological perspectives regarding issues of crime, deviance, and social control. Particular attention is paid to the analysis of how laws and cultural norms shape the definition and meaning of crime and deviance. Topics covered include street crimes, corporate crimes, white-collar crimes, domestic violence, drugs and alcohol abuse, lifestyle crimes, prison systems, capital punishment, rehabilitation, and the trend towards privatization of prisons. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- compare and contrast various sociological perspectives and their relevance to the understanding of crime, deviance, and social control.
- define basic terms and concepts regarding crime, deviance, and social control.
- explain the nature and meaning of deviance as a function of cultural norms, politics, social status, and law.
- apply various sociological theories to explain the process by which actions and behaviors come to be defined as deviant and/or criminal.
- evaluate the strengths and weaknesses of sociological theories as they relate to deviance, crime, and social control.
- differentiate between roles of various institutions of social control.
- explain the complex structural nature of punishment, prisons, and rehabilitation.

SOC 320 Minorities in America

This course examines patterns of racial and ethnic group relations in the United States of America. It employs basic sociological approaches to the study of race and ethnicity, with an emphasis on a comparative analysis of historical, social, and economic factors affecting intergroup and intragroup dynamics. Topics include prejudice, discrimination, racism, racial and ethnic stratification, assimilation patterns among groups, demographic shifts, civil rights, and other related topics. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- utilize basic sociological approaches to race and ethnicity
- define “minority status” and assess the attributes of minority groups within the broader U.S. society
- evaluate and critique factors affecting assimilation of minority groups
- compare and contrast the social construction and social experiences of major ethnic and racial groups in the U.S.
- examine the importance of social systems in shaping and maintaining the dynamic relationship between dominant and subordinant groups
- formulate macro level and micro level analyses of minority and dominant social issues
- analyze current complex racial and ethnic issues and evaluate solutions
- discuss the relationship among the individual, interpersonal, institutional, and systemic spheres
- assess the various definitions of diversity
SOC 325 Chicano Culture

This course is an introduction to fundamental concepts, social theories, and methods used to understand and critically analyze the production, adaptation, and construction of Chicano identity and Chicano culture within the United States. It includes micro and macro sociological analysis of Chicano culture and its relationship to Chicano social identity, social inequality, and social change.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain historical and cultural origins of Mexican-Americans in the United States
- compare and contrast sociological paradigms’ approaches to Chicano culture
- list and describe various elements of Chicano culture
- evaluate differences between individual experiences of Chicano culture and systemic functions of Chicano culture
- analyze connections between culture and the Chicano Movement
- interpret how culture can be used to empower and oppress
- differentiate between culture expression and stereotyping
- generate and evaluate potential solutions to at least three of the modern cultural dilemmas Chicanos face in the United States today
- describe and evaluate the demographic shift in the Chicano population in the United States
- differentiate between ethnocentric and culturally relative analyses of Chicano culture and the Chicano movement

SOC 335 Sociology of Aging

This course examines the aged and aging process with emphasis on social factors affecting and affected by an aging population. It includes an analysis of demographics, history of aging in America, social conditions, resources and support systems, employment, retirement, and social class/cultural differences.

This course is not open to students who have completed GERON 300.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- chart the demographic shift in America as it relates to older adults and evaluate the concept of generational equity
- explain at least five of the major implications and challenges of increased longevity as they relate to end-of-life issues, advocacy, adult abuse, filial responsibility, generational equity, and entitlements
- compare major biological theories with social theories of aging
- explain the major social issues as related to aging in America and their possible solutions
- analyze the overall economic position of older Americans, including retirement plans, health care, job outlook, and entitlements
- calculate the cost of the average funeral and construct cost-saving measures
SOC 342 Gender Relations in American Society

This course deals with gender relations in American society. It examines historical, social, economic, political, and cultural forces in shaping gender identity, gender roles, and gender expectations. This course utilizes sociological theories to explain gender experiences as socially constructed rather than biologically determined. Specifically, it examines the experiences of people of diverse economic, racial, and ethnic backgrounds within historical and cross-cultural perspectives. This course includes analysis and discussion of topics such as gender relations in the home, workplace, mass media, health care system, and politics.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- evaluate various sociological perspectives relevant to gender socialization, gender identity formation, and gender inequalities.
- construct a sociological and theoretical understanding of gender socialization in terms of how men's and women's experiences diverge in regarding family life, workplace, media, politics, education, and science.
- compare men's and women's lives as historically and culturally created realities and experiences.
- explain historical and theoretical causes and consequences of gender inequality in American society.
- discuss the role of various social, economic, political, religious, and cultural institutions in creating, reinforcing, and perpetuating gender inequality.
- utilize theory, history, and quantitative information to remedy gender inequality in American society.

SOC 350 Sociology of Popular Culture

This course analyzes the historical development and emergence of American popular culture and the relationship between contemporary popular culture, social institutions and collective behavior. Further, it considers popular culture within the context of social, political, and economic changes in the United States and includes an analysis of theories of popular culture, hegemony, advertising, music, and film.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Compare and contrast the impact of differing popular culture products on different audiences through reception and consumption approaches.
- Evaluate American popular culture products by utilizing the sociological perspective.
- Define key terms relating the study of popular culture.
- Critique the works and perspectives of sociological and cultural studies theorists like Marx, Adorno, Benjamin, Weber, Veblin, Goffman, Gramsci, and Durkheim.
- Examine the effects of subcultural and counter-cultural practice and objects on American society.
- Apply core concepts within the study of popular culture to historically relevant events and examples.
- Compare and contrast the main differences among core sociological theories such as conflict theory, structural functionalism, symbolic interactionism, and feminist theory and their application to popular culture.
- Analyze the historical, cultural, economic, and political influences on representations relating to race, class, gender, sexual orientation, and nationality.
- Evaluate various arguments related to the debate on taste with special emphasis on high culture, low culture, and folk culture.
This course provides an in-depth examination of society and human behavior from various sociological perspectives. Sociological theories, both macro and micro, are applied to different aspects of life including culture, social stratification and inequality, conflict and social change, and politics and economy. The class is conducted as a seminar in which students will be responsible for developing in-depth analysis and understanding of issues based on classical and contemporary sociological theories. This course is designed for those from all academic disciplines who are motivated to learn sociological perspectives and how they apply to all aspects of human experience both at the individual and societal levels. The honors section utilizes a rigorous and an intensive instructional methodology designed to challenge motivated students.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify and correctly use basic sociological terminology and concepts
- distinguish between primary and secondary sources as forms of scientific evidence
- analyze various theoretical perspectives used by sociologists to explain institutional patterns and social events
- identify the evidence that logically supports different sociological perspectives
- explain the causes and consequences of issues and events within a sociological framework
- critique the theoretical adequacy of different sociological perspectives
- assess the empirical validity of the premises argued by various classical and contemporary sociological theories
- synthesize alternative interpretations about social systems and human action with a focus on how social, economic, political, and historical forces intersect to shape social life
- evaluate the role of human agency in bringing about conflict and social change
- apply the pros and cons of various sociological perspectives to the socio-economic, political, and cultural topics at hand

SOC 495 Independent Studies in Sociology

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.
Speech Communication | American River College

The number-one skill identified by employers is the ability to communicate clearly in both oral and written form. The number-two skill identified by employers is the ability to work effectively as a member of a group or team. Speech courses are vital to developing the communication skills necessary for personal and professional success.

Division Dean
Diana Hicks

Department Chairs
David Austin

Associate Degree for Transfer

A.A.-T. in Communication Studies

This degree provides a foundation for students to transfer to a CSU campus with a major in Communication, Speech Communication, Communications, or Communication Studies.

The Associate in Arts degree in Communication Studies for Transfer provides students with a major that fulfills the general requirements of the California State University for transfer. Students with this degree will receive priority admission with junior status to the California State University system.

The Associate in Arts degree in Communication Studies for Transfer (A.A.-T.) may be obtained by the completion of 60 transferable, semester units with a minimum of a 2.0 GPA, including (a) the major or area of emphasis described in the Required Program outlined below (earning a C or better in these courses), and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

Catalog Date: June 1, 2020

Degree Requirements

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<td>SPEECH 301</td>
<td>Public Speaking</td>
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<tr>
<td>SPEECH 311</td>
<td>Argumentation and Debate (3)</td>
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<td>SPEECH 321</td>
<td>Interpersonal Communication (3)</td>
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<td>SPEECH 331</td>
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<td>SPEECH 325</td>
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<td>General Principles (3)</td>
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Speech (SPEECH)

**SPEECH 301 Public Speaking**

| Units: | 3 |
| Hours: | 54 hours LEC |
| Prerequisite: | None. |
| Advisory: | Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340 |
| Transferable: | CSU; UC |
| General Education: | AA/AS Area II(b); CSU Area A1; IGETC Area 1C |
| C-ID: | C-ID COMM 110 |
| Catalog Date: | June 1, 2020 |

This course covers oral composition and delivery of messages in public speaking situations. It focuses on how to manage anxieties about speaking in public, organize ideas when speaking to inform and persuade, use supporting materials to increase the effectiveness of messages, appeal to different audiences, and critically evaluate messages. By the end of the course, students will be more confident and effective in oral communication situations. Audio/video recording equipment may be used as an aid to self-analysis and improvement.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- organize and deliver informative speeches.
- organize and deliver persuasive discourse designed to convince or actuate an audience.
- research and critically evaluate information to create informed responses to issues and problems.
- defend claims with appropriate evidence.
- manage personal communication apprehension in public speaking situations.
- analyze and identify factors that contribute to effective design, development, and delivery of speeches.
- design messages that adapt to target audiences in order to maximize communication effectiveness.

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The Associate in Arts in Communication Studies for Transfer (AA-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- assess the factors which contribute to communication competency.
- generate strategies to communicate effectively with others in dyads, groups, and public situations.
- evaluate the role of communication in human interactions.
- analyze evidence, reasoning, and persuasive appeals for credibility, logic, and relevance.
- demonstrate skills and behaviors which contribute to open and respectful communication of diverse ideas and beliefs.

**Career Information**

A primary skill employers in all fields seek is effective communication. A degree in Communication Studies enriches personal development and enhances opportunities for employment and promotion in such diverse professional fields as education, law, law enforcement, health, science, management, organizational development, psychology, public service, sales, training, entertainment, and social services.
• produce messages extemporaneously.

SPEECH 302 Persuasive Speech

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: SPEECH 301 with a grade of "C" or better; and eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC (UC credit limitation: SPEECH 302 & 311 combined: maximum credit, one course)
General Education: CSU Area A3
C-ID: C-ID COMM 190
Catalog Date: June 1, 2020

This course is a detailed study of persuasive discourse through an understanding of basic communication principles. Emphasis is placed on the use of proofs, language, and logical thinking. Audio- and/or video-recording equipment may be used as an aid for self-analysis and improvement.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• analyze persuasive appeals.

• design persuasive messages.

• produce effective oral persuasion responsibly and ethically.

• evaluate the ways language produces influence.

• demonstrate the skills necessary for open and respectful communication of diverse ideas and beliefs.

SPEECH 311 Argumentation and Debate

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGRW 300, ENGRW 480, or SPEECH 301
Transferable: CSU; UC (UC credit limitation: SPEECH 302 & 311 combined: maximum credit, one course)
General Education: CSU Area A3
C-ID: C-ID COMM 120
Catalog Date: June 1, 2020

This course focuses on critical thinking with an emphasis on building and analyzing logical arguments. Rhetorical strategies are discussed and practiced. The course covers organization, supporting materials, delivery of effective arguments, and the use of questioning in critical thinking.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• critically evaluate reasoning and evidence.

• develop research questions for presentations.

• arrange and organize ideas.

• prioritize main points and distinguish these from subordinate ideas.

• support claims with logic and reasoning.

• identify fallacies of reasoning.

• debate convincingly with clarity and impact.

SPEECH 321 Interpersonal Communication

Units: 3
Hours: 54 hours LEC
This course focuses on communication between individuals, with emphasis on the acquisition of techniques and skills essential to self-actualization and to establishing authentic personal, social, and professional relationships. Effective communication strategies are discussed, practiced, and reflected upon both in and outside the classroom environment.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify key principles of ethical interpersonal communication.
- devise strategies for increasing interpersonal effectiveness.
- diagnose issues relating to the success or failure of interpersonal relationships.
- detect the impact of the self, others, and perception on interpersonal communication.
- produce and process competent verbal and nonverbal messages.
- evaluate the relative merits of various interpersonal communication strategies.

SPEECH 325 Intercultural Communication

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: None for ENGRD 310 or ENGRD 312; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC
General Education: AA/AS Area VI; CSU Area D; IGETC Area 4
C-ID: C-ID COMM 150
Catalog Date: June 1, 2020

This course is an introduction to the challenges and rewards of intercultural communication in everyday situations. It is designed to increase understanding of variations in communication patterns across cultures and prepares individuals for more effective communication. Emphasis is on both international culture variance and sub-cultural group-based experiential background variance.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- assess the major areas of cultural diversity and their impact on communication.
- analyze the effects of cultural variance on the selection and interpretation of verbal and nonverbal cues.
- formulate strategies for interacting successfully across intercultural communication barriers.
- distinguish between cultural practices and universal human communication behaviors.
- describe how culture affects perceptions, values, norms, and roles.
- resolve conflict arising from cultural differences.

SPEECH 331 Group Discussion

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC
General Education: AA/AS Area II(b); CSU Area A1; IGETC Area 1C
C-ID: C-ID COMM 140
Catalog Date: June 1, 2020

This course covers the dynamics of group communication and prepares individuals to function more effectively in groups. It focuses on oral communication in task and
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- operate as an effective member of small task-oriented groups.
- judge benefits of group work.
- generate and persuasively express critical thought which contributes positively to group decision making.
- devise solutions by using structured problem-solving techniques.
- evaluate benefits of conflict.
- assess the appropriateness of various conflict-management techniques.
- use effective conflict management techniques.
- choose productive approaches to leadership.
- examine the impact of group roles and norms.
- manage verbal and nonverbal behavior to increase communication effectiveness in the small group setting.
- prepare for, organize, and deliver presentations effectively within small group settings.
- discover, critically evaluate, and accurately report information.

SPEECH 361 The Communication Experience

| Units: | 3 |
| Hours: | 54 hours LEC |
| Prerequisite: | None. |
| Advisory: | Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340. |
| Transferable: | CSU; UC |
| General Education: | AA/AS Area II(b); CSU Area A1; IGETC Area 1C |
| C-ID: | C-ID COMM 180 |
| Catalog Date: | June 1, 2020 |

This course provides an introduction to basic skills and concepts necessary for effective communication in a variety of contexts. Topics include effective listening, facilitation of interpersonal relationships, conflict resolution, media communication, practical group experience, and public speaking.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- assess and manage communication apprehension.
- design and employ effective listening strategies.
- generate effective verbal and nonverbal messages applicable to a variety of communication situations.
- manage group interactions productively.
- organize and orally present information using effective public speaking strategies.
- predict and recognize sources of conflict.
- demonstrate behaviors that contribute to respectful communication of diverse ideas.
- assess aspects of media communication.

SPEECH 362 Mediated Communication Experience

| Units: | 3 |
| Hours: | 54 hours LEC |
| Prerequisite: | None. |
| Transferable: | CSU |
This course focuses on the skills and concepts necessary to communicate effectively in the online environment. Topics include online group work and presentations, public speaking, interviewing, conference calls, and computer mediated interpersonal communication. Students will be expected to use their own video recording devices.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- assess the basic concepts of the field of mediated communication.
- demonstrate active listening and effective feedback in online interactions.
- manage issues related to communication apprehension.
- use appropriate verbal and nonverbal communication techniques when delivering oral presentations through mediated channels.
- adapt messages to diverse audiences in a variety of contexts.
- exhibit productive behaviors as a member of a group.
- apply ethical standards to communication.
- utilize telecommunications applications to transmit messages through text, video, audio, and images.

SPEECH 495 Independent Studies in Speech

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.
Associate Degree

A.S. in Speech-Language Pathology Assistant Program

This degree prepares students to assist Speech-Language Pathologists in treating disorders of communication. Such disorders may be related to articulation and phonology, child and adult language, motor speech, voice, fluency, and hearing. Topics include an introduction to the field of communication disorders, articulation and phonology for the speech-language pathology assistant (SLPA), professional issues and practices in speech-language pathology, speech/language/hearing clinical strategies, clinical considerations in service delivery to clients with communication disorders, and fieldwork experience.

Catalog Date: June 1, 2020

Degree Requirements

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<th>COURSE CODE</th>
<th>COURSE TITLE</th>
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<td>DEAF 310</td>
<td>American Sign Language I</td>
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<tr>
<td>ECE 312</td>
<td>Child Development (3)</td>
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<tr>
<td>or PSYC 372</td>
<td>Child Development (3)</td>
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<tr>
<td>ECE 325</td>
<td>Positive Guidance Strategies with Young Children</td>
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<td>ECE 404</td>
<td>Children with Special Needs</td>
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<td>GERON 302</td>
<td>Psychology of Aging: Adult Development and Aging (3)</td>
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<tr>
<td>or PSYC 374</td>
<td>Psychology of Aging: Adult Development and Aging (3)</td>
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<tr>
<td>SLPA 105</td>
<td>Articulation and Phonology for the SLPA</td>
<td>3</td>
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<td>SLPA 110</td>
<td>Professional Issues and Practices in Speech-Language Pathology</td>
<td>3</td>
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<td>SLPA 115</td>
<td>Speech, Language, and Hearing Clinical Strategies</td>
<td>3</td>
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<tr>
<td>SLPA 120</td>
<td>Clinical Considerations in Service Delivery to Clients with Communication Disorders</td>
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<td>SLPA 121</td>
<td>Fieldwork Experience in Speech-Language Pathology</td>
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<td>SLPA 300</td>
<td>Introduction to Communication Disorders</td>
<td>3</td>
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<td>SPEECH 325</td>
<td>Intercultural Communication</td>
<td>3</td>
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<tr>
<td>SPEECH 331</td>
<td>Group Discussion</td>
<td>3</td>
</tr>
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<td>Total Units:</td>
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The Speech-Language Pathology Assistant Program Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:
• describe various communication disorders, including etiology and some remedial techniques.
• explain the major areas of cultural diversity and the relationship between culture and communication.
• demonstrate skills needed to assist in the management of speech-language pathology programs and services.
• describe the therapeutic process especially in terms of how learning occurs and strategies for effective lesson delivery.
• implement a treatment protocol as prescribed by the supervising Speech-Language Pathologist.
• describe professional responsibilities and ethical behavior appropriate for the Speech-Language Pathology Assistant.

Career Information

Upon completion of the Associate in Science degree, a student possesses the course work and field work experience to work as a Speech-Language Pathology Assistant (SLPA) in both private and public agencies, such as hospitals, rehabilitation centers, and the public schools serving preschool through adult-age clients. Successful completion of the Speech-Language Pathology Assistant program qualifies the graduate for eligibility to apply to the Speech-Language Pathology and Audiology and Hearing Aid Dispensers Board for registration as a Speech-Language Pathology Assistant.

Speech-Language Pathology (SLPA)

SLPA 105 Articulation and Phonology for the SLPA

<table>
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<td>Hours:</td>
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<tr>
<td>Prerequisite:</td>
<td>SLPA 300 with a grade of &quot;C&quot; or better</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
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This course introduces principles and practices for management of individuals with articulation and/or phonologic disorders, with consideration for cultural and linguistic variations. Screening protocols as well as therapeutic practices and materials are discussed. Additionally, this course covers the study and application of the International Phonetic Alphabet (IPA), transcription from Standard American English to IPA, and transcription from IPA to Standard American English.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• differentiate between articulation disorders and phonologic disorders.
• identify anatomical structures and physiological functions related to normal speech production.
• transcribe Standard American English into the IPA and transcribe the IPA into Standard American English.
• collect a speech sample from a child and develop a phonetic inventory.
• accurately document performance of a sample client on an articulation screener.
• model therapeutic techniques for treating articulation and phonologic disorders.
• label oral motor tools and describe how to use them effectively with clients.

SLPA 110 Professional Issues and Practices in Speech-Language Pathology

<table>
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<tr>
<th>Units:</th>
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</thead>
<tbody>
<tr>
<td>Hours:</td>
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<tr>
<td>Prerequisite:</td>
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</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
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</tbody>
</table>

This course introduces principles and practices for management of individuals with communicative disorders, with consideration for cultural and linguistic variations. It includes legal and ethical considerations for the practicing Speech-Language Pathology Assistant (SLPA) as well as the practicing Speech-Language Pathologist (SLP). Requirements for employment in various work settings, including interdisciplinary and supervisory relationships, observational skills, mandated reporting, Code of Ethics, and scope of practice are covered. A total of six (6) hours of clinical observation at off-campus locations in the area are a part of the course.

Student Learning Outcomes

Upon completion of this course, the student will be able to:
• demonstrate functional knowledge of professional responsibilities and ethical behavior appropriate for the Speech-Language Pathology Assistant (SLPA).

• describe the skills needed to assist in the management of speech-language pathology programs and services.

• evaluate the supervisory process, the clinical competencies expected, and the SLP/SLPA role in the process.

• describe a variety of recording and behavioral interpretation techniques for use in observation.

• identify the important skills in observation, including differentiating between fact, opinion, judgment, and speculation.

• list job professions that are considered mandated reporters and describe the process of reporting abuses (of the child or adult client).

• demonstrate functional knowledge of concepts and principles in the context of cultural and linguistic differences when serving the communicative needs of multilingual populations.

• analyze therapeutic processes and materials to address communication deficits from the review of live speech and language therapy sessions.

SLPA 115 Speech, Language, and Hearing Clinical Strategies

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: SLPA 105 with a grade of "C" or better
Catalog Date: June 1, 2020

This course explores specific materials and strategies regarding speech, language, and hearing therapeutic service delivery with a focus on screening and intervention. It covers speech, language and hearing screening procedures, forms of Augmentative and Alternative Communication (AAC), development of forms of AAC, and the collection and transcription of language samples. This course is designed as an additional opportunity to gain more experience in preparation for fieldwork as a Speech-Language Pathology Assistant (SLPA).

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• identify various forms of Augmentative and Alternative Communication (AAC).

• demonstrate high-tech, low-tech, and no-tech forms of AAC for use with children and/or adults.

• collect language samples in children and/or adults.

• transcribe language samples in children and/or adults.

• calculate and confirm Mean Length of Utterance (MLU).

• administer a speech and language screening and accurately document child/adult performance.

• administer a hearing screening and accurately document child/adult performance.

SLPA 120 Clinical Considerations in Service Delivery to Clients with Communication Disorders

Units: 3
Hours: 54 hours LEC
Prerequisite: SLPA 110 with a grade of "C" or better
Catalog Date: June 1, 2020

This course explores specific disorders of communication, and their causes and characteristics. Specific materials and strategies regarding service delivery are emphasized, with a focus on evidence-based practice. Similarities and differences with regard to therapeutic service provision by the Speech-Language Pathology Assistant (SLPA) and the Speech-Language Pathologist (SLP) are introduced. This course covers remediation techniques and rationales for commonly used therapeutic approaches as well as principles of learning, strategies for service delivery with groups of clients, data collection, clinical documentation, and record keeping. The scope of responsibilities and the role of the SLPA in intervention and behavior management strategies are also reviewed. A total of six (6) hours of clinical observation at off-campus locations in the area are a part of the course.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• formulate information related to the etiologies, variations, and disorders of human communication.

• critique common treatment strategies used in remediation of communication disorders.
investigate principles of evidence-based practice.

demonstrate functional knowledge of the therapeutic process.

observe and report clinical behavior in an objective manner, including techniques for accurate charting and graphing of client responses.

implement a treatment protocol as prescribed by the supervising SLP.

SLPA 121 Fieldwork Experience in Speech-Language Pathology

Units: 4
Hours: 18 hours LEC; 162 hours LAB
Prerequisite: SLPA 115 and 120 with grades of "C" or better

Enrollment Limitation: Prior to student orientation, the following requirements must be submitted for review: (1.) Proof of negative tuberculin (TB) skin test within three months prior to class. (2.) If TB skin test result is positive, proof of inactive TB chest x-ray within one year prior to class. (3.) Proof of completion of CPR/First Aid certification. (4.) Proof of malpractice insurance. Live Scan fingerprinting is determined through clinical placement protocol.

Catalog Date: June 1, 2020

This course provides supervised fieldwork experience assisting with the clinical management of persons with communicative disorders. It covers the job-related skills needed to be a speech-language pathology assistant (SLPA). It also provides opportunities to interact with clients/patients while implementing a prescribed treatment plan, and assisting with screening or evaluation under the direction of a speech-language pathologist. This course includes opportunities for record keeping and managing client data, setting up/preparing for sessions, and performing various clerical duties. A portion of this course may be offered in a TBA component of 162 hours which will include supervised fieldwork experience assisting with the clinical management of persons with communicative disorders. All fieldwork is done in specified off-campus locations.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- manage speech and language screenings (without interpretation) following specified screening protocols developed by a supervising Speech-Language Pathologist (SLP).
- plan activities pertaining to documented treatment plans in order to provide services to clients/patients under the direction of a supervising SLP.
- manage intervention activities and assist in service delivery with clients identified by a supervising SLP.
- appraise client/patient progress toward meeting the established objectives as stated in the prescribed treatment plan and document changes made.
- detect and report client/patient progress and any other important information to the supervising SLP.
- create materials and assist with other clerical duties as directed by a supervising SLP.
- apply skills as necessary to assist the supervising SLP, such as scheduling and record keeping.
- explain Health Insurance Portability and Accountability Act (HIPAA) legislation and maintain the confidentiality of client information.
- perform all duties according to documented legal and ethical standards.
- complete the application process to become a registered speech-language pathology assistant.

SLPA 126 Neurogenic Communication Disorders for the SLPA

Units: 3
Hours: 54 hours LEC
Prerequisite: SLPA 300 with a grade of "C" or better

Catalog Date: June 1, 2020

This course explores neurogenic cognitive-communicative disorders in adults and is designed for the speech-language pathology assistant (SLPA). It covers basic neuroanatomy, cognitive-communicative disorders acquired in adulthood, as well as therapeutic approaches and strategies for service delivery. The scope of responsibilities and the role of the SLPA are reviewed.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- label basic neuroanatomy structures and describe their function(s).
- formulate information related to etiologies, variations, and disorders of human communication as it relates to the adult client.
- critique common treatment strategies used in remediation of cognitive-communication disorders.
• investigate principles of evidence-based practice.
• demonstrate functional knowledge of the therapeutic processes addressing the adult with cognitive-communication disorders.

SLPA 300 Introduction to Communication Disorders

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 and ESLW 340.
Transferable: CSU
Catalog Date: June 1, 2020

This course is an introduction to the field of communication disorders, including an overview and history of the profession of speech-language pathology. It includes an overview of various speech and language disorders, as well as guidelines for determining the development of typical and atypical speech and language, and a minimum of three hours of video observations.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• differentiate between typical and atypical speech and language development.
• identify major categories of communication disorders and their possible etiological factors.
• label diagrams of anatomical structures necessary for the production of speech.
• identify communication disorders in individuals of various ages with consideration of cultural and linguistic differences.
• identify various options for employment within the field, as well as professional organizations which support the field.
• analyze therapeutic processes and materials to address communication deficits from the review of multimedia sources.
Student Government (SGVT)

SGVT 300 Introduction to Student Government

- **Units:** 2
- **Hours:** 18 hours LEC; 54 hours LAB
- **Prerequisite:** None.
- **Transferable:** CSU
- **Catalog Date:** June 1, 2020

This course provides a study of the legal, educational, and philosophical basis of student government and leadership studies. It may include travel to other campuses, area and state conferences, and it provides the opportunity to participate on faculty and administrative committees. Topics are designed to teach leadership skills and to give practical experience in the field of student government. This course is highly advised for those involved in student government. Field trips may be required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- recommend appropriate advocacy strategies using acquired knowledge of Title 5, parliamentary procedure, committee structures, and campus resources.
- develop effective leadership skills which may include delegating, problem solving, critical thinking, effective meeting planning, time management, and budgeting.
- assess interpersonal skills which may include goal setting, stress management, motivation, oral and written communication skills, active listening, group participation, and diversity awareness.
- organize a variety of campus activities.
- create a budget for student organizations.
- analyze budgets for student organizations.

SGVT 310 Leadership Development

- **Units:** 3
- **Hours:** 54 hours LEC
- **Prerequisite:** None.
- **Transferable:** CSU
- **Catalog Date:** June 1, 2020

This course provides emerging and existing student leaders the opportunity to explore the concept of leadership and to develop and improve their leadership skills. It examines contemporary leadership models as well as personal values and beliefs that affect personal philosophy of leadership. This course provides opportunities to experience leadership in college and community settings. This course is highly advised for those involved in student government.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:
• define fundamental elements of leadership.
• evaluate diverse leadership theories, styles and philosophies.
• evaluate personal leadership values and beliefs.
• describe leadership theories, styles, and approaches within the planning and conduct of organized events.
• develop organizational and situational acumen.
• demonstrate effective critical thinking and ethical decision-making skills.
• define values and self-knowledge of leadership skills and abilities.
• provide purposeful feedback to others.
• construct a personal philosophy of leadership that includes an understanding of self, others, and community.
• assess personal performance.
• define strategies to manage and effect change.
Teacher Education | American River College

Division Dean
Douglas Herndon

Department Chairs
NA

(916) 484-8101
2020-2021 Unofficial Catalog Preview

Theatre Arts | American River College

Division Dean Angela Milano
Department Chairs Kathy Burleson Sam Williams

(916) 484-8433

Associate Degrees for Transfer

A.A.-T. in Theatre Arts

This degree is designed to facilitate successful transfer to baccalaureate theatre or drama degree programs. It provides students with the lower division breadth and depth of the field of theatre arts and exposes students to the core principles and practices in the field. It covers the basics of acting, theatre technology and production, and the historical and modern development of theatre and dramatic literature in the world of entertainment.

The Associate in Arts in Theatre Arts for Transfer degree provides students with a major that fulfills the general requirements of the California State University for transfer. Students with this degree will receive priority admission with junior status to the California State University system. The Associate in Arts in Theatre Arts for Transfer (AA-T) degree may be obtained by the completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program outlined below (earning a C or better in these courses) and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education Breadth Requirements.

Catalog Date: June 1, 2020

Degree Requirements

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<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<td>TA 300</td>
<td>Introduction to the Theatre (3)</td>
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<td>or TA 302</td>
<td>History and Theory of the Theatre I (3)</td>
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<td>TA 350</td>
<td>Theory and Techniques of Acting I (3)</td>
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<td>Modern Rehearsal and Performance I (1 - 3)</td>
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<td>TAP 301</td>
<td>Modern Rehearsal and Performance II (1 - 3)</td>
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<td>TAP 302</td>
<td>Modern Rehearsal and Performance III (1 - 3)</td>
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<td>TAP 303</td>
<td>Modern Rehearsal and Performance IV (1 - 3)</td>
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<td>TAP 310</td>
<td>Modern Technical Production I (1 - 3)</td>
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A minimum of 9 units from the following: 9

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<tr>
<td>TA 351</td>
<td>Theory and Techniques of Acting II (3)</td>
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<td>TA 420</td>
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<td>Stage Lighting (3)</td>
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<td>TA 430</td>
<td>Costume Construction (3)</td>
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</table>

A maximum of 3 units of TAP courses listed above not already used toward this degree.

Total Units: 18

The Associate in Arts in Theatre Arts for Transfer (AA-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- critique and evaluate the role of the theatre arts and its relationship to other parts of society.
- evaluate the historical, artistic, social, and philosophical environments in which theatre exists.
- analyze and critique dramatic literature and performance.
- formulate alternative solutions to theatrical production situations.
- employ audition and performance skills in community, educational, and/or professional theatres.
- develop skills to work as a theatre technician in community, educational, and/or professional theatres.
- demonstrate the ability to work effectively as an ensemble member of a theatre company.
- demonstrate skills that will allow the student to thrive in a baccalaureate level theatre program.

## Associate Degrees

### A.A. in Theatre Arts: Acting

This degree provides training in the areas of acting, voice, movement, improvisation, and dramatic styles. The course work and theatrical production activities are arranged to provide opportunities for students to develop an appreciation for theatre, to improve in the knowledge and skills necessary for work in the theatrical arts professions, and to transfer to a four-year theatre program.

Catalog Date: June 1, 2020

### Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
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<tr>
<td>TA 300</td>
<td>Introduction to the Theatre</td>
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<tr>
<td>TA 350</td>
<td>Theory and Techniques of Acting I</td>
<td>3</td>
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<tr>
<td>TA 351</td>
<td>Theory and Techniques of Acting II</td>
<td>3</td>
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<td>TA 370</td>
<td>Theatre Movement</td>
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<td>TA 375</td>
<td>Voice, Diction and Dialects</td>
<td>3</td>
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<td>TA 420</td>
<td>Stagecraft</td>
<td>3</td>
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<tr>
<td>TA 437</td>
<td>Stage Make-up I</td>
<td>3</td>
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<tr>
<td>TA 344</td>
<td>Improvisation and Theatre Games (2)</td>
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<tr>
<td>TA 356</td>
<td>Acting for the Camera I (3)</td>
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<td>TA 357</td>
<td>Acting for the Camera - II (3)</td>
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<td>TA 362</td>
<td>Styles of Acting: Classical (3)</td>
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<tr>
<td>TA 366</td>
<td>Styles of Acting: Modern (3)</td>
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<td>Acting for the Camera I (3)</td>
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<td>TA 357</td>
<td>Acting for the Camera - II (3)</td>
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<td>TA 362</td>
<td>Styles of Acting: Classical (3)</td>
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<td>Styles of Acting: Modern (3)</td>
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<td>TA 377</td>
<td>Musical Theatre Techniques (3)</td>
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<tr>
<td>TA 390</td>
<td>Directing and Play Production (3)</td>
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<tr>
<td>TA 406</td>
<td>Children's Theatre (3)</td>
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<td>A minimum of 2 units from the following:</td>
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<tr>
<td>MUSM 342</td>
<td>Recording Studio Techniques I (3)</td>
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<tr>
<td>TA 404</td>
<td>Techniques of Puppetry (3)</td>
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<tr>
<td>TA 422</td>
<td>Stage Lighting (3)</td>
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<td>TA 424</td>
<td>Advanced Technical Theatre (3)</td>
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<tr>
<td>TA 430</td>
<td>Costume Construction (3)</td>
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<tr>
<td>TA 433</td>
<td>Costume Production (0.5 - 3)</td>
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<tr>
<td>TA 434</td>
<td>Vintage Costuming (0.5 - 2)</td>
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<tr>
<td>or FASHN 334</td>
<td>Vintage Costuming (0.5 - 2)</td>
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<tr>
<td>TA 435</td>
<td>History and Theory of Costuming (3)</td>
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<tr>
<td>or FASHN 330</td>
<td>History of Western World Fashion (3)</td>
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<td>TA 440</td>
<td>Arts Management (3)</td>
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A minimum of 2 units from the following:

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<tr>
<td>Any TAP (Theatre Arts Performance) course.</td>
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<tr>
<td>TA 466</td>
<td>Rehearsal and Performance - Musical Ensemble (0.5 - 3)</td>
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<td>or MUP 370</td>
<td>Rehearsal and Performance - Musical Ensemble (0.5 - 3)</td>
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A minimum of 2 units from the following:

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<table>
<thead>
<tr>
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<tr>
<td>DANCE 310</td>
<td>Jazz Dance I (1)</td>
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<tr>
<td>DANCE 320</td>
<td>Ballet I (1)</td>
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<td>DANCE 340</td>
<td>Ballroom Dance (1)</td>
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<tr>
<td>DANCE 360</td>
<td>Tap Dance I (1)</td>
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<td>DANCE 377</td>
<td>Musical Theatre Dance I (2)</td>
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<td>ENGLT 380</td>
<td>Introduction to Shakespeare (3)</td>
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<tr>
<td>ENGLT 382</td>
<td>Introduction to Dramatic Literature (3)</td>
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<td>MUFHL 321</td>
<td>Basic Musicianship (3)</td>
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<tr>
<td>MUIVI 310</td>
<td>Voice Class I (2)</td>
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<td>MUIVI 390</td>
<td>Jazz and Popular Vocal Styles and Improvisation I (2)</td>
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<tr>
<td>MUP 350</td>
<td>Concert Choir I (2)</td>
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</table>

Any TA or TAP course not used to fulfill other requirements of the major.

Total Units: 31

Not used to fulfill other requirements for the major.

The Theatre Arts: Acting Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- recognize standard practices of ensemble playing in a rehearsal/performance environment
- compare and analyze the theories and techniques of acting from a historical perspective
- analyze texts and scripts as they pertain to performance
- demonstrate skill for technical aspects of acting, including physical, vocal, imaginative, analytical, and emotional elements
- analyze theatre as a dynamic art form influencing society
- compare and contrast theatrical periods and styles in terms of acting, directing, playwriting, and technical elements
- analyze the components of a theatrical production
- apply imagination and character analysis to identify and describe the personality and motivations of a given character
- apply technical processes, including lighting, set, costume, and/or stage make-up design, as they pertain to a given dramatic script
A.A. in Theatre Arts: Technical Production

The Technical Theatre degree provides a broad overview of theatre with an emphasis on exploring the technical elements of theatre. Coursework includes stagecraft, lighting, costuming, makeup, sound, and puppetry, together with opportunities for practical participation in productions. The program is designed to prepare students for work as technicians and crew, or to transfer to four-year colleges in preparation to be designers.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
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<tr>
<td>TA 300</td>
<td>Introduction to the Theatre</td>
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<tr>
<td>TA 350</td>
<td>Theory and Techniques of Acting I (3)</td>
<td>3</td>
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<td>TA 420</td>
<td>Stagecraft</td>
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<td>TA 404</td>
<td>Techniques of Puppetry (3)</td>
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<td>TA 422</td>
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<td>TA 430</td>
<td>Costume Construction (3)</td>
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<td>Stage Make-up I (3)</td>
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<td>ART 320</td>
<td>Design: Fundamentals (3)</td>
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<td>Introduction to Computer Aided Drafting and Design (CADD) (3)</td>
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<td>Portfolio and Presentation in Interior Design (3)</td>
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<td>Beginning CADD for Interior Design (3)</td>
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<td>Introduction to Musical Instrument Digital Interface (MIDI) (2)</td>
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<td>Recording Studio Techniques I (3)</td>
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<tr>
<td>or FASHN 334</td>
<td>Vintage Costuming (0.5 - 2)</td>
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<tr>
<td>TA 435</td>
<td>History and Theory of Costuming (3)</td>
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<td>or FASHN 330</td>
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<td>TA 437</td>
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A minimum of 6 units from the following:  

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</table>

Any TA or TAP courses not used to fulfill other requirements for the major.  

Total Units: 29

1Not used to fulfill other requirements for the major.
2Earned by a minimum of 0.5 units in each of two productions for a total of 2 units.

*The Theatre Arts: Technical Production Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.*

**Student Learning Outcomes**
Upon completion of this program, the student will be able to:

- assess the influence of theatre as a dynamic art form and a social and cultural force in our society.
- compare theatrical periods and styles in terms of acting, directing, playwriting, and technical elements.
- analyze the components of a theatrical production and the role of technical theatre in the production process.
- evaluate a script, assess production requirements, and develop practical and artistic solutions through scenic, lighting, costume, sound, or makeup designs.
- integrate practical information from construction plans.
- demonstrate proficiency in technical production skills.
- evaluate tools, materials, and processes used in technical theatre work.

Certificates of Achievement

Acting Certificate

This certificate provides training in the theories and techniques of acting. The training starts with the basic principles of acting and refines them through theoretic, rehearsal, and performance processes. This program is designed to introduce and develop the craft of acting.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>TA 350</td>
<td>Theory and Techniques of Acting I</td>
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<tr>
<td>TA 351</td>
<td>Theory and Techniques of Acting II</td>
<td>3</td>
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<tr>
<td>TA 370</td>
<td>Theatre Movement</td>
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<tr>
<td>TA 375</td>
<td>Voice, Diction and Dialects</td>
<td>3</td>
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<tr>
<td>TA 344</td>
<td>Improvisation and Theatre Games (2)</td>
<td>2</td>
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<td>TA 356</td>
<td>Acting for the Camera I (3)</td>
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<td>TA 357</td>
<td>Acting for the Camera - II (3)</td>
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<td>TA 362</td>
<td>Styles of Acting: Classical (3)</td>
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<td>TA 366</td>
<td>Styles of Acting: Modern (3)</td>
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<td>TA 377</td>
<td>Musical Theatre Techniques (3)</td>
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<tr>
<td>TA 466</td>
<td>Rehearsal and Performance - Musical Ensemble (0.5 - 3)</td>
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<tr>
<td>or MUP 370</td>
<td>Rehearsal and Performance - Musical Ensemble (0.5 - 3)</td>
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<td>TAP 300</td>
<td>Modern Rehearsal and Performance I (1 - 3)</td>
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<td>TAP 320</td>
<td>Classical Rehearsal and Performance I (1 - 3)</td>
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<td>Children's Theatre Rehearsal and Performance I (1 - 3)</td>
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<tr>
<td>TAP 380</td>
<td>Repertory/Touring Rehearsal and Performance I (1 - 3)</td>
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</table>

A minimum of 1 unit from the following:

- TA 406
- TA 466
- or MUP 370
- TAP 300
- TAP 320
- TAP 340
- TAP 360
- TAP 380

A minimum of 3 units from the following:

- Any TA or TAP course not used to fulfill other requirements of the major.

Total Units: 17
Student Learning Outcomes

Upon completion of this program, the student will be able to:

- recognize standard practices of ensemble playing in a rehearsal and performance environment
- compare and analyze the theories and techniques of acting from a historical perspective
- analyze texts and scripts as they pertain to performance
- execute skill for technical aspects of acting, including physical, vocal, imaginative, and emotional elements
- apply imagination and character analysis to identify and describe the personality and motivations of a given character

Career Information

A person with an acting certificate may go into acting, directing, film, teaching, and many other careers where oration and presentation are key components.

Children's Theatre Certificate

This certificate provides the knowledge needed to create theatrical productions for children. Coursework includes acting, improvisation, voice, technical theatre, and theatre productions for children.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
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<tbody>
<tr>
<td>TA 350</td>
<td>Theory and Techniques of Acting I</td>
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<td>TA 344</td>
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<td>TA 370</td>
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<td>TA 400</td>
<td>Creative Drama for Children (3)</td>
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<tr>
<td>TA 404</td>
<td>Techniques of Puppetry (3)</td>
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<tr>
<td>TA 404</td>
<td>Techniques of Puppetry (3)</td>
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<td>TA 430</td>
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<td>TA 437</td>
<td>Stage Make-up I (3)</td>
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<td>TAP 360</td>
<td>Children's Theatre Rehearsal and Performance I (1 - 3)</td>
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<td>Children's Theatre Technical Production I (1 - 3)</td>
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<td>TAP 380</td>
<td>Repertory/Touring Rehearsal and Performance I (1 - 3)</td>
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<tr>
<td>TAP 390</td>
<td>Repertory and Touring Technical Production I (1 - 3)</td>
<td></td>
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</tbody>
</table>

A minimum of 4 units from the following:

Total Units: 15

1Not used to fulfill other requirements.
Student Learning Outcomes

Upon completion of this program, the student will be able to:

- analyze children's literature for dramatic structure, characterization, and performance elements.
- demonstrate the basic skills of drama, acting, voice, movement, and improvisation.
- develop simple drama activities and games to promote child creativity.
- apply technical processes, including stagecraft, costume construction, and/or stage make-up, as they pertain to children's theatre.
- integrate dramatic techniques of acting, puppetry, storytelling, and movement into children's theatre productions.

Career Information

People with a Children's Theatre certificate may work as actors or directors in children's theatre, or utilize their skills to augment careers in elementary education, recreation, or arts programs.

Costuming Certificate

This certificate provides training in the skills needed to create theatrical costumes. Coursework includes costume construction, history of costume, patterning, and makeup.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>FASHN 374</td>
<td>Pattern Making and Design</td>
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<td>TA 430</td>
<td>Costume Construction</td>
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<td>TA 435</td>
<td>History and Theory of Costuming (3)</td>
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<tr>
<td>or FASHN 330</td>
<td>History of Western World Fashion (3)</td>
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<td>TA 437</td>
<td>Stage Make-up I</td>
<td>3</td>
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<td>FASHN 320</td>
<td>Textiles (3)</td>
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<tr>
<td>FASHN 342</td>
<td>Fashion Illustration (3)</td>
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<td>FASHN 378</td>
<td>Advanced Pattern Making and Design (3)</td>
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<td>TA 404</td>
<td>Techniques of Puppetry (3)</td>
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<td>FASHN 334</td>
<td>Vintage Costuming (0.5 - 2)</td>
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<td>TA 434</td>
<td>Vintage Costuming (0.5 - 2)</td>
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<td>TA 433</td>
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<td>A minimum of 1 unit from the following:</td>
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<tr>
<td>TAP 310</td>
<td>Modern Technical Production I (1 - 3)</td>
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<tr>
<td>TAP 330</td>
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<td>TAP 350</td>
<td>Musical Technical Production I (1 - 3)</td>
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<td>TAP 370</td>
<td>Children's Theatre Technical Production I (1 - 3)</td>
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<td>TAP 390</td>
<td>Repertory and Touring Technical Production I (1 - 3)</td>
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<td>Total Units:</td>
<td>17.5</td>
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</table>

Student Learning Outcomes
Upon completion of this program, the student will be able to:

- analyze the role of costumes and the costume shop staff in a theatrical production.
- organize a practical and artistic solution to the costume requirements of a dramatic work.
- evaluate the costumes of a dramatic production.
- analyze the techniques required to design and develop a period costume.
- analyze the components of major historical fashion periods and their relationship to society.
- demonstrate techniques in altering, constructing, patterning, dyeing, and painting costumes.

Career Information

A person with a costuming certificate may work creating and maintaining costumes for theatre, film, TV, advertising, and other entertainment fields.

Certificates

Musical Theatre Certificate

This certificate synthesizes the performance skills of movement, acting, and singing with the musical theatre script/song. The training starts with the basic principles of musical theatre techniques and refines them through the choreographic, theoretic, and performance processes. The curriculum is designed to introduce and develop the craft of musical theatre.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>TA 350</td>
<td>Theory and Techniques of Acting I</td>
<td>3</td>
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<td>TA 370</td>
<td>Theatre Movement</td>
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<td>TA 377</td>
<td>Musical Theatre Techniques</td>
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<tr>
<td>MUIVI 310</td>
<td>Voice Class I (2)</td>
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<td>MUIVI 390</td>
<td>Jazz and Popular Vocal Styles and Improvisation I (2)</td>
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<td>MUP 350</td>
<td>Concert Choir I (2)</td>
<td>2</td>
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<tr>
<td>MUP 360</td>
<td>Chamber Singers (2)</td>
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<td>MUP 400</td>
<td>Vocal Jazz Ensemble (2)</td>
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<td>Jazz Dance I (1)</td>
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<td>DANCE 320</td>
<td>Ballet I (1)</td>
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<td>DANCE 340</td>
<td>Ballroom Dance (1)</td>
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<td>DANCE 360</td>
<td>Tap Dance I (1)</td>
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<td>DANCE 377</td>
<td>Musical Theatre Dance I (2)</td>
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<td>MUFHL 321</td>
<td>Basic Musicianship (3)</td>
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<td>MUIVI 310</td>
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<td>MUIVI 340</td>
<td>Beginning Piano (2)</td>
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<td>MUIVI 390</td>
<td>Jazz and Popular Vocal Styles and Improvisation I (2)</td>
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<td>MUIVI 391</td>
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<td>MUP 350</td>
<td>Concert Choir I (2)</td>
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<td>MUP 360</td>
<td>Chamber Singers (2)</td>
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<td>TA 351</td>
<td>Theory and Techniques of Acting II (3)</td>
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<td>TA 362</td>
<td>Styles of Acting: Classical (3)</td>
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<td>TA 366</td>
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<tr>
<td>TA 375</td>
<td>Voice, Diction and Dialects (3)</td>
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A minimum of 1 unit from the following:

- TA 466 Rehearsal and Performance - Musical Ensemble (0.5 - 3)
- or MUP 370 Rehearsal and Performance - Musical Ensemble (0.5 - 3)
- TAP 340 Musical Rehearsal and Performance I (1 - 3)
- TAP 380 Repertory/Touring Rehearsal and Performance I (1 - 3)

Total Units: 15

Not used to fulfill other requirements of the major.

### Student Learning Outcomes

Upon completion of this program, the student will be able to:

- synthesize choreographed movement and blocking skills with optimum singing skills
- interpret a character through a musical theatre song/script/dance
- critique acting, singing, and movement skills in a musical theatre performance
- develop and perform an audition package consisting of a ballad and an up-tempo song
- identify historical eras in the development of American Musical Theatre

### Career Information

A person with a Musical Theatre certificate may go into acting or directing careers in musical theatre or may augment careers in education, recreation, and arts programs.

### Theatre Production Certificate

This certificate provides training in the skills needed to develop and maintain the technical aspects of productions in theatre, film, TV, and entertainment venues. Coursework includes scenery, lighting, props, stage management, sound, costuming, and puppetry.

Catalog Date: June 1, 2020

### Certificate Requirements

<table>
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<tr>
<th>COURSE CODE</th>
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<tr>
<td>TA 420</td>
<td>Stagecraft</td>
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<td>TA 422</td>
<td>Stage Lighting</td>
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A minimum of 5 units from the following:

- ART 300 Drawing and Composition I (3)
- ART 420 Film Making (2)
- ARTNM 302 Digital Basics for Art New Media (1.5)
- ARTNM 328 Beginning Digital Photo Imagery (3)
<table>
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<td>ARTNM 332</td>
<td>Digital Video (3)</td>
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<td>DESGN 301</td>
<td>Introduction to Computer Aided Drafting and Design (CADD) (3)</td>
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<td>IDES 340</td>
<td>Beginning CADD for Interior Design (3)</td>
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<td>MUSM 140</td>
<td>Concert Sound Reinforcement (2)</td>
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<td>MUSM 334</td>
<td>Introduction to Musical Instrument Digital Interface (MIDI) (2)</td>
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<td>MUSM 342</td>
<td>Recording Studio Techniques I (3)</td>
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<td>MUSM 344</td>
<td>Recording Studio Techniques II (3)</td>
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<td>MUSM 356</td>
<td>Pro Tools 101, Introduction to Pro Tools (1.5)</td>
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<td>TA 404</td>
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<td>TA 433</td>
<td>Costume Production (0.5 - 3)</td>
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<td>TA 437</td>
<td>Stage Make-up I (3)</td>
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<td>TA 440</td>
<td>Arts Management (3)</td>
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<td>WELD 300</td>
<td>Introduction to Welding (3)</td>
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A minimum of 2 units from the following: 2

| TA 466      | Rehearsal and Performance - Musical Ensemble (0.5 - 3)                       |         |
| or MUP 370  | Rehearsal and Performance - Musical Ensemble (0.5 - 3)                       |         |
| TAP 310     | Modern Technical Production I (1 - 3)                                        |         |
| TAP 311     | Modern Technical Production II (1 - 3)                                       |         |
| TAP 330     | Classical Technical Production I (1 - 3)                                     |         |
| TAP 331     | Classical Technical Production II (1 - 3)                                    |         |
| TAP 350     | Musical Technical Production I (1 - 3)                                       |         |
| TAP 351     | Musical Technical Production II (1 - 3)                                      |         |
| TAP 370     | Children's Theatre Technical Production I (1 - 3)                           |         |
| TAP 371     | Children's Theatre Technical Production II (1 - 3)                          |         |
| TAP 390     | Repertory and Touring Technical Production I (1 - 3)                        |         |
| TAP 391     | Repertory and Touring Technical Production II (1 - 3)                       |         |

A minimum of 2.5 units from the following: 2.5

Any TA or TAP class not used to fulfill other requirements.

Total Units: 15.5

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- analyze the role of technical theatre in the production process.
- analyze historical and artistic theatrical styles.
- analyze production requirements and develop practical and artistic solutions.
- evaluate a script and develop appropriate scenic, lighting, costume, sound, or makeup designs.
- analyze and apply information from scenic, lighting, and/or costuming plans.
- demonstrate proficiency in technical production skills.
- identify and evaluate tools, materials, and processes used in technical theatre areas.
Theatre Arts (TA)

TA 294 Topics in Theatre Arts

Units: 0.5 - 4
Hours: 27 - 162 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

This course covers topics in theatre which are not included in current course offerings. A portion of this course may be offered in a TBA component of 27-216 hours which may include theatrical studies, preparation or performance.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- evaluate the role of this specific theatre topic in society.
- analyze the steps needed toward accomplishing the goal of the topic.
- describe the methods used in this specific theatrical area.
- develop and evaluate the techniques used in this topic.

TA 300 Introduction to the Theatre

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGW 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC
General Education: AA/AS Area I; CSU Area C1; IGETC Area 3A
C-ID: C-ID THTR 111
Catalog Date: June 1, 2020

This course provides a general introduction to live theatre as an artistic and social force. It surveys the literary, cultural, and historical aspects of theatre arts. This is an audience-oriented, non-performance course open to all students. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze and evaluate the nature of theatre and its role in society.
- assess the historical, artistic, social, and philosophical environments in which theatre exists.
- critically analyze dramatic performances.
- identify and examine theatrical components in production.
- propose alternative solutions to theatrical production situations.
- appreciate viewing theatre as an art form.

TA 302 History and Theory of the Theatre I

Units: 3
Hours: 54 hours LEC

Career Information

A person with a Theatre Production certificate may become a stagehand, set builder, lighting and sound technician, makeup artist, properties artisan, or stage manager in theatre, film, or TV.
This course is a survey of the history of world theatre from its origins through the 17th Century. The history and evolution of drama and theatre practice are studied in relationship to cultural, political, and social conditions of the time. Plays are read that exemplify major developments and significant artists. Field trips to attend live performances may be required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- describe the historical development of theatre from its origins to the 17th Century.
- assess the relationship of theatre arts to other parts of society throughout history.
- analyze the artistic, social, and philosophical environments in which theatre evolved.
- evaluate significant work of playwrights from distinct periods of theatre history.

**TA 303 History and Theory of the Theatre II**

**Units:** 3  
**Hours:** 54 hours LEC  
**Prerequisite:** None.  
**Advisory:** Eligible for ENGRD 116 AND ENGWR 101; OR ESLR 320 AND ESLW 320.  
**Transferable:** CSU; UC  
**General Education:** AA/AS Area I; CSU Area C1; CSU Area C2; IGETC Area 3A  
**Catalog Date:** June 1, 2020

This course is a survey of the history of world theatre from the 17th Century to the modern era. The history and evolution of drama and theatre practice are studied in relationship to cultural, political, and social conditions of the time. Plays are read that exemplify major developments and significant artists. Field trips to attend live performances may be required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- describe the historical development of theatre from the 17th Century to the modern era.
- assess the relationship of theatre arts to other parts of society throughout history, including the present day.
- evaluate the artistic, social, and philosophical environments in which theatre evolved.
- evaluate significant work of playwrights from distinct periods of theatre history, including current writers.

**TA 306 Diversity in American Drama (1960 to Present)**

**Units:** 3  
**Hours:** 54 hours LEC  
**Prerequisite:** None.  
**Advisory:** Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR AND ESLW 340.  
**Transferable:** CSU; UC  
**General Education:** AA/AS Area I; AA/AS Area VI; CSU Area C1; IGETC Area 3A  
**Catalog Date:** June 1, 2020

This course surveys the theatrical expression of Native-American, African-American, Latino, and Asian-American theatre from 1960 to the present. It includes the social, political, cultural, and economic climate reflected in the text and production of the play. Field trips may be required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- compare and contrast the ways that ritual, music, dance, and storytelling influence and shape the theatrical expressions of various cultures.
- analyze stereotypes and racism as expressed in the theatre of various cultures in society.
- describe the ramifications and contributions of the unique theatrical expression of America's diverse populations.
- identify the negative theatrical images of various cultures and their influence on society.
- describe the major historical, cultural, political, and economic forces at work within the various groups and in society at large.
- compare and contrast the theatrical expressions of various groups with mainstream theatrical expression in the same period.

TA 344 Improvisation and Theatre Games

Units: 2
Hours: 18 hours LEC; 54 hours LAB
Prerequisite: None.
Transferable: CSU; UC
Catalog Date: June 1, 2020

This course explores theatre games and improvisational exercises designed to develop trust, cooperation, mental acuity, and physical and vocal range as an actor. Improvisation technique is built from the ground up, providing a strong foundation for advanced work in non-scripted performance as well as modern rehearsal techniques that involve extensive use of improvisation. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply techniques used in games and exercises to develop physical and vocal range as an actor.
- analyze character, setting, and objective without the use of a script.
- compare and contrast improvisational acting techniques with other acting methods.
- demonstrate an honest imaginative improvisational performance.
- evaluate the improvisational work of others in a constructive manner using the Viola Spolin technique.
- create a collaborative group performance using improvisational techniques.

TA 350 Theory and Techniques of Acting I

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 340 and ESLR 340.
Transferable: CSU; UC (UC credit limitation: TA 350 and 480 combined: maximum credit, one course)
General Education: AA/AS Area I; CSU Area C1; IGETC Area 3A
C-ID: C-ID THTR 151
Catalog Date: June 1, 2020

This course explores the major theories and techniques of acting, including improvisation, physical expressiveness, voice production, character portrayal, and scene work. Field trips may be required. This course is not open to students who have completed TA 480.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- recognize standard practices of ensemble playing in a rehearsal/performance environment.
- demonstrate basic skills of acting, including physical, vocal, imaginative, analytical, and emotional elements.
- compose a character analysis based on the text and subtext of a given script.
- identify the elements of the performance space.
- assess emotional, behavioral, sensory, and cognitive resources for character development.
- utilize body and voice as the primary instrument of dramatic expression.
- analyze dramatic textual components as they pertain to performance.
- critique a scene from an observer's point of view, identifying the strengths and weaknesses of that presentation.
TA 351 Theory and Techniques of Acting II

Units: 3
Hours: 54 hours LEC
Prerequisite: TA 350 with a grade of "C" or better
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340
Transferable: CSU; UC
C-ID: C-ID THTR 152
Catalog Date: June 1, 2020

This course covers the application of advanced acting theories and techniques. It includes analyzing and performing scripts from realistic and stylized drama, audition monologues, and complex acting exercises. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate complex techniques dealing with the craft of acting.
- identify and explain principles of voice production and body movement.
- evaluate scene work developed from published plays.
- describe fundamental concepts that comprise effective acting techniques.
- illustrate an awareness of the importance of discipline, exactness, persistence, diligence, imagination, and teamwork in the craft of acting.
- analyze the personality and motivations of a given character.
- synthesize appropriate attributes and techniques to create a character which is believable and appropriate to the style and genre of the play from which a scene is taken.
- employ imagination to simulate the dramatic experiences of a given character.
- apply elements of effective acting techniques as a personal standard.

TA 356 Acting for the Camera I

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: TA 350 with a grade of "C" or better
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC
Catalog Date: June 1, 2020

This course introduces the theory and technique of acting for film and video, focusing on the differences between stage acting and acting for the camera. It provides opportunities to apply acting theory and technique in a video studio setting. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate the basic fundamentals of the craft of acting for the camera.
- differentiate the technical and stylistic differences between stage acting and acting for the camera.
- apply acting skills and talents in a video studio setting.
- analyze a scene from an observer's point of view using a fundamental technique point of view to identify strengths and weaknesses.
- demonstrate performance technique for talk show interviews, work in professional commercials, and work in professional industrial films and theatrical films.
- describe the steps involved in entering the business of acting for films and video.

TA 357 Acting for the Camera - II
This course develops advanced skills of acting for film and television. It provides opportunities in a studio setting to practice monologues, commercials using a teleprompter, and scene work. Field trips may be required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- analyze the principles of dramatic structure.
- assess the objectives of a character in a scene.
- evaluate fundamental concepts of good acting techniques.
- diagnose the strengths and weaknesses of scene work.
- evaluate the various methods of creating character through choices in voice, movement, and style.
- synthesize a methodology for developing a role incorporating skills and character study.
- analyze advanced skills in the craft of acting for the camera in a video studio setting.
- demonstrate performance techniques for work in auditions, industrial films and commercials, television, and film scenes.
- design a film career portfolio.
- demonstrate performance techniques for work in auditions, individual films and commercial, television, and film scenes.

**TA 362 Styles of Acting: Classical**

| Units: | 3 |
| Hours: | 36 hours LEC; 54 hours LAB |
| Prerequisite: | TA 356 with a grade of "C" or better |
| Transferable: | CSU; UC (UC credit limitation: 362 and 366 combined: maximum credit, 6 units) |
| Catalog Date: | June 1, 2020 |

This course explores the styles of acting used in Classic Theatre from the Greeks through Restoration. It examines the actor's approach to the text as well as the voice and movement needs of classic styles. Styles include Greek, Commedia dell'Arte, Shakespeare, and Restoration. Field trips may be required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- explain the concept of style as it relates to art and to the theatre.
- analyze and compare personal style to classical styles utilized in dramatic literature.
- integrate dramatic works within their historical/societal context and develop characterizations appropriate to the dramatic genre.
- demonstrate versatility of movement and voice that conforms to the classical style of different periods of theatre.
- apply physical and vocal techniques to public performance of three classic styles of acting.

**TA 366 Styles of Acting: Modern**

| Units: | 3 |
| Hours: | 36 hours LEC; 54 hours LAB |
| Prerequisite: | TA 350 with a grade of "C" or better |
| Transferable: | CSU; UC (UC credit limitation: 362 and 366 combined: maximum credit, 6 units) |
| Catalog Date: | June 1, 2020 |

This course explores the styles of acting required for modern theatre from 1875 to the present. It examines the actor's approach to modern texts as well as the voice and
movement needs of modern styles. Topics include Realism, Epic Theatre, Theatre of the Absurd, and contemporary solo performance. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain the concept of artistic style as it relates to art and society.
- analyze personal style and compare and contrast this with the styles of other historical periods.
- integrate dramatic works within their historical/societal context and develop characterizations appropriate to the dramatic genres.
- demonstrate a versatility of movement and voice that conforms to the modern style of different genres of theatre.
- synthesize study of modern acting styles with techniques learned in general acting classes and theatre productions.
- critique acting performances for their style appropriateness.

TA 370 Theatre Movement

Units: 2
Hours: 18 hours LEC; 54 hours LAB
Prerequisite: None.
Transferable: CSU; UC
Catalog Date: June 1, 2020

This course is an active participation and performance experience designed to provide opportunities in discovery and to solve movement tasks of the actor. It incorporates exercises to expand the individual’s movement for characters and scenes, as well as training in specific movement areas, such as combat, mime, period style, and dance. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate practical techniques of stage combat, dance, mime, and period style
- compare body movements as they relate to acting problems
- analyze the manners, dress, and dance forms of historical periods relevant to the stage
- demonstrate increased physical flexibility, strength, and balance with stage movement
- generate collaborative ensemble movement
- develop characters through theatrical movement techniques
- critique movement techniques of a dramatic performance

TA 375 Voice, Diction and Dialects

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC
Catalog Date: June 1, 2020

This course focuses on the overall improvement of vocal quality, explores monologue and dialogue performances, and develops confidence in speaking and voice production. It emphasizes self-improvement drills involving breath control, resonance, pitch, inflection, and articulation, and introduces a study of the vocal anatomy, its parts, and their functions. Additionally, this course covers the study and application of the International Phonetic Alphabet (IPA), and includes a special study and application of stage dialects and/or accent reduction.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify the elements of proper vocal production.
- locate and describe basic parts of the anatomy that affect and support vocal production.
- integrate knowledge of proper vocal technique into performances of narration, poetry, and/or dramatic monologues.
- assess personal strengths and weaknesses in the areas of correct breathing, phonation, resonation, and articulation.
- identify the International Phonetic Alphabet (IPA) sounds and their respective symbols and be able to apply them to speech.
- identify, define, and describe basic areas of IPA sound placement in the mouth.
- compare and contrast the differences in vowel and consonant formation between standard American speech and select dialects.
- integrate the fundamental sounds of select dialects into performances of narration, poetry, and/or dramatic monologue.
- practice and perform narration, poetry, and/or dramatic monologues demonstrating the sounds unique to select dialects and/or standard American speech.
- assess and enumerate the vocal challenges, successes, and issues of other speakers and identify remedies for noted issues.

**TA 377 Musical Theatre Techniques**

**Units:** 3  
**Hours:** 36 hours LEC; 54 hours LAB  
**Prerequisite:** None  
**Transferable:** CSU; UC  
**Catalog Date:** June 1, 2020

This is a performance-oriented course integrating acting and singing skills through the creation of a unified character. It is both an introduction for students with little or no previous musical theatre experience and a continuing performance forum for those with previous training. Primary emphasis is placed on the three core areas of musical theatre performance: acting, singing, and movement. Field trips may be required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- synthesize choreographed movement and blocking skills with optimum singing skills.
- define the various categories of musical theatre songs and dance styles.
- identify the various types of lyrics of musical theatre songs.
- analyze the components of musical theatre songs and dance styles.
- interpret a character through a musical theatre song/script.
- critique acting, singing, and movement skills in a musical theatre performance.
- develop and perform an audition package consisting of a ballad and an up-tempo solo.
- identify historical eras in the development of American musical theatre.

**TA 390 Directing and Play Production**

**Units:** 3  
**Hours:** 36 hours LEC; 54 hours LAB  
**Prerequisite:** TA 350 with a grade of "C" or better  
**Advisory:** TA 300, 351, and 420; and eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.  
**Transferable:** CSU; UC  
**Catalog Date:** June 1, 2020

This course is an introduction to directing and the elements of play production. It includes the process of preparing and analyzing a script for production, auditioning and casting a play, blocking and rehearsing actors, and dealing with technical and promotion needs of a production. It also requires directing scenes and/or short plays and preparing a prompt book. Field trips may be required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- analyze and interpret a script to translate the written word into stage language that is behavioral, visual, and aural.
- analyze the genre and style of a specific play to develop appropriate staging.
- identify the organizational and administrative responsibilities of a stage director from script selection through final performance.
- define and appraise fundamental guidelines of composition in combining the actor with the stage and scenic elements.
- analyze the structure and progression of a scene in a given play in terms of "motivational units."
- demonstrate communication skills dealing with actors and technicians relative to both rehearsal problems and concepts.
- identify and evaluate basic organizational procedures of casting and script interpretation.
- analyze plays for their production and performance possibilities.
- prepare a prompt book for production of the selected play.
- select, cast, and rehearse a play to be presented at a public performance.
- evaluate the technical support that is provided for a play production.

**TA 395 Playwriting**

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<tr>
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<tbody>
<tr>
<td>Hours:</td>
<td>54 hours LEC</td>
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<tr>
<td>Prerequisite:</td>
<td>None.</td>
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<tr>
<td>Transferable:</td>
<td>CSU; UC</td>
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<td>Catalog Date:</td>
<td>June 1, 2020</td>
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This course is an introduction to the fundamentals of the craft of dramatic writing. It emphasizes elements of plot construction and character development through writing exercises, study of superior models of drama, and drafting and revision of an original play script. Field trips may be required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- define the fundamental elements of drama
- identify the practical relationship between written elements of a play script and their application in the live theatre
- create an original dramatic work through an applied process of story and character development
- revise a play script based on self-assessment and the input of others
- analyze existing plays for their structural and dramatic effectiveness
- evaluate the work of others in a collaborative environment

**TA 400 Creative Drama for Children**

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<tbody>
<tr>
<td>Hours:</td>
<td>54 hours LEC</td>
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<tr>
<td>Prerequisite:</td>
<td>None.</td>
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<tr>
<td>Transferable:</td>
<td>CSU</td>
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<td>Catalog Date:</td>
<td>June 1, 2020</td>
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This course explores theatrical forms and activities to help drama leaders guide children in developing their academic, social, and performance skills. It includes strategies for infusing drama, pantomime, improvisation, puppetry, and creative role-playing into school curriculum and recreational programs. It is designed for anyone who interacts with pre-school and elementary-age children. Field trips may be required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- list the benefits of using drama as a teaching tool for young children.
- analyze and explore the nature of working in groups and setting classroom limits.
- develop simple drama activities and games.
- distinguish and contrast the various creative drama techniques including imaginative play, creative movement, pantomime, story dramatization, improvisation, theatre games, puppetry, and storytelling.
• research, compile, and organize a collection of creative drama games and activities based on children’s ages, stages of development, and curriculum needs.

• plan drama activities which are integrated with classroom curriculum.

• select and lead creative drama activities and then evaluate and analyze their effectiveness.

**TA 404 Techniques of Puppetry**

**Units:** 3  
**Hours:** 36 hours LEC; 54 hours LAB  
**Prerequisite:** None.  
**Advisory:** Eligible for ENGRD 116 AND ENGWR 101; OR ESLR 320 AND ESLW 320.  
**Transferable:** CSU  
**Catalog Date:** June 1, 2020

This course explores puppetry as a dramatic medium. It covers the history and development of puppetry, puppet design and creation, puppet manipulation and improvisation, and puppet play production techniques and applications.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

• create original material for puppetry using standard dramatic structure  
• dramatize a story with appropriate puppet movement and dialog (using improvisation and/or rehearsal)  
• incorporate voice and puppet movement to develop character and motivation  
• design puppets representing the basic puppet classifications  
• construct puppets using basic craft skills (clay and foam modeling, casting, sewing, woodworking, painting)  
• plan and execute productions using constructed puppets

**TA 406 Children’s Theatre**

**Units:** 3  
**Hours:** 36 hours LEC; 54 hours LAB  
**Prerequisite:** None.  
**Enrollment Limitation:** Audition/Interview  
**Transferable:** CSU  
**General Education:** AA/AS Area I; CSU Area C1  
**Catalog Date:** June 1, 2020

This course explores children’s literature in performance through dramatic presentations of fiction, drama, and poetry for an audience of children or young people. It provides the opportunity to analyze and experience the production process from script to stage. It includes the development of a touring children’s production. No prior theatrical experience is required. This course is recommended for theatre, education, early childhood education, and recreation majors. Public performances and regular field trips are required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

• analyze children’s literature for theme, structure, characterization, and performance elements.  
• devise and present a theatrical script from children’s literature.  
• create a character analysis.  
• demonstrate acting skills in intensive play production rehearsal and performance environments.  
• evaluate an actor’s responsibilities to the ensemble.  
• demonstrate commitment to the demands of a touring production through participation in the production process.

**TA 420 Stagecraft**
This course is an introduction to technical theatre and the creation of scenic elements for theatre, film or television. It covers design styles, painting, set construction, set movement techniques, properties construction, backstage and rehearsal organization and management, and career possibilities. The course combines lectures, reading and projects with practical experience gained from working on department productions. A portion of this course may be offered in a TBA component of 18 hours which may include scenery construction, props, and painting.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate scenic production skills
- incorporate scenic tools, materials, and processes in the creation of scenery and props
- analyze scenic production problems, evaluate alternatives and recommend solutions
- evaluate the role of the theatre technician
- examine the production process in technical theatre

### TA 422 Stage Lighting

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<th>Units:</th>
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<tr>
<td>Hours:</td>
<td>36 hours LEC; 72 hours LAB</td>
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<tr>
<td>Prerequisite:</td>
<td>None.</td>
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<tr>
<td>Advisory:</td>
<td>ENGRD 15 and ENGWR 51, OR ESLR 310 and ESLW 310, OR placement through assessment process; AND MATH 25 or MATH 41, TA 300, and TA 420.</td>
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<td>Transferable:</td>
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<td>C-ID:</td>
<td>C-ID THTR 173</td>
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<td>Catalog Date:</td>
<td>June 1, 2020</td>
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This course introduces the basic concepts of lighting for stage, film or television. Topics include the basic elements of lamps and fixtures, electricity, dimmers and control consoles. It also covers the design elements of color, distribution, and space to produce a lighting design. Practical lighting skills are gained from work on department productions. A portion of this course may be offered in a TBA component of 18 hours which may include hanging, circuiting, and focusing lights.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate practical stage lighting and rigging techniques
- analyze and apply the basic components of stage lighting such as optics, electricity, and instrumentation
- analyze artistic lighting components such as color, angle, and style
- evaluate a script and setting, and design an appropriate light plot
- analyze a script, and design and produce a basic sound plot

### TA 424 Advanced Technical Theatre

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<th>Units:</th>
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<tr>
<td>Hours:</td>
<td>36 hours LEC; 72 hours LAB</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>TA 420 and 422 with grades of &quot;C&quot; or better</td>
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<tr>
<td>Transferable:</td>
<td>CSU; UC</td>
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<td>Catalog Date:</td>
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This is an advanced study course dealing with technical theatre design and production techniques in the areas of scenery, props, lighting, sound, scenic painting, rigging or stage management through individual projects and participation in major productions. A portion of this course may be offered in a TBA component of 18-72 hours which may include practical work in lighting, scenic construction or design, sound design, rigging, or stage managing techniques.
Upon completion of this course, the student will be able to:

- analyze and evaluate theatrical designs and projects
- demonstrate advanced technical theatre skills
- integrate specialized technical processes in the solution of production problems
- evaluate production requirements and create appropriate designs and/or projects for the production

**TA 430 Costume Construction**

**Units:** 3  
**Hours:** 36 hours LEC; 54 hours LAB  
**Prerequisite:** None  
**Advisory:** Eligible for ENGRD 116 AND ENGWR 102; OR ESLR 320 AND EISLW 320  
**Transferable:** CSU; UC  
**Catalog Date:** June 1, 2020

This course explores the basic areas of costume construction and offers experience in constructing costumes for theatrical productions. Topics include fabrics, color, patterns, sewing techniques, costume pieces, and accessories. Period styles, costume analysis, and basic elements of costume design are also covered. Field trips may be required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- explain the role of theatre and costuming in society at large.
- describe the role of the costume designer and the costume shop staff in a theatre production.
- analyze the historical, artistic, and social environments of various periods and their resultant styles.
- demonstrate basic design skills and basic patterning, construction, and alteration techniques using various sewing machines and hand sewing tools.
- explain the composition, properties, and construction of fabric and demonstrate textile manipulation techniques.
- organize an artistic and practical solution to the costume requirements of a dramatic work.
- evaluate the costumes in a live theatrical presentation.

**TA 433 Costume Production**

**Units:** 0.5 - 3  
**Hours:** 27 - 162 hours LAB  
**Prerequisite:** FASHN 374 or TA 430 with a grade of "C" or better  
**Advisory:** Eligible for ENGRD 116 AND ENGWR 102; OR ESLR 320 AND EISLW 320  
**Transferable:** CSU  
**Catalog Date:** June 1, 2020

This lab course explores the process of developing costumes for theatrical productions through the set-up, creation, and assembly of costumes for mainstage productions. Projects focus on developing sewing, craft, and patterning skills, clothing alteration methods and working with fabrics, hats and accessories, dyes and textile paints as utilized in each production. Field trips may be required. A portion of this course may be offered in a TBA component of hours which may include pattern making, sewing, alteration, and maintenance of costumes.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- apply patterning, construction, and alteration skills while demonstrating proficiency in the operation of various sewing machines and tools.
- examine period styles as they relate to a specific costume situation.
- formulate an artistic and practical solution to the costume requirements of a dramatic work.
- evaluate and enact a viable approach to constructing theatrical costumes.
• demonstrate basic skills that alter existing fabric such as dying, distressing, and painting.

• organize and maintain a costume shop and its storage units.

**TA 434 Vintage Costuming**

**Same As:** FASHN 334  
**Units:** 0.5 - 2  
**Hours:** 4.5 - 18 hours LEC; 13.5 - 54 hours LAB  
**Prerequisite:** None.  
**Advisory:** FASHN 357 or TA 430; and eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300, OR ESLR 340 AND ESLW 340.  
**Transferable:** CSU; UC  
**Catalog Date:** June 1, 2020

This course covers the principles and techniques involved in developing and constructing period costumes and/or accessories through individual fabrication of costume pieces. The historical period or topic changes each semester. This course is open to all skill levels, with basic knowledge of sewing recommended. It is not open to students who have completed FASHN 334. Field trips may be required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

• research and identify historical costume pieces as covered in the specific semester's topic.

• compare and contrast the costume pieces of different historical periods.

• analyze the design and construction techniques necessary to create a period costume as specified in the specific semester's topic.

• construct period costume pieces as covered in the specific semester's topic.

**TA 435 History and Theory of Costuming**

**Units:** 3  
**Hours:** 54 hours LEC  
**Prerequisite:** None.  
**Advisory:** Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.  
**Transferable:** CSU; UC  
**General Education:** AA/AS Area I; CSU Area C1; IGETC Area 3A  
**Catalog Date:** June 1, 2020

This is a survey course of historical periods as portrayed through fashion and costumes from ancient through modern times. The impact of social, political, cultural, and economic issues on costuming is explored and analyzed, as is the effect of costumes on society. This course integrates design elements with historical styles to develop designs for theatrical costumes. Field trips may be required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

• evaluate the roles of fashion and theatre and their relationship to society.

• analyze the major historical eras and their impact on fashion style.

• recognize the clothing components of different historical styles.

• demonstrate basic design skills.

• integrate historical knowledge with design elements to develop designs for historical theatrical costumes.

**TA 437 Stage Make-up I**

**Units:** 3  
**Hours:** 36 hours LEC; 54 hours LAB  
**Prerequisite:** None.  
**Transferable:** CSU; UC  
**C-ID:** C-ID THTR 175  
**Catalog Date:** June 1, 2020
This course covers the basic techniques of theatrical makeup. It explores makeup materials, color and light, modeling techniques, and design elements in the development of makeup designs for corrective, old age, historical, stylized faces, clowns, animals, and fantasy makeup.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate the basic techniques of theatrical makeup.
- research and design makeup for straight, corrective, age, character, and fantasy situations.
- analyze design elements and application techniques to achieve makeup designs for a variety of characters.
- compile and organize a pictorial research notebook of photographs of people's faces.
- analyze the interaction of heredity, environment, temperament, health, and age as they are manifested in facial characteristics.
- assess the creative use of makeup design to interpret a production and create visual characterization.
- demonstrate proper knowledge of skin preparation, products, and safety procedures in application and removal of makeup.

TA 440 Arts Management

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU
Catalog Date: June 1, 2020

This general survey course in arts management emphasizes organization, marketing, audience development, and financial management. It includes promotion and publicity, house management, box office operations, and public relations. It also includes field work projects with an existing arts organization.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain the role of arts management in the entertainment industry.
- analyze the organizational structure of an arts organization.
- evaluate marketing and audience development strategies.
- evaluate business, box office, and public relations methods.
- examine operations and apply practical experience to the solving of management problems.

TA 452 One-Act Play Workshop

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Enrollment Limitation: Audition/Interview
Transferable: CSU; UC
Catalog Date: June 1, 2020

This course explores the play production process. It provides experience as an active participant in the analysis, preparation, and production of one-act plays through participation as either directors, writers, actors, or technicians. This course culminates in public performances.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the professional responsibilities of an actor and/or technician associated with the preparation and performance of a theatrical production
- analyze the evolution of a character in production from script to performance
- analyze and solve technical challenges associated with the creation and presentation of a theatrical production
TA 466 Rehearsal and Performance - Musical Ensemble

This course provides a workshop training experience in the preparation and performance of musical theatre ensemble productions. A different production is presented each semester the course is offered. Students interested in singing/acting roles audition with the director. Students interested in instrumental positions audition with the musical director. Students interested in technical work interview with the technical director. Field trips may be required. A portion of this course may be offered in a TBA component of 27-162 hours which may include acting, singing, dancing, musical, or technical rehearsals and preparation. It is not open to students who have completed MUP 370.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- practice and perform a musical production.
- evaluate the professional responsibilities of an actor, singer, musician, or technician in a production as appropriate.
- analyze the evolution of a participant’s role in a production from rehearsal to performance.
- integrate acting, singing, and/or dancing skills in an intensive rehearsal/performance environment (if participating as an actor/singer).
- integrate musical skills in an intensive rehearsal/performance environment (if participating as a musician).
- incorporate basic technical skills in the creation or manipulation of sets, props, costumes, lighting, or sound as appropriate (if participating as a technician).
- analyze and solve problems associated with the creation and presentation of acting, musical, and technical challenges.
- analyze the differences in producing musical theatre from other styles of theatre.

TA 481 Honors Seminar in History of Film

This honors course (a supplement to TA 312, 314, and 315) provides a seminar for advanced students to view and analyze additional films important to the development of cinematic art to analyze and criticize those films in terms of acting, directing, writing, editing, cinematography, and genre. May be taken twice with different co requisites.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate writing skills for film criticism.
- analyze film acting, directing, writing, cinematography, editing, sound, music, and genre.
- assess film form and content.
- compare and contrast analysis and evaluation of films with peers.
- research individual artists and their work.
This course covers topics in theatre which are not included in current course offerings. May require field trips. A portion of this course may be offered in a TBA component of 27-216 hours which may include theatrical studies, preparation or performance.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Analyze background and current status of special topic.
- Evaluate concepts acquired from the special topic in practical applications.
- Compare and contrast special topic information to regular curriculum information.
- Develop and evaluate the techniques used in this topic.
- Transfer knowledge learned in special topic research to practical application in other courses and endeavors.
- Devise materials required for special topic and put them to practical use in other courses and endeavors.

TA 495 Independent Studies in Theatre Arts

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

TA 498 Work Experience in Theatre Arts

Units: 1 - 4
Hours: 60 - 300 hours LAB
Prerequisite: None.
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position, or job related to theatre arts with a cooperating site supervisor. Students are advised to consult with the Theatre Arts Department faculty to review specific certificate and degree work experience requirements.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU
General Education: AA/AS Area III(b)
Catalog Date: June 1, 2020

This course provides students with opportunities to develop marketable skills in preparation for employment or advancement within the field of theatre arts. It is designed for students interested in work experience and/or internships in transfer-level degree occupational programs. Course content includes understanding the application of education to the workforce, completion of Title 5 required forms which document the student’s progress and hours spent at the work site, and developing workplace skills and competencies.

During the semester, the student is required to complete 75 hours of related paid work experience, or 60 hours of related unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. All students are required to attend the first class meeting, a mid-semester meeting, and a final meeting. Additionally, students who have not already successfully completed a Work Experience course will be required to attend weekly orientations while returning participants may meet individually with the instructor as needed. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate application of industry knowledge and theoretical concepts in the field of theatre arts related to a transfer degree level career as written in the minimum three (3) learning objectives created by the student and his/her employer or work site supervisor at the start of the course
- make effective decisions, use workforce information, and manage his/her personal career plans.
• behave professionally, ethically, and legally at work, consistent with applicable laws, regulations, and organizational norms.

• behave responsibly at work, exhibiting initiative and self-management in situations where it is needed.

• apply effective leadership styles at work, with consideration to group dynamics, team and individual decision making, and workforce diversity.

• communicate in oral, written, and other formats, as needed, in a variety of contexts at work.

• locate, organize, evaluate, and reference information at work.

• demonstrate originality and inventiveness at work by combining ideas or information in new ways, making connections between seemingly unrelated ideas, and reshaping goals in ways that reveal new possibilities using critical and creative thinking skills such as logical reasoning, analytical thinking, and problem-solving.
## Associate Degree

### A.A. in Film

This degree provides a broad overview of film history, theory, and practice. It combines the critical study of film as an art form and societal influence, including studies in diversity and genres, with opportunities for practical experience in film acting, writing, production, and post-production. It provides students with a foundation for further study in cinematic arts, as well as preparation for career opportunities which employ those arts.

Catalog Date: June 1, 2020

### Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAFILM 300</td>
<td>Introduction to Film</td>
<td>3</td>
</tr>
<tr>
<td>TAFILM 307</td>
<td>Diversity in American Film</td>
<td>3</td>
</tr>
<tr>
<td>TAFILM 320</td>
<td>Cinema Genres</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A minimum of 6 units from the following:</td>
<td>6</td>
</tr>
<tr>
<td>TAFILM 302</td>
<td>History of Film (3)</td>
<td></td>
</tr>
<tr>
<td>TAFILM 303</td>
<td>History of Film: 1880's through 1950's (3)</td>
<td></td>
</tr>
<tr>
<td>TAFILM 304</td>
<td>History of Film: 1950's to Present (3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A minimum of 12 units from the following:</td>
<td>12</td>
</tr>
<tr>
<td>ART 420</td>
<td>Film Making (2)</td>
<td></td>
</tr>
<tr>
<td>ARTNM 332</td>
<td>Digital Video (3)</td>
<td></td>
</tr>
<tr>
<td>ARTNM 373</td>
<td>Storyboarding (3)</td>
<td></td>
</tr>
<tr>
<td>ARTNM 405</td>
<td>Digital 2D Animation (3)</td>
<td></td>
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<tr>
<td>ARTNM 420</td>
<td>Introduction to 3D Modeling (3)</td>
<td></td>
</tr>
<tr>
<td>ARTNM 431</td>
<td>3D Short Production (3)</td>
<td></td>
</tr>
<tr>
<td>ENGCW 441</td>
<td>Feature Film Screenwriting Workshop I (3)</td>
<td></td>
</tr>
<tr>
<td>ENGLT 403</td>
<td>Film Adaptations (3)</td>
<td></td>
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<tr>
<td>MUSM 342</td>
<td>Recording Studio Techniques I (3)</td>
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<tr>
<td>MUSM 344</td>
<td>Recording Studio Techniques II (3)</td>
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</tr>
<tr>
<td>MUSM 356</td>
<td>Pro Tools 101, Introduction to Pro Tools (1.5)</td>
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<tr>
<td>MUSM 357</td>
<td>Pro Tools 110 Intermediate Pro Tools (1.5)</td>
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<tr>
<td>TA 350</td>
<td>Theory and Techniques of Acting I (3)</td>
<td></td>
</tr>
</tbody>
</table>
The Film Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- analyze the historical development of film art.
- assess the influence of film as a dynamic art form, and as a social and cultural force in our society.
- evaluate the components of a film production, including acting, directing, writing, and technical elements.
- compare and contrast different styles and genres of film.
- integrate theoretical knowledge with practical production experience.

Certificate of Achievement

Film Certificate

This certificate concentrates on the critical study of film as an art form and societal influence, with additional opportunities for practical experience in film acting, production, and post-production.

Catalog Date: June 1, 2020

Certificate Requirements

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<th>COURSE CODE</th>
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<td></td>
<td>A minimum of 6 units from the following:</td>
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<tr>
<td>TAFILM 302</td>
<td>History of Film (3)</td>
<td></td>
</tr>
<tr>
<td>TAFILM 303</td>
<td>History of Film: 1880's through 1950's (3)</td>
<td></td>
</tr>
<tr>
<td>TAFILM 304</td>
<td>History of Film: 1950's to Present (3)</td>
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</tr>
<tr>
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<td>A minimum of 5 units from the following:</td>
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<tr>
<td>ART 420</td>
<td>Film Making (2)</td>
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<tr>
<td>ARTNM 332</td>
<td>Digital Video (3)</td>
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<td>ARTNM 405</td>
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<td>Feature Film Screenwriting Workshop I (3)</td>
<td></td>
</tr>
<tr>
<td>ENGLT 403</td>
<td>Film Adaptations (3)</td>
<td></td>
</tr>
<tr>
<td>MUSM 334</td>
<td>Introduction to Musical Instrument Digital Interface (MIDI) (2)</td>
<td></td>
</tr>
<tr>
<td>MUSM 342</td>
<td>Recording Studio Techniques I (3)</td>
<td></td>
</tr>
</tbody>
</table>
### Student Learning Outcomes

Upon completion of this program, the student will be able to:

- assess the influence of film as a dynamic art form and a social and cultural force in our society.
- distinguish the component parts of a film including acting, directing, screenwriting, cinematography, and production and technical elements.
- analyze the historical development of film.
- evaluate films in terms of cultural diversity.
- integrate theoretical knowledge with practical production experience.

### Career Information

People may go into the field of film or television as actors, directors, producers, critics, and technicians.

### Theatre Arts Film (TAFILM)

**TAFILM 300 Introduction to Film**

<table>
<thead>
<tr>
<th>Units:</th>
<th>Hours:</th>
<th>Prerequisite:</th>
<th>Advisory:</th>
<th>Transferable:</th>
<th>General Education:</th>
<th>Catalog Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>54 hours LEC</td>
<td>None.</td>
<td>Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.</td>
<td>CSU; UC</td>
<td>AA/AS Area I; CSU Area C1; IGETC Area 3A</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course explores the artistic, business, and social elements of film. It examines components of film making, such as acting, directing, cinematography, writing, and editing. Films are analyzed to evaluate film making techniques and the impact of cinematic art and entertainment on society. Field trips may be required. This course is formerly known as TA 310.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze film as a mode of artistic expression and communication.
- synthesize information concerning film making techniques and the impact of film on society.
- evaluate the work of individual film artists in the development of the art of cinema.
- demonstrate communication skills for film critique.

**TAFILM 302 History of Film**

<table>
<thead>
<tr>
<th>Units:</th>
<th>Hours:</th>
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<tbody>
<tr>
<td>3</td>
<td>54 hours LEC</td>
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</table>
This course is an historical and critical survey of film as an art form. It emphasizes the evaluation of films which are landmarks in the art of moviemaking from around the world, from the invention of film to the present day. This course is formerly known as TA 312.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- explain the development of film and the art of film making.
- categorize landmark films in a time period and genre.
- compare and contrast different cinematic styles and structures.
- assess the contribution of prominent filmmakers to world cinema.

**TAFILM 303 History of Film: 1880's through 1950's**

- Units: 3
- Hours: 54 hours LEC
- Prerequisite: None.
- Advisory: Eligible for ENGRD 116 AND ENGWR 101; OR ESLR 320 AND ESlW 320.
- Transferable: CSU; UC (Transfer Credit Limitation: TA 312/TAFILM 302, TA 314/TAFILM 303, TA 315/TAFILM 304, TA 481 - any combination, maximum credit 6 units)
- General Education: AA/AS Area I; CSU Area C1; IGETC Area 3A
- Catalog Date: June 1, 2020

This course is an historical and critical survey of film as an art form. It emphasizes the evolution of artistic and technical facets of production in features, documentaries, and experimental films, concentrating on films from the 1880s through the 1950s. Field trips may be required. This course is formerly known as TA 314.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- explain the development of film and the art of film making.
- distinguish some of the major historical, cultural, political, and economic forces that shaped world cinema of the 1800s through the 1950s.
- compare and contrast different cinematic styles and structures.
- analyze selected films for their effective use of visual techniques.
- evaluate prominent directors' works and their contribution to world cinema.
- formulate an independent and critical aesthetic perspective on the cinema.

**TAFILM 304 History of Film: 1950's to Present**

- Units: 3
- Hours: 54 hours LEC
- Prerequisite: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
- Advisory: CSU; UC (Transfer Credit Limitation: TA 312/TAFILM 302, TA 314/TAFILM 303, TA 315/TAFILM 304, TA 481 - any combination, maximum credit 6 units)
- Transferable: AA/AS Area I; CSU Area C1; IGETC Area 3A
- General Education: None.
- Catalog Date: June 1, 2020

This course is an historical and critical survey of film as an art form. It emphasizes the evolution of artistic and technical facets of production in features, documentaries, and experimental films, concentrating on films from 1950 to the present. Field trips may be required. This course is formerly known as TA 315.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:
explain the development of film and the art of film making.

distinguish some of the major historical, cultural, political, and economic forces that have shaped world cinema from the 1950s to the present.

compare and contrast different cinematic styles and structures.

analyze selected films for their effective use of visual techniques.

evaluate prominent directors’ works and their contribution to world cinema.

formulate an independent and critical aesthetic perspective on the cinema.

TAFILM 307 Diversity in American Film

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGW 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC
General Education: AA/AS Area I; AA/AS Area VI; CSU Area C1; IGETC Area 3A
Catalog Date: June 1, 2020

This course surveys the cinematic expression of artists often underrepresented in the mainstream media, such as women, Native-Americans, African-Americans, Hispanics/Latinos, Asian-Americans, and gays, lesbians, bi-sexuals, and transgenders. Media stereotypes and the social, political, and cultural climates that created them are covered. Field trips may be required. This course is formerly known as TA 318.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe stereotypes, bias, and racism as expressed in the cinema.
- analyze the ramifications and contributions of the unique cinematic expression of America’s minority communities.
- identify the negative images of the groups being studied in the American cinema.
- assess the major historical, cultural, political, and economic forces at work within the groups and in society at large.
- compare and contrast the cinematic expressions of the groups with each other and with mainstream cinematic expression in the same period.

TAFILM 320 Cinema Genres

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGW 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU; UC
General Education: AA/AS Area I; CSU Area C2; IGETC Area 3A
Catalog Date: June 1, 2020

This course examines one or more film genres such as Western, horror, film noir, and science fiction. It explores specific types of film in depth, concentrating on historical and technical developments in a specific genre, and examines the work of actors, directors, writers, cinematographers, producers, and studios for that genre. Field trips may be required. This course is formerly known as TA 320.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- define and describe various film genres.
- evaluate and analyze films of a genre.
- compare one genre's components and style with that of other genres.
- classify the primitive, classic, revisionist, and parodic stages of a genre.
- evaluate the work of directors, actors, writers, cinematographers, and producers in a genre.
Theatre Arts Performance | American River College

TAP 300 Modern Rehearsal and Performance I

Units: 1 - 3  
Hours: 54 - 162 hours LAB  
Course Family: Modern Performance and Technical Production (http://arc.losrios.edu/course-families#id_100003)  
Prerequisite: None.  
Enrollment Limitation: Students must audition and/or interview with the director to participate in this course.  
Advisory: TA 350  
Transferable: CSU; UC  
C-ID: C-ID THTR 191  
Catalog Date: June 1, 2020

This course is the first in a series of four courses that provide workshop training in the rehearsal and performance of Modern theatre. It is designed for students with little or no prior theatre experience. Students audition or interview with the director for participation in a Modern drama or comedy. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include acting, singing, dancing, and/or technical rehearsals and preparation.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- prepare, audition, rehearse, and perform Modern theatre in community, educational, and/or professional theatres.
- employ methods for presentation of Modern realism, anti-realism, and/or Post Modern theatre.
- list and demonstrate the requirements of performing in a Modern theatre production including the audition, rehearsal, and production processes.
- create and dramatize the behavioral life of a character in rehearsal and performance.
- demonstrate basic understanding of Modern script analysis and the techniques of character analysis.
- detail and demonstrate an understanding of the basic skills, work ethic, and rehearsal methods necessary to performing a Modern role on stage to create the world of a chosen play.
- demonstrate ensemble acting techniques in collaborative theatre.
- demonstrate the basic collaborative responsibilities with the director, actors, crew members, and designers in rehearsal and in performance in the creation of a Modern theatre production.
- analyze the development of an actor's or production team member's role in a production from script to performance.

TAP 301 Modern Rehearsal and Performance II

Units: 1 - 3  
Hours: 54 - 162 hours LAB  
Course Family: Modern Performance and Technical Production (http://arc.losrios.edu/course-families#id_100003)  
Prerequisite: TAP 300 with a grade of "C" or better  
Enrollment Limitation: Students must audition and/or interview with the director to participate in this course.
This course is the second in a series of four courses that provide workshop training in the rehearsal and performance of Modern theatre. It is designed for students with basic/minimal theatre experience. Students audition or interview with the director for participation in a Modern drama or comedy. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include acting, singing, dancing, and/or technical rehearsals and preparation.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate basic proficiency in the skills, work ethic, and rehearsal methods necessary to performing a Modern role on stage to create the world of a chosen play.
- prepare, audition, rehearse, and perform Modern theatre in community, educational, and/or professional theatres.
- explore methods for presentation of Modern realism, anti-realism, and/or Post Modern theatre.
- list and demonstrate basic proficiency in the requirements of performing in a Modern theatre production including the audition, rehearsal, and production processes.
- analyze a Modern drama script and character.
- create and dramatize the behavioral life of a character in rehearsal and performance.
- demonstrate ensemble acting techniques in collaborative theatre.
- demonstrate the basic collaborative responsibilities with the director, actors, crew members, and designers in rehearsal and in performance in the creation of a Modern theatre production.
- analyze the development of an actor’s or production team member’s role in a production from script to performance.

TAP 302 Modern Rehearsal and Performance III

Units: 1 - 3
Hours: 54 - 162 hours LAB
Course Family: Modern Performance and Technical Production (http://arc.losrios.edu/course-families#id_100003)
Prerequisite: TAP 301 with a grade of "C" or better
Enrollment Limitation: Students must audition and/or interview with the director to participate in this course.
Advisory: TA 366
Transferable: CSU; UC
C-ID: C-ID THTR 191
Catalog Date: June 1, 2020

This course is the third in a series of four courses that provide workshop training in the rehearsal and performance of Modern theatre. It is designed for students with beginning/moderate theatre experience. Students audition or interview with the director for participation in a Modern drama or comedy. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include acting, singing, dancing, and/or technical rehearsals and preparation.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- utilize the varying systems of rehearsal and performance of Modern realism, anti-realism, and/or Post Modern theatre.
- demonstrate an intermediate proficiency in the skills, work ethic, and rehearsal methods necessary to performing a Modern role on stage to create the world of a chosen play.
- research, prepare, audition, rehearse, and perform Modern theatre in community, educational, and/or professional theatres.
- list and demonstrate intermediate proficiency in the requirements of performing in a Modern theatre production including the audition, rehearsal, and production processes.
- analyze a Modern drama script and character.
- create and dramatize the behavioral life of a character in rehearsal and performance.
- demonstrate ensemble acting techniques in collaborative theatre.
- demonstrate an intermediate proficiency in collaborating with the director, actors, crew members, and designers in rehearsal and in performance in the creation of a Modern theatre production.
- analyze the development of an actor’s or technician’s role in a production from script to performance.
- evaluate the professional responsibilities of an actor or production team member’s role in a Modern theatre production.
TAP 303 Modern Rehearsal and Performance IV

Units: 1 - 3
Hours: 54 - 162 hours LAB
Course Family: Modern Performance and Technical Production
Prerequisite: TAP 302 with a grade of "C" or better
Enrollment Limitation: Students must audition and/or interview with the director to participate in this course.
Advisory: TA 366
Transferable: CSU; UC
C-ID: C-ID THTR 191
Catalog Date: June 1, 2020

This course is the fourth in a series of four courses that provide workshop training in the rehearsal and performance of Modern theatre. It is designed for students with intermediate/significant theatre experience. Students audition or interview with the director for participation in a Modern drama or comedy. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include acting, singing, dancing, and/or technical rehearsals and preparation.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate mastery of the methods of rehearsing and performing Modern theatre art.
- demonstrate leadership and an exemplary work ethic while assisting the director and other actors in Modern script analysis, character analysis, staging, and the rehearsal process.
- research, prepare, audition, rehearse, and perform Modern theatre in community, educational, and/or professional theatres.
- utilize the varying systems of rehearsal and performance of Modern realism, anti-realism, and/or Post Modern theatre.
- analyze and solve problems associated with the creation and presentation of Modern theatre, including acting, staging, and technical challenges.
- create and dramatize the behavioral life of a character in rehearsal and performance.
- list and demonstrate mastery in the requirements of performing in a Modern theatre production including the audition, rehearsal, and production processes.
- demonstrate ensemble acting techniques in collaborative theatre.
- demonstrate mastery and leadership in collaborating with the director, actors, crew members, and designers in rehearsal and in performance in the creation of a Modern theatre production.
- analyze the development of an actor's or technician's role in a production from script to performance.
- evaluate the professional responsibilities of an actor or technician in a Modern theatre production.
- lead and mentor beginning actors in the methods of preparing and presenting Modern theatre art.

TAP 310 Modern Technical Production I

Units: 1 - 3
Hours: 54 - 162 hours LAB
Course Family: Modern Performance and Technical Production
Prerequisite: None
Enrollment Limitation: Interview
Transferable: CSU; UC
C-ID: C-ID THTR 192
Catalog Date: June 1, 2020

This course is the first in a series of four courses that provide workshop training in the technical production of modern theatre. It provides practical experience, in the modern theatre style, in one of the following areas: scenery, scenic painting, properties, costumes, lighting, sound, video, projections, stage management, house management, box office, publicity, and running crews. It is designed for students who want an introductory experience. Students interested in technical work interview for positions with the technical director. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include technical preparation, activities, rehearsals, and performances.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze the responsibilities of crew members, technicians, and designers in development of a production in the modern theatre style
• demonstrate the basic skills of a beginning crew member or technician
• describe basic shop and crew procedures, equipment, materials, and safety procedures
• perform basic planning for specific technical elements of a production in the modern theatre style
• assess the importance of teamwork in carrying out a group project in technical theatre
• develop a basic proficiency in working and collaborating with the director, designers, and performers in a modern theatre production

TAP 311 Modern Technical Production II

Units: 1 - 3  
Hours: 54 - 162 hours LAB  
Course Family: Modern Performance and Technical Production (http://arc.losrios.edu/course-families#id_100003)  
Prerequisite: TAP 310 with a grade of "C" or better  
Enrollment Limitation: Interview  
Transferable: CSU; UC  
C-ID: C-ID THTR 192  
Catalog Date: June 1, 2020

This course is the second in a series of four courses that provide workshop training in the technical production of modern theatre. It provides practical experience, in the modern theatre style, in one of the following areas: scenery, scenic painting, properties, costumes, lighting, sound, video, projections, stage management, house management, box office, publicity, and running crews. It is designed for students with basic/minimal experience. Students interested in technical work interview for positions with the technical director. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include technical preparation, activities, rehearsals, and performances.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• analyze the responsibilities of crew members, technicians, and designers in development of a production in the modern theatre style
• demonstrate the skills of a beginning crew member or technician
• analyze shop and crew procedures, equipment, materials, and safety procedures with a second level expertise
• perform second level planning for specific technical aspects of a production in the modern theatre style
• integrate planning and skills instruction to create solutions to technical problems
• demonstrate beginning proficiencies in two of the technical areas (scenery, costumes, makeup, lighting, sound, projections, operations crew, stage management, house management, box office/publicity)
• demonstrate in a modern theatre production increased proficiency performing the technical tasks of the second level of a specific technical production area (scenery, costumes, makeup, lighting, sound, projections, operations crew, stage management, house management, box office/publicity)
• develop a second level proficiency in working and collaborating with the director, designers, and performers in a modern theatre production

TAP 312 Modern Technical Production III

Units: 1 - 3  
Hours: 54 - 162 hours LAB  
Course Family: Modern Performance and Technical Production (http://arc.losrios.edu/course-families#id_100003)  
Prerequisite: TAP 311 with a grade of "C" or better  
Enrollment Limitation: Interview  
Transferable: CSU; UC  
C-ID: C-ID THTR 192  
Catalog Date: June 1, 2020

This course is the third in a series of four courses that provide workshop training in the technical production of modern theatre. It provides practical experience, in the modern theatre style, in one of the following areas: scenery, scenic painting, properties, costumes, lighting, sound, video, projections, stage management, house management, box office, publicity, and running crews. It is designed for students with beginning/moderate experience. Students interested in technical work interview for positions with the technical director. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include technical preparation, activities, rehearsals, and performances.

Student Learning Outcomes

Upon completion of this course, the student will be able to:
• analyze the responsibilities of crew members, technicians, and designers in development of a production in the modern theatre style
• demonstrate the intermediate skills of a crew member or technician
• analyze shop and crew procedures, equipment, materials, and safety procedures with a third level expertise
• perform intermediate level planning of technical aspects of a production in the modern theatre style
• integrate planning and skills instruction to create solutions to technical problems
• demonstrate beginning proficiencies in three of the technical areas (scenery, costumes, makeup, lighting, sound, projections, operations crew, stage management, house management, box office/publicity)
• demonstrate in a modern theatre production increased proficiency performing the technical tasks of the third level of a specific technical production area (scenery, costumes, makeup, lighting, sound, projections, operations crew, stage management, house management, box office/publicity)
• develop an intermediate proficiency in working and collaborating with the director, designers, and performers in a modern theatre production

TAP 313 Modern Technical Production IV

This course is the fourth in a series of four courses that provide workshop training in the technical production of modern theatre. It provides practical experience, in the modern theatre style, in one of the following areas: scenery, scenic painting, properties, costumes, lighting, sound, video, projections, stage management, house management, box office, publicity, and running crews. It is designed for students with intermediate/significant theatre experience. Students interested in technical work interview for positions with the technical director. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include technical preparation, activities, rehearsals, and performances.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• evaluate the responsibilities of crew members, technicians, and designers in development of a production in the modern theatre style
• demonstrate skill mastery by performing duties of a lead crew member or technician
• evaluate and design shop, crew and safety procedures; evaluate and choose equipment and materials
• perform significant planning of technical aspects of a production in the modern theatre style
• integrate planning and skills instruction to create solutions to complex technical problems
• develop the importance of teamwork in a group project in technical theatre by mentoring beginning crew members
• demonstrate beginning proficiencies in four of the technical areas (scenery, costumes, makeup, lighting, sound, projections, operations crew, stage management, house management, box office/publicity)
• demonstrate in a modern theatre production increased proficiency performing the technical tasks of the fourth mastery level of a specific technical production area (scenery, costumes, makeup, lighting, sound, projections, operations crew, stage management, house management, box office/publicity)
• demonstrate mastery and leadership in working and collaborating with the director, designers, and performers in a modern theatre production

TAP 320 Classical Rehearsal and Performance I

This course is the first in a series of four courses that provide workshop training in the technical production of classical theatre. It provides practical experience, in the classical theatre style, in one of the following areas: scenery, scenic painting, properties, costumes, lighting, sound, video, projections, stage management, house management, box office, publicity, and running crews. It is designed for students with intermediate/significant theatre experience. Students interested in technical work interview for positions with the technical director. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include technical preparation, activities, rehearsals, and performances.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• evaluate the responsibilities of crew members, technicians, and designers in development of a production in the modern theatre style
• demonstrate skill mastery by performing duties of a lead crew member or technician
• evaluate and design shop, crew and safety procedures; evaluate and choose equipment and materials
• perform significant planning of technical aspects of a production in the modern theatre style
• integrate planning and skills instruction to create solutions to complex technical problems
• develop the importance of teamwork in a group project in technical theatre by mentoring beginning crew members
• demonstrate beginning proficiencies in four of the technical areas (scenery, costumes, makeup, lighting, sound, projections, operations crew, stage management, house management, box office/publicity)
• demonstrate in a modern theatre production increased proficiency performing the technical tasks of the fourth mastery level of a specific technical production area (scenery, costumes, makeup, lighting, sound, projections, operations crew, stage management, house management, box office/publicity)
• demonstrate mastery and leadership in working and collaborating with the director, designers, and performers in a modern theatre production

TAP 312 Classical Technical Production IV

This course is the fourth in a series of four courses that provide workshop training in the technical production of classical theatre. It provides practical experience, in the classical theatre style, in one of the following areas: scenery, scenic painting, properties, costumes, lighting, sound, video, projections, stage management, house management, box office, publicity, and running crews. It is designed for students with intermediate/significant theatre experience. Students interested in technical work interview for positions with the technical director. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include technical preparation, activities, rehearsals, and performances.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• evaluate the responsibilities of crew members, technicians, and designers in development of a production in the modern theatre style
• demonstrate skill mastery by performing duties of a lead crew member or technician
• evaluate and design shop, crew and safety procedures; evaluate and choose equipment and materials
• perform significant planning of technical aspects of a production in the modern theatre style
• integrate planning and skills instruction to create solutions to complex technical problems
• develop the importance of teamwork in a group project in technical theatre by mentoring beginning crew members
• demonstrate beginning proficiencies in four of the technical areas (scenery, costumes, makeup, lighting, sound, projections, operations crew, stage management, house management, box office/publicity)
• demonstrate in a modern theatre production increased proficiency performing the technical tasks of the fourth mastery level of a specific technical production area (scenery, costumes, makeup, lighting, sound, projections, operations crew, stage management, house management, box office/publicity)
• demonstrate mastery and leadership in working and collaborating with the director, designers, and performers in a modern theatre production

TAP 330 Classical Technical Production V

This course is the fifth in a series of four courses that provide workshop training in the technical production of classical theatre. It provides practical experience, in the classical theatre style, in one of the following areas: scenery, scenic painting, properties, costumes, lighting, sound, video, projections, stage management, house management, box office, publicity, and running crews. It is designed for students with intermediate/significant theatre experience. Students interested in technical work interview for positions with the technical director. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include technical preparation, activities, rehearsals, and performances.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• evaluate the responsibilities of crew members, technicians, and designers in development of a production in the modern theatre style
• demonstrate skill mastery by performing duties of a lead crew member or technician
• evaluate and design shop, crew and safety procedures; evaluate and choose equipment and materials
• perform significant planning of technical aspects of a production in the modern theatre style
• integrate planning and skills instruction to create solutions to complex technical problems
• develop the importance of teamwork in a group project in technical theatre by mentoring beginning crew members
• demonstrate beginning proficiencies in four of the technical areas (scenery, costumes, makeup, lighting, sound, projections, operations crew, stage management, house management, box office/publicity)
• demonstrate in a modern theatre production increased proficiency performing the technical tasks of the fourth mastery level of a specific technical production area (scenery, costumes, makeup, lighting, sound, projections, operations crew, stage management, house management, box office/publicity)
• demonstrate mastery and leadership in working and collaborating with the director, designers, and performers in a modern theatre production

TAP 340 Classical Technical Production VI

This course is the sixth in a series of four courses that provide workshop training in the technical production of classical theatre. It provides practical experience, in the classical theatre style, in one of the following areas: scenery, scenic painting, properties, costumes, lighting, sound, video, projections, stage management, house management, box office, publicity, and running crews. It is designed for students with intermediate/significant theatre experience. Students interested in technical work interview for positions with the technical director. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include technical preparation, activities, rehearsals, and performances.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• evaluate the responsibilities of crew members, technicians, and designers in development of a production in the modern theatre style
• demonstrate skill mastery by performing duties of a lead crew member or technician
• evaluate and design shop, crew and safety procedures; evaluate and choose equipment and materials
• perform significant planning of technical aspects of a production in the modern theatre style
• integrate planning and skills instruction to create solutions to complex technical problems
• develop the importance of teamwork in a group project in technical theatre by mentoring beginning crew members
• demonstrate beginning proficiencies in four of the technical areas (scenery, costumes, makeup, lighting, sound, projections, operations crew, stage management, house management, box office/publicity)
• demonstrate in a modern theatre production increased proficiency performing the technical tasks of the fourth mastery level of a specific technical production area (scenery, costumes, makeup, lighting, sound, projections, operations crew, stage management, house management, box office/publicity)
• demonstrate mastery and leadership in working and collaborating with the director, designers, and performers in a modern theatre production
This course is the first in a series of four courses that provide workshop training in the rehearsal and performance of Classical theatre. It is designed for students with little or no prior theatre experience. Students audition or interview with the director for participation in a Classical drama or comedy. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include acting, singing, dancing, and/or technical rehearsals and preparation.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- employ vocal, physical, and analytical skills necessary to present a play written between approximately 500 BCE and 1850 CE.
- prepare, audition, rehearse, and perform Classical theatre in community, educational, and/or professional theatres.
- list and demonstrate the requirements of being an actor in a Classical theatre production including the audition, rehearsal, and production processes.
- demonstrate basic understanding of Classical script analysis and the techniques of character analysis.
- describe and demonstrate a basic understanding of the skills and rehearsal methods necessary to performing a Classical role on stage to create the world of a chosen play.
- demonstrate ensemble acting techniques in collaborative theatre.
- demonstrate the basic collaborative responsibilities with the director, actors, crew members, and designers in rehearsal and in performance in the creation of a Classical theatre production.
- analyze the development of an actor's or technician's role in a production from script to performance.
- create and dramatize the behavioral life of a character in rehearsal and performance.

TAP 321 Classical Rehearsal and Performance II

Units: 1 - 3  
Hours: 54 - 162 hours LAB  
Course Family: Classical Performance and Technical Production (http://arc.losrios.edu/course-families#id_100004)  
Prerequisite: TAP 320 with a grade of "C" or better  
Enrollment Limitation: Students must audition and/or interview with the director to participate in this course.  
Advisory: TA 362  
Transferable: CSU; UC  
C-ID: C-ID THTR 191  
Catalog Date: June 1, 2020

This course is the second in a series of four courses that provide workshop training in the rehearsal and performance of Classical theatre. It is designed for students with basic/minimal theatre experience. Students audition or interview with the director for participation in a Classical drama or comedy. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include acting, singing, dancing, and/or technical rehearsals and preparation.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate basic proficiency in the skills and rehearsal methods necessary to performing a Classical role on stage to create the world of a chosen play.
- prepare, audition, rehearse and perform Classical theatre in community, educational, and/or professional theatres.
- describe and utilize special techniques necessary to present plays written between approximately 550 BCE and 1850 CE.
- list and demonstrate basic proficiency in the requirements of being an actor in a Classical theatre production including the audition, rehearsal, and production processes.
- analyze a Classical script and character.
- create and dramatize the behavioral life of a character in rehearsal and performance.
- fit in effectively as an ensemble member of a theatre company.
- demonstrate the basic collaborative responsibilities with the director, actors, crew members, and designers in rehearsal and in performance in the creation of a Classical theatre production.
- analyze the development of an actor's or technician's role in a production from script to performance.

TAP 322 Classical Rehearsal and Performance III
TAP 323 Classical Rehearsal and Performance IV

This course is the third in a series of four courses that provide workshop training in the rehearsal and performance of Classical theatre. It is designed for students with beginning/moderate theatre experience. Students audition or interview with the director for participation in a Classical drama or comedy. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include acting, singing, dancing, and/or technical rehearsals and preparation.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate an intermediate proficiency in the elevated speech and period movement necessary to present plays written approximately between 550 BCE and 1850 CE.
- demonstrate an understanding of the social context of Classical plays.
- research, prepare, audition, rehearse, and perform Classical theatre in community, educational, and/or professional theatres.
- list and demonstrate intermediate proficiency in the requirements of being an actor in a Classical theatrical production including the audition, rehearsal, and production processes.
- analyze a Classical drama script and character.
- create and dramatize the behavioral life of a character in rehearsal and performance.
- fit in effectively as an ensemble member of a theatre company.
- demonstrate an intermediate proficiency in collaborating with the director, actors, crew members, and designers in rehearsal and in performance in the creation of a Classical theatre production.
- analyze the development of an actor's or technician's role in a production from script to performance.
- evaluate the professional responsibilities of an actor or technician in a Classical theatre production.

TAP 323 Classical Rehearsal and Performance IV

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate mastery of and serve as an example of the elevated speech and period movement necessary to present plays written approximately between 550 BCE and 1850 CE.
- demonstrate leadership in a cast by assisting the director and other actors in Classical script analysis and the techniques of character analysis.
- research, prepare, audition, rehearse, and perform Classical theatre in community, educational, and/or professional theatres.
- analyze and solve problems associated with the creation and presentation of Classical theatre, including acting, staging, and technical challenges.
- create and dramatize the behavioral life of a character in rehearsal and performance.
- list and demonstrate mastery in the requirements of being an actor in a Classical theatre production including the audition, rehearsal, and production processes.
- integrate effectively as an ensemble member of a theatre company.
- demonstrate mastery and leadership in collaborating with the director, actors, crew members, and designers in a classical theatre production.
- analyze the evolution of an actor's or technician's role in a production from script to performance.
- evaluate the professional responsibilities of an actor or technician in a Classical theatre production.
- lead and mentor beginning actors in the methods of preparing and presenting Classical theatre art.

### TAP 330 Classical Technical Production I

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<tr>
<th>Units:</th>
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<tbody>
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<td>Course Family:</td>
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<td>Prerequisite:</td>
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<td>Enrollment Limitation:</td>
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<td>C-ID THTR 192</td>
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<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
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This course is the first in a series of four courses that provide workshop training in the technical production of classical theatre. It provides practical experience, in the classical theatre style, in one of the following areas: scenery, scenic painting, properties, costumes, lighting, sound, video, projections, stage management, house management, box office, publicity, and running crews. It is designed for students who want an introductory experience. Students interested in technical work interview for positions with the technical director. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include technical preparation, activities, rehearsals, and performances.

#### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze the responsibilities of crew members, technicians, and designers in development of a production in the classical theatre style
- demonstrate the basic skills of a beginning crew member or technician
- describe basic shop and crew procedures, equipment, materials, and safety procedures
- perform basic planning of technical aspects of a production in the classical theatre style
- assess the importance of teamwork in carrying out a group project in technical theatre
- develop a basic proficiency in working and collaborating with the director, designers, and performers in a classical theatre production

### TAP 331 Classical Technical Production II

<table>
<thead>
<tr>
<th>Units:</th>
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<tbody>
<tr>
<td>Hours:</td>
<td>54 - 162 hours LAB</td>
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<tr>
<td>Course Family:</td>
<td>Classical Performance and Technical Production</td>
</tr>
<tr>
<td>Prerequisite:</td>
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<td>Enrollment Limitation:</td>
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<td>C-ID THTR 192</td>
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<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
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This course is the second in a series of four courses that provide workshop training in the technical production of classical theatre. It provides practical experience, in the classical theatre style, in one of the following areas: scenery, scenic painting, properties, costumes, lighting, sound, video, projections, stage management, house management, box office, publicity, and running crews. It is designed for students with basic/minimal theatre experience. Students interested in technical work interview for positions with the technical director. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include technical preparation, activities, rehearsals, and performances.

#### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze the responsibilities of crew members, technicians and designers in development of a production in the classical theatre style
- demonstrate the skills of a beginning crew member or technician
- analyze shop and crew procedures, equipment, materials, and safety procedures with a second level expertise
perform second level planning for specific technical aspects of a production in the classical theatre style

integrate planning and skills instruction to create solutions to technical problems

demonstrate beginning proficiencies in two of the technical areas (scenery, costumes, makeup, lighting, sound, projections, operations crew, stage management, house management, box office/publicity)

demonstrate in a classical theatre production increased proficiency performing the technical tasks of the second level of a specific technical production area (scenery, costumes, makeup, lighting, sound, projections, operations crew, stage management, house management, box office/publicity)

develop a second level proficiency in working and collaborating with the director, designers, and performers in a classical theatre production

TAP 332 Classical Technical Production III

Units: 1 - 3
Hours: 54 - 162 hours LAB
Course Family: Classical Performance and Technical Production (http://arc.losrios.edu/course-families#id_100004)
Prerequisite: TAP 331 with a grade of "C" or better
Enrollment Limitation: Interview
Transferable: CSU; UC
C-ID: C-ID THTR 192
Catalog Date: June 1, 2020

This course is the third in a series of four courses that provide workshop training in the technical production of classical theatre. It provides practical experience, in the classical theatre style, in one of the following areas: scenery, scenic painting, properties, costumes, lighting, sound, video, projections, stage management, house management, box office, publicity, and running crews. It is designed for students with beginning/moderate theatre experience. Students interested in technical work interview for positions with the technical director. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include technical preparation, activities, rehearsals, and performances.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

analyze the responsibilities of crew members, technicians, and designers in development of a production in the classical theatre style

demonstrate the intermediate skills of a crew member or technician

analyze shop and crew procedures, equipment, materials, and safety procedures with a third level expertise

perform intermediate level planning of technical aspects of a production in the classical theatre style

integrate planning and skills instruction to create solutions to technical problems

demonstrate beginning proficiencies in three of the technical areas (scenery, costumes, makeup, lighting, sound, projections, operations crew, stage management, house management, box office/publicity)

demonstrate in a classical theatre production increased proficiency performing the technical tasks of the third level of a specific technical production area (scenery, costumes, makeup, lighting, sound, projections, operations crew, stage management, house management, box office/publicity)

develop an intermediate proficiency in working and collaborating with the director, designers, and performers in a classical theatre production

TAP 333 Classical Technical Production IV

Units: 1 - 3
Hours: 54 - 162 hours LAB
Course Family: Classical Performance and Technical Production (http://arc.losrios.edu/course-families#id_100004)
Prerequisite: TAP 332 with a grade of "C" or better
Enrollment Limitation: Interview
Transferable: CSU; UC
C-ID: C-ID THTR 192
Catalog Date: June 1, 2020

This course is the fourth in a series of four courses that provide workshop training in the technical production of classical theatre. It provides practical experience, in the classical theatre style, in one of the following areas: scenery, scenic painting, properties, costumes, lighting, sound, video, projections, stage management, house management, box office, publicity, and running crews. It is designed for students with intermediate/significant theatre experience. Students interested in technical work interview for positions with the technical director. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include technical preparation, activities, rehearsals, and performances.

Student Learning Outcomes
TAP 340 Musical Rehearsal and Performance I

Upon completion of this course, the student will be able to:

- evaluate the responsibilities of crew members, technicians, and designers in development of a production in the classical theatre style
- demonstrate skill mastery by performing duties of a lead crew member or technician
- evaluate and design shop, crew and safety procedures; evaluate and choose equipment and materials
- perform significant planning of technical aspects of a classical theatre production
- integrate planning and skills instruction to create solutions to complex technical problems
- develop the importance of teamwork in a group project in technical theatre by mentoring beginning crew members
- demonstrate beginning proficiencies in four of the technical areas (scenery, costumes, makeup, lighting, sound, projections, operations crew, stage management, house management, box office/publicity)
- demonstrate in a classical theatre production increased proficiency performing the technical tasks of the fourth mastery level of a specific technical production area (scenery, costumes, makeup, lighting, sound, projections, operations crew, stage management, house management, box office/publicity)
- demonstrate mastery and leadership in working and collaborating with the director, designers, and performers in a classical theatre production

This course is the first in a series of four courses that provide workshop training in the rehearsal and performance of musical theatre. It is designed for students with little or no prior theatre experience. Students audition or interview with the director for participation in a musical. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include acting, singing, dancing, and/or technical rehearsals and preparation.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- prepare, audition, rehearse, and perform musical theatre in community, educational, and/or professional theatres.
- employ the skills in singing, dancing, acting, and/or musicianship necessary for a musical theatre production.
- list and demonstrate the steps necessary to take a musical theatre production from script to performance.
- demonstrate basic understanding of musical theatre script analysis and the techniques of character analysis.
- create and dramatize the behavioral life of a character in rehearsal and performance.
- demonstrate ensemble acting techniques in collaborative theatre.
- demonstrate the basic collaborative responsibilities with the director, conductor, vocal director, choreographer, musicians, actors, crew members, and designers in rehearsal and in performance in the creation of a musical theatre production.
- analyze the development of a performer's role from audition to opening.

TAP 341 Musical Rehearsal and Performance II

Upon completion of this course, the student will be able to:

- evaluate the responsibilities of crew members, technicians, and designers in development of a production in the classical theatre style
- demonstrate skill mastery by performing duties of a lead crew member or technician
- evaluate and design shop, crew and safety procedures; evaluate and choose equipment and materials
- perform significant planning of technical aspects of a classical theatre production
- integrate planning and skills instruction to create solutions to complex technical problems
- develop the importance of teamwork in a group project in technical theatre by mentoring beginning crew members
- demonstrate beginning proficiencies in four of the technical areas (scenery, costumes, makeup, lighting, sound, projections, operations crew, stage management, house management, box office/publicity)
- demonstrate in a classical theatre production increased proficiency performing the technical tasks of the fourth mastery level of a specific technical production area (scenery, costumes, makeup, lighting, sound, projections, operations crew, stage management, house management, box office/publicity)
- demonstrate mastery and leadership in working and collaborating with the director, designers, and performers in a classical theatre production

This course is the second in a series of four courses that provide workshop training in the rehearsal and performance of musical theatre. It is designed for students with
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate basic proficiency in the skills necessary for a musical theatre production, including singing, dancing, acting, and/or musicianship.
- prepare, audition, rehearse, and perform musical theatre in community, educational, and/or professional theatres.
- list and demonstrate with basic proficiency the steps necessary to take a musical theatre production from script to stage.
- analyze a musical theatre script and character.
- fit in effectively as an ensemble member of a theatre company.
- analyze the differences in producing musical theatre from other styles of theatre.
- create and dramatize the behavioral life of a character in rehearsal and performance.
- demonstrate the basic collaborative responsibilities with the director, choreographer, vocal director, musicians, actors, crew members, and designers in rehearsal and in performance in the creation of a musical theatre production.
- analyze the evolution of an actor's or technician's role in a production from audition to opening night.

TAP 342 Musical Rehearsal and Performance III

This course is the third in a series of four courses that provide workshop training in the rehearsal and performance of musical theatre. It is designed for students with beginning/moderate theatre experience. Students audition or interview with the director for participation in a musical. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include acting, singing, dancing, and/or technical rehearsals and preparation.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- research, prepare, audition, rehearse and perform musical theatre in community, educational, and/or professional theatres.
- demonstrate an intermediate proficiency in the skills necessary for musical theatre production, including acting, singing, dancing, and/or musicianship.
- analyze a musical theatre script and character.
- identify and demonstrate an intermediate proficiency in the skills necessary to take a musical from script to stage.
- create and dramatize the behavioral life of a character in rehearsal and performance.
- fit in effectively as an ensemble member of a theatre company.
- demonstrate an intermediate proficiency in collaborating with the director, conductor, choreographer, vocal director, musicians, actors, crew members, and designers in rehearsal and in performance in the creation of a musical theatre production.
- analyze the evolution of a performer's role from auditions to opening night.
- evaluate the professional responsibilities of an actor or technician in a musical theatre production.

TAP 343 Musical Rehearsal and Performance IV

This course is the fourth in a series of four courses that provide workshop training in the rehearsal and performance of musical theatre. It is designed for students with moderate/proficiency theatre experience. Students audition or interview with the director for participation in a musical. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include acting, singing, dancing, and/or technical rehearsals and preparation.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- research, prepare, audition, rehearse and perform musical theatre in community, educational, and/or professional theatres.
- demonstrate an intermediate proficiency in the skills necessary for musical theatre production, including acting, singing, dancing, and/or musicianship.
- analyze a musical theatre script and character.
- identify and demonstrate an intermediate proficiency in the skills necessary to take a musical from script to stage.
- create and dramatize the behavioral life of a character in rehearsal and performance.
- fit in effectively as an ensemble member of a theatre company.
- demonstrate an intermediate proficiency in collaborating with the director, conductor, choreographer, vocal director, musicians, actors, crew members, and designers in rehearsal and in performance in the creation of a musical theatre production.
- analyze the evolution of a performer's role from auditions to opening night.
- evaluate the professional responsibilities of an actor or technician in a musical theatre production.
This course is the fourth in a series of four courses that provide workshop training in the rehearsal and performance of musical theatre. It is designed for students with intermediate/significant theatre experience. Students audition or interview with the director for participation in a musical. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include acting, singing, dancing, and/or technical rehearsals and preparation.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate mastery of the methods of rehearsing and performing musical theatre.
- demonstrate leadership in a cast by assisting the director and other actors in musical theatre script analysis and the techniques of character analysis.
- research, prepare, audition, rehearse, and perform musical theatre in community, educational, and/or professional theatres.
- utilize varying technique 'systems' to prepare physically and vocally for a musical theatre role.
- analyze and solve problems associated with the creation and presentation of musical theatre, including acting, staging, musical, and technical challenges.
- integrate effectively as an ensemble member of a theatre company.
- demonstrate mastery and leadership in collaborating with the director, conductor, choreographer, vocal director, musicians, actors, crew members, and designers in rehearsal and in performance in the creation of a musical theatre production.
- analyze the evolution of an actor's role in a musical theatre production from audition to opening.
- evaluate the professional responsibilities of a performer in a musical theatre production.
- lead and mentor beginning actors in the methods of preparing and presenting musical theatre.
- create and dramatize the behavioral life of a character in rehearsal and performance.

TAP 350 Musical Technical Production I

This course is the first in a series of four courses that provide workshop training in the technical production of musical theatre. It provides practical experience, in the musical theatre style, in one of the following areas: scenery, scenic painting, properties, costumes, lighting, sound, video, projections, stage management, house management, box office, publicity, and running crews. It is designed for students who want an introductory experience. Students interested in technical work interview for positions with the technical director. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include technical preparation, activities, rehearsals, and performances.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze the responsibilities of crew members, technicians, and designers in development of a production in the musical theatre style
- demonstrate the basic skills of a beginning crew member or technician
- describe basic shop and crew procedures, equipment, materials, and safety procedures
- perform basic planning of technical aspects of a production in the musical theatre style
- assess the importance of teamwork in carrying out a group project in technical theatre
- develop a basic proficiency in working and collaborating with the director, designers, and performers in a musical theatre production
TAP 351 Musical Technical Production II

This course is the second in a series of four courses that provide workshop training in the technical production of musical theatre. It provides practical experience, in the musical theatre style, in one of the following areas: scenery, scenic painting, properties, costumes, lighting, sound, video, projections, stage management, house management, box office, publicity, and running crews. It is designed for students with basic/minimal theatre experience. Students interested in technical work interview for positions with the technical director. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include technical preparation, activities, rehearsals, and performances.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze the responsibilities of crew members, technicians, and designers in development of a production in the musical theatre style
- demonstrate the skills of a beginning crew member or technician
- analyze shop and crew procedures, equipment, materials, and safety procedures with a second level expertise
- perform second level planning for specific technical aspects of a production in the musical theatre style
- integrate planning and skills instruction to create solutions to technical problems
- demonstrate beginning proficiencies in two of the technical areas (scenery, costumes, makeup, lighting, sound, projections, operations crew, stage management, house management, box office/publicity)
- demonstrate in a musical theatre production increased proficiency performing the technical tasks of the second level of a specific technical production area (scenery, costumes, makeup, lighting, sound, projections, operations crew, stage management, house management, box office/publicity)
- develop a second level proficiency in working and collaborating with the director, designers, and performers in a musical theatre production

TAP 352 Musical Technical Production III

This course is the third in a series of four courses that provide workshop training in the technical production of musical theatre. It provides practical experience, in the musical theatre style, in one of the following areas: scenery, scenic painting, properties, costumes, lighting, sound, video, projections, stage management, house management, box office, publicity, and running crews. It is designed for students with beginning/moderate theatre experience. Students interested in technical work interview for positions with the technical director. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include technical preparation, activities, rehearsals, and performances.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze the responsibilities of crew members, technicians, and designers in development of a production in the musical theatre style
- demonstrate the intermediate skills of a crew member or technician
- analyze shop and crew procedures, equipment, materials, and safety procedures with a third level expertise
- perform intermediate level planning of technical aspects of a musical theatre production
- integrate planning and skills instruction to create solutions to technical problems
- demonstrate beginning proficiencies in three of the technical areas (scenery, costumes, makeup, lighting, sound, projections, operations crew, stage management, house management, box office/publicity)
• demonstrate in a musical theatre production increased proficiency performing the technical tasks of the third level of a specific technical production area (scenery, costumes, makeup, lighting, sound, projections, operations crew, stage management, house management, box office/publicity)

• develop an intermediate proficiency in working and collaborating with the director, designers, and performers in a musical theatre production

TAP 353 Musical Technical Production IV

Units: 1 - 3
Hours: 54 - 162 hours LAB
Course Family: Musical Performance and Technical Production
Prerequisite: TAP 352 with a grade of "C" or better
Enrollment Limitation: Interview
Transferable: CSU; UC
C-ID: C-ID THTR 192
Catalog Date: June 1, 2020

This course is the fourth in a series of four courses that provide workshop training in the technical production of musical theatre. It provides practical experience, in the musical theatre style, in one of the following areas: scenery, scenic painting, properties, costumes, lighting, sound, video, projections, stage management, house management, box office, publicity, and running crews. It is designed for students with intermediate/significant experience. Students interested in technical work interview for positions with the technical director. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include technical preparation, activities, rehearsals, and performances.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• evaluate the responsibilities of crew members, technicians, and designers in development of a production in the musical theatre style

• demonstrate skill mastery by performing duties of a lead crew member or technician

• evaluate and design shop, crew and safety procedures; evaluate and choose equipment and materials

• perform significant planning of technical aspects of a musical theatre production

• integrate planning and skills instruction to create solutions to complex technical problems

• develop the importance of teamwork in a group project in technical theatre by mentoring beginning crew members

• demonstrate beginning proficiencies in four of the technical areas (scenery, costumes, makeup, lighting, sound, projections, operations crew, stage management, house management, box office/publicity)

• demonstrate in a musical theatre production increased proficiency performing the technical tasks of the fourth mastery level of a specific technical production area (scenery, costumes, makeup, lighting, sound, projections, operations crew, stage management, house management, box office/publicity)

• demonstrate mastery and leadership in working and collaborating with the director, designers, and performers in a musical theatre production

TAP 360 Children's Theatre Rehearsal and Performance I

Units: 1 - 3
Hours: 54 - 162 hours LAB
Course Family: Children's Theatre Performance and Technical Production
Prerequisite: None.
Enrollment Limitation: Students must audition and/or interview with the director to participate in this course.
Advisory: TA 350
Transferable: CSU; UC
C-ID: C-ID THTR 191
Catalog Date: June 1, 2020

This course is the first in a series of four courses that provide workshop training in the rehearsal and performance of children's theatre. It is designed for students with little or no prior theatre experience. Students audition or interview with the director for participation in a children's show. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include acting, singing, dancing, and/or technical rehearsals and preparation.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• prepare, audition, rehearse, and perform children's theatre in community, educational, and/or professional theatres.

• employ methods for the presentation of children's theatre.
- differentiate the style of acting required of children's theatre performers from other basic styles of acting.
- list and demonstrate the basic skills of being an actor in a children's theatre production including the audition, rehearsal, and production processes.
- demonstrate basic understanding of children's theatre script analysis and the techniques of character analysis.
- demonstrate the basic skills and rehearsal methods necessary to performing a role on stage to create the world of a chosen play.
- demonstrate ensemble acting techniques in collaborative theatre.
- create and dramatize the behavioral life of a character in rehearsal and performance.

TAP 361 Children's Theatre Rehearsal and Performance II

This course is the second in a series of four courses that provide workshop training in the rehearsal and performance of children's theatre. It is designed for students with basic/minimal theatre experience. Students audition or interview with the director for participation in a children's show. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include acting, singing, dancing, and/or technical rehearsals and preparation.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate moderate proficiency in the skills and rehearsal methods necessary to performing a role on stage to create the world of a chosen children's play.
- prepare, audition, rehearse, and perform children's theatre in community, educational, and/or professional theatres.
- explore methods for the presentation of children's theatre.
- list and demonstrate moderate proficiency in the requirements of being an actor in a children's theatre production including the audition, rehearsal, and production processes.
- analyze a children's play script and character.
- demonstrate ensemble acting techniques in collaborative theatre.
- differentiate the style of acting required of children's theatre performers from other basic styles of acting.
- analyze the development of an actor's or production team member's role in a production from script to performance.
- create and dramatize the behavioral life of a character in rehearsal and performance.
- collaborate, at a basic proficiency, with the director, actors, crew members, and designers in rehearsal and in performance in the creation of a children's show.

TAP 362 Children's Theatre Rehearsal and Performance III

This course is the third in a series of four courses that provide workshop training in the rehearsal and performance of children's theatre. It is designed for students with beginning/moderate theatre experience. Students audition or interview with the director for participation in a children's show. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include acting, singing, dancing, and/or technical rehearsals and preparation.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- demonstrate an intermediate proficiency in the skills and rehearsal methods necessary to performing a children's theatre role on stage to create the world of a chosen play.
- research, prepare, audition, rehearse, and perform children's theatre in community, educational, and/or professional theatres.
- list and demonstrate intermediate proficiency in the requirements of being an actor in a children's production including the audition, rehearsal, and production processes.
- analyze a children's theatre script and character.
- differentiate the style of acting required of children's theatre performers from other basic styles of acting.
- create and dramatize the behavioral life of a character in rehearsal and performance.
- demonstrate ensemble acting techniques in collaborative theatre.
- collaborate, at an intermediate proficiency, with the director, actors, crew members, and designers in rehearsal and in performance in the creation of a production.
- analyze the development of an actor's or technician's role in a production from script to performance.
- evaluate the professional responsibilities of an actor's, crew member's, or production team member's role in a children's theatre production.

TAP 363 Children's Theatre Rehearsal and Performance IV

Units: 1 - 3
Hours: 54 - 162 hours LAB
Course Family: Children's Theatre Performance and Technical Production
Prerequisite: TAP 362 with a grade of "C" or better
Enrollment Limitation: Students must audition and/or interview with the director to participate in this course.
Advisory: TA 350
Transferable: CSU; UC
C-ID: C-ID THTR 191
Catalog Date: June 1, 2020

This course is the fourth in a series of four courses that provide workshop training in the rehearsal and performance of children's theatre. It is designed for students with intermediate/significant theatre experience. Students audition or interview with the director for participation in a children's show. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include acting, singing, dancing, and/or technical rehearsals and preparation.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate mastery of the methods of rehearsing and performing children's theatre.
- demonstrate leadership in a cast by assisting the director and other actors in children's theatre script analysis and the techniques of character analysis.
- research, prepare, audition, rehearse, and perform children's theatre in community, educational, and/or professional theatres.
- analyze and solve problems associated with the creation and presentation of children's theatre, including acting, staging, and technical challenges.
- list and demonstrate mastery in the requirements of being an actor in a children's theatre production including the audition, rehearsal, and production processes.
- demonstrate ensemble acting techniques in collaborative theatre.
- differentiate the style of acting required of children's theatre performers from other basic styles of acting.
- analyze the development of an actor's, production team member's, and crew member's role in a children's theatre production from script to performance.
- create and dramatize the behavioral life of a character in rehearsal and performance.
- lead and mentor beginning actors in the methods of preparing and presenting children's theatre.
- demonstrate mastery and leadership in collaborating with the director, actors, crew members and designers in rehearsal and in performance in the creation of a children's theatre production.

TAP 370 Children's Theatre Technical Production I

Units: 1 - 3
Hours: 54 - 162 hours LAB
This course is the first in a series of four courses that provide workshop training in the technical production of children's theatre. It provides practical experience, in the children's theatre style, in one of the following areas: scenery, scenic painting, properties, costumes, lighting, sound, video, projections, stage management, house management, box office, publicity, and running crews. It is designed for students who want an introductory experience. Students interested in technical work interview for positions with the technical director. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include technical preparation, activities, rehearsals, and performances.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze the responsibilities of crew members, technicians, and designers in development of a production in the children's theatre style
- demonstrate the basic skills of a beginning crew member or technician
- describe basic shop and crew procedures, equipment, materials, and safety procedures
- perform basic planning of technical aspects of a production in the children's theatre style
- assess the importance of teamwork in carrying out a group project in technical theatre
- develop a basic proficiency in working and collaborating with the director, designers, and performers in a children's theatre production

TAP 371 Children's Theatre Technical Production II

Units: 1 - 3
Hours: 54 - 162 hours LAB
Course Family: Children's Theatre Performance and Technical Production
Prerequisite: TAP 370 with a grade of "C" or better
Enrollment Limitation: Interview
Transferable: CSU; UC
C-ID: C-ID THTR 192
Catalog Date: June 1, 2020

This course is the second in a series of four courses that provide workshop training in the technical production of children's theatre. It provides practical experience, in the children's theatre style, in one of the following areas: scenery, scenic painting, properties, costumes, lighting, sound, video, projections, stage management, house management, box office, publicity, and running crews. It is designed for students with basic/minimal theatre experience. Students interested in technical work interview for positions with the technical director. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include technical preparation, activities, rehearsals, and performances.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze the responsibilities of crew members, technicians, and designers in development of a production in the children's theatre style
- demonstrate the skills of a beginning crew member or technician
- analyze shop and crew procedures, equipment, materials, and safety procedures with a second level expertise
- perform second level planning for specific technical aspects of a production in the children's theatre style
- integrate planning and skills instruction to create solutions to technical problems
- demonstrate beginning proficiencies in two of the technical areas (scenery, costumes, makeup, lighting, sound, projections, operations crew, stage management, house management, box office/publicity)
- demonstrate in a children's theatre production increased proficiency performing the technical tasks of the second level of a specific technical production area (scenery, costumes, makeup, lighting, sound, projections, operations crew, stage management, house management, box office/publicity)
- develop a second level proficiency in working and collaborating with the director, designers, and performers in a children's theatre production

TAP 372 Children's Theatre Technical Production III
This course is the third in a series of four courses that provide workshop training in the technical production of children's theatre. It provides practical experience, in the children's theatre style, in one of the following areas: scenery, scenic painting, properties, costumes, lighting, sound, video, projections, stage management, house management, box office, publicity, and running crews. It is designed for students with beginning/moderate theatre experience. Students interested in technical work interview for positions with the technical director. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include technical preparation, activities, rehearsals, and performances.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze the responsibilities of crew members, technicians, and designers in development of a production in the children's theatre style
- demonstrate the intermediate skills of a crew member or technician
- analyze shop and crew procedures, equipment, materials, and safety procedures with a third level expertise
- perform intermediate level planning of technical aspects of a children's theatre production
- integrate planning and skills instruction to create solutions to technical problems
- demonstrate beginning proficiencies in three of the technical areas (scenery, costumes, makeup, lighting, sound, projections, operations crew, stage management, house management, box office/publicity)
- demonstrate in a musical theatre production increased proficiency performing the technical tasks of the third level of a specific technical production area (scenery, costumes, makeup, lighting, sound, projections, operations crew, stage management, house management, box office/publicity)
- develop an intermediate proficiency in working and collaborating with the director, designers, and performers in a children's theatre production

TAP 373 Children's Theatre Technical Production IV

This course is the fourth in a series of four courses that provide workshop training in the technical production of children's theatre. It provides practical experience, in the children's theatre style, in one of the following areas: scenery, scenic painting, properties, costumes, lighting, sound, video, projections, stage management, house management, box office, publicity, and running crews. It is designed for students with intermediate/significant theatre experience. Students interested in technical work interview for positions with the technical director. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include technical preparation, activities, rehearsals, and performances.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- evaluate the responsibilities of crew members, technicians, and designers in development of a production in the children's theatre style
- demonstrate skill mastery by performing duties of a lead crew member or technician
- evaluate and design shop, crew and safety procedures; evaluate and choose equipment and materials
- perform significant planning of technical aspects of a children's theatre production
- integrate planning and skills instruction to create solutions to complex technical problems
- develop the importance of teamwork in a group project in technical theatre by mentoring beginning crew members
- demonstrate beginning proficiencies in four of the technical areas (scenery, costumes, makeup, lighting, sound, projections, operations crew, stage management, house management, box office/publicity)
- demonstrate in a children's theatre production increased proficiency performing the technical tasks of the fourth mastery level of a specific technical production area
TAP 380 Repertory/Touring Rehearsal and Performance I

Units: 1 - 3
Hours: 54 - 162 hours LAB
Course Family: Repertory/Touring Performance and Technical Production
Prerequisite: None.
Enrollment Limitation: Students must audition and/or interview with the director to participate in this course.
Advisory: TA 350
Transferable: CSU; UC
C-ID: C-ID THTR 191
Catalog Date: June 1, 2020

This course is the first in a series of four courses that provide workshop training in the rehearsal and performance of repertory and/or touring theatre. It is designed for students with little or no prior theatre experience. Students audition or interview with the director for participation in a repertory and/or touring theatre production. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include acting, singing, dancing, and/or technical rehearsals and preparation.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- prepare, audition, rehearse and perform repertory and/or touring theatre in community, educational, and/or professional theatres.
- employ methods for presentation of a repertory and/or touring theatre production.
- list and demonstrate the requirements of being an actor in a repertory and/or touring theatre production including the audition, rehearsal, and production processes.
- demonstrate the basic skills and rehearsal methods necessary for performing a repertory and/or touring theatre role on stage to create the world of a chosen play.
- analyze a script and a character at a basic level.
- create and dramatize the behavioral life of a character in rehearsal and performance.
- demonstrate the physical and vocal skills necessary in the physically demanding and intensive performance environment of a repertory and/or touring theatre production.
- demonstrate ensemble acting techniques in collaborative theatre.
- collaborate, at a basic proficiency, with the director, actors, crew members and designers in rehearsal and in performance in the creation of a repertory and/or touring theatre production.
- analyze the evolution of an actor's or production team member's role in a production from script to performance.

TAP 381 Repertory/Touring Rehearsal and Performance II

Units: 1 - 3
Hours: 54 - 162 hours LAB
Course Family: Repertory/Touring Performance and Technical Production
Prerequisite: TAP 380 with a grade of "C" or better
Enrollment Limitation: Students must audition and/or interview with the director to participate in this course.
Advisory: TA 350
Transferable: CSU; UC
C-ID: C-ID THTR 191
Catalog Date: June 1, 2020

This course is the second in a series of four courses that provide workshop training in the rehearsal and performance of repertory and/or touring theatre. It is designed for students with basic/minimal theatre experience. Students audition or interview with the director for participation in a repertory and/or touring theatre production. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include acting, singing, dancing, and/or technical rehearsals and preparation.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate moderate proficiency in the skills and rehearsal methods necessary to performing a repertory and/or touring theatre role on stage to create the world of a chosen play.
• prepare, audition, rehearse, and perform repertory and/or touring theatre in community, educational, and/or professional theatres.

• list and demonstrate moderate proficiency in the requirements of performing in a repertory and/or touring theatre production including the audition, rehearsal, and production processes.

• analyze a script and character.

• create and dramatize the behavioral life of a character in rehearsal and performance.

• demonstrate ensemble acting techniques in collaborative theatre.

• define and demonstrate the collaborative responsibilities of the director, actors, crew members and designers in rehearsal and in performance in the creation of a repertory and/or touring theatre production.

• analyze the evolution of an actor's, crew member's, or production team member's role in a production from script to performance.

• demonstrate with moderate skill the physical and vocal skills necessary in the physically demanding and intensive performance environment of a repertory and/or touring theatre production.

TAP 382 Repertory/Touring Rehearsal and Performance III

Units: 1 - 3
Hours: 54 - 162 hours LAB
Course Family: Repertory/Touring Performance and Technical Production
Prerequisite: TAP 381 with a grade of "C" or better
Enrollment Limitation: Students must audition and/or interview with the director to participate in this course.
Advisory: TA 350
Catalog Date: June 1, 2020

This course is the third in a series of four courses that provide workshop training in the rehearsal and performance of repertory and/or touring theatre. It is designed for students with beginning/moderate theatre experience. Students audition or interview with the director for participation in a repertory and/or touring theatre production. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include acting, singing, dancing, and/or technical rehearsals and preparation.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• utilize the varying systems of rehearsal and performance of repertory and/or touring theatre production.

• demonstrate an intermediate proficiency in the skills and rehearsal methods necessary to performing a repertory and/or touring role on stage to create the world of a chosen play.

• research, prepare, audition, rehearse, and perform repertory and/or touring in community, educational, and/or professional theatres.

• list and demonstrate intermediate proficiency in the requirements of performing in a repertory and/or touring production including the audition, rehearsal, and production processes.

• analyze a script and character.

• create and dramatize the behavioral life of a character in rehearsal and performance.

• demonstrate ensemble acting techniques in collaborative theatre.

• demonstrate an intermediate proficiency in collaborating with the director, actors, crew members and designers in rehearsal and in performance in the creation of a repertory and/or touring production.

• analyze the evolution of an actor's, production team member's, and crew member's role in a repertory and/or touring production from script to performance.

• demonstrate with intermediate skill the physical and vocal skills necessary in the physically demanding and intensive performance environment of a repertory and/or touring theatre production.

• evaluate the professional responsibilities of an actor or production team member's role in a repertory and/or touring theatre production.

TAP 383 Repertory/Touring Rehearsal and Performance IV

Units: 1 - 3
Hours: 54 - 162 hours LAB
Course Family: Repertory/Touring Performance and Technical Production
Prerequisite: TAP 381 with a grade of "C" or better
Enrollment Limitation: Students must audition and/or interview with the director to participate in this course.
Advisory: TA 350
Catalog Date: June 1, 2020

This course is the fourth in a series of four courses that provide workshop training in the rehearsal and performance of repertory and/or touring theatre. It is designed for students with intermediate expertise in theatre. Students audition or interview with the director for participation in a repertory and/or touring theatre production. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include acting, singing, dancing, and/or technical rehearsals and preparation.
This course is the fourth in a series of four courses that provide workshop training in the rehearsal and performance of repertory and/or touring theatre. It is designed for students with intermediate/significant theatre experience. Students audition or interview with the director for participation in a repertory and/or touring theatre production. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include acting, singing, dancing, and/or technical rehearsals and preparation.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate mastery of the methods of rehearsing and performing repertory and/or touring theatre.
- demonstrate leadership in a cast by assisting the director and other actors in modern script analysis and the techniques of character analysis.
- research, prepare, audition, rehearse, and perform repertory and/or touring theatre in community, educational, and/or professional theatres.
- utilize the varying systems of rehearsal and performance of repertory and/or touring theatre.
- analyze and solve problems associated with the creation and presentation of repertory and/or touring theatre, including acting, staging, and technical challenges.
- create and dramatize the behavioral life of a character in rehearsal and performance.
- list and demonstrate mastery in the requirements of being an actor in a repertory and/or touring theatre production including the audition, rehearsal, and production processes.
- demonstrate ensemble acting techniques in collaborative theatre.
- demonstrate mastery and leadership in collaborating with the director, actors, crew members, and designers in rehearsal and in performance in the creation of a repertory and/or touring theatre production.
- analyze the evolution of an actor's, production team member's, and crew member's role in a production from script to performance.
- evaluate the professional responsibilities of an actor or technician in a repertory and/or touring theatre production.
- lead and mentor beginning actors in the methods of preparing and presenting repertory and/or touring theatre art.
- demonstrate with advanced skill the physical and vocal skills necessary in the physically demanding and intensive performance environment of a repertory and/or touring theatre production.

TAP 390 Repertory and Touring Technical Production I

Units: 1 - 3
Hours: 54 - 162 hours LAB
Course Family: Repertory/Touring Performance and Technical Production
Prerequisite: None.
Enrollment Limitation: Interview
Transferable: CSU; UC
C-ID: C-ID THTR 192
Catalog Date: June 1, 2020

This course is the first in a series of four courses that provide workshop training in the technical production of repertory and touring theatre. It provides practical experience, in the repertory and touring theatre style, in one of the following areas: scenery, scenic painting, properties, costumes, lighting, sound, video, projections, stage management, house management, box office, publicity, and running crews. It is designed for students who want an introductory experience. Students interested in technical work interview for positions with the technical director. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include technical preparation, activities, rehearsals, and performances.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze the responsibilities of crew members, technicians, and designers in development of a production in the repertory or touring theatre style
- demonstrate the basic skills of a beginning crew member or technician
- describe basic shop and crew procedures, equipment, materials, and safety procedures
- perform basic planning of technical aspects of a repertory or touring theatre production
• assess the importance of teamwork in carrying out a group project in technical theatre

• develop a basic proficiency in working and collaborating with the director, designers, and performers in a repertory or touring theatre production

TAP 391 Repertory and Touring Technical Production II

Units: 1 - 3
Hours: 54 - 162 hours LAB
Course Family: Repertory/Touring Performance and Technical Production (http://arc.losrios.edu/course-families#id_100045)
Prerequisite: TAP 390 with a grade of "C" or better
Enrollment Limitation: Interview
Transferable: CSU; UC
C-ID: C-ID THTR 192
Catalog Date: June 1, 2020

This course is the second in a series of four courses that provide workshop training in the technical production of repertory and touring theatre. It provides practical experience, in the repertory and touring theatre style, in one of the following areas: scenery, scenic painting, properties, costumes, lighting, sound, video, projections, stage management, house management, box office, publicity, and running crews. It is designed for students with basic/minimal theatre experience. Students interested in technical work interview for positions with the technical director. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include technical preparation, activities, rehearsals, and performances.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• analyze the responsibilities of crew members, technicians, and designers in development of a production in the repertory or touring theatre style

• demonstrate the skills of a beginning crew member or technician

• analyze shop and crew procedures, equipment, materials, and safety procedures with a second level expertise

• perform second level planning for specific technical aspects of a production in the repertory or touring theatre style

• integrate planning and skills instruction to create solutions to technical problems

• demonstrate beginning proficiencies in two of the technical areas (scenery, costumes, makeup, lighting, sound, projections, operations crew, stage management, house management, box office/publicity)

• demonstrate beginning proficiencies in a children’s theatre production increased proficiency performing the technical tasks of the second level of a specific technical production area (scenery, costumes, makeup, lighting, sound, projections, operations crew, stage management, house management, box office/publicity)

• develop a second level proficiency in working and collaborating with the director, designers, and performers in a repertory or touring theatre production

TAP 392 Repertory and Touring Technical Production III

Units: 1 - 3
Hours: 54 - 162 hours LAB
Course Family: Repertory/Touring Performance and Technical Production (http://arc.losrios.edu/course-families#id_100045)
Prerequisite: TAP 391 with a grade of "C" or better
Enrollment Limitation: Interview
Transferable: CSU; UC
C-ID: C-ID THTR 192
Catalog Date: June 1, 2020

This course is the third in a series of four courses in repertory and touring theatre. It provides practical experience, in the repertory and touring theatre style, in one of the following areas: scenery, scenic painting, properties, costumes, lighting, sound, video, projections, stage management, house management, box office, publicity, and running crews. It is designed for students with beginning/moderate theatre experience. Students interested in technical work interview for positions with the technical director. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include technical preparation, activities, rehearsals, and performances.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• analyze the responsibilities of crew members, technicians, and designers in development of a production in the repertory or touring theatre style

• demonstrate the intermediate skills of a crew member or technician

• analyze shop and crew procedures, equipment, materials, and safety procedures with a third level expertise
TAP 393 Repertory and Touring Technical Production IV

Units: 1 - 3
Hours: 54 - 162 hours LAB
Course Family: Repertory/Touring Performance and Technical Production
Prerequisite: TAP 392 with a grade of "C" or better
Enrollment Limitation: Interview
Transferable: CSU; UC
C-ID: C-ID THTR 192
Catalog Date: June 1, 2020

This course is the fourth in a series of four courses that repertory and touring theatre. It provides practical experience, in the repertory and touring theatre style, in one of the following areas: scenery, scenic painting, properties, costumes, lighting, sound, video, projections, stage management, house management, box office, publicity, and running crews. It is designed for students with intermediate/significant theatre experience. Students interested in technical work interview for positions with the technical director. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include technical preparation, activities, rehearsals, and performances.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- evaluate the responsibilities of crew members, technicians, and designers in development of a production in the repertory or touring theatre style
- demonstrate skill mastery by performing duties of a lead crew member or technician
- evaluate and design shop, crew and safety procedures; evaluate and choose equipment and materials
- perform significant planning of technical aspects of a repertory or touring theatre production
- integrate planning and skills instruction to create solutions to complex technical problems
- develop the importance of teamwork in a group project in technical theatre by mentoring beginning crew members
- demonstrate beginning proficiencies in four of the technical areas (scenery, costumes, makeup, lighting, sound, projections, operations crew, stage management, house management, box office/publicity)
- demonstrate in a repertory or touring theatre production increased proficiency performing the technical tasks of the fourth mastery level of a specific technical production area (scenery, costumes, makeup, lighting, sound, projections, operations crew, stage management, house management, box office/publicity)
- demonstrate mastery and leadership in working and collaborating with the director, designers, and performers in a repertory or touring theatre production
Welding Technology | American River College

Division Dean Gary Aguilar
Department Chairs Chris Messier

(916) 484-8354

Associate Degree

A.S. in Welding Technology

The Welding Technology degree provides skills and knowledge in manual and semi-automatic welding processes used in the metal fabrication and construction industries. Instruction covers materials, equipment, procedures, testing techniques as well as safety and blueprint reading. Competencies include techniques of joining ferrous and non-ferrous metals by the use of Shielded Metal Arc Welding (SMAW), Gas Metal Arc Welding (GMAW), Flux Cored Arc Welding (FCAW), and Gas Tungsten Arc Welding (GTAW), and welding procedures.

Catalog Date: June 1, 2020

Degree Requirements

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The Welding Technology Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- select the correct electrode classification and parameters for various thickness of material and welding positions on ferrous and nonferrous metals.
- define principles of gas metal arc welding.
- interpret GMA electrode and classification and specification.
• describe gas metal arc (GMA) welding operations of various joint designs using selected electrodes on different positions.
• describe shielded metal arc welding operations of various positions using selected electrodes on different joint designs.
• define principles of arc welding.
• select correct electrode amperage settings for the job application.
• identify gas tungsten arc (GTA) welding principles and safe welding practices.
• define GTA applications and limitations.
• explain the reason for the formation of each discontinuity type, and distinguish different discontinuities.
• interpret fabrication blueprints using a systematic process.
• interpret graphic welding symbols.
• relate the requirements for welding ferrous and nonferrous metals.
• select the appropriate setting and application methods.
• list the methods used for discontinuity prevention and identify surface defects in welds.

Career Information
Welding certification is recognized by the welding industry as an important step in the profession. The American Welding Society (AWS) nationally accredits American River College's welding program. The ARC welding program has met all the requirements of the AWS QC4 standards for Accreditation of Test Facilities for their Certified Welder Program. Graduating students may find positions in oil refineries, nuclear power plants, aerospace, structural buildings, bridge construction, auto industry, and small commercial fabricating shops.

Certificates of Achievement

Shielded Metal Arc Plate and Pipe Certificate
This certificate promotes competence in plate and pipe welding. Emphasis is on power sources, electrode selection on various joint designs, techniques, and positions in welding. Instruction includes safety and proper procedures in making fillet and groove welds that are in compliance with structural and pipe welding codes.

Catalog Date: June 1, 2020

Certificate Requirements

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Student Learning Outcomes
Upon completion of this program, the student will be able to:

• interpret electrode classification and specification
• select correct amperage setting for the job application
• define principles of arc welding
• certify and perform SMA operations in various positions using selected electrodes on different joint designs

Welding Metallurgy and Inspection (270 hours) Certificate
The Welding Metallurgy and Inspection certificate provides the science of metallurgy and weld inspection. Emphasis is on the identification and selection of irons and steel,
Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Describe the mechanical properties of different types of metals
- Interpret and explain the Nondestructive Testing (NDT) procedures of codes and specifications relating to welding
- Evaluate and explain in simple terms the reason for the formation of discontinuity in each of the welding processes
- Explain different methods used for the prevention of weld discontinuities
- Describe the crystalline structures of metals and explain how grain forms in metal
- Explain the problems hydrogen causes when welding steel
- Analyze phase diagrams of carbon and stainless steels

Welding Technology Certificate

This certificate provides skills and knowledge in manual and semi-automatic welding processes used in the metal fabrication and construction industries. Instruction covers materials, equipment, welding procedures, testing techniques, inspection, welding metallurgy, blueprint reading, and welding safety. Competencies include techniques of joining ferrous and non-ferrous metals by the use of Shielded Metal Arc Welding (SMAW), Gas Metal Arc Welding (GMAW), Flux Cored Arc Welding (FCAW), and Gas Tungsten Arc Welding (GTAW). Oxyacetylene welding, oxyacetylene cutting and plasma arc cutting, are also covered.

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### Student Learning Outcomes

Upon completion of this program, the student will be able to:

- list the factors that must be considered before a welding process is selected
- evaluate a weld according to a given standard or code
- compare the three types of welding current used for Gas Tungsten Arc Welding
- define voltage, electrical potential, amperage, and electrical current as related to Gas Metal Arc Welding
- discuss how the Gas Metal Arc Welding molten weld pool can be controlled by varying the shielding gas, power settings, weave pattern, travel speed, electrode extension, and gun angle
- explain what each of the digits in a standard Flux Cored Arc Welding electrode identification number mean
- list and define the three units used to measure a welding current
- give the characteristics of the three filler metal groups E6010 and E6011, E6012 and E6013, and E7016 and E7018
- discuss three general categories of pipe welds including how they are used and what type of weld root penetration and strength they require
- make a single V-groove butt welded joint on a pipe in any position to code specifications
- list the crystalline structures of metals and explain how grains form
- describe practical applications of metallurgy
- solve basic welding fabrication math problems
- read a set of welding blueprint drawings and explain each item shown and its dimensioning

### Career Information

Graduates may find employment in a number of industries including: pipe line construction, oil refining, aerospace, structural building, bridge construction, automotive, and small commercial fabricating. They may also work as welding shop supervisors and welding sales persons, and they can also become welding shop owners.

### Certificates

**Gas Metal Arc and Flux Core Arc Welding Plate (252 hours) Certificate**

The Gas Metal Arc Welding certificate promotes competence in welding with different types of metal transfer, constant voltage power sources, different types of shielding gases, and electrode selection on various joint designs. Instruction is provided in gas metal and flux cored arc welding on fillet and groove welds to specific structural and pipe standards.

Catalog Date: June 1, 2020

### Certificate Requirements

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</table>
Student Learning Outcomes

Upon completion of this program, the student will be able to:

- select the correct electrode classification and parameters for various thicknesses of material and welding positions on ferrous and nonferrous metals
- define principles of gas metal arc welding
- interpret electrode classification and specification
- analyze gas metal arc welding operations on various joint designs using selected electrodes for different welding positions

Gas Tungsten Arc Plate and Pipe Welding (180 hours) Certificate

The Gas Tungsten Arc Welding certificate promotes competence in welding ferrous and nonferrous materials. Emphasis is on proper use of gas tungsten arc welding (GTA) equipment setup requirements, process variables, material requirements, and welding procedures that are in compliance with industry standards.

Catalog Date: June 1, 2020

Certificate Requirements

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Student Learning Outcomes

Upon completion of this program, the student will be able to:

- identify GTA principles and safe practices.
- define GTA applications and limitations.
- weld mild steel, stainless steel, and aluminum alloys using GTA procedures in all positions.
- evaluate and demonstrate procedures for a given welding project or application.
- relate the requirements of welding ferrous and nonferrous materials.
- select the appropriate settings and applications methods of GTA process.

Pipe Welding Certificate

This certificate promotes competence in pipe welding with emphasis on power sources, electrode/filler metal selection on various joint designs, techniques, and positions for welding. Instruction includes safety, math, and proper procedures in making fillet and groove welds that are in compliance with structural and pipe welding codes.

Catalog Date: June 1, 2020

Certificate Requirements

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Student Learning Outcomes

Upon completion of this program, the student will be able to:

- interpret electrode and filler metal classifications and specifications.
- select correct amperage setting for the job application.
- define principles of arc welding.
- perform Shielded Metal Arc Welding and Gas Tungsten Arc Welding operations in various positions using selected electrodes on different joint designs.
- use math in welding applications.

Career Information

Certificate completers may find employment in a number of industries, including PG&E pipeline construction, oil refining, power generation, structural building, bridge construction, and small commercial fabricating shops.

Welding Equipment Maintenance and Blueprint Interpretation (234 hours) Certificate

This certificate promotes competence in solving equipment, mathematical and manufacturing problems that apply to the welding trade. It emphasizes metal placement, measurement, and layout of tools used in construction, as well as the fundamentals of blueprint reading and welding equipment repair.

Catalog Date: June 1, 2020

Certificate Requirements

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Student Learning Outcomes

Upon completion of this program, the student will be able to:

- evaluate algebraic expressions by substituting given numbers for letter values
- solve formulas by substituting numbers for letters, analyzing word statements and diagram values
- compute the area, radius, and diameter of a circle
- compute area, radius, and central angles of a sector
- measure angles in degrees, minutes, and seconds
- identify and demonstrate the proper use of common power tools and accessories used in the welding trade
- interpret fabrication blueprints using a systematic process
- interpret graphic welding symbols
- interpret electrical and electronically controlled circuits
- evaluate testing equipment used for welding maintenance repair
WELD 105 Introduction to Metal Sculpture

Units: 1.5
Hours: 18 hours LEC; 27 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

This course covers metal sculpture techniques, design principles, and materials used for sculpture for functional and nonfunctional art forms, on ferrous and non-ferrous metals. Techniques on the major welding processes such as Shielded Metal Arc, Gas Metal Arc, Gas Tungsten Arc, and Oxy-Acetylene are an integral part of the course, as well as related safety issues.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply safety standards to each welding process and other related metal working equipment.
- apply traditional and non-traditional metal working techniques to design and execute 3-dimensional functional and nonfunctional art forms.
- utilize welding and cutting processes to construct art projects.
- inspect welding for projects and make corrective changes to create structurally sound connections.

WELD 107 Welding Equipment Maintenance

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

This course covers the basics of welding equipment maintenance, troubleshooting, and repair. Electrical and electronically controlled circuits are discussed and tested. Overall theory of operation and safety are presented, as well as maintenance scheduling and the use of electronic test equipment and other measuring devices. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify the electronic components of a welding power supply
- evaluate the operating characteristics of various types of welding equipment
- conduct research on the operation and purchase of welding equipment components that require replacement or repair
- apply critical thinking analysis towards the troubleshooting and repair of welding equipment
- properly use test equipment needed in the problem solving and repair of nonoperational equipment
- apply the required knowledge of the electrical components and their connection to welding power supplies to produce satisfactory welds
- determine the proper way of connecting welding equipment to the correct power source during the installation process
- apply the required safety procedures when maintaining or repairing any type of welding equipment

WELD 115 Code Welding

Units: 2
Hours: 18 hours LEC; 54 hours LAB
Prerequisite: WELD 300 with a "C" grade or better, or a minimum of one year of welding experience.
Catalog Date: June 1, 2020

This course provides individualized training for welder performance qualification. Code and test requirements are presented. Welders select the code, metal, process, and positions to be used. Preparation for competing in the SkillsUSA regional, state, and national competition is also covered. This course may be taken up to four times for credit with different competitions. A field trip and participation at the site of the SkillsUSA regional competition are required.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- perform arc welding that meet SkillsUSA standards.
- analyze welding projects and make corrective changes to meet SkillsUSA standards.
- understand the parameters of a specified welding procedure.
- apply safety rules and regulations for welding and metal cutting.
- explain the variables for each chosen process.
- explain the requirements for the SkillsUSA competitions.

WELD 117 Ultrasonic Testing Level One

Units: 3
Hours: 45 hours LEC; 27 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

This course covers the theory, technique, application, and evaluation used in the material processing, welding, and inspection industries. Ultrasonic testing as applied to industry practices, such as building construction, aeronautics, shipbuilding, materials fabrication, and others, is covered. Successful completion of this course certifies that the requirements of the American Society of Nondestructive Testing (ASNT) TC-1A for UT level I are met.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- perform basic material testing.
- explain the basic physical principles of ultrasonic testing.
- describe basic ultrasonic machine functions.
- perform basic machine and testing calibrations.

WELD 118 Ultrasonic Testing Level Two

Units: 3
Hours: 45 hours LEC; 27 hours LAB
Prerequisite: WELD 117 with a "C" or better, or evidence of completion of UT Level I certification.
Catalog Date: June 1, 2020

This course covers advanced theory, technique application, and evaluation techniques used in the material processing, welding, and inspection industries. It covers advanced ultrasonic testing as applied to industry practices such as building construction, aeronautics, shipbuilding, and materials fabrication. Successful completion of this course meets the requirements of the American Society of Nondestructive Testing (ASNT) TC1-A for Ultrasonic Testing Level II.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- calibrate an ultrasonic testing machine to the proper standards.
- demonstrate proper techniques when examining materials and/or welds.
- evaluate ultrasonic test results to ensure they meet code requirements.
- perform inspections that meet industry standards.

WELD 140 Mathematics for Welding Technicians

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
General Education: AA/AS Area II(b)
Catalog Date: June 1, 2020
This course covers the application of mathematics principles in technical and trade work. Areas covered are fundamentals of general mathematics, common fractions, decimal fractions, percent, signed numbers, measurements, customary measurement units, metric measurement units, steel rules and vernier calipers, fundamentals of algebra, basic algebraic operations, fundamentals of plane geometry, triangles, polygons, circles, areas, volumes, and fundamentals of trigonometry.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- interpret and apply common welding formulas
- demonstrate problem-solving skills for technical and trade work
- analyze problems that are encountered in metal fabrication
- solve equations needed in the welding field

### WELD 150 Employability Skills for Technical Careers

**Same As:** AT 107 and ET 250  
**Units:** 2  
**Hours:** 36 hours LEC  
**Prerequisite:** None.  
**Advisory:** ENGWR 102 or 103, and ENGRD 116 with a grade of "C" or better; OR ESLR 320, ESLL 320, and ESLW 320 with a grade of "C" or better.  
**General Education:** AA/AS Area III(b)  
**Catalog Date:** June 1, 2020

This course provides the opportunity to explore technical careers while developing valuable work and life skills. It is an introduction to a variety of technically-related occupations, emphasizing technical careers in the Sacramento area. Activities are designed to enhance personal development, employability skills, and self esteem through leadership, citizenship, and character development. This course is not open to students who have completed AT 107 or ET 250.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- identify personal interests.
- demonstrate effective communication skills.
- demonstrate personal qualities that are desirable in the workplace.
- create long-term and short-term goals.

### WELD 155 Industry Training

**Units:** 3  
**Hours:** 36 hours LEC; 54 hours LAB  
**Prerequisite:** None.  
**Catalog Date:** June 1, 2020

This course covers welding processes, knowledge, and skills specific to employers' needs. Workplace safety and etiquette are included. Metal fabrication skills for specific employment needs and welding certification testing are covered if requested by employers.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- select welding process and fabrication variables.
- prepare metal fabrications to basic prints.
- produce welds to code standards.
- demonstrate proper workplace etiquette.

### WELD 294 Topics in Welding
This course provides an opportunity to study current topics in welding technology that are not included in existing courses.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- research the specialized needs of a manufacturer
- formulate tasks related to the specific needs of the company
- access information effectively and efficiently for welding standards used in manufacturing
- evaluate welding procedure information to specific standards

WELD 295 Independent Studies in Welding

Units: 0.5 - 5
Hours: 9 hours LEC; 27 - 270 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

WELD 298 Work Experience in Welding

Units: 1 - 4
Hours: 60 - 300 hours LAB
Prerequisite: None.
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position, or job related to the welding field with a cooperating site supervisor.
Advisory: Students are advised to consult with the Welding Department faculty to review specific certificate and degree work experience requirements.
General Education: AA/AS Area III(b)
Catalog Date: June 1, 2020

This course provides students with opportunities to develop marketable skills in preparation for employment or advancement within the welding field. It is designed for students interested in work experience and/or internships in associate degree level or certificate occupational programs. Course content includes understanding the application of education to the workforce, completion of Title 5 required forms which document the student’s progress and hours spent at the work site, and developing workplace skills and competencies.

During the semester, the student is required to complete 75 hours of related paid work experience, or 60 hours of related unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. All students are required to attend the first class meeting, a mid-semester meeting, and a final meeting. Additionally, students who have not already successfully completed a Work Experience course will be required to attend weekly orientations while returning participants may meet individually with the instructor as needed. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate mastery of specific job skills in the welding field related to an associate degree or certificate occupational program level career as written in the minimum three (3) learning objectives created by the student and his/her employer or work site supervisor at the start of the course.
- make effective decisions, use workforce information, and manage his/her personal career plans.
- behave professionally, ethically, and legally at work, consistent with applicable laws, regulations, and organizational norms.
- behave responsibly at work, exhibiting initiative and self-management in situations where it is needed.
- develop effective leadership styles at work, with consideration to group dynamics, team and individual decision making, and workforce diversity.
- communicate in oral, written, and other formats, as needed, in a variety of contexts at work.
- locate, organize, evaluate, and reference information at work.
- demonstrate originality and inventiveness at work by combining ideas or information in new ways, making connections between seemingly unrelated ideas, and reshaping goals in ways that reveal new possibilities using critical and creative thinking skills such as logical reasoning, analytical thinking, and problem-solving.
This course is an introduction to welding processes, including shielded metal arc, gas metal arc, flux-cored gas shield and self shield, gas tungsten arc, oxyacetylene cutting and welding on joint designs, and positions used in industry. Safety in arc welding, oxyacetylene, and plasma cutting is also covered. Field trips may be required.

Upon completion of this course, the student will be able to:

- apply safety standards to each welding process.
- demonstrate proper welding techniques for each welding process.
- evaluate welding projects in accordance with D1.1 Structural Welding Code-Steel Welding Procedures and Specifications.
- analyze welding projects and make corrective changes to meet industry standards.
- perform skills in arc welding that meet industry standards.

This course provides a general overview of basic metallurgy of ferrous and non-ferrous metals. Topics include various steel making processes, different types of furnaces, identifying types of steels, and their mechanical, physical, chemical, and electrical properties. Crystal structures of metals, the iron equilibrium diagram, the periodic table of elements emphasizing those elements associated with steels, metallurgical failure of welds, steel deformation, and heat treatment of steels are also covered. In addition, material hardness using different hardness testing methods, calculation of different steel strengths and stresses, and impact tests using the Charpy and Izod methods are covered. Field trips may be required.

Upon completion of this course, the student will be able to:

- describe practical applications of metallurgy
- classify various steel making processes
- evaluate how steel is formed into various shapes and products
- evaluate the different types of iron and steel alloy
- describe the mechanical and physical properties of metal
- describe the basic metallurgical concept of iron, steel, and cast iron
- use the iron carbon equilibrium diagram to explain phase changes of iron and steel
- explain the micro structural analyses of steel
- explain heat treating and quenching
- explain annealing and normalizing
- explain isothermal transformation diagrams
- explain tempering
- explain metallurgical and chemical terminology
- explain how temperature affects distortion
• evaluate different types of material strengths
• compare steel hardness using different hardness testing methods
• explain surface hardening
• analyze Charpy Vee and Izod tests

WELD 316 Welding Inspection

Units: 2
Hours: 36 hours LEC
Prerequisite: WELD 300 with a grade of "C" or better; OR at least one year of welding experience.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU
Catalog Date: June 1, 2020

This course covers the welding requirements for any type of welded structure made from commonly used carbon and low-alloy steel construction. Topics include welding construction industry, rules, regulations, and the principles, requirements, and methods of inspection. It covers weld measurements and discontinuities for evaluation acceptance using a variety of tools. It also emphasizes the lines of communication between the plant managers, welders, welding engineers, design/project engineers, welding foreman/supervisors, shop or field superintendents, and reporting supervisors. This course offers preparation for the Certified Welding Inspector Examination given by the American Welding Society.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• explain the scope and limitations of the Structural Welding Code (D1.1).
• explain safe practices for welding inspectors.
• analyze the requirements for a pre-qualified welding procedure.
• describe the qualification requirements of welding procedures and welding personnel, such as welders, welding operators, and tack welders, necessary to perform code work.
• explain the requirements for the preparation, assembly, and workmanship of welded steel structures to personnel.
• examine the qualification and responsibilities of inspectors, acceptance criteria for production welds, and standard procedures for performing visual inspection.
• explain the metal joining and cutting processes used in manufacturing.
• evaluate weld and base metal discontinuities.
• explain the mechanical and chemical properties of metals.
• interpret the requirements for the design of welded connections.
• interpret weld-joint geometry and weld-symbol dimensioning.
• explain the welding metallurgy of commonly used materials.
• demonstrate effective communication skills in the work place.

WELD 320 Shielded Metal Arc Welding – Structural

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: WELD 300 with a grade of "C" or better; OR at least one year of welding experience.
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Transferable: CSU
Catalog Date: June 1, 2020

This course covers employment training for welding technicians. It emphasizes developing manipulative proficiency in the use of Shielded Metal Arc Welding (SMAW) in the horizontal (2F-2G), vertical (3F-3G), and overhead (4F-4G) positions on steel. It also covers filler metal classifications, welding power supplies, and welding safety. Welding test plates in accordance with the requirements to AWS D1.1 Structural Welding Code and AWS D1.5 Bridge Code are also covered.

Student Learning Outcomes

Upon completion of this course, the student will be able to:
demonstrate welding skills on joint designs and positions used in industry.

explain arc blow, what causes it, and how to control it.

explain the characteristics of the four filler metal groups for steel.

define arc length, and describe the effects of using an improper arc length.

explain and define the three units used to measure welding current.

define open circuit voltage and operating voltage.

analyze a welding machine duty cycle chart and explain its significance.

describe the effects of the welding essential variables by comparing the bead's shape for weld width, reinforcement height, and appearance.

evaluate a weld according to a given standard or code.

analyze welding procedures used in manufacturing for production welding.

describe the use of destructive and nondestructive testing for weld testing.

**WELD 322 Shielded Metal Arc Welding (Pipe)**

**Units:** 3  
**Hours:** 36 hours LEC; 54 hours LAB  
**Prerequisite:** WELD 320 with a grade of "C" or better; OR a minimum of 2 years of welding experience.  
**Advisory:** Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.  
**Transferable:** CSU  
**Catalog Date:** June 1, 2020

This course covers the applications of shielded metal arc welding used to join low-pressure piping systems that carry water and residential natural gas. Topics include: welding required for high pressure critical piping systems such as steam pipe, fuel transportation pipe lines, boilers, offshore oil-rigs, and other critical heavy-duty piping systems.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- explain the code used for structural, refinery, and fuel transport piping systems.

- describe the system for depicting welding on a pipe print.

- distinguish between pipe and tubing.

- distinguish the different weld passes on pipe and explain the purpose of each one.

- inspect and evaluate welds on pipe according code standards.

- describe the four pipe positions.

- identify the pipe positions to qualify welders for all positions of pipe welding.

**WELD 330 Gas Tungsten Arc Welding (Plate)**

**Units:** 3  
**Hours:** 36 hours LEC; 54 hours LAB  
**Prerequisite:** WELD 300 with a grade of "C" or better; OR at least one year of welding experience.  
**Advisory:** Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.  
**Transferable:** CSU  
**Catalog Date:** June 1, 2020

This course covers Gas Tungsten Arc Welding (GTAW) of aluminum, stainless steel, carbon steel, and other metals used in industry. This course content is relevant to code welding in accordance to the American Society of Mechanical Engineers Section 1X (ASME), the Structural welding Code D1.1 (AWS), and the American Petroleum Institute 1104 (API). It also covers filler metal selection, both specifications and classifications, shielding gases, welding power supplies, and welding safety. Certification and procedure qualification to code specifications are also covered.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:
identify the variables that must be considered when setting up the components of the GTAW system.

demonstrate safety precautions regarding electrical current, inert gases, the welding environment, and other areas of concern, such as hot work and ventilation.

explain equipment components and accessories.

analyze the factors of current type, amperage ranges, duty cycle, and adequate control during the welding operation to determine the selection of a power supply for welding.

identify and explain functions of shielding gases in the GTAW system.

design a welding procedure using GTAW for the root pass, fill passes, and cover passes.

interpret the factors that determine the selection of filler materials.

evaluate each weld by using the visual inspection method for defects according to the ASME, the AWS, and the API 1104 standards.

WELD 332 Gas Tungsten Arc Welding (Pipe)

WELD 333 Gas Metal Arc Welding, Steel

This course covers the application of low-pressure and high-pressure critical piping systems used in oil, gas, nuclear, and chemical industries. It covers Gas Tungsten Arc Welding (GTAW) of aluminum pipe, stainless steel pipe, and carbon steel pipe. It explores code welding in accordance to the American Society of Mechanical Engineers Section 1X (ASME), Structural Welding Code D1.1 (AWS), and American Petroleum Institute 1104 (API). Certification and procedure qualification to ASME Section 1X, AWS D1.1, API 1104 code specifications are also covered.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe joint design and joint preparation
- analyze and interpret the most common root defects and the causes for each one
- evaluate the use of a hot pass
- explain reasons for purging pipe weld areas and describe the criteria for selecting gases used for purging
- describe the different types of purging dams
- explain root purging operation and oxygen level test
- perform tack welding procedures
- perform torch manipulation and welding techniques used for welding pipe
- examine and evaluate welded pipe according to AWS, ASME and API standards.
- explain how to make a single V-groove weld on pipe in any position
- identify areas to be inspected when performing GTAW pipe operations
- identify and describe types of weld integrity test performed on a welded pipe

This course is the study of welding using the Gas Metal Arc Welding (GMAW) process on carbon steels in accordance with the American Welding Society (AWS), Structural welding Code D1.1, and Sheet Steel Code D1.3. It covers semi-automatic wire-feed welding with micro wires on steel plates of varying thicknesses. It also covers joint design and all welding positions, welding power supplies, types of metal transfer (spray, globular, pulsed-arc, and short circuit), filler metal selection, both specifications and classifications, shielding gases used for each type of transfer, and welding safety.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe how to use Gas Metal Arc Welding (GMAW) safely
- analyze and interpret the defects that may be caused when welding with the GMAW process
- explain the various types of metal transfer
- analyze problems that may occur when welding with the constant voltage welding machine
- describe the five essential variables that can be used to control the molten weld pool
- list shielding gases used for short-circuiting, spray, and pulse-spray transfer
- interpret how the molten weld pool can be controlled by varying the shielding gas, power setting, and weave pattern
- explain voltage, amperage, and electrical current as related to GMA welding
- evaluate completed welds to code specifications

WELD 334 Gas Metal Arc Welding: Ferrous and Non-Ferrous Metals

| Units: | 2 |
| Hours: | 18 hours LEC; 54 hours LAB |
| Prerequisite: | WELD 333 with a grade of "C" or better |
| Advisory: | ENGWR 102 and ENGRD 116 with a grade of "C" or better; OR ESLR 320 and ESLW 320 with a grade of "C" or better. |
| Transferable: | CSU |

This course covers semiautomatic wire feed welding using micro wires on aluminum and stainless steel plate of varying thickness. Joint design, gas variations and all welding positions are covered. The emphasis of this course is on code welding aluminum and stainless steels. The content of this course is relevant to code welding in accordance to the American Welding Society (AWS), Structural Aluminum Welding Code D1.2 and Structural Welding Stainless Steel Code D1.6. It also covers welding power supplies, types of metal transfer (spray, globular, pulsed-arc, and short circuit). This course also covers filler metal selection, both specifications and classifications, and shielding gases used for each type of transfer. Welding safety is also covered.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe safe procedures when using Gas Metal Arc Welding (GMAW) equipment
- explain the procedure in setting up constant potential or constant voltage power supplies when welding aluminum and stainless steel
- describe the shielding gases and electrode classifications when welding aluminum and stainless steel
- demonstrate welding techniques made on groove and fillet welds using various modes of metal transfer
- explain the significance of the filler metal prefixes
- interpret the standard filler metal numbering system for aluminum and stainless steel
- analyze the cause of corrosion in stainless steel welds
- explain the types of weld heat-affected zones
- describe the effects of preheating and post heating on stainless steel and aluminum
- explain the precautions that must be taken when welding stainless steel and aluminum alloys
- evaluate welds beads made with various shielding gas mixtures

WELD 335 Flux Core Arc Welding

| Units: | 3 |
| Hours: | 36 hours LEC; 54 hours LAB |
| Prerequisite: | WELD 300 with a grade of "C" or better, or a minimum of one year of welding experience. |
| Transferable: | CSU |

Catalog Date: June 1, 2020
This course provides training to develop semi-automatic welding skills on carbon steels. Topics include small and large diameter flux cored electrodes, with and without external shielding gas, in all positions on fillet and groove welds. It also provides a thorough technical understanding of the Flux Core Arc Welding process and arc welding safety.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain the semi-automatic Flux Core Arc Welding (FCAW) process.
- analyze and interpret the most common weld defects and the causes for each one.
- recognize basic welding symbols and the different weld types and proper placement.
- determine when and why a backing bar and or back gouging is used in structural steel welding.
- examine and evaluate welds for certification and fabrication requirements in accordance to the American Welding Society (AWS) D1.1 Structural Steel Code.

WELD 342 Symbol Reading, Layout and Fabrication

<table>
<thead>
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<tbody>
<tr>
<td>Hours:</td>
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<td>Prerequisite:</td>
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<td>Corequisite:</td>
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<td>CSU</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
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</tbody>
</table>

This course covers blueprint and welding symbol interpretation. It includes metal layout, measurement, marking, and layout tools used in construction, and techniques of fabrication and assembly methods. It also covers fundamentals of blueprint reading, including basic lines and views, dimensions, notes and specifications, structural shapes, sections, detail, and assembly.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- interpret working sketches and prints common to metal fabrication
- analyze concepts and sketching techniques on structural shapes commonly used by welders
- examine and interpret weld symbols that are represented on drawings
- locate notes and specifications concerning important details on drawings
- interpret views on drawings with conventional breaks
- draw oblique and isometric sketches from orthographic views
- convert measurements from metric to standard

WELD 495 Independent Studies in Welding

| Units:           | 1 - 3 |
| Prerequisite:    | None. |
| Transferable:    | CSU |
| Catalog Date:    | June 1, 2020 |

| Units:           | 1 - 3 |
| Prerequisite:    | None. |
| Transferable:    | CSU |
| Catalog Date:    | June 1, 2020 |
Cooperative Work Experience (WEXP) is an experiential academic program where students apply what they have learned in the classroom to a work environment.

The program offers students the opportunity to develop technical skills, explore possible career choices, build confidence, network with people in the field, and transition into the world of work.

Division Dean  Dr. Frank Kobayashi
Department Chairs  Vivian Dillon

| Units: | 1 - 3 |
| Hours: | 60 - 225 hours LAB |
| Prerequisite: | None. |
| Enrollment Limitation: | Students must be in a paid or unpaid internship, volunteer position, or job with a cooperating site supervisor. |
| Advisory: | Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340. |
| General Education: | AA/AS Area III(b) |
| Catalog Date: | June 1, 2020 |

This course provides students with opportunities to acquire desirable work habits, attitudes and career awareness. It is designed for students interested in exploring various career options. Course content includes understanding the application of education to the workforce, completion of Title 5 required forms which document the student's progress and hours spent at the work site, and developing workplace skills and competencies.

During the semester, the student is required to complete 75 hours of related paid work experience, or 60 hours of related unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. All students are required to attend the first class meeting, a mid-semester meeting, and a final meeting. Additionally, students who have not already successfully completed a Work Experience course will be required to attend weekly orientations while returning participants may meet individually with the instructor as needed. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate competencies for effective and competitive workforce performance as written in the minimum three (3) learning objectives created by the student and his/her employer or work site supervisor at the start of the course.
- make effective decisions, use workforce information, and manage his/her personal career plans.
- behave professionally, ethically, and legally at work, consistent with applicable laws, regulations, and organizational norms.
- behave responsibly at work, exhibiting initiative and self-management in situations where it is needed.
- apply effective leadership styles at work, with consideration to group dynamics, team and individual decision making, and workforce diversity.
- communicate in oral, written, and other formats, as needed, in a variety of contexts at work.
- locate, organize, evaluate, and reference information at work.
- demonstrate originality and inventiveness at work by combining ideas or information in new ways, making connections between seemingly unrelated ideas, and reshaping goals in ways that reveal new possibilities using critical and creative thinking skills such as logical reasoning, analytical thinking, and problem-solving.
WEXP 298 Work Experience in (Subject)

Units: 1 - 4  
Hours: 60 - 300 hours LAB  
Prerequisite: None.  
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position, or job related to career goals with a cooperating site supervisor.  
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.  
General Education: AA/AS Area III(b)  
Catalog Date: June 1, 2020

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in associate degree level or certificate occupational programs. Course content includes understanding the application of education to the workforce, completion of Title 5 required forms which document the student’s progress and hours spent at the work site, and developing workplace skills and competencies.

During the semester, the student is required to complete 75 hours of related paid work experience, or 60 hours of related unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. All students are required to attend the first class meeting, a mid-semester meeting, and a final meeting. Additionally, students who have not already successfully completed a Work Experience course will be required to attend weekly orientations while returning participants may meet individually with the instructor as needed. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate mastery of specific job skills in a field of study related to an associate degree or certificate occupational program level career as written in the minimum three (3) learning objectives created by the student and his/her employer or work site supervisor at the start of the course.
- make effective decisions, use workforce information, and manage his/her personal career plans.
- behave professionally, ethically, and legally at work, consistent with applicable laws, regulations, and organizational norms.
- behave responsibly at work, exhibiting initiative and self-management in situations where it is needed.
- apply effective leadership styles at work, with consideration to group dynamics, team and individual decision making, and workforce diversity.
- communicate in oral, written, and other formats, as needed, in a variety of contexts at work.
- locate, organize, evaluate, and reference information at work.
- demonstrate originality and inventiveness at work by combining ideas or information in new ways, making connections between seemingly unrelated ideas, and reshaping goals in ways that reveal new possibilities using critical and creative thinking skills such as logical reasoning, analytical thinking, and problem-solving.

WEXP 498 Work Experience in (Subject)

Units: 1 - 4  
Hours: 60 - 300 hours LAB  
Prerequisite: None.  
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position, or job related to career goals with a cooperating site supervisor.  
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.  
Transferable: CSU  
General Education: AA/AS Area III(b)  
Catalog Date: June 1, 2020

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in transfer-level degree occupational programs. Course content includes understanding the application of education to the workforce, completion of Title 5 required forms which document the student’s progress and hours spent at the work site, and developing workplace skills and competencies.

During the semester, the student is required to complete 75 hours of related paid work experience, or 60 hours of related unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. All students are required to attend the first class meeting, a mid-semester meeting, and a final meeting. Additionally, students who have not already successfully completed a Work Experience course will be required to attend weekly orientations while returning participants may meet individually with the instructor as needed. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate application of industry knowledge and theoretical concepts in a field of study related to a transfer degree level career as written in the minimum three (3) learning objectives created by the student and his/her employer or work site supervisor at the start of the course.
- make effective decisions, use workforce information, and manage his/her personal career plans.
- behave professionally, ethically, and legally at work, consistent with applicable laws, regulations, and organizational norms.
- behave responsibly at work, exhibiting initiative and self-management in situations where it is needed.
- apply effective leadership styles at work, with consideration to group dynamics, team and individual decision making, and workforce diversity.
- communicate in oral, written, and other formats, as needed, in a variety of contexts at work.
- locate, organize, evaluate, and reference information at work.
- demonstrate originality and inventiveness at work by combining ideas or information in new ways, making connections between seemingly unrelated ideas, and reshaping goals in ways that reveal new possibilities using critical and creative thinking skills such as logical reasoning, analytical thinking, and problem-solving.
The Sacramento Regional Public Safety Training Center (SRPSTC), operated by American River College, is dedicated to providing high quality training and educational programs for public safety personnel. The center offers entry-level and advanced in-service instruction in areas that meet the needs of individuals as well as public and private agencies.

All courses meet the academic standards of the Los Rios Community College District. These courses may be certified by the California Commission on Peace Officer Standards and Training (POST), California Standards and Training for Corrections (STC), and the California State Fire Marshal's Office. Most courses presented at the SRPSTC are offered in an intensive, concentrated, short-term format.

Graduates from the basic core courses may be eligible for employment in county and city law enforcement agencies specializing in police, corrections and/or probation.

Division Dean
Bryon G. Gustafson, Ph.D.

Department Chairs
Charissa Gorre

(916) 570-5000

Certificate of Achievement

POST Basic Law Enforcement Academy- Modular Format Certificate

This certificate meets or exceeds the California Peace Officer Standards and Training (POST) minimum standards for the Level I reserve or full-time regular peace officer training. Upon completion of the program the student will be eligible to seek employment as a Level I reserve or full time peace officer in California.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
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<tr>
<td>PSTC 1502</td>
<td>Basic Law Enforcement Academy- Module III</td>
<td>6-7</td>
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<tr>
<td>PSTC 1503</td>
<td>Basic Law Enforcement Academy- Module II</td>
<td>8-11</td>
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<tr>
<td>PSTC 1504</td>
<td>Basic Law Enforcement Academy- Module I</td>
<td>13.5-17</td>
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<tr>
<td>Total Units:</td>
<td></td>
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</table>

Enrollment Eligibility

To be eligible for enrollment in the program, the student must meet the following criteria:

- be a minimum of 18 years of age.
- be a U.S. high school graduate, pass the GED, pass the California High School Proficiency Examination, or have attained a two-year or four-year degree from an accredited college or university.
- possess a valid California Driver's License.
- undergo a fingerprint and criminal history check.
- complete a medical suitability examination.

Student Learning Outcomes
Upon completion of this program, the student will be able to:

- demonstrate the ability to safely drive and control a law enforcement vehicle while operating under emergency and pursuit conditions.
- distinguish and apply reasonable force options in a given circumstance.
- demonstrate the ability to deliver strikes with an impact weapon or facsimile, as directed.
- demonstrate proficiency in victimology and crisis intervention.
- demonstrate proficiency in contacting people with simulated disabilities.
- demonstrate proficiency in responding to and investigating a simulated suspicious person/circumstance.
- perform the tasks of an officer conducting a preliminary homicide investigation.
- demonstrate proficiency in responding to and investigating a simulated domestic violence incident.
- demonstrate proficiency in conducting a preliminary investigation of a simulated felonious assault.
- demonstrate proficiency in responding to and investigating a simulated pedestrian stop.
- demonstrate proficiency in conducting a simulated vehicle pullover during low light/night time conditions.
- demonstrate proficiency in conducting a simulated high risk vehicle stop.
- demonstrate proficiency in responding to and investigating a simulated incident involving one or more suspects concealed in a building.
- demonstrate proficiency in reacting to a simulated ambush.

Career Information

With the POST Basic Law Enforcement Academy- Modular Format certificate the student will be eligible for employment as a Level I reserve peace officer or a full-time regular peace officer in California.

Firefighting Training Center (FIRE)

FIRE 1084 Wildfire Powersaws Refresher (S-212)

Units: 0.5
Hours: 8 hours LEC; 8 hours LAB
Prerequisite: FIRE 1080
Catalog Date: June 1, 2020

This course is designed to refresh and re-certify chain saw operators in the job performance requirements of the wildfire power saw operator position in the Incident Command System and on the fire ground. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate chain saw maintenance procedures and use of tool repair kit.
- describe proper tree felling and bucking procedures.
- demonstrate proper tree bucking and felling procedures.
- assess a standing tree with limbs near the ground in a closed stand of timber and properly size-up, clear work area, and limb the tree.
- assess a brush field and properly size-up, cut, and remove a strip of brush to near ground level, 6 feet wide (1.8 m) and 20 feet long (6.1m).
- demonstrate the use of all personal protective equipment.

FIRE 1100 Fire Control 3A (Structural Fire Fighting in Acquired Structures)

Units: 0.25
Hours: 1 hours LEC; 15 hours LAB
This course is designed to develop fundamental skills in combating structure fires by providing the students with a thorough understanding of structural fire attack, utilizing an acquired structure. Topics include fire behavior, ventilation, interior attack, and exterior attack. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- employ hands-on fire fighting experience in fire behavior.
- employ hands-on fire fighting experience in ventilation techniques.
- employ hands-on fire fighting experience in interior fire attack methods.
- employ hands-on fire fighting experience in exterior fire attack methods.
FIRE 1130 Company Officer 2A (Human Resource Management for Company Officers)

This course provides information on the use of human resources to accomplish assignments, evaluate member performance, supervise personnel, and integrate health and safety plans, policies, and procedures into daily activities as well as the emergency scene. Topics include human resource management, and health and safety. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply and follow human resource policies and procedures, given an administrative situation requiring action.
- create a professional development plan for a member of the organization, providing the individual with the necessary knowledge, skills, and abilities to maintain or advance professional development, given the requirements for promotion and opportunities for a member’s professional development.

FIRE 1131 Company Officer 2B (General Administration Functions for Company Officers)

This course provides information on general administrative functions and the implementation of department policies and procedures and addresses conveying the fire department's role, image, and mission to the public. Topics include administration, and community and government relations. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain the impact of state and federal laws and regulations as they apply to the company officer to reduce the risk and civil and criminal liability, given a list of state and federal laws and regulations pertaining to fire service supervisors.
- explain the benefits to the organization and the purpose for establishing cooperative external agency relationships, given a specific problem or issue in the community and a list of local, statewide, and national resources.

FIRE 1132 Company Officer 2C (Fire Inspections and Investigation for Company Officers)

This course provides information on conducting inspections, identifying hazards and addressing violations, performing a fire investigation to determine preliminary cause, and securing the incident scene and preserving evidence. Topics include orientation, fire and life safety inspections, and fire investigation. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the procedures for conducting fire inspections, identifying all hazards, including hazardous materials; completing approved forms; and initiating approved follow up action, given the policies of the agency.
- employ measures to secure and incident scene with recognizable perimeters, which keep unauthorized persons from restricted areas, and which protect all evidence or potential evidence from damage or destruction.
FIRE 1133 Company Officer 2D (All-Risk Operations for Company Officers)

Units: 1.25  
Hours: 20 hours LEC; 20 hours LAB  
Prerequisite: FIRE 1507 and 1602 with grades of "C" or better  
Enrollment Limitation: Completion of Incident Command System (I-200), which is an online course offered by Federal Emergency Management Agency (FEMA).  
Catalog Date: June 1, 2020

This course provides information on conducting incident size-up, developing and implementing an initial plan of action involving single and multiunit operations for various types of emergency incidents to mitigate the situation following agency safety procedures, conducting preincident planning, and develop and conduct a post-incident analysis. Topics include initial Incident Action Plan (IAP), postincident analysis, operational planning, and service demands. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- develop an initial plan of action, identifying the resources required to control the emergency.
- implement a plan of action at a simulated emergency operation, deploying resources to mitigate the situation.
- develop and conduct a post incident analysis, identifying and communicating all required critical elements and completing and processing the approved forms in accordance with policies and procedures.
- identify elements of operational plans, obtaining required resources and their assignments, mitigating the incident.
- write a report identifying the major causes for service demands for various planning areas within the organization's service area.

FIRE 1134 Company Officer 2E (Wildland Incident Operations for Company Officers)

Units: 1.75  
Hours: 28 hours LEC; 12 hours LAB  
Prerequisite: FFS 1541, FIRE 1133, and FIRE 1507 with grades of "C" or better  
Catalog Date: June 1, 2020

This course provides information on evaluating and reporting incident conditions, analyzing incident needs, developing and implementing a plan of action to deploy incident resources completing all operations to suppress a wildland fire, establishing an incident command post, creating and incident action plan, and completing incident records and reports. Topics include report on conditions, ongoing incident conditions, establishing an incident command post, deploying resources, incident needs, suppression operations, personnel needs and issues, and incident records and reports. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- employ information regarding travel route, assignment, time needed, and point of contact from dispatch.
- develop an initial report on conditions that communicates required incident information.
- demonstrate the ability to size up an incident to formulate an incident action plan that sets incident objectives and applies strategies and tactics according to agency policy, using an Incident Command System (ICS) 201 Incident Briefing form.
- evaluate incident conditions, identify progress, changes in fuels, topography, weather, fire behavior, personnel safety, and other significant events, and communicate these conditions to the supervisor and to assigned and adjoining personnel.
- determine a incident command post.
- describe proper emergency medical procedures.
- deploy resources to suppress a wildland fire, taking appropriate suppression actions and ensuring personnel safety.
- describe ways to update supervisors, crew members, and adjoining personnel.
- analyze incident needs.
- describe how to provide for assigned resources' needs.
- describe information needed for the transfer of command and complete this process.
- describe wildland fire suppression operations.
- describe the needs of personnel.
- demonstrate how to maintain wildland incident records.
FIRE 1140 Chief Fire Officer 3A: Human Resources Management

Units: 1
Hours: 16.25 hours LEC; 9.75 hours LAB
Prerequisite: None.
Enrollment Limitation: Meet the educational requirements for Company Officer, or seeking Fire Marshal Certification.
Catalog Date: June 1, 2020

This course provides students with a basic knowledge of the human resources requirements related to the roles and responsibilities of a chief fire officer. Topics include developing plans for providing employee accommodation, developing hiring procedures, establishing personnel assignments, describing methods of facilitating and encouraging professional development, developing an ongoing education training program, developing promotion procedures, developing proposals for improving employee benefits, and developing a measurable accident and injury prevention program. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the certification task book and testing process for chief fire officer.
- identify the prerequisite qualifications, and the human resource management, community and government relations, administrative, inspection and investigation, emergency service delivery, health and safety, and emergency management duties of a chief fire officer.
- identify the prerequisite knowledge and mobilization and suppression duties of a wildland fire officer II.
- develop a plan for providing an employee accommodation, including adequate information to justify the requested change(s).
- develop procedures for hiring members, ensuring a valid and reliable process.
- establish personnel assignments, maximizing efficiency in accordance with policies and procedures.
- define the requirements of the California Firefighters Procedural Bill of Rights Act as they apply to the roles and responsibilities of the chief fire officer.
- describe methods of facilitating and encouraging members to participate in professional development to achieve their personal and professional goals.
- develop an ongoing education training program, giving members of the organization appropriate training to meet the mission of the organization.
- develop procedures and programs for promoting members, ensuring a valid, reliable, job-related, and nondiscriminatory process.
- develop a proposal for improving an employee benefit, including adequate information to justify the requested benefit improvement.
- develop a measurable accident and injury prevention program, evaluating results to determine program effectiveness.

FIRE 1141 Chief Fire Officer 3B: Budget and Fiscal Responsibilities

Units: 0.5
Hours: 9.5 hours LEC; 8.5 hours LAB
Prerequisite: None.
Enrollment Limitation: Meet the educational requirements for Company Officer.
Catalog Date: June 1, 2020

This course provides students with a basic knowledge of the budgeting requirements related to the roles and responsibilities of a Chief Fire Officer. Topics include developing a budget management system, developing a division or departmental budget, and describing the process for ensuring competitive bidding. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the certification task book and testing process for chief fire officer.
- develop a budget management system to keep the division or department within the budgetary authority.
- develop a divisional or departmental budget, determining and justifying capital, operating, and personnel costs.
- describe the agency's process for ensuring competitive bidding, including developing requests for proposal (RFPs) and soliciting and awarding bids.
FIRE 1142 Chief Fire Officer 3C: General Administration Functions for Chief Fire Officers

Units: 0.75
Hours: 14 hours LEC; 10 hours LAB
Prerequisite: None.
Enrollment Limitation: Meet the educational requirements for Company Officer.
Catalog Date: June 1, 2020

This course provides a basic knowledge of the administration requirements related to the roles and responsibilities of a Chief Fire Officer. Topics include directing a department record management system, analyzing and interpreting records and data, developing a model plan for continuous organizational improvement, developing a plan to facilitate approval, preparing community awareness programs, and evaluating the inspection program of the Agency Having Jurisdiction (AHJ). Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify different levels in the Executive Chief Officer certification track, the courses and requirements for Chief Fire Officer certification, and be able to describe the certification task book and testing process.
- direct the development, maintenance, and evaluation of a department record management system, ensuring the achievement of completeness and accuracy.
- analyze and interpret records and data to determine validity and recommend improvements.
- develop a model plan for continuous organizational improvement, maximizing resource utilization.
- develop a plan to facilitate approval for a new program, piece of legislation, form of public education, or fire safety code.
- develop a community risk reduction program to meet desired program outcomes.
- evaluate the inspection program of the AHJ, assessing results to determine effectiveness.

FIRE 1143 Chief Fire Officer 3D: Emergency Service Delivery Responsibilities

Units: 0.75
Hours: 12.5 hours LEC; 11.5 hours LAB
Prerequisite: None.
Enrollment Limitation: Meet the educational requirements for Company Officer.
Catalog Date: June 1, 2020

This course provides basic knowledge of the emergency service requirements related to the roles and responsibilities of a Chief Fire Officer. Topics include developing a plan for the integration of fire services resources, developing an agency resource contingency plan, evaluating incident facilities, supervising multiple resources, developing and utilizing an incident action plan, obtaining incident information to facilitate transfer of command, developing and conducting a post-incident analysis, and maintaining incident records. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the certification task book and testing process for chief fire officer.
- develop a plan for integrating fire services resources in the community’s emergency management plan, ensuring that the role of the fire service complies with local, state/provincial, and national requirements.
- develop a plan for the agency to ensure the mission of the organization is performed in times of extraordinary need.
- evaluate the need for and location of incident facilities, so that the location is correctly sited, clearly identified, and communicated to personnel.
- employ multiple resources and deploy them in accordance with the incident action plan and agency policies and procedures.
- prepare, review, validate, modify, and document an incident action plan for each operational period, determining, assigning, and placing the required resources to mitigate the incident, and applying strategies and tactics according to agency policies and procedures and incident objectives.
- obtain incident information from the outgoing incident commander to ensure the new incident commander has the information necessary to operate and complete the transfer of command.
- develop and conduct a post-incident analysis in order to identify and communicate all required critical elements, and complete and process appropriate forms in accordance with policies and procedures.
- maintain incident records to document required information.
FIRE 1150 Executive Chief Fire Officer: Human Resource Management

Units: 1
Hours: 19 hours LEC; 9 hours LAB
Prerequisite: None.
Enrollment Limitation: Meet educational requirements for Chief Fire Officer
Catalog Date: June 1, 2020

This course provides the skills and knowledge needed to perform his/her duties safely, effectively, and competently. Topics include selection and placement of human resources, development of a positive and participative member/management program, establishment and evaluation of a list of education and in-service training goals, appraisal of a member assistance program, and the evaluation of an incentive program to determine if the desired results are achieved. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify the different levels of Company Officer certification, the courses and requirements for Executive Chief Fire Officer certification, and be able to describe the capstone task book and testing process.
- identify administrate job performance requirements and evaluate and improve the department, according to the specified job performance requirements.
- determine effective recruitment, selection, and placement of human resources according to the law and consistent with current best practices.
- initiate the development of a positive and participative member/management program.
- establish and evaluate a list of education and inservice training goals so that all members can achieve and maintain required proficiencies.
- appraise a member assistance program to determine if the program produces the desired results and benefits.
- evaluate an incentive program to determine if the desired results are achieved.

FIRE 1151 Executive Chief Fire Officer: Community and Government Relations

Units: 0.25
Hours: 6.5 hours LEC; 4 hours LAB
Prerequisite: None.
Enrollment Limitation: Meet educational requirements for Chief Fire Officer
Catalog Date: June 1, 2020

This course introduces the skills and knowledge needed to perform his/her duties safely, effectively, and competently. Topics include assuming a leadership role in community events. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify the different levels of Company Officer certification, the courses and requirements for Executive Chief Fire Officer certification, and be able to describe the capstone task book and testing process.
- identify how to project a positive image of the fire department to the community, per the specified job performance requirements.
- identify a leadership role in community events in order to understand and respond to community needs and enhance the image of the organization.

FIRE 1152 Executive Chief Fire Officer: Administration

Units: 1.25
Hours: 21.5 hours LEC; 9 hours LAB
Prerequisite: None.
Enrollment Limitation: Meet educational requirements for Chief Fire Officer
Catalog Date: June 1, 2020

This course introduces the skills and knowledge needed to perform one's duties safely, effectively, and competently. Topics include developing a comprehensive, long-range plan, evaluating and projecting training requirements, assessing facility and building needs, completing a written comprehensive risk, hazard, and value analysis, and developing a plan for a capital improvement project or program. Pass/No Pass only.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- identify the different levels of Company Officer certification, the courses and requirements for Executive Chief Fire Officer certification, and be able to describe the capstone task book and testing process.
- develop a comprehensive, long-range plan to meet the projected needs of the community.
- compile a written comprehensive risk, hazard, and value analysis of the community so that an accurate evaluation is made for service delivery decision making.
- develop a plan for a capital improvement project or program to educate citizens about organization needs.

FIRE 1153 Executive Chief Fire Officer: Emergency Services Delivery

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<tr>
<th>Units:</th>
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<tbody>
<tr>
<td>Hours:</td>
<td>35.5 hours LEC; 3 hours LAB</td>
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<td>Prerequisite:</td>
<td>None.</td>
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<td>Enrollment Limitation:</td>
<td>Meet educational requirements for Chief Fire Officer</td>
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<td>Catalog Date:</td>
<td>June 1, 2020</td>
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This course provides the skills and knowledge needed to perform his/her duties safely, effectively, and competently. Topics include developing a comprehensive disaster plan and a comprehensive plan for the organization to operate at a civil disturbance. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify the different levels of Company Officer certification, the courses and requirements for Executive Chief Fire Officer certification, and be able to describe the capstone task book and testing process.
- develop a comprehensive disaster plan that integrates other organizations' resources in order to rapidly and effectively mitigate the impacts on a community.
- develop a comprehensive plan for the organization to operate at a civil disturbance, integrate with other organizations' actions, and provide for the safety and protection of members.

FIRE 1154 Executive Chief Fire Officer: Health and Safety

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<th>Units:</th>
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<tr>
<td>Hours:</td>
<td>11.5 hours LEC; 3 hours LAB</td>
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<tr>
<td>Prerequisite:</td>
<td>None.</td>
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<td>Enrollment Limitation:</td>
<td>Meet educational requirements for Chief Fire Officer</td>
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<td>Catalog Date:</td>
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This course introduces the skills and knowledge needed to perform his/her duties safely, effectively, and competently. Topic include maintaining, developing, and providing leadership for a risk management program. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify the different levels of Company Officer certification, the courses and requirements for Executive Chief Fire Officer certification, and be able to describe the capstone task book and testing process.
- identify, maintain, develop, and provide leadership for a risk management program to reduce injuries and property damage accidents.

FIRE 1160 Incident Management of Major Fires

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<th>Units:</th>
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<tr>
<td>Hours:</td>
<td>16 hours LEC; 24 hours LAB</td>
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<tr>
<td>Prerequisite:</td>
<td>FFS 1510 with a grade of &quot;C&quot; or better</td>
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<td>Catalog Date:</td>
<td>June 1, 2020</td>
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This course covers the knowledge, skills, and abilities for those who are responsible for command and control of dynamic and complex fireground emergencies. Topics include assuming command, situational awareness and risk assessment process, Incident Action Plan (IAP), incident organization, accountability and command worksheets, continuing, transferring, and terminating command, and simulations. Pass/No Pass only.
Upon completion of this course, the student will be able to:

- identify the components of the process of assuming command of an incident.
- employ improved situational awareness, and identify the risk assessment process.
- identify an effective communications plan.
- develop and implement an Incident Action Plan (IAP).
- develop an effective incident organization to assemble, coordinate, and control tactical resources, allowing for expansion based on complexity of the incident.
- initiate and maintain accountability throughout the event at all levels and initiate a command worksheet.
- demonstrate how to continue, transfer, and terminate command.

FIRE 1161 Incident Management of High-Rise Fires

Units: 1.5
Hours: 20.5 hours LEC; 19.5 hours LAB
Prerequisite: FIRE 1133 and 1160 with grades of "C" or better
Catalog Date: June 1, 2020

This course provides knowledge, skills, and abilities required for those managing incidents occurring in large, multistory buildings. These incidents may present significant management, logistical, and safety challenges to emergency personnel. The size and complexity of the interior spaces; limited, sometimes arduous access; extended travel and response times; and the concentrated occupant load with egress challenges, all contribute to the problems faced by emergency responders. Additionally, most high-rise structures are equipped with various environmental, fire protection, and life-safety systems that require support and control. Successful emergency operations in these types of buildings also require preplanning and technical competence on the part of the emergency responders. Topics include identifying critical factors and hazards, identifying construction and fire-protection features, response roles and responsibilities, development and multi-division/group response roles and responsibilities, development and multi-branch response roles and responsibilities, and assessing and using fire and life-safety systems. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify the construction and fire-protection features based upon the age and occupancy type of a high-rise building.
- describe the elements of the incident command system’s modular development and the roles and responsibilities for initial response.
- describe the elements of the incident command system’s modular development and the roles and responsibilities for multi-division/group (reinforced) response.
- describe the elements of the incident command system’s modular development and the roles and responsibilities for multi-branch (extended) response.
- describe the fire and life-safety systems based upon the age and occupancy type of the building.

FIRE 1162 Incident Management of the Fire Fighter Emergency

Units: 0.75
Hours: 9 hours LEC; 15 hours LAB
Prerequisite: FIRE 1133 with a grade of "C" or better
Enrollment Limitation: Completion of Incident Command System (I-200), which is an online course offered by Federal Emergency Management Agency (FEMA).
Catalog Date: June 1, 2020

This course provides incident management terminology and methodology that is employed during a fire fighter emergency. Topics include functions of command, critical incident factors, warning signs of a Rapid Intervention Crew (RIC) deployment, duties of the RIC, command procedures of the emergency, and post deployment considerations. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify the eight functions/standards of command.
- identify critical incident factors.
- identify the warning signs of a pending RIC deployment.
- identify the duties of the RIC.
• employ the incident command procedures to address the fire fighter emergency.
• employ the RIC division/group/division's procedures to address the fire fighter emergency.
• describe the post-deployment considerations.

### FIRE 1221 Fire Prevention 1B

**Units:** 2  
**Hours:** 40 hours LEC  
**Prerequisite:** None.  
**Catalog Date:** June 1, 2020

This course focuses on specific codes, ordinances and statutes that pertain to fire prevention practices in California. Topics include building construction, occupancy requirements, evacuation procedures, fire hazards, safety devices, inspection reports, fire detection and alarm systems. Credit/No Credit Only.

#### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Identify the relationships of fire protection and life safety to building construction and furnishings
- Analyze and compute occupancy loads and egress requirements
- Assess and compare the operation readiness of two different types of sprinkler systems and list the common problems
- Assess and compare the operational readiness of a wet and dry standpipe system and list the common problems
- Validate the readiness of detection and alarm systems
- Classify fire hazards and safety devices

### FIRE 1222 Fire Prevention 1C

**Units:** 2  
**Hours:** 40 hours LEC  
**Prerequisite:** None.  
**Catalog Date:** June 1, 2020

This course focuses on the special hazards associated with flammable and combustible liquids and gases. Topics of discussion include bulk flammable liquid and gas storage, extinguishing flammable liquid and gas fires, and transportation of flammable liquids and gases. Credit/No Credit Only.

#### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Classify the physical properties of flammable liquids and gases, combustible liquids and compressed gases
- Generate guidelines on the storage and handling of flammable liquids and gases
- Assess the installation of storage tanks and containers for flammable liquids and gases
- Implement the techniques for fire extinguishing of flammable liquids and gases
- Evaluate information relative to the Department of Transportation (DOT), labeling and placarding system
- Identify those regulations governing the transportation of flammable liquids and gases
- Define the procedures for controlling compressed and liquefied gas leaks
- Question procedures relative to the transfer of compressed and liquefied gases

### FIRE 1500 Firefighter Academy

**Units:** 14 - 15  
**Hours:** 137 - 140 hours LEC; 363 - 419 hours LAB
This course provides the knowledge necessary to assume the role of firefighter with the ability to work effectively and safely within a fire agency. Topics include indoctrination into the fire service, firefighter health and safety, self-contained breathing apparatus (SCBA), emergency scene operations, ropes and knots, hand and power tools, building construction and related hazards, fire behavior, fire hose use and maintenance, ground ladder operations, forcible entry, structural search and rescue operations, structural firefighting operations, ventilation techniques, overhaul, firefighter survival, wildland firefighting techniques, tools and equipment, hazardous materials, and weapons of mass destruction.

This course was formerly listed as FIRE 1090 prior to September 2010. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- define the role of a firefighter in a fire department, identify the mission of the fire service, follow standard operating procedures and rules and regulations of the fire department, and access the department’s member assistance program
- identify common types of accidents and injuries, maintain a healthy and physically fit lifestyle, and follow life safety initiatives in the line of duty
- demonstrate use of a self-contained breathing apparatus (SCBA) during emergency operations, correctly don SCBA within 60 seconds, demonstrate emergency techniques and procedures if the self-contained breathing apparatus fails, recognize low-air warnings, and exit hazardous areas prior to air depletion
- set up operations in work areas at emergency scenes, follow procedures, wear protective equipment, establish safe protected work areas as directed and perform assigned tasks in protected work areas
- demonstrate the following knots; Overhand, Half Hitch, Clove Hitch, Beckett Bend, Bowline, Figure 8, Water, and Handcuff
- specify the maintenance, operations and use of a variety of hand and power tools. Describe the differences between two-and four-stroke engines and how they are identified
- describe common building materials, various construction types, and identify dangerous building conditions created by fire
- identify dangerous fire behavior conditions and describe mitigation needed to ensure firefighter safety
- arrange fire hose on a fire engine according to its use and type, place nozzles on attack lines, and inspect, maintain, and place hose in or out of service after evaluating its condition
- deploy ground ladders, assess hazards, ensure ladders are stable and their angles are correct for climbing, extend extension ladders and lock in place, position the tip of the ladder against reliable structural components
- demonstrate safe use of forcible entry tools and techniques to remove barriers and produce an opening that is safe and provides appropriate access into a structure
- employ search and rescue techniques in a structure while maintaining safety and team integrity, search all assigned areas, locate and remove all victims
- operate a hose line in an interior structure fire, maintain crew integrity, deploy the attack line for advancement, gain access into the fire area, effectively apply water, correctly approach the fire using standard attack techniques, locate and control hidden fires, and bring the fire under control
- perform vertical and horizontal ventilation on a structure, free ventilation openings of obstructions, use tools as designed, place ladders and ventilation devices correctly, and clear structure of smoke, as a part of a team
- analyze tools and equipment needed to conserve property, demonstrate standardized salvage techniques
- apply personal protective equipment and following standard operating procedures, activate an emergency call for assistance and exit a hazardous area without endangering others
- demonstrate proper use of wildland personal protective clothing and shelter according to the manufacturers’ guidelines within 60 seconds
- describe basic wildland fire behavior and recognize hazards and unsafe situations, promptly communicate hazard(s) to a supervisor, and take appropriate action
- recognize the presence of hazardous materials and the indicators of a hazardous materials incident, correctly identify the materials involved, take personal protective actions, initiate the appropriate notification process, and secure the area
- perform basic control, containment, and confinement techniques in a simulated hazardous materials incident; protect citizens, emergency responders and the environment from contamination

FIRE 1503 Firefighter Intern Recruit Academy

Units: 12 - 12.5
Hours: 130 hours LEC; 270 - 290 hours LAB
Prerequisite: None.
Enrollment Limitation: Completion of a firefighter intern certificate.
Catalog Date: June 1, 2020

This course is a continuation of the firefighter intern program. It provides the techniques and skills to work effectively and safely within the fire environment as well as the fire...
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Describe the history, development, structure, organization, and responsibility of the fire service.
- Apply the components and principles of the Incident Command System.
- Explain the core values of the fire service and the duty to provide service to the public.
- Perform preventative maintenance to fire station, apparatus, and equipment.
- Use fire department apparatus and tools within the scope of assignment.
- Explain and apply the basic concept of fire control, fire and arson investigation, and fire communication systems.
- Demonstrate basic skills in public education procedures and instruction.
- Apply workplace rules and laws regarding harassment/discrimination policies and mandated reporting procedures.
- Identify and demonstrate first responder responsibilities for handling medical emergencies.
- Identify first responder responsibilities for mitigation of hazardous material incidents.
- Demonstrate safe driving procedures for emergency response vehicles.
- Demonstrate fire suppression tactics and strategies.
- Explain wildland fire behavior, suppression techniques, and safety measures.
- Demonstrate firefighter rescue and survival skills.

FIRE 1504 CDF Firefighter 1 Basic

Units: 3
Hours: 48 hours LEC, 18 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

This course provides basic knowledge, skills, and demonstrated abilities as required to perform as a California Department of Forestry (CDF) Firefighter 1 Basic. Topics include fire physics and vegetation terminology, personal protective gear, self-contained breathing apparatus, ground ladders, firefighting equipment, fire shelters, wildland hose-lays, structural firefighting, and safety procedures. This course was formerly listed as FIRE 1096 prior to October 2010. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- exhibit the proper fit, care, and use of self-contained breathing apparatus.
- describe the proper care and use of ground ladders.
- illustrate the ability to properly inspect and maintain firefighting equipment per CDF’s 67 hour firefighter manual.
- demonstrate proper fire shelter deployment techniques.
- setup wildland hose-lays in a field environment.
- assess building construction for proper strategy and tactics related to structural operations.
- demonstrate the knowledge, skills and abilities to safely perform the many firefighting tasks required of a CDF Firefighter 1.
- create realistic wildland fire scenarios using a sand table.
- compare strategies and tactics from past wildland fire incidents.
- predict outcomes from decisions made on the fireline.
FIRE 1506 Transitional Fire Academy

Units: 11.5 - 13.5
Hours: 140 hours LEC; 205 - 300 hours LAB
Prerequisite: None.
Enrollment Limitation: Acceptance into the transitional firefighter academy AND successful completion of a California State Fire Training accredited fire academy or lateral transfer from a full-time career fire department
Catalog Date: June 1, 2020

This course provides the knowledge necessary to assume the role of firefighter with the ability to work effectively and safely with the fire environment as well as within a company in the fire department in all functions of that urban fire agency. Topics include indoctrination into a particular fire department, general maintenance, apparatus and equipment operations, fire control, wildland firefighting, emergency vehicle operations, salvage, fire prevention and public education, fire and arson investigation, rapid intervention crew tactics, vehicle extrication, physical fitness/wellness, emergency care, and forcible entry. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify and describe the history, development, structure, organization and responsibility of the fire service as it relates to his/her particular fire department
- define, identify and apply the components and principles of the incident command system
- explain the core values of the fire service and its duty to providing service delivery to the public
- perform preventative maintenance on the fire station, apparatus, and equipment
- demonstrate the use of fire service apparatus and tools within the scope of his/her assignment
- explain and apply the basic concepts of fire control, fire and arson investigation and the fire communication system
- identify and demonstrate the basic skills in public education procedures and instruction
- demonstrate an understanding of work place rules and laws regarding harassment/discrimination policies and mandated reporting procedures
- describe the importance of the wellness programs, stress management and approved academy physical fitness programs
- identify and demonstrate first responders responsibilities for handling hazardous materials incidents
- demonstrate safe driving procedures for emergency response vehicles

FIRE 1507 Firefighter II Academy

Units: 3.5
Hours: 42 hours LEC; 70 hours LAB
Prerequisite: None.
Enrollment Limitation: To enroll in this course (FIRE 1507) the student must be an employee of a state or local fire agency and a Certified Fire Fighter I.
Catalog Date: June 1, 2020

This course provides the skills and knowledge needed for the entry-level professional fire fighter to perform one's duties safely, effectively, and competently. Topics include fire department communications, fireground operations, rescue operations, and prevention, preparedness, and maintenance. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify different levels in the Fire Fighter certification track, the courses and requirements for Fire Fighter II certification, and be able to describe the certification task book process.
- identify and describe the role and responsibilities of a Fire Fighter II within the organization, determine the need for command, and organize and coordinate activities using the incident management system until command is transferred.
- complete a basic incident report that completely and accurately records all pertinent information.
- communicate the need for team assistance in a manner that consistently informs the supervisor, follows department standard operating procedures, and safely accomplishes the assignment.
- operate as a member of a team, extinguish an ignitable liquid fire, select the correct type of foam concentrate for the given fuel and conditions, apply a properly proportioned foam stream to the surface of the fuel to create and maintain a foam blanket, extinguish the fire, prevent reignition, maintain team protection, and face hazards until the team successfully retreats to a safe haven.
- operate as a member of a team, control a flammable gas cylinder fire, maintain crew integrity, identify contents, identify safe havens prior to advancing, close any open valves, and extinguish flames only when leaking gas is eliminated, the cylinder is cooled, cylinder integrity is evaluated, hazardous conditions are recognized...
and acted upon, and the cylinder is faced during approach and retreat.

- coordinate an interior attack line for a team’s accomplishment of an assignment at a structure fire, establish crew integrity, select attack techniques for the given level of the fire (e.g., attic, grade level, upper levels, or basement), communicate attack techniques to the attack teams, maintain constant team coordination, continuously evaluate fire growth and development, communicate or manage search, rescue, and ventilation requirements, report hazards to the attack teams, and apprise incident command of changing conditions.

- note and protect evidence of fire cause and origin from further disturbance until investigators arrive on the scene.

- extricate a victim entrapped in a motor vehicle, stabilize the vehicle, disentangle the victim without further injury, and manage hazards, as a member of a team.

- assist rescue operation teams, follow procedures, recognize and retrieve rescue items in the time prescribed by the Agency Having Jurisdiction (AHJ), and complete the assignment.

- perform a fire safety survey in a private dwelling, identify fire and life safety hazards, recommend hazard corrections to the occupant, and refer unresolved issues to the proper authority.

- present accurate fire safety information to station visitors or small groups and answer or refer questions.

- prepare a pre-incident survey that records required occupancy information, note items of concern, and include accurate sketches or diagrams.

- maintain power plants, power tools, and lighting equipment, keep equipment clean and maintained according to manufacturer and departmental guidelines, record maintenance, and place equipment in a ready state or report it otherwise.

- perform an annual service test on fire hose, follow procedures, evaluate the condition of the hose, remove any damaged hose from service, and record the results.

FIRE 1520 Fire Apparatus Driver/Operator 1A - Pumping Apparatus

**Units:** 1.25  
**Hours:** 19.5 hours LEC; 20.5 hours LAB  
**Prerequisite:** None.  
**Enrollment Limitation:** Valid Class C California Drivers License.  
**Catalog Date:** June 1, 2020

This course provides information on fire apparatus preventive maintenance and driving/operating. Topics include routine tests, inspections, and servicing functions, operate, reverse, maneuver, and turn a fire apparatus in a variety of conditions, and operate all fixed systems and equipment on a fire apparatus. This course was formerly listed as FIRE 1260 prior to October 2010. Pass/No Pass only.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- describe the certification task book and testing process.

- perform routine tests, inspections, and servicing functions on the systems and components of a fire apparatus to verify its operational status.

- document routine tests, inspections, and servicing functions by checking all items for proper operation and report any deficiencies.

- operate a fire apparatus following a predetermined route on a public way in compliance with all applicable state and local laws and policies and procedures of the jurisdiction.

- operate a fire apparatus during emergency and nonemergency responses using defensive driving techniques while maintaining control of the apparatus.

- operate all fixed systems and equipment on a fire apparatus not specifically addressed elsewhere in this standard in accordance with the applicable instructions and policies.

- demonstrate driving skills necessary to operate an emergency vehicle including off-road driving.

FIRE 1521 Fire Apparatus Driver/Operator 1B - Pumping Apparatus Operations

**Units:** 1.25  
**Hours:** 18 hours LEC; 22 hours LAB  
**Prerequisite:** FIRE 1520  
**Enrollment Limitation:** Hold a valid Class C Firefighter Endorsed driver’s license (minimum).  
**Catalog Date:** June 1, 2020

This course provides information on pumping apparatus preventive maintenance and operations. Topics include routine tests, inspections, and servicing functions, producing hand, master, and foam fire streams, relay pump operations, and supplying water to fire sprinkler and standpipe systems. This course was formerly listed as FIRE 1261 prior to October 2010. Pass/No Pass only.
Upon completion of this course, the student will be able to:

- describe the certification task book and testing process.
- perform and document routine tests, inspections, and servicing functions on the systems and components unique to a pumping apparatus to verify their operational status.
- produce an effective hand or master stream by engaging the pump, setting all pressure control and apparatus safety devices, achieving and maintaining the rate flow of the nozzle, while continuously monitoring the apparatus for potential problems.
- demonstrate how to pump a 2½” or larger supply line to provide the correct pressure and flow to the next pumping apparatus in the relay.
- demonstrate how to produce a foam fire stream to provide properly proportioned foam.
- demonstrate how to supply water to fire sprinkler and standpipe systems at the correct volume and pressure.

**FIRE 1522 Fire Apparatus Engineer Refresher**

**Units:** 1.5  
**Hours:** 20 hours LEC; 21 hours LAB  
**Prerequisite:** None.  
**Enrollment Limitation:** Must be in the position of Fire Engineer or above.  
**Catalog Date:** June 1, 2020

This course provides updates, enhancements, and refreshes the skills required by the fire apparatus engineer. Topics include wildland firefighting, arson identification, structural firefighting, incident command, strategy and tactics on initial attack incidents, supervision, management and company officer skills. This course was formerly listed as FIRE 1010 prior to October 2010. Pass/No Pass only.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- demonstrate the ability to operate fire engine pumps and water moving systems.
- demonstrate the ability to deploy wildland hoselays.
- investigate arson fires set in the wildland environment.
- assess leadership skills among various leadership styles.
- operate within the incident command system.
- compare incident management systems used to organize emergency incidents.

**FIRE 1523 Emergency Vehicle Operator - Phase I**

**Units:** 0.25  
**Hours:** 2 hours LEC; 7 hours LAB  
**Prerequisite:** Completion of a State of California Fire Marshal approved Firefighter 1 academy.  
**Catalog Date:** June 1, 2020

This course is the first phase of operating the emergency vehicle for fire personnel. The course includes skid pan exercises and vehicle driving exercises. This course was formerly listed as SMFD & SFD 1041 prior to October 2010. Pass/No Pass Only.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- Demonstrate ability to control a vehicle through a skid.
- Evaluate traffic obstacles and apply roadway position.

**FIRE 1524 Emergency Vehicle Operator - Phase II**
This course is a continuation of Driver Emergency Vehicle Operator Phase I training techniques. It includes vehicle placement, steering basics, acceleration, and braking. This course was formerly listed as SMFD & SFD 1042 prior to October 2010. Pass/No Pass Only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Judge the traffic environment and select the appropriate driving procedure.
- Compare courses of action while driving and select appropriate course.

FIRE 1525 Emergency Vehicle Operator: Fire

This course is a continuation of Emergency Vehicle Operator - Phase II training techniques. It includes apparatus inspection, safety, code 3 driving, and special considerations. This course was formerly listed as SMFD & SFD 1043 prior to October 2010. Pass/No Pass Only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Identify the primary points of apparatus inspection.
- Describe the procedure involving driving with lights and sirens.
- Select the responses in various traffic situations.

FIRE 1526 Fire Apparatus Driver/Operator - Aerial Apparatus

This course provides information on aerial apparatus preventive maintenance and operations. Topics include routine tests, inspections, and servicing functions on the systems and components unique to an aerial apparatus; maneuvering, positioning, and stabilizing an aerial apparatus; maneuvering, positioning, and lowering the aerial device; and deploying and operating an elevated master stream. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Identify the courses and requirements for the Fire Apparatus Driver/Operator – Aerial Apparatus certification, and be able to describe the certification task book and testing process.
- Perform and document routine tests, inspections, and servicing functions on the systems and components unique to an aerial apparatus to verify their operational status.
- Demonstrate how to maneuver and position an aerial apparatus for correct aerial device deployment.
- Demonstrate how to stabilize an aerial apparatus and transfer power to the aerial device hydraulic system in order to deploy the aerial device.
- Demonstrate how to maneuver and position the aerial device from each control station to accomplish the assignment.
- Demonstrate how to lower an aerial device using the emergency operating system to its bedded position.
- Demonstrate how to deploy and operate an elevated master stream so the stream is effective and the aerial and master stream devices are operated correctly.
FIRE 1527 Fire Apparatus Driver/Operator - Tillered Apparatus

This course provides information on operating a fire department aerial apparatus equipped with a tiller. Topics include practical driving exercises, and operating, positioning and stabilizing the apparatus from both the tractor and tiller positions. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify the courses and requirements for the Fire Apparatus Driver/Operator – Tillered Apparatus certification, and be able to describe the certification task book and testing process.
- perform the practical driving exercises specified in National Fire Protection Association (NFPA) 1002 paragraphs 4.3.2 through 4.3.5 (Practical driving exercises) without striking the apparatus or obstructions.
- operate an aerial apparatus equipped with a tiller over a predetermined route on a public way using the maneuvers specified in NFPA 1002 paragraph 4.3.1 while in compliance with all applicable state and local laws, and policies and procedures of the jurisdiction.

FIRE 1528 Fire Apparatus Driver/Operator - Water Tender

This course provides information on water tender preventive maintenance and operations. Topics include routine tests, inspections, and servicing functions unique to a water tender, maneuvering and positioning a water tender at a water shuttle fill site and establishing, maneuvering, and positioning at a water shuttle dumpsite. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the certification task book and testing process.
- perform and document routine tests, inspections, and servicing functions unique to a water tender, to verify their operational status.
- operate a water tender in compliance with all applicable jurisdictional rules and regulations and operational limitations of the apparatus.
- maneuver and position a water tender at a water shuttle fill site, without striking any objects or stretching additional hose, and attach supply hose to the intake connections.
- establish a water shuttle dumpsite by keeping the draft tank full at all times, emptying the dump tank, and transferring the water from one tank to the next.
- maneuver and position a water tender at an established water shuttle dumpsite and discharge all of the water from the water tender into the portable tank without striking any object at the dumpsite.

FIRE 1529 Fire Apparatus Driver/Operator - Wildland Fire Apparatus

This course provides information on preventive maintenance and operation of a wildland fire apparatus. Topics include routine tests, inspections, and servicing functions on the systems and components unique to wildland fire apparatus, and operating a wildland fire apparatus and producing an effective fire stream. Pass/No Pass only.
Upon completion of this course, the student will be able to:

- describe the certification task book and testing process.
- perform and document routine tests, inspections, and servicing functions on the systems and components unique to wildland fire apparatus.
- operate a wildland fire apparatus in compliance with all applicable jurisdictional rules and regulations and operational limitations of the apparatus.
- produce an effective fire stream by engaging the pump, setting all pressure-control and vehicle safety devices, and achieving the rated flow of the nozzle while monitoring the apparatus for potential problems.

**FIRE 1554 Communicable Disease Awareness**

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<td>Enrollment Limitation:</td>
<td>Currently certified as a California EMT-1</td>
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<td>June 1, 2020</td>
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This course provides emergency responders with communicable disease awareness. Topics include identification, recognition, communicability, prevention, and the operation of communicable diseases. This course was formerly listed as FIRE 1116 prior to November 2010. Pass/No Pass only.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- define most common communicable diseases.
- identify signs and symptoms of communicable diseases.
- describe communicability of diseases.
- differentiate between communicable and non-communicable diseases.
- identify standardized safety control methods, plans, and purposes.
- apply safety methods to operate in the presence of blood or other bodily fluids.
- identify medical/legal and ethical issues related to the intervention and response to communicable diseases.

**FIRE 1600 Hazmat First Responder Operational**

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<td>Hours:</td>
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<td>Prerequisite:</td>
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This course covers the basic strategies involving potential exposure to hazardous materials. This course also covers how to detect hazmat substances, consult references for information, and implement operational procedures. This course was formerly listed as FIRE 1068, CDF 1068, SFD 1068, and SMFD 1068 prior to April 2011. Pass/No Pass only.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- identify the typical agencies from all levels of government that are likely to respond to a hazmat event and identify their roles, responsibilities and capabilities
- identify hazardous materials using the DOT Emergency Response Guidebook (ERG)
- describe the value, methods and limitations of stabilizing the hazmat incident through safe containment; and, describe protective action options available to first responders
- cite the health effects that hazardous materials present to the first responder's life, health, and safety
FIRE 1601 Hazardous Materials First Responder Operational Refresher

Units: 0.25
Hours: 6 hours LEC; 3 hours LAB
Prerequisite: FIRE 1600
Catalog Date: June 1, 2020

This course is a refresher covering the basic strategies involving potential exposure to hazardous materials. Topics include detecting hazardous material substances, consulting references for information, and implementing operational procedures. May be taken one time for credit. This course was formerly listed as CDF 1085 prior to April 2011. Pass/No Pass Only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify the basic hazard and risk assessment techniques.
- define and demonstrate selection and use of personal protective equipment provided to the First Response Operational (FRO) level.
- explain basic hazardous materials terminology.
- apply basic control, containment, and/or confinement operations within the capabilities of the resources and personal protective equipment available in assigned jurisdiction.
- implement basic decontamination procedures.
- explain relevant standard operating procedures and termination procedures.

FIRE 1602 Hazardous Materials Incident Commander

Units: 0.5
Hours: 10 hours LEC; 6 hours LAB
Prerequisite: FIRE 1600; Proof of completion of FEMA Incident Command System (ICS) 100
Catalog Date: June 1, 2020

This course provides the content related to the role of an Incident Commander (IC), during a hazardous material (hazmat) event, with the emphasis on personnel safety and management. Topics include hazmat laws and regulations, command and scene management, operational risk management, and protective actions. This course was formerly listed as CDF, FJPA, SFD, SMFD, and USDA 1091 prior to April 2011. Pass/No Pass Only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the most dangerous types of hazardous materials.
- identify laws, regulations, and plans that govern an emergency response to a hazardous materials incident.
- demonstrate how to estimate potential outcomes when given a simulated hazardous materials leak.
- identify hazardous material disposal requirements.
- identify potential action response options (defensive, offensive and non-intervention) available.
- identify legal roles and rights of the media in a hazardous material event.
- identify common "real-world" problems likely to occur in a hazardous material event.
- demonstrate the ability to approve an appropriate level of personal protective equipment commonly used in a hazardous materials incident.

FIRE 1610 Hazardous Materials Technician: Module 1A: Basic Chemistry

Units: 2
Hours: 40 hours LEC
Prerequisite: FIRE 1600
Catalog Date: June 1, 2020

This course provides the student with the most essential and basic aspects of chemistry and physics as they relate to successful hazardous materials incident management. Topics include basic terminology and theory of chemistry, overview of the identification and hazards of salts, hydrocarbons, and other non-salts and, most importantly, provides the student with the skills required to recognize the hazard and behavior of a material given only its chemical identification or formula. It meets standards prescribed by the CA State Fire Marshal and Office of Emergency Services. Pass/No Pass only.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- recognize chemical compounds in terms of general categories and classifications.
- identify symbols, names of elements, and atomic numbers on a periodic table.
- name the four families and their outer shell electron configuration, explain the octet/duet rule and predict the type of ion formed by each family.
- identify the hazard of each family including reactivity and oxidation ability.
- identify the six types of salt and predict the hazards, recognize the general physical, chemical, health and environmental properties of salts and non-salts.
- identify alkane, alkene, alkyne and aromatic hydrocarbons.
- define the physical parameters of vapor pressure, vapor content, vapor density, specific gravity, boiling point, flash point, polarity, and standard and normal temperature and pressure; and correctly identify the relative ranking of chemicals with respect to these physical parameters when compared to other chemicals.
- define the concepts: fire, oxidation, the fire tetrahedron, heat transfer, ignition temperature, flammable limits, and standard temperature and pressure.
- describe the importance of chemical compatibility to responders, recognize the 4 types of chemical reactions, list the rules of solubility and use an incompatibility chart to determine the potential reaction(s) between two materials.
- determine the logical systematic order of elements,
- list the features of reducing agents and oxidizing agents.
- identify the structures of hydrocarbons including isomers or aromatics.
- explain the difference between slow and fast oxidation, the effects of oxygen on the combustion process, and the factors to consider when assessing an incident for the potential of fire.

FIRE 1611 Hazardous Materials Technician: Module 1B: Applied Chemistry

Units: 1.25
Hours: 20.25 hours LEC; 19.75 hours LAB
Prerequisite: FIRE 1610
Catalog Date: June 1, 2020

This course provides the student with basic terminology and theory of chemistry as it relates to hazardous materials. Topics include chemical aspects of the hazard classes, toxicology, including hazard and risk assessment, function and use of detection instruments, monitoring hazardous atmospheres, and use of a field identification kit to identify unknown solids and liquids. It meets standards prescribed by the CA State Fire Marshal and Office of Emergency Services. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- list the different exposure levels and the terms needed to describe them, identify which are legal requirements and which are recommended and describe what actions (if any) must be taken in a variety of situations when given sample exposures.
- describe the differences between and the unique benefits of using printed and electronic reference sources.
- perform research on a named chemical using textbooks, computer based and internet based resources.
- describe the process of looking for contaminants in air, list the major components of a normal atmosphere, and list the types of contaminants that make an atmosphere hazardous.
- describe the process of looking for contaminants in air, list the major components of a normal atmosphere, and list the types of contaminants that make an atmosphere hazardous.
- identify classifications of chemicals and incidents which require detection capabilities beyond the Oxygen/PID/CGI/Colorimetric Tube range and discuss and compare the capabilities of five different advanced types of instruments.
- describe the principles of operation of Radiation Monitoring devices and demonstrate their use with sample sources of radioactive material.
- describe the difference between strategic and tactical air monitoring and describe the elements that can affect the accuracy of tactical air monitoring.
- define and demonstrate the process and technique(s) of the Field Identification of Unknown Solids and Liquids, as it applies to Hazmat Emergency Response.
- describe how safety procedures serve as a reminder of the real hazards of chemicals and to demonstrate that these materials can be handled and used in a completely safe way.
FIRE 1612 Hazardous Materials Technician: Module 1C: Incident Considerations

Units: 1.25
Hours: 18.5 hours LEC; 21.5 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

This course provides the student with on-scene incident considerations. Topics include data research, meteorological considerations, protective actions, personal protective equipment, incident command aspects, site safety concepts, legislative and regulatory measures influencing emergency response, and contingency planning. It meets standards prescribed by the CA State Fire Marshal and Office of Emergency Services. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- define toxicology, list 2 subdivisions of toxicology, and identify dose as a key concept in toxicology.
- identify how various meteorological factors may influence a hazardous materials incident.
- recognize general protective action concepts associated with hazardous materials response, with specific emphasis on evacuation and shelter-in-place options.
- identify the three types of vapor-protective, splash-protective and support-function clothing and describe the advantages and disadvantages of each.
- explain the significance of degradation, penetration, and permeation as they relate to suit selection.
- identify the factors to be considered and the process involved in selecting the proper chemical protective clothing, at least three indications of material degradation of chemical protective clothing, and the relative advantages and disadvantages of various cooling methods/devices.
- list the primary differences between a Drug Lab, an Explosives Lab and a Biological Lab, and list the response priorities.
- describe the duties of a member of the Command Staff within the Incident Command System at a hazardous materials incident.
- describe the concept of dose-response relationships, list the factors that affect dose response values and define the terms “lethal dose (LD),” “lethal concentration (LC),” “no observed effect level (NOEL),” “threshold limit value (TLV),” “permissible exposure limit (PEL),” “short term exposure limit (STEL),” “immediately dangerous to life and health (IDLH),” “maximum allowable concentration (MAC),” “level of concern (LOC)” and emergency response planning guide (ERPG).
- recognize the importance of establishing control zones and identify the three control zones to be established at a hazardous materials incident.
- identify various environmental, mechanical, physiologic and psychological stresses that personnel working in chemical protective clothing are subjected to.
- identify some of the problems and resources which must be evaluated in order to triage hazardous materials incidents.
- describe the various decontamination methods, the types of decontamination, factors that can affect the decontamination process and resources needed to set up a Contamination Reduction Corridor.
- demonstrate the use of plugging and patching equipment for drums.
- demonstrate the use of transfer pumps for product transfer between drums.
- demonstrate the safe use of chemical sampling equipment for solids and liquids.
- demonstrate the safe use of absorbent materials for containing a liquid spill.
- demonstrate the collection of evidence at a hazardous materials incident, including the use of chain of custody forms, evidence seals, scene mapping and photography.
- identify and discuss the basic concept of levels of chemical protective clothing.
- identify and use the accepted standard operating procedures for hazardous materials incidents.

FIRE 1613 Hazardous Materials Technician: Module 1D: Tactical Field Operations

Units: 1.25
Hours: 20 hours LEC; 20 hours LAB
Prerequisite: FIRE 1612
Catalog Date: June 1, 2020

This course provides the student with experience in hazardous materials tactical field operations. Topics include confinement, control, hazmat triage and sabotage, performing in chemical protective clothing, preservation of evidence, decontamination, and emergency medical system considerations. It meets standards prescribed by the CA State Fire Marshal and Office of Emergency Services. Pass/No Pass only.
Upon completion of this course, the student will be able to:

- describe the components of a site safety plan for a hazardous materials incident and identify key points that should be made in a safety briefing prior to working on the scene.
- describe the duties of the Assistant Safety Officer - Hazmat within the Incident Command System at a hazardous materials incident.
- identify various non-bulk and intermediate bulk packaging, the types of materials they contain, basic design and construction features, and some of the marking requirements for the various packages.
- identify the following regarding intermodal tank containers: tank construction features, tank markings, general classes of tanks, tank fittings and how to handle hazardous materials in tank containers.
- describe the type of carrier and material most commonly involved in highway hazardous materials incidents.
- identify some of the ways in which chemicals could be used for terrorism.
- identify the types of shipping papers that may be found on rail cars, as well as the types of information they contain.
- identify various tank cars by type, capacity and contents they typically transport. The student shall also identify various tank markings and construction features.
- identify various tank car fittings that may be found on the different types of tank cars.
- identify how a liquid pipeline may carry different products, the types of information which may be found on a pipeline marker, basic guidelines to follow for mitigating pipeline incidents and some of the regulations pertaining to pipeline construction and safety.
- identify various offensive control options that may be utilized at a hazardous materials incident including repositioning leaking drums, overpacking, using absorbents, plugging, patching and catching.
- identify basic design and construction features of storage tanks found at fixed facilities, the types of materials they may contain, and the types of damage that they could incur.
- identify some of the metals used in aircraft construction, and the advantages and disadvantages of each, as well as the fuels and fluids generally found aboard aircraft and their associated hazards.
- demonstrate the use of emergency hand signals.
- demonstrate the use of grounding and bonding equipment for product transfer.
- demonstrate the use of plugging and patching equipment for drums.
- demonstrate the use of transfer pumps for product transfer between drums.
- demonstrate overpacking of a 55 gallon drum by the “V- Roll” and “End Over” Techniques.
- demonstrate the safe use of chemical sampling equipment for solids and liquids.
- demonstrate the safe application of a "Chlorine Institute A Kit."
- demonstrate the safe application of a "Chlorine Institute B Kit."
- identify and use accepted Standard Operating Procedures for hazardous materials incidents.
- identify and use the selected method for field identification of the released hazardous material.
- identify components of the three phases of an effective incident termination: debriefing, post-incident analysis and critique.

FIRE 1614 Hazardous Materials Specialist Module 1F: Special Mitigation Techniques

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<tr>
<td>Hours:</td>
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<td>Catalog Date:</td>
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This course is an introduction to mitigation techniques. Topics include plugging, patching and repairing methods, advanced chemical field identification testing procedures, and fixed facility repair considerations. It is part one of a two part series (including FIRE 1615) leading to certification as a Hazardous Materials Specialist. It meets requirements of CA Code of Regulations Title 8, Section 519(q). Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- determine the range of skills necessary to function as a Hazardous Materials Specialist working on a Hazmat Team.
• determine the safety hazards inherent in this advanced course and procedures to follow in case of accident or injury.
• initiate and complete the identification of hazardous materials using the HazCat or 5-Step identification system.
• identify rail tank cars by construction features and markings.
• identify damage to tank cars that may result in tank car failure and understand how to repair damaged or malfunctioning fittings.
• determine the magnitude of damage to rail tank cars involved in derailments and rail accidents.
• determine features of MC 306/DOT 406 cargo tanks, materials transported, and methods of proper removal.

FIRE 1615 Hazardous Materials Specialist Module 1G: Advanced Field Operations

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<td>Hours:</td>
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This course covers material presented in Hazardous Materials Courses 1A-1F in an environment of scenario based full scale exercises. Students are evaluated on their ability to perform and be certified as a member of a Hazardous Materials Team. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• practice operational guidelines at simulated hazardous materials incidents.
• utilize chemical protective clothing and perform simulated hazardous materials mitigation skills.
• utilize methods and procedures to mitigate leaking containers.
• utilize methods and procedures to transfer hazardous materials between containers.
• classify known and unknown chemicals.
• utilize methods and procedures to participate as a member of a Hazmat Team in simulated hazardous materials incidents.
• practice safe methods and procedures while operating at hazardous materials incidents.

FIRE 1621 Incident Command System (I-200)

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<td>Hours:</td>
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This class introduces the basic components of the Incident Command System (ICS) used to manage all types of emergency incidents. This management system includes common structure, responsibilities and terminology used on incidents at the local, state, and federal levels. This course was formerly listed as FIRE 1052 prior to April 2011. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• describe the principal features that constitute the ICS
• identify the ICS organizational structure and how it is used
• identify the ICS incident facilities and their use
• describe the kinds of resources often used in incidents and events
• define common responsibilities associated with ICS assignments

FIRE 1628 High Rise Incident Management - Basic Organization
This course provides the content related to management of major high rise fire incidents. The content is based on curricula established at the National Fire Academy and Firefighting Resources of Southern California Organized for Potential Emergencies (FIRESCOPE), program. This course was formerly listed as FIRE 1078 prior to April 2011. Pass/No Pass only.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- identify the critical elements of successful high rise incident management
- identify roles and responsibilities for command and control procedures for major high-rise operations
- explain functions of incident command/operations (IC/Ops), fire attack, base, lobby control, staging, rapid intervention crew (RIC), firefighter accountability tracking system (FATS), communications, and systems
- identify first-alarm capabilities and incident command system (ICS) organization

FIRE 1631 Incident Management

This course provides an in-depth look into the various areas of commanding an initial attack. Topics include command presence, transfer of command, tactics and strategy, and size-up. This course was formerly listed as CDF, FJPA, SFD, and SMFD 1092 prior to April 2011. Pass/No Pass Only.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- Identify the history and behavior to predict and recognize the strategies employed in the initial attack.
- Analyze the initial attack dispatch resources to be sure adequate resources are responding to implement the initial attack incident action plan.
- Describe the communication and interaction with the fire organization, public, and media.
- Prepare a company officer to utilize the ICS during an initial attack emergency operation.

FIRE 1653 Instructor I: Instructional Methodology

This course introduces the skills and knowledge needed for the entry-level professional instructor to perform his or her duties safely, effectively, and competently. At the end of this course, candidates for certification will be able to teach and deliver instruction from a prepared lesson plan utilizing instructional aids and evaluation instruments. The Instructor will also be able to adapt a lesson plan and complete the reporting requirements to the local jurisdiction. Topics include instructional development, instructional delivery, evaluation and testing, and program management. Pass/No Pass only.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- demonstrate the ability to review instructional materials and determine which elements of the lesson plan, learning environment, and resources need adaptation.
- demonstrate how to adapt a prepared lesson plan to meet the needs of the student and the objectives of the lesson plan.
- present prepared lessons using the cognitive and psychomotor methods indicated by the lesson plans to achieve stated objectives and enable students to achieve learning outcomes, following applicable safety standards and practices, and addressing risks.
- demonstrate the ability to adjust to differences in learning styles, abilities, cultures, and behaviors, in order to accomplish lesson objectives, address disruptive
behavior, and maintain a safe and positive learning environment.

- demonstrate the ability to operate audiovisual equipment and demonstration devices so that the equipment functions properly.
- demonstrate the ability to administer oral, written, and performance tests in a manner that eliminates bias and discrimination, conduct tests following correct procedures, and maintain the security of test materials.
- demonstrate the ability to grade student oral, written, or performance tests accurately and secure student examinations, and grades properly.
- demonstrate the ability to report test results by recording them accurately, forwarding test result forms according to procedure, and reporting any unusual circumstances in testing or test results.
- demonstrate the ability to provide student evaluation feedback that is timely, objective, clear, relevant, and specific enough for the student to make efforts to modify behavior, and will include suggestions for additional study or behavior modification based on the data.
- demonstrate the ability to evaluate other student instructor presentations to provide constructive feedback that identifies strengths and weaknesses of the teaching demonstration.
- demonstrate the ability to assemble course materials by obtaining the lesson plan and all resources and equipment needed to deliver the lesson.
- demonstrate the ability to schedule instructional sessions to deliver specified lessons.

FIRE 1654 Instructor II: Instructional Development

Units: 1.25
Hours: 14.25 hours LEC; 25.75 hours LAB
Prerequisite: FIRE 1653 with a grade of "C" or better
Catalog Date: June 1, 2020

This course introduces the skills and knowledge needed for the intermediate level professional instructor to perform his or her duties safely, effectively, and competently. Topics include developing lesson plans and evaluation instruments, teaching and delivering instruction, evaluating and coaching other instructors, analyzing resources, and formulating a program budget. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify different levels in the Instructor certification track, the courses and requirements for Instructor II certification, and be able to describe the certification task book and testing process.
- define the role of the Instructor II with regard to program management, instructional development, instructional delivery, and evaluation and testing.
- demonstrate the ability to create a lesson plan that addresses Job Performance Requirements (JPRs) or learning objectives for the topic and includes learning objectives, a lesson outline, course materials, instructional aids, and an evaluation plan.
- demonstrate the ability to modify an existing lesson plan to address the JPRs or learning objectives for the topic; and include learning objectives, the lesson outline, course materials, instructional aids, and an evaluation plan.
- demonstrate the ability to conduct a class using a lesson plan that the instructor has prepared, using multiple teaching methods and techniques to achieve lesson objectives.
- demonstrate the ability to supervise other instructors and students during training to ensure that all participants follow applicable safety standards and practices and meet instructional goals.
- demonstrate the ability to develop student evaluation instruments that determine whether the student has achieved the learning objectives; evaluate relevant performance in an objective, reliable, and verifiable manner; and are bias-free to any audience or group.
- demonstrate the ability to develop a class evaluation instrument that gives students the ability to provide feedback to the instructor about instructional methods, communication techniques, learning environment, course content, and student materials.
- demonstrate the ability to schedule instructional sessions to ensure delivery of specified sessions according to departmental policy.
- demonstrate the ability to formulate budget needs by identifying and documenting the resources required to meet training goals.
- demonstrate the ability to acquire and obtain training resources within established timelines and budget constraints, and according to agency policy.
- demonstrate the ability to coordinate training record-keeping in a way that meets all agency and legal requirements.
- demonstrate the ability to evaluate instructors to identify areas of strengths and weaknesses and recommend changes in instructional style and communication methods, providing opportunity for instructor feedback to the evaluator.

FIRE 1655 Instructor III: Instructional Program Management
This course introduces information on planning, developing, and implementing comprehensive programs and curricula. Topics include instructional development, program management, program and instructor evaluation, and test reliability and validity. Pass/No Pass only.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- identify course objectives, events, requirements, assignments, activities, resources, evaluation methods, and participation requirements in the course syllabus.
- identify different levels in the Instructor III certification track, the courses and requirements for Instructor III certification, and be able to describe the certification task book and testing process.
- identify the duties of an Instructor III.
- demonstrate the ability to conduct an agency needs assessment/analysis that identifies instructional needs and recommends solutions.
- demonstrate the ability to utilize adult learning principles to design a performance-based training program or curriculum that includes job-related knowledge and skills, meets time and budget constraints, and supports agency goals.
- demonstrate the ability to modify an existing curriculum to meet agency requirements and achieve the learning objectives.
- demonstrate the ability to write clear, concise, and measurable program and course goals to correlate with agency goals.
- demonstrate the ability to write clear, concise, and measurable course objectives that reflect specific tasks.
- demonstrate the ability to construct a course content outline that supports the agency structure and reflects current acceptable practices.
- demonstrate the ability to create a program evaluation plan that evaluates instructors, course components, facilities, and obtains student input for course improvement.
- demonstrate the ability to develop a course evaluation plan that measures objectives and follows agency policies and procedures.
- demonstrate the ability to construct a performance-based instructor evaluation plan that evaluates instructors at regular intervals.
- demonstrate the ability to analyze student test instruments to determine validity and make necessary changes.
- demonstrate the ability to develop a system for the acquisition, storage, and dissemination of test results consistent with agency policies and federal, state, and local laws and provides feedback to those affected by the information.
- demonstrate the ability to administer a readily accessible training record system that captures concise information and meets all agency and legal requirements.
- demonstrate the ability to develop recommendations for training program policies that achieve training and agency goals.
- demonstrate the ability to select instructional staff who can achieve agency and instructional goals.
- demonstrate the ability to write equipment-purchasing specifications that support curriculum needs.
- demonstrate the ability to present evaluation findings, conclusions, and recommendations to agency administrator that are unbiased, supported, and reflect agency goals, policies, and procedures.

**FIRE 1670 Fire Investigation 1A, Fire Cause and Origin Determination**

This course provides participants with an introduction and basic overview of fire scene investigation. The focus of this course is to provide information in determining the area of fire origin in fires involving vehicles, structures, and wildland. Accidental and criminal fire causes are discussed in detail. This course was formerly listed as FIRE 1240 prior to September 2010. Pass/No Pass only.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- distinguish the four different methods of heat transfer and compare their effects during a fire's progression
- choose the correct California Arson Law section when applying it to a factual situation
recognize the elements necessary for the ignition and the sustained combustion of fuel and heat
explain the elements required for an electrically caused fire to occur
identify common scene indicators of arson and apply it to a factual situation
describe the methodology required for a proper and thorough investigation of a structure, vehicle, and wildland fire
differentiate between the different types of explosions and their unique effects

FIRE 1671 Fire Investigation 1B, Techniques of Fire Investigation

Units: 2
Hours: 40 hours LEC
Prerequisite: FIRE 1670
Catalog Date: June 1, 2020

This course expands on specific topics encountered by the fire investigator. These topics include detailed information on motives of fire setters; conducting a post blast scene; the investigation of a fire death; the recognition, collection, and preservation of evidence; interviewing and interrogation of witnesses and suspects; and the effect of a building's construction on the spread of fire. This course was formerly listed as FIRE 1241 prior to September 2010. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- differentiate between the six common motives associated with fire setters
- examine a fire scene appraising the different safety hazardous associated with an investigation
- compare a fire scene investigation versus a post blast scene investigation
- examine a fire scene to determine the appropriate evidence to support a fire cause
- compare factures associated with an interview and an interrogation
- appraise a fire death scene to determine if a criminal act has occurred
- organize their case investigations utilizing proper case reports, resources, and insurance information

FIRE 1672 Fire Investigation 2A

Units: 2
Hours: 40 hours LEC
Prerequisite: FIRE 1671
Catalog Date: June 1, 2020

This course provides information on how to investigate, apprehend, and convict arsonists. It focuses heavily on legal case preparation. Topics include interviewing and interrogating suspects, search and seizure, warrants, courtroom demeanor, and working with the district attorney’s office. This course was formerly listed as FIRE 1242 prior to September 2010. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- differentiate among the three effects of an explosion
- validate an arson corpus after examining a practical fire scene
- examine a fire scene to gather evidence in supporting a fire cause
- appraise an explosion scene to determine if a criminal act has occurred
- organize a fire investigation utilizing case reports, court exhibits, and testimony
- differentiate between the U.S. Supreme Court's finding and California's Supreme Court's requirements in preparing a search warrant
- recognize the elements necessary for the ignition and the sustained combustion of fuel and heat in a practical situation
- describe the methodology and procedure required for a proper surveillance operation
**FIRE 1673 Fire Investigation 2B**

Units: 2  
Hours: 40 hours LEC  
Prerequisite: FIRE 1672  
Catalog Date: June 1, 2020

This course provides advanced instruction in fire scene investigation, case preparation, and courtroom presentation. Topics include reviewing fire scene photography, sketching, evidence collection, interviewing and interrogation, and extensive use of simulations for developing and presenting an arson case in court. This course was formerly listed as FIRE 1243 prior to September 2010. Pass/No Pass only.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- demonstrate the proper procedure of qualifying as an expert witness in fire origin and cause
- structure interview questions with witnesses and suspects in accordance with federal and state law requirements
- identify common scene indicators of arson and apply it to a practical situation
- examine a fire scene to determine the appropriate evidence needed to support a criminal fire cause
- verify an arson corpus after examining a criminal fire scene

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**FIRE 1674 Fire Investigator 1A: Basic Fire Investigation**

Units: 1.75  
Hours: 29 hours LEC; 11 hours LAB  
Prerequisite: FT 304 with a grade of "C" or better  
Enrollment Limitation: On-line courses: Basic Electricity (CFITrainer.net), and Ethics and the Fire Investigator (CFITrainer.net)  
Catalog Date: June 1, 2020

This course provides information on securing the fire scene and determining the origin and cause of the fire. Topics include responsibilities of a fire investigator, securing the fire ground, conducting an exterior and interior survey, analyzing fire patterns, interpreting individual fire patterns, discriminating the effects of explosions, examining and removing fire debris, reconstructing the area of origin, inspecting the performance of building systems. Pass/No Pass only.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- identify the courses and requirements for Fire Investigator certification, and be able to describe the certification task book and testing processes.
- employ the all aspects of the scientific method as the operating analytical process throughout the investigation.
- secure the fire ground to protect all evidence or potential evidence from damage or destruction and ensure unauthorized persons recognize the perimeters of the investigative scene and are kept from the restricted areas.
- conduct an exterior survey to identify and preserve evidence, interpret fire damage, identify hazards to avoid injuries, determine accessibility to the property, and discover all potential means of ingress and egress.
- conduct an interior survey to identify and preserve areas of potential evidentiary value requiring further examination, determine the evidentiary value of contents, and identify hazards to avoid injuries.
- analyze fire patterns to determine fire development, evaluate methods and effects of suppression, recognize false origin area patterns, and identify all areas of origin.
- interpret individual fire patterns and the burning characteristics of the material involved in relationship with all patterns observed and the mechanisms of heat transfer that led to the formation of the pattern.
- discriminate the effects of explosions from other types of damage to identify an explosion and preserve its evidence.
- examine and remove fire debris to check for fire cause evidence, identify potential ignition source(s), and preserve evidence without investigator-inflicted damage or contamination.
- reconstruct the area of origin to identify and correlate all protected areas and fire patterns related to contents or structural remains, return items potentially critical to cause determination and photo documentation to their prefire location, and discover the area(s) or point(s) of origin.
- inspect the performance of building systems, including detection, suppression, HVAC, utilities, and building compartmentation to determine the need for expert resources, consider an operating system’s impact on fire growth and spread in identifying origin areas, identify defeated and/or failed systems, and recognize the system’s potential as a fire cause.
FIRE 1675 Fire Investigator 1B: Evidence and Documentation

Units: 1.5  
Hours: 24 hours LEC; 10 hours LAB  
Prerequisite: FIRE 1674  
Enrollment Limitation: On-line course: Introduction to Evidence (CFITrainer.net)  
Catalog Date: June 1, 2020

This course provides information on scene documentation and evidence collection/preservation. Topics include photographing the scene, diagramming the scene, constructing investigative notes, processing evidence and establishing chain of custody, processing victims and fatalities, selecting evidence for analysis, maintaining a chain of custody, preparing a fire investigation report, and disposing of evidence. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify the courses and requirements for Fire Investigator certification, and be able to describe the certification task book and testing process.
- assemble photographs of the scene to accurately document and support scene findings.
- diagram the scene and identify evidence, pertinent contents, significant patterns, and area(s) or point(s) of origin.
- construct investigative notes that provide accurate documentation of the scene and represent complete scene findings.
- locate, document, collect, label, package, and store evidence to properly identify and preserve for use in testing, legal, or other proceedings and examinations, establish the chain of custody, and avoid cross-contamination and investigator-inflicted damage to evidentiary items.
- process victims and fatalities to discover and preserve all evidence while utilizing proper procedures and following protocol.
- select evidence for analysis so the items support specific investigation needs.
- maintain a chain of custody with written documentation for each piece of evidence.
- prepare a written report that accurately reflects the investigative findings, is concise, expresses the investigator’s opinion, contains facts and data that the investigator relies on in rendering an opinion, contains the reasoning of the investigator to reach each opinion, and meets the needs or requirements of the intended audience(s).
- dispose of evidence safely in compliance with jurisdictional or agency requirements.

FIRE 1676 Fire Investigator 1C: Preparation for Legal Proceedings

Units: 1.25  
Hours: 19 hours LEC; 21 hours LAB  
Prerequisite: FIRE 1674, FIRE 1675, and PSTC 1501  
Enrollment Limitation: On-line course: Motive, Means, and Opportunity: Determining Responsibility in an Arson Case (CFITrainer.net)  
Catalog Date: June 1, 2020

This course provides information on legal considerations for a court proceeding. Topics include coordinating expert resources, formulating an opinion, presenting investigative findings, and testifying during legal proceedings. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify the courses and requirements for Fire Investigator certification, and be able to describe the certification task book and testing process.
- gather reports and records for a legal proceeding that are authentic, complete, and applicable to the investigation while maintaining the chain of custody to ensure the material is admissible.
- evaluate the investigative file to identify areas for further investigation, interpret the relationship between gathered documents and information, and discover corroborative evidence and information discrepancies.
- coordinate expert resources to match experts competencies to the specific investigation needs, justify financial expenditures, and further the investigative goals of determining cause and responsibility.
- formulate an opinion concerning origin, cause, and responsibility for the fire supported by data, facts, records, reports, documents, and evidence.
- present investigative findings that are accurate and include only need-to-know information for the intended audience.
- testify during legal proceedings to present all pertinent investigative information and evidence clearly and accurately while adhering to the appropriate demeanor and attire.
FIRE 1682 Interagency Incident Business Management (S-260)

This course provides the foundation of incident business management practices. Topics include property management, recruitment, acquisition, and accident investigation. This course was formerly listed as FIRE 1093 prior to April 2011. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- illustrate rules of conduct for incident assignments
- describe the recruitment of casual employees
- organize pay provisions, commissary, and travel times
- assess compensation for injury
- describe the acquisition of equipment, supplies, and services
- examine property management
- analyze cooperative agreements
- describe investigating and documenting accidents and claims

FIRE 1703 Basic Wildland Fire Prevention

This course provides the basic methods and practices used in wildland fire prevention. Topics include fire prevention history, campfire safety, powerline safety and fire investigation. This course was formerly listed as USDA 1107 prior to April 2011. Pass/No Pass Only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Describe the history of wildland fire prevention.
- List primary points of fire prevention.
- Describe department policy on fire prevention.
- Describe the five important areas in railroad fire prevention.

FIRE 1722 Division/Group Supervisor (S-339)

This course provides the knowledge and skills to perform specific responsibilities as a Division/Group Supervisor within the Incident Command System. Topics include pre-incident responsibilities, incident arrival and check-in, assigned and available status, and out-of service status and demobilization. This course was formerly listed as CDF,EGFD,FJPA,SMFD,and USDA 1086 prior to April 2011. Pass/No Pass Only.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- Identify and define concepts of divisions and groups within the Incident Command System.
- Describe pre-incident responsibilities.
- Describe responsibilities assigned at an incident.
- Describe responsibilities while in available or out-of-service status.
- Describe the demobilization process and explain responsibilities.
- Describe Incident Command System documentation procedures specific to Divisions, Groups, and subordinate functions.

**FIRE 1723 Professional Training for Fire Service Personnel**

**Units:** 7.5 - 9.75  
**Hours:** 84 - 114 hours LEC; 156 - 186 hours LAB  
**Prerequisite:** None.  
**Enrollment Limitation:** Completion of a State of California Fire Marshal approved Firefighter 1 academy  
**Catalog Date:** June 1, 2020

This course provides current knowledge and techniques needed to maintain and improve fire service skills. It meets mandatory state and local training requirements. Topics may include fire service administration, suppression, emergency medical services, fire prevention, wellness and fitness, rescue, leadership/management, and command and control. This course was formerly listed as SFD and SMFD 1104 prior to April 2011. Pass/No Pass Only.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- Describe and discuss the various policies and procedure within the fire agency organization.
- Operate fire department computer and related software.
- Analyze various laws and legal issues affecting the fire service.
- Identify the latest techniques to manage and supervise employees.
- Operate various hose lays on the fire ground.
- Calculate various mathematical hydraulic formulas to ensure proper engine pressures.
- Apply different search and rescue techniques used to search structures.
- Operate aerial apparatus for different fire ground and rescue situations.
- Perform various truck company evolutions.
- Describe the different approaches and techniques used in extrication.
- Employ the various types of ventilation used in the fire service.
- Describe how to secure utilities at different types of structures.
- Explain the various type of techniques used to ensure firefighter safety and survival.
- Describe the benefits of a post incident analysis as they might relate to firefighter safety.
- Describe the basics of fire behavior.
- Discuss the different techniques used to control wildland fires.
- Discuss the different techniques used to control fire involving high rise buildings.
- Recognize different medical problems through the use of a patient assessment.
- Identify the various types of medical emergencies a firefighter may encounter.
- Apply different treatment techniques used to treat patients.
- Interpret the local protocols and procedures identified with in the EMS service area.
- Identify the legal responsibilities of a emergency medical provider.
- Demonstrate CPR.
• Discuss the use of the incident command system as it applies to multi-casualty incidents.
• Define bloodborne pathogens and identify ways to protect oneself from them.
• Identify the correct personnel protective equipment use at various incidents.
• Demonstrate self contained breathing apparatus procedures.
• Demonstrate the use of other specialized equipment utilized in the fire service: saws, lighting, hand tools, etc.
• Express knowledge of the periodic table.
• Identify level of protective clothing for hazardous materials at entry.
• Apply current laws and regulations pertaining to hazardous materials.
• Identify category types relating to weapons of mass destruction.
• Employ skill and knowledge in technical rescue procedures.
• Conduct search and rescue techniques.
• Apply a Rapid Intervention Crew, RIC requirements, and develop a RIC plan.
• Describe the steps associated with pump operations and water flow.
• Identify five (5) apparatus types used in the fire service.
• Apply tiller operations and truck positioning techniques.
• Apply defensive driving skills and Emergency Vehicle Operations Control capabilities.
• Explain general staff sections in the Incident Command System.
• Describe the responsibilities of the various positions during a major fire or emergency incident.
• Identify the various ways that resources can be acquired and coordinated.
• Describe command and control as it applies to an incident including the command and general staff positions.
• Explain status reports using the Conditions/Actions/Needs model of field reporting.
• Compare and contrast the differences between the various stages of fire.
• Compare the relative effectiveness of different types of fire department connections and systems.
• Identify specific risks and exposures in your first-in response area.
• Conduct a risk assessment of occupancies and developments.
• Identify the five (5) types of building construction.
• Identify the high-hazard risks and develop a target hazard plan.

FIRE 1760 Low-Angle Rope Rescue Operational (LARRO)

Units: 0.5
Hours: 7 hours LEC; 17 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

This course provides the techniques and methods for using rope, webbing, hardware friction devices, and litters in low-angle rescue situations. Topics include rope and related equipment, anchor systems, safety lines, stretcher lashing and rigging, mechanical advantage systems, and single-line and two-line rescue systems. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• describe rope rescue equipment, rescue knots and hitches, anchor systems, system attachments and fall restraint, belay/safety line systems, and load-releasing devices.
• describe methods and techniques used to inspect and maintain rescue rope, webbing, and hardware.
• demonstrate methods and techniques to tie knots and package victims and rescuers.
- demonstrate methods and techniques for using rescue equipment to build lower/raise systems.
- explain rescue scene organization and management.
- demonstrate and apply basic low-angle rope rescue techniques.

**FIRE 1761 Rescue Systems 1: Basic Rescue Skills**

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<tr>
<td>Hours:</td>
<td>9 hours LEC; 31 hours LAB</td>
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<td>Prerequisite:</td>
<td>FIRE 1500 and 1760</td>
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<td>Catalog Date:</td>
<td>June 1, 2020</td>
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This course provides rescue professionals with the level of knowledge to perform urban search and rescues. Topics include team organization, rescue, and environmental considerations, use of ropes, knots rigging and pulley systems, descending, rappelling, and belaying tools and techniques, subsurface rescue techniques, use of cribbing, wedges, cutting/prying and hydraulic tools, use of fire service ladders in specialized rescue situations, and day and night simulated rescue exercises. Pass/No Pass only.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- apply techniques to operate safely when working around the structural collapse of light frame buildings.
- identify the potential hazards associated with rescue operations.
- build on skills acquired in low angle rope rescue operational (LARRO) training.
- demonstrate techniques for lifting and moving heavy objects.
- demonstrate techniques to break or breach building components to access a victim(s).
- demonstrate techniques to shore and stabilize building components.

**FIRE 1762 Aircraft Rescue and Firefighting (FC 5)**

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<tbody>
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<td>Hours:</td>
<td>19 hours LEC; 5 hours LAB</td>
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<td>Prerequisite:</td>
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This course provides the knowledge to operate safely during an aircraft emergency. This course identifies types of aircraft, aviation fuels, proper extinguishing agents, and airport communication systems used in aircraft emergencies. This course was formerly listed as CDF, FJPA, SFD, SMFD, USDA, and FIRE 1062 prior to April 2011. Pass/No Pass only.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- identify typical airport operations
- describe airport communications systems
- identify types of aircraft, engines, and systems
- identify the different types of aviation fuels
- identify the different types of extinguishing agents and their appropriate uses
- demonstrate proper utilization of protective clothing and breathing apparatus
- describe how to work around aircraft emergency egress systems, aircraft armament and have an understanding of the types of hazardous cargo carried aboard aircraft
- identify the importance of maintaining, knowing how to operate, and understanding the capabilities of aircraft fire fighting and rescue apparatus and equipment
- demonstrate a sound workable knowledge of all facets of aircraft fire fighting and rescue procedures
FIRE 1763 Rescue Boat Operations

This course provides the skills needed to operate a rescue boat and perform rescue in river and flood situations. Safety, course philosophy, and terminology are covered. "In water" experiences for students include how to read dynamics flow for safety travel, perform self-rescue and victim-rescue operations, along with executing pre/post-inspections of the personal watercraft (PWC). This course was formerly listed as FIRE 1059 prior to April 2011. Pass/No Pass only.

Upon completion of this course, the student will be able to:

- describe the codes and regulations that impact rescue boat operations
- identify the primary components of a rescue boat
- describe the differences between rescue operations in dynamic water as opposed to rescue operations in static water
- describe the inspection process on a rescue boat
- describe the maintenance process on a rescue boat
- identify the crew positions in a rescue boat
- identify the different types of rescue boats
- demonstrate how to launch a rescue boat
- demonstrate how to hover and ferry a rescue boat
- demonstrate how to shore a rescue boat
- demonstrate how to trailer a rescue boat

FIRE 1764 Personal Watercraft Operations

This course provides the knowledge and skills necessary to operate personal watercraft on water related incidents. Subjects learned are the reading of water movement and the tactics/strategies for operating personal watercraft. Not open to students who have completed CDF 1063, Rescue Water Craft. This course was formerly listed as CDF, SFD, and SMFD 1061 prior to April 2011. Pass/No Pass Only.

Upon completion of this course, the student will be able to:

- Describe the codes and regulations that impact personal watercraft operations.
- Describe some of the tactics and strategies for operating personal watercraft.
- Explain the philosophy of personal watercraft use.
- Name the components of the pre-operation inspection.
- Demonstrate the shoring procedure for personal watercraft.
- Demonstrate how to right an overturned personal watercraft.
- Discuss the differences between static and dynamic water as it relates to personal watercraft operations.
- Demonstrate how to hover and ferry a personal watercraft.
- Demonstrate how to perform a victim pick-up.
FIRE 1766 River and Flood Water Rescue

Units: 0.5  
Hours: 5 hours LEC; 11 hours LAB  
Prerequisite: None.  
Catalog Date: June 1, 2020  

This course is intended for the training of fire service personnel in water rescue techniques. Topics include swift water rescue, submerged vehicles, drowning, use of engine/truck company equipment for water rescue, use of rafts and boats, and underwater search and recovery. This course was formerly listed as FIRE 1079 prior to April 2011. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify river hydrology and where incidents occur
- list the safety equipment required in water rescue
- select the industry standard equipment for rescue
- list river search techniques for day and night operations
- identify medical concerns associated with rescue operations
- describe the techniques employed in shore-based rescue
- identify techniques for self-rescue

FIRE 1768 Vehicle Extrication

Units: 0.75  
Hours: 9 hours LEC; 15 hours LAB  
Prerequisite: FIRE 1500  
Catalog Date: June 1, 2020  

This course provides the knowledge and skills to prepare a fire fighter to extricate victim(s) from a common passenger vehicle in a safe and effective manner in accordance with established policies and procedures. Topics include sizing up a vehicle incident, scene safety zones, fire protection, stabilizing a common passenger vehicle, isolating and managing energy sources, access and egress points, disentangling victims, removing victims, and terminating a vehicle incident. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the fire agency's role at a vehicle accident.
- identify scene safety operation procedures.
- describe fire protection policies and procedures.
- identify initial vehicle immobilization techniques.
- describe system awareness and isolation methods.
- describe vehicle access and egress standard operating procedures.
- describe extrication equipment uses, limitations, and safety considerations.
- describe disentanglement points and techniques.
- identify patient handling techniques.
- employ protective measures for rescuers and bystanders during termination operations.

FIRE 1769 Trench Rescue Technician

Units: 0.75  
Hours: 10 hours LEC; 14 hours LAB  
Prerequisite: FIRE 1761
This course transitions students from classroom discussion to working safely and efficiently in a trench rescue environment. Topics include trench and excavation regulations, understanding soil, trench configurations, trench hazards, rescue team preparation, incident response, initial on-scene and pre-entry operations, shoring systems and components, installation of shoring systems, victim rescue and recovery, and incident termination. Pass/No Pass only.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- demonstrate their knowledge by accurately citing specific regulations that impact trench rescue operations.
- describe soil classifications and types, soil testing procedures and other factors affecting trench stability.
- recognize types of trenches and excavations, along with the types of collapses, collapse patterns, and factors leading to trench failures.
- describe the different types of hazards associated in and around the trench incident as well as how to mitigate those hazards.
- recall and discuss rescue team preparation including rescue tool maintenance and use, scene accountability, personal protective equipment and scene safety.
- outline trench rescue considerations when responding to a given trench rescue incident.
- identify and integrate the operational priorities at a given trench rescue incident.
- describe and demonstrate the pre-entry operation essential to safely perform in-and-around a given trench rescue incident.
- demonstrate various types of protective systems in trench rescue operations.
- identify shoring system components and demonstrate how they are deployed and used in a given trench rescue operation.
- demonstrate the installation of shoring systems in a given trench rescue operation.
- identify factors that affect victim search, soil removal, and demonstrate victim rescue and recovery at a given trench rescue operation.
- demonstrate all of the elements necessary to terminate a given trench rescue operation.

**FIRE 1800 Firefighter Training (S-130)**

**Units:** 2  
**Hours:** 35.5 hours LEC  
**Prerequisite:** None.  
**Catalog Date:** June 1, 2020

This course provides new firefighters with basic wildland firefighting skills. It also provides the knowledge needed to identify basic weather conditions, topography, fuels, and their effect on fire behavior. Pass/No Pass only.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- demonstrate how to construct a fireline to required standards  
- demonstrate how to strengthen, reinforce, and use holding actions on a fireline  
- describe how to extinguish the fire with or without use of water  
- demonstrate how to locate self and fire on a map  
- describe how to assess and report fire situation data (written or oral) by radio and/or messenger  
- describe the assigned tasks and the safe actions used to complete those tasks  
- describe factors in a wildland environment which could impact safety

**FIRE 1801 Fire Fighter Survival**

**Units:** 0.25  
**Hours:** 4 hours LEC; 12 hours LAB  
**Prerequisite:** None.  
**Catalog Date:** June 1, 2020
This course provides a greater understanding of how to avoid committing fatal errors on the fireground. Topics include fire fighter survival terminology, developing a survival attitude, increasing situational awareness, and problem-solving techniques. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify fire fighter survival terminology.
- demonstrate knowledge of the federal government involvement to reduce fire fighter injuries and fatalities and the guidelines and laws put in place from tragic fire loss events.
- apply fire fighter fatality case study recommendations to enhance fire fighter training to handle their own emergencies on the fireground.
- employ techniques for developing fire fighter survival attitude and identify personal equipment that fire fighters should carry in their possession for self-preparedness measures.
- employ situational awareness to prevent the fire fighter emergency and recognize critical structural fireground factors.
- employ “When to call a fire fighter emergency” and emergency communications when fire fighters become lost, trapped, or disoriented inside a burning structure.
- employ Self-Contained Breathing Apparatus (SCBA) knowledge and techniques for air awareness and SCBA air emergencies, and applying them during hands-on evolutions.

FIRE 1803 Rapid Intervention Crew Operations

Units: 0.5
Hours: 4 hours LEC; 20 hours LAB
Prerequisite: FIRE 1500 and 1801
Catalog Date: June 1, 2020

This course is designed for fire fighters to rescue a downed fire fighter in an Immediately Dangerous to Life and Health (IDLH) environment in the continuing effort to reduce the number of fire fighter injuries and deaths that occur regularly. Students train using evolutions and scenarios based off tragedies suffered by fellow fire fighters from departments across the country. Students receive information on how to locate and use these Line of Duty Death (LODD) studies as training and prevention tools throughout their careers. This course focuses on the three phases of a Rapid Intervention Crew (RIC) operation: 1) predeployment, 2) deployment, and 3) rescue. During the class, you will also gain a greater understanding of RIC operations terminology and the RIC mindset. Topics include identifying causes of firefighter injuries and fatalities at structure fires, describing and preventing common fire ground errors that have caused injuries or fatalities, demonstrating self-survival knowledge and techniques, and demonstrating and applying firefighter rescue and self-survival techniques. This course was formerly listed as FIRE 1050 prior to April 2011. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify rapid intervention crew terminology.
- employ fire fighter fatality case study recommendations to enhance rapid intervention crew training to handle fire fighter emergencies on the fireground.
- employ techniques and training in developing the “RIC mindset” and steps taken before a RIC deployment occurs (pre-deployment) to increase the chances of a successful outcome.
- employ techniques and training in conducting a RIC deployment, including search operations and thermal imaging.
- employ techniques and training in conducting rescue operations once a downed fire fighter is located, including assessment and extrication from the structure.

FIRE 1804 Confined Space Awareness

Units: 0.25
Hours: 6 hours LEC; 2 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

This course provides instruction in identifying a permit and non-permit required confined space, the hazards associated with confined spaces, state regulations and industry standards, incident management, communications, and equipment requirements. It does not qualify participants to make permit-required entries. Topics include regulations and standards, dangers of confined space incidents, permit-required confined spaces, hazards, resources needed, tactical worksheets, communications, nonentry rescue, and incident command. This course was formerly listed as CDF 1081 prior to April 2011. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:
- identify the regulations and industry standards relating to confined-space incidents.
- describe the history behind the dangers of confined spaces and describe the industry-recognized levels of training.
- define and recognize a confined space.
- define and recognize a permit-required confined space.
- recognize and identify all incident hazards.
- apply isolation procedures, considering hazard isolation and minimizing risks to rescuers and victims.
- recognize the need for confined space support resources.
- adapt resource application to the operational requirements and take into account rescue time constraints.
- recognize the need for technical rescue resources at the incident.
- apply search protocols, minimize risks to searchers, and account for all searchers.
- employ communications with victim(s) and document victim(s) conditions.
- perform nonentry rescue, operating the retrieval system to extract the victim, protecting the rescuer from fall hazards when working near unprotected edges, establishing and maintaining victim communication, managing the victim through the portal, and initiating patient care on extraction.
- describe the mandatory positions and components of a permit-required confined-space entry, per Cal-OSHA.
- describe how to properly terminate the incident, including performing rehab, debriefing personnel, inventorying and inspecting equipment, and completing documentation.

**FIRE 1805 Wildland Firefighting Skills**

Units: 1.75  
Hours: 26 hours LEC; 20 hours LAB  
Prerequisite: None.  
Catalog Date: June 1, 2020

This course provides the necessary information required in wildland firefighting to safely operate in emergency conditions. Topics include map/compass and GPS use, radio use, hand tool use, fire shelters, belt weather kits, and human factors. This course was formerly listed as USDA 1109 prior to April 2011. Credit/No Credit only.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- Demonstrate proficiency in map reading, compass reading, and GPS reading.
- Apply hand tools, radios, belt-weather kits, and fire shelters in firefighting.
- Relate to the human factors in emergency situations.

**FIRE 1806 Confined Space Rescue Technician**

Units: 1  
Hours: 11 hours LEC; 29 hours LAB  
Prerequisite: FIRE 1804  
Catalog Date: June 1, 2020

This course is an intensive hands-on training program that will prepare students for confined-space emergencies. Topics include identifying confined spaces and permit-required confined spaces, the hazards associated with permit-required confined spaces, target industries and hazards, state and federal regulations, components of a rescue operation, and the roles and responsibilities of the rescue team. Pass/No Pass only.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- identify regulations and standards for entry into confined spaces.
- identify confined spaces and permit-required confined spaces.
- identify the hazards associated with confined spaces.
• perform confined-space rescue on incidents involving terrorism or weapons of mass destruction.
• select and use atmospheric monitoring equipment and the equipment necessary to control hazards in confined spaces.
• identify, select, and use personal protective equipment.
• use various types of victim removal and packaging systems.
• construct rope rescue systems for confined-space rescue.
• plan, organize, operate, and command at confined-space rescue incidents.
• apply the principles of confined-space rescue through directed rescue scenarios.

FIRE 1807 Advanced Firefighter Training (S-131)

Units: 0.5
Hours: 8 hours LEC
Prerequisite: FIRE 1800
Catalog Date: June 1, 2020

This course provides advanced training in wildland firefighting skills with an emphasis on safety and tactics. This is suggested training for firefighters who wish to become qualified at first level supervisory positions. This course also meets the training requirements for Advanced Firefighter/Squad Boss and Incident Commander Type 5. This course was formerly listed as FIRE 1067 prior to April 2011. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• define the appropriate information during fire suppression activities
• incorporate and maintain open lines of communication with all appropriate fire suppression personnel
• make informed fire fighting decisions
• demonstrate the steps required to properly size up a fire situation and determine appropriate tactics
• document fireline activities

FIRE 1808 Fire Ground Skills: Update

Units: 0.25
Hours: 4 hours LEC; 4 hours LAB
Prerequisite: Completion of a State of California Fire Marshal approved Firefighter 1 academy
Catalog Date: June 1, 2020

This course updates critical knowledge, skills, and abilities employed in emergency conditions. Topics include self-contained breathing apparatus, ground ladders, ropes and knots, apparatus operation, wildland hoselays, and fire shelter deployment and safety. This course was formerly listed as CDF 1048 prior to April 2011. Credit/No Credit only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• Demonstrate correct fit, care, and use of self contained breathing apparatus.
• Describe correct care and use of ground ladders; demonstrate proper deployment and use of ladders.
• Utilize and care for fire service ropes, including tying fire service knots.
• Operate CDF fire engine pumps and water moving systems.
• Describe use and care of fire shelters
• Demonstrate deployment techniques.
• Deploy wildland hoselays.
FIRE 1809 Wildland Fire Chain Saws (S-212)

Units: 1
Hours: 11 hours LEC; 25 hours LAB
Prerequisite: None.
Enrollment Limitation: To enroll in this course (FIRE 1809) the student must be an employee of a federal fire fighting agency, or a member of a state or local fire agency.
Catalog Date: June 1, 2020

This course is designed for prospective chainsaw operators. Topics include introduction to the function, maintenance and use of internal combustion engine powered chain saws, tactical wildland fire applications, and training for firefighters with little or no previous experience in operating a chain saw, providing hands-on cutting experience in surroundings similar to fireline situations. This course was formerly listed as CDF, FJPA, SMFD, USDA, EGFD, and SFD 1080 prior to September 2011. Credit/No Credit only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- define and apply chain saw safety standards as required by OSHA and agency handbooks, manuals, directives, and owner’s manuals.
- identify and demonstrate basic chain saw operation, troubleshooting, maintenance, and safety features.
- demonstrate the tactical application of chain saws in fireline construction and mop up operations.

FIRE 1860 Physical Fitness for Fire Service Personnel

Units: 1.5 - 3
Hours: 13 hours LEC; 42 - 130 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

This course is a physical fitness course for employed firefighters. It includes fire service wellness initiatives, cardiovascular and muscular fitness, safety and proper usage of exercise equipment, joint flexibility, hydration, nutrition and weight control, cardiac risk factors, and sleep disorders. This course was formerly listed as FITNS 341 prior to April 2011. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- recognize major fire service wellness initiatives
- investigate physical disablers and illnesses common to firefighters
- describe the methods of self-evaluating personal fitness levels
- examine the basic elements of nutrition
- diagnose personal risk factors for coronary artery disease and formulate appropriate interventions
- differentiate between safe and unsafe practices during resistance training
- resolve the physiological responses of dehydration and supplementation through fluid replacement
- access sleeping disorders associated with fire suppression and formulate appropriate interventions
- recommend specific exercises associated with fire fighting

FIRE 1872 Basic Air Operations (S-270)

Units: 0.75
Hours: 16 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020

This course covers aircraft types and capabilities, aviation management and safety for flying in and working with agency aircraft, tactical and logistical uses of aircraft, and requirements for helicopter take-off and landing areas. Topics include the types of helicopters and air tankers and the criteria that make up each type. Also included are safe firefighting conduct operations when aircraft are being used. Note: The regulations, procedures and policies addressed in this course are primarily those governing federal agency and ICS operations. State, county, or other political subdivisions using this course will need to consult their agency having jurisdiction with respect to regulations, procedures and policies. This course was formerly listed as FIRE 1058 prior to April 2011. Pass/No Pass only.
Upon completion of this course, the student will be able to:

- identify the Incident Command System (ICS) types helicopters and air tankers and the criteria that make up each type.
- identify and discuss safety procedures to be followed while flying in or working around agency aircraft.
- define tactical and logistical aircraft use.
- describe safety procedures to be observed during water, foam, or retardant dropping.
- identify helicopter operations.

FIRE 1873 Strike Team/Task Force Leader, All-Hazards (STEN/TFLD) (AH-330)

Upon completion of this course, the student will be able to:

- define the differences between a Strike Team and a Task Force, so that Strike Team/Task Force (ST/TF) Leaders will maximize the use of resources, reducing the span-of-control and simplifies communications.
- identify the qualification requirements for ST/TF personnel, so that ST/TF are formed and designated with the all hazard incident command structure.
- assemble a ST/TF leader kit and personal “kit”, and describe the tools needed to assemble, brief and coordinate your resources while traveling to, during and returning from an incident, so that the safety, coordination and needs of all personnel and equipment on the ST/TF are provided.
- identify personnel actions, significant events and equipment issues, so that understanding of agreements are maintained and the duties are managed with maximum coordination, notification and documentation.
- utilize the resources of a ST/TF, so that the assignment will complete all operational goals with the elements of management and supervision while keeping personnel on track.
- describe the proper steps to assemble and brief the ST/TF on the assignment, operational procedures, expectations, information on the equipment and personnel, so that guidelines for assignment, safe travel routes and checking in are performed on all hazard incident.
- utilize assigned resources, so that Strike Team/Task Force resources are managed within incident guidelines matching assignments while assigned to an incident.
- describe the demobilization process, so that maximum safety and orderly demobilization is completed with the resources of the ST/TF for efficient return to home assignment.
- describe a snapshot in the “day in the life of a ST/TF leader,” so that elements and procedures are administered and managed on the all hazard incident.
- describe risk and the risk control elements, so that risk is managed with calculated and pre-determined tools with proper risk refusal.
- determine escape routes and safety zones when engaging a fire, so that human factors that contribute to fireline decision errors are managed with fireline conditions and utilization of required safety zones for maximum personnel safety considerations.
- determine tactical maneuvers and tactical actions, so that an appropriate tactical engagement process is determine utilizing FIRESCOPE WUI placarding system.
- determine and establish incident objectives, establish briefing elements, and provide feedback action item feedback for passover assignments on case studies, so that a relief transition assignment can carry the objectives of an incident action plan during the next operational period responding to an appropriate question and answer period.
- identify and describe typical situations that may be encountered as a ST/TF leader, so that a predetermined systematic problem analysis is completed and can be documented or reported for standard outcomes.
- determine unintended consequences, and identify potential freelancing decisions, so that the appropriate actions are determined to be directly in support of the all hazard incident action plan avoiding freelancing decisions.
This course presents the rules and regulations required to operate as a strike team/task force leader on emergency incidents. Additionally, this course explains the many rules and regulations governing strike team leaders’ actions. This course was formerly listed as CDF, FJPA, SMFD, and USDA 1075 prior to April 2011. Credit/No Credit only.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- Identify the hazards and risks on various incidents and describe how to mitigate them.
- List and describe the rules and regulations as they pertain to a strike team leader’s management of an incident.
- Implement task force/strike team.
- List and describe the five components of an Incident Action Plan.
- Develop and implement an incident action plan.

**FIRE 1875 Fire Operations in the Wildland/Urban Interface (S-215)**

This course is designed for the firefighter operating as incident commander in areas where urban growth and expansion interfaces with the wildland. Topics include firefighter safety in the interface, managing human factors in the interface, pre-incident planning, size-up and initial strategy, structure triage, structure protection overview, tactics in the interface, tactical operations and resource use in the interface, action assessment, plans updates, and after action review. This course was formerly listed as FIRE 1073 prior to April 2011. Pass/No Pass only.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- describe how to operate safely and effectively in a wildland/urban interface incident by using situational awareness.
- describe how to perform structure triage.
- describe how to operate safely and effectively in a wildland/urban interface incident by using pre-planning tools.
- apply a basic understanding of fire behavior.
- apply strategy and tactics unique to the wildland/urban environment.

**FIRE 1880 Field Observer/Display Processor (S-244/S-245)**

This course provides the techniques, theory, and practical experience to be a field observer/display processor in the Incident Command System Planning Section. Topics include identifying and interpreting maps, making map calculations, using observation aids, mapping from aircraft, making field observations, and processing and displaying data. This course was formerly listed as CDF, FJPA, SMFD, and USDA 1118 prior to April 2011. Credit/No Credit only.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:
Define the various types of maps used in wildland fire situations.

- Record weather and fire behavior measurements on a topographic map.
- Demonstrate the use of equipment as a Field Observer/Display Processor.
- Define the role of the Field Observer/Display Processor in the Incident Command System.

FIRE 1881 Helicopter Training (S217)

**Units:** 1.5  
**Hours:** 26 hours LEC; 14 hours LAB  
**Prerequisite:** FT 55 (SMFD 1055) and FT 52 (SMFD 1052)  
**Catalog Date:** June 1, 2020

This course provides an understanding of basic helicopter operations and their use on wildland firefighting incidents. This course includes aircraft terminology, helicopter support systems and helicopter tactics used in their operation. This course was formerly listed as FIRE 1070 prior to April 2011. Credit/No Credit only.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- Perform safety briefing to passengers.
- Listen safety precautions to be observed when working around helicopters.
- Describe the procedures to be taken during a landing area emergency.
- List and complete incident reporting documents.
- List the six procedures to be accomplished during an in-flight emergency.
- List the personal protective equipment requirements.
- Discuss the general aspects of helicopter design, flight controls, terminology and principals of flight.
- Describe "safe autorotation" theory.
- Demonstrate how to correctly complete the helicopter load calculation form.
- Identify various helicopter models and types.
- Define helispots, helibase, and safety circles.

FIRE 1882 Ignition Operations (S-234)

**Units:** 1  
**Hours:** 16 hours LEC; 8 hours LAB  
**Prerequisite:** None.  
**Catalog Date:** June 1, 2020

This course presents the functions of an Ignition Specialist or Firing-Boss on emergency incidents. It includes backfire and burnout safety training and the proper application of fire suppression firing methods and practices. This course was formerly listed as FIRE 1094 prior to April 2011. Pass/No Pass only.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- identify the roles and responsibilities of Firing-Boss and Ignition Specialist
- name resources needed to successfully conduct an ignition operation
- discuss an ignition plan utilizing fire behavior data

FIRE 1883 Chainsaw Bench

**Units:** 0.5

1.5 Units: 16 hours LEC; 8 hours LAB

**Catalog Date:** June 1, 2020
This course covers basic chainsaw field mechanics and troubleshooting. Topics include chainsaw components, attachments, adjustments, problems, and maintenance.
This course was CDF, FJPA, and USDA 1083 prior to September 2011. Pass/No Pass only.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- Identify 20 parts of the chainsaw and describe the function of each.
- Describe cutting attachment inspections, adjustments, and maintenance.
- List the three carburetor adjustments and the function of each.
- Describe how carburetor adjustments are made.
- Explain air and fuel filter maintenance.
- List three problems that cause ignition failure.
- List the daily, weekly, and monthly maintenance items.
- Describe the procedure to adjust starter cord spring tension.

FIRE 1884 Crew Boss (Single Resource) (Blended) (S-230)

Units: 0.25
Hours: 8 hours LEC
Prerequisite: FFS 1541 with a grade of "C" or better
Enrollment Limitation: To enroll in this course (FIRE 1884) the student must be an employee of a federal fire fighting agency, or a member of a state or local fire agency.
Catalog Date: June 1, 2020

This course covers the performance of duties associated with the single resource boss position from initial dispatch through demobilization to the home unit. Topics include operational leadership, preparation and mobilization, assignment preparation, risk management, entrapment avoidance, safety and tactics, offline duties, demobilization, and post incident responsibilities. Pass/No Pass only.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- describe Crew Boss responsibilities prior to and during mobilization, on the incident, and during demobilization.
- identify the hazards and risks on various incidents and describe how to mitigate them.
- describe tactics which are appropriate to various wildland fire situations and procedures to implement them through the chain of command.

FIRE 1885 Firing Operations (S-219)

Units: 1
Hours: 16 hours LEC; 8 hours LAB
Prerequisite: None
Enrollment Limitation: To enroll in this course (FIRE 1885) the student must be an employee of a federal fire fighting agency, or a member of a state or local fire agency.
Catalog Date: June 1, 2020

This course utilities a blended approach to learning, incorporating a mix of online and instructor-led training (ILT). Students complete the online training portion of the course prior to taking the ILT. Topics include the roles and responsibilities of a Firing Boss (FIRB), outlines duties of other personnel who may engage firing operations, and illustrates common firing devices and techniques. Pass/No Pass only.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- identify the roles and responsibilities of the FIRB for planning, execution, safety, coordination, and evaluation of an ignition operation on a wildland or prescribed fire.
describe the characteristics, applications, safety, and availability of the various firing devices a FIRB has at their disposal.

given a wildland or prescribed scenario, prepare a firing plan and briefing that contains desired fire behavior, firing techniques, required resources, coordination, safety and risk management factors, and communication, to meet specific objectives.

FIRE 1886 Engine Boss (Single Resource) (Blended) (S-231)

Units: 0.25
Hours: 3.5 hours LEC; 4.5 hours LAB
Prerequisite: FIRE 1884
Enrollment Limitation: To enroll in this course (FIRE 1886) the student must be an employee of a federal fire fighting agency, or a member of a state or local fire agency.
Catalog Date: June 1, 2020

This course is designed to produce student proficiency in the performance of the duties associated with Engine Boss, single resource (ENGB). Topics include engine and crew capabilities and limitations, information sources, fire size-up considerations, tactics, and wildland/urban interface. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- perform the tasks of an engine boss in making the tactical decisions required to safely manage an engine on an incident.

Public Safety Training Center (PSTC)

PSTC 1200 Basic Law Enforcement Academy

Units: 24 - 32
Hours: 304 - 389 hours LEC; 410 - 584 hours LAB
Prerequisite: None.
Enrollment Limitation: Students must 1) Be free of felony convictions 2) Possess a valid California Driver's License 3) Undergo a fingerprint and criminal history check 4) Be a minimum of 18 years of age 5) Be a United States high school graduate, pass the GED, pass the California High School Proficiency Examination, or have attained a two-year or four-year degree from an accredited college or university 6) Complete a medical suitability examination.
Catalog Date: June 1, 2020

The Basic Law Enforcement Academy meets or exceeds the minimum training requirements of the California Commission on Peace Officer Standards and Training (POST) for Level I Reserve Officer training and for Full-time Regular Peace Officer employment. Topics include: leadership, professionalism & ethics, policing in the community, introduction to criminal law, laws of arrest, search and seizure, presentation of evidence, juvenile law & procedure, investigative report writing, vehicle operations, use of force, vehicle operations, domestic violence, unusual occurrences, traffic collision investigations, crime scenes, evidence, defensive tactics, firearms/chemical agents, hazardous materials awareness, and cultural diversity/discrimination. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain the components of leadership, the responsibility of law enforcement officers to lead, and the impact of law enforcement leadership on the profession.
- distinguish between problem oriented policing and community policing.
- discuss landmark events in the evolution of civil and human rights.
- identify and discuss the freedoms and rights afforded to individuals under the US Constitution, the Bill of Rights, and later amendments.
- describe a peace officer’s authority, responsibility, and potential for liability in the areas of search and seizure law, the protections provided by constitutional law, statutory law, and case law against unreasonable searches and seizures.
- describe the rules of evidence as they pertain to relevancy, types of evidence, and evidence authentication.
- discuss the consequences of using unreasonable force and the legal/ethical responsibilities to intervene if force used by another peace officer is inappropriate or unlawful.
- describe the consequences for the use of unreasonable force on the officer, community perception, and public trust.
- demonstrate safe and effective handcuffing procedures, mechanics of control holds and take down techniques, handgun retention techniques, and delivering strikes with an impact weapon.
- distinguish and apply reasonable force options in a given circumstance.
- demonstrate the safe and effective operation of specified firearms.
- demonstrate the ability to safely drive and control a law enforcement vehicle while operating under emergency and pursuit conditions.
- demonstrate appropriate actions officers should take to maintain their own safety and the safety of others while on patrol.
- identify terminology, capabilities, exposure symptoms, and decontamination procedures in order to safely and effectively handle/deploy chemical agents and gas masks.
- demonstrate proficiency in Victimology and Crisis Intervention.
- demonstrate proficiency in performing the tasks of an officer conducting preliminary investigations.
- demonstrate proficiency in contacting people with simulated disabilities.
- demonstrate proficiency in responding to and investigating simulated in-progress crimes and critical incidents.
- prepare an arrest report which minimally incorporates the elements of a crime, probable cause to stop, probable cause to search/seize evidence, recovery of evidence, probable cause to arrest, and admonishment of the suspect.
- demonstrate proficiency in providing basic life support techniques.
- demonstrate appropriate peace officer responses while testifying as a witness.

PSTC 1251 Skills and Knowledge Modules

Units: 0.25 - 3
Hours: 4.5 - 44 hours LEC
Prerequisite: POST certified basic law enforcement academy or equivalent as determined by the Dean of Academy Instruction. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant POST certified basic law enforcement academy or equivalent as determined by the Dean of Academy Instruction. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.
Enrollment Limitation: Students must 1) Be free of felony convictions; 2) possess a valid California Driver's License; 3) undergo a fingerprint and criminal history check; 4) be a minimum of 18 years of age; 5) be a United States high school graduate; pass the GED, pass the California High School Proficiency Examination, or have attained a two-year or four-year degree from an accredited college or university; and 6) complete a medical suitability examination.
Catalog Date: June 1, 2020

This course is designed to facilitate the acquisition of advanced skills and knowledge necessary for policing and peacekeeping in contemporary society. Course topics are based upon California Commission on Peace Officer Standards and Training (POST) updates to mandated minimum training for peace officers, legislative mandates, changes in local, state and federal laws, and evolving bodies of knowledge in the law enforcement field. Course hours are variable in order to meet specific local and regional needs which may exceed the POST minimum. Topics include: arrest methods update, chemical agents update, community relations, courtroom testimony, emotional survival, entry techniques update, ethics, field tactics, impact weapons update, interpersonal/tactical communication update, investigative report writing update, juvenile law update, legal update, less than lethal force update, search and seizure update, search warrant writing and service and tactical firearms update. Pass/No Pass.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- discuss the inter-relationship between statutory and case law, law enforcement practice and policies, and social and cultural change.
- develop new and/or advanced skills and knowledge beyond basic academy competencies.
- demonstrate skills and knowledge as POST mandated in the course curriculum.
- pass POST required written and exercise exams for perishable skills.

PSTC 1270 Juvenile Corrections Officer Core

Units: 7.5
Hours: 126 hours LEC; 34 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

This course is designed for the new juvenile corrections officer or the individual interested in a career in juvenile corrections. Topics include California criminal justice system, professionalism and ethics, defensive tactics, report writing, mental health issues, gangs and physical conditioning. This course is certified by California Standards and Training for Corrections (STC). This course is formerly known as PSTC 1519. Pass/No Pass only.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- assess gang signs to determine gang affiliation.
- draft court reports making recommendations to court personnel.
- analyze court documents to determine appropriate sentencing.
- apply arrest and control techniques to restrain and/or take into custody law violators.
- identify appropriate criminal codes applying to violations of the law.
- define mental health issues that afflict individuals in a custodial environment.

PSTC 1271 Adult Correctional Officer Core Course

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This course is designed for entry level positions in the adult corrections field. Topics include criminal procedure, interviewing and counseling techniques, defensive tactics, public relations, oral and written communications, classifications and housing of inmates, court testimony and indicators of psychological problems. This course meets or exceeds Standards and Training for Corrections' minimum training requirements for entry level adult corrections officers. This course is formerly known as SCSD 1139 and PSTC 1879. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- compare and contrast the past and present criminal justice system.
- assess a set of facts and apply the appropriate statute, code or regulation.
- classify individuals as gang members based on specific identifying criteria.
- categorize items as non-contraband or contraband in a correctional setting.
- apply restraint holds.

PSTC 1272 CDC Advanced Investigations

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This course is designed to enhance the basic criminal investigation skills of the California Department of Corrections Investigator. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify and apply the accepted and standard methods of collecting evidence
- recognize the effects of drugs and alcohol
- prepare a valid search warrant
- assemble and analyze intelligence information from various sources
- differentiate gang affiliations

PSTC 1273 Probation Officer Core Course

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<td>156 hours LEC; 40 hours LAB</td>
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<tr>
<td>Hours:</td>
<td>156 hours LEC; 40 hours LAB</td>
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<tr>
<td>Prerequisite:</td>
<td>PSTC 1294</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
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</table>
This course is designed for entry-level positions in the probation officer field. Topics include criminal justice system, legal foundations, terminology, codes, statutes, case law, indicators of psychological problems, gangs, interviews, court reports, and report writing. This course meets or exceeds minimum standards set by Standards and Training for Corrections (STC). This course is formerly known as PSTC 1878. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate proper search techniques in a field setting.
- differentiate the need to interview or interrogate a subject based upon a recognized fact pattern.
- compare and contrast legal liabilities, roles, and responsibilities relating to the position of probation officer.
- recommend a course of action to court officials relating to probation.
- demonstrate the physical skills and abilities necessary to physically defend self and others.

PSTC 1275 Adult Corrections: Supplemental Core Course

Units: 3.5
Hours: 59.5 hours LEC; 10.5 hours LAB
Prerequisite: PSTC 1271
Catalog Date: June 1, 2020

This course expands upon the student’s existing knowledge of legal and procedural concepts introduced in PSTC 1271. Instruction is focused on correctional codes and statutes, inmate classification, contraband, and booking and inmate supervision. This course is formerly known as PSTC 1294. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply regulations related to Title 15 to a correctional facility.
- assess inmate needs and provide appropriate supervision and care.
- differentiate the different types and classes of fires.
- compare and contrast inmate gangs and their cultures.
- examine safety policies and strategies for supervising inmates.
- evaluate situations and select appropriate security measures to safeguard inmates and officers.

PSTC 1300 Bureau of Investigative and Security Services (BSIS) Skills Training Course for Security Guards

Units: 2
Hours: 40 hours LEC
Prerequisite: None.
Enrollment Limitation: Applicants must 1) be at least 18 years old and 2) undergo a criminal history background check through the California Department of Justice (DOJ) and the Federal Bureau of Investigation (FBI).
Catalog Date: June 1, 2020

This course provides the student with the skills training required for security guard licensing by the Department of Consumer Affairs, Bureau of Security and Investigative Services (BSIS). Topics include powers to arrest, weapons of mass destruction, public relations, observation and documentation, communication and its significance, liability/legal aspects, officer safety, handling of difficult people, trespass, and courtroom demeanor. Students will receive a certificate of completion at the end of the course and be eligible to apply for BSIS security guard registration.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain the role and responsibilities of the security guard/proprietary private security officer.
- differentiate the legal authority between a security guard/proprietary private security officer and a peace officer.
- recall the definition of arrest.
- describe the circumstances under which a security guard/proprietary private security officer may perform a frisk for weapons.
- recall the definition of terrorism and the techniques of physical security.
- discuss the reasons security guards should develop and maintain positive relationships with community members and customers.
- write a basic observation report.
- identify internal and external resources that may be necessary to contact under normal and/or emergency conditions.
- compare and contrast aspects of civil, legal, and administrative liability.
- discuss aspects of personal safety.
- recall the definition of trespass.
- describe challenges associated with conflict management.
- demonstrate professional demeanor before, during, and after courtroom testimony.

**PSTC 1301 Skills Training for Security Guards - BSIS Elective A**

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<tr>
<td>Hours:</td>
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<td>Catalog Date:</td>
<td>June 1, 2020</td>
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This course improves the skills and knowledge of the BSIS Security Guard and is accepted as part of the 16 hours of elective training mandated by the Business and Professions Code section 7683.6 and 7683.6 (b). It may be taken within thirty (30) days from the day the security guard's registration card is issued or the day the security guard starts employment, or within the first six (6) months from the day the security guard's registration card is issued or the day the security guard starts employment. Topics include security officer safety and handling difficulty people. Pass/No Pass Only.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:
- identify basic threats to officer safety.
- discuss proper and safe measures to take when exposed to a blood borne pathogen.
- identify hazardous materials, precautionary measures to avoid injury, and proper safety and notification procedures.

**PSTC 1302 Skills Training for Security Guards - BSIS Elective B**

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<tr>
<th>Units:</th>
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<tr>
<td>Hours:</td>
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<td>Catalog Date:</td>
<td>June 1, 2020</td>
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This course improves the skills and knowledge of the BSIS Security Guard and is accepted as part of the 16 hours of elective training mandated by the Business and Professions Code section 7683.6 and 7683.6 (b). It may be taken within thirty (30) days from the day the security guard's registration card is issued or the day the security guard starts employment, or within the first six (6) months from the day the security guard's registration card is issued or the day the security guard starts employment. Topics include trespass and arrest; search and seizure update. Pass/No Pass Only.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:
- discuss how trespass law applies to open land, private property, private buildings, public property, and other public places.
- recall the Merchant Law, its use and limitations.

**PSTC 1305 Introduction to Loss Prevention**
This course introduces the student to the foundational concepts of loss prevention in the retail industry. It covers the roles and responsibilities of loss prevention officers, the crimes that commonly occur in the retail environment, the legal authority for the loss prevention officer to effect an arrest, loss prevention techniques, case building, and courtroom testimony. Students may be required to travel to multiple locations for course instruction and demonstrations. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- discuss the impact of theft on retail businesses.
- discuss the roles and responsibilities of the loss prevention officer/agent.
- describe the types of crimes that commonly occur in the retail environment.
- recall the legal authority for loss prevention officers/agents to effect an arrest.
- identify theft evidence.
- write a retail theft incident report.
- compare and contrast floor walking techniques.
- prepare for courtroom testimony in a retail theft case.

PSTC 1400 Limited Peace Officer Criminal Investigations I

Units: 4
Hours: 66 hours LEC; 18 hours LAB
Prerequisite: PSTC 1501, 1555, and 1800
Catalog Date: June 1, 2020

This course is designed to provide advanced investigative skills and knowledge to the limited peace officer, as defined in PC 830.11 PC. Topics include evidence, interviewing techniques, search and seizure, search warrants, working with victims and witnesses, managing informants, information sources, case preparation, courtroom testimony, media relations, and surveillance techniques. This course was formerly PSTC 1803. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- discuss the role of a criminal investigator at a crime scene.
- recognize, identify, and properly handle evidence.
- recall search and seizure laws and the legal requirements and parameters of a search warrant.
- obtain investigative information using advanced interview and interrogation techniques.
- develop and organize an investigative surveillance plan.
- discuss the requirements, issues, and challenges of maintaining and managing informants over time.

PSTC 1401 Limited Peace Officer Criminal Investigations II

Units: 3
Hours: 48 hours LEC; 20 - 32 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

This course is designed to advance the skill set of the limited peace officer, as defined in PD 830.11 PC. Topics include personal safety, medical marijuana investigations, economic crimes, tobacco dating, crime scene management, evidence identification, collection, processing, and preservation, case management, investigative report writing, and courtroom testimony. Pass/No Pass only.
Student Learning Outcomes
Upon completion of this course, the student will be able to:

- demonstrate and define situational awareness.
- discuss investigative and evidentiary aspects of medical marijuana, economic crimes, and tobacco dating.
- recall the common obstacles to effective crime scene management.
- discuss the technological advances in evidence identification, collection, processing, and preservation.
- assess case documents and files for investigative detail and compliance for regulatory review and audit.
- prepare an in-depth and detailed investigative report.
- anticipate courtroom challenges and objections to victim, witness, and suspect credibility and testimony and plan/implement investigative methods to minimize these issues.

PSTC 1402 Limited Police Officer Criminal Investigations III

Units: 3
Hours: 48 hours LEC; 20 - 32 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

This course is designed to provide advanced investigative skills and knowledge to the limited peace officer, as defined in PC 830.11 PC. Topics include community oriented policing and problem-solving, media relations, and surveillance techniques. Pass/No Pass only.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- define community oriented policing.
- apply a problem-solving model to a crime pattern or quality of life issue.
- evaluate social media content for investigative leads.
- recall the laws and limitations associated with seizure of electronic devices.
- discuss the legal issues associated with accessing social media accounts for investigative and evidentiary purposes.

PSTC 1403 Basic Skills for the District Attorney Non-Sworn Investigator

Units: 1.5
Hours: 32 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020

This course is designed to provide the student with foundational skills and knowledge for employment as a non-sworn investigator in a California District Attorney’s office. Topics include the role of the district attorney and district attorney investigator, evidence, interview skills, report writing, technology resources, criminal justice information systems, subpoenas and due diligence, personal safety, and courtroom testimony. Pass/No Pass only.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- describe the roles of the district attorney and the district attorney investigator.
- describe the prosecutor’s obligations in discovery.
- list the components of evidence collection and preservation.
- demonstrate basic interview skills.
- demonstrate basic note-taking skills.
- cite key provisions of the Electronic Communications Privacy Act.
identifying common law enforcement sharing applications and their capabilities.

- define due diligence and associated legal requirements.

- explain the necessity of situational awareness and the use of tactical communication in the field.

- compare and contrast direct and cross examination.

- demonstrate appropriate demeanor when objections are raised during courtroom testimony.

PSTC 1500 Basic Sheriff Academy

**Units:** 25  
**Hours:** 198 hours LEC; 758 hours LAB  
**Prerequisite:** None.  
**Enrollment Limitation:** Students must 1) be free of felony convictions; 2) possess a valid California Driver's License; 3) undergo a fingerprint and criminal history check; 4) be a minimum of 18 years of age; 5) be a United States high school graduate; pass the GED, pass the California High School Proficiency Examination, or have attained a two-year or four-year degree from an accredited college or university; and 6) complete a medical suitability examination.  
**Catalog Date:** June 1, 2020

This course is a consolidated program of regular basic law enforcement training. Topics include criminal law, juvenile law, laws of evidence, administration of justice, community relations, investigation, traffic control and procedures, patrol procedures, defensive tactics, arrest control, weaponless defense, baton techniques, first aid/cardio pulmonary resuscitation (CPR), and vehicle operations. This course is certified by the California Commission on Peace Officer Standards and Training (POST). Pass/No Pass only.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- define necessary procedures including patrol, arrest, self defense, and vehicle operations.

- explain and analyze basic investigations, traffic control, and community relations.

- apply defensive techniques including handcuffing, baton, chemical agents, and weaponless defense.

- analyze critical aspects of juvenile law, criminal law, laws of evidence, and other related codes.

- demonstrate the principles of handgun shooting, including safe and effective techniques to manipulate the semiautomatic pistol in both the left and right hand.

- write a clear, concise, and organized report which documents the facts and activities of a criminal investigation.

- evaluate the consequences of using unreasonable force and the legal and ethical responsibilities to intervene if the force being used by another peace officer is unlawful or inappropriate.

PSTC 1501 PC 832 Arrest, Search & Seizure

**Units:** 2  
**Hours:** 36 hours LEC; 4 hours LAB  
**Prerequisite:** None.  
**Catalog Date:** June 1, 2020

This course satisfies the arrest, search, and seizure requirement for peace officers as defined in section 832 of the California Penal Code. Topics include professional orientation, justice system, knowing your community, laws of evidence and arrest, investigation, use of force and, arrest and control. This course is Commission on Peace Officer Standards and Training (POST) certified. Pass/No Pass only.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- discuss ethical conduct required of today's peace officers.

- compare and contrasts elements of a crime and select the appropriate crime code(s).

- name the components of the criminal justice system.

PSTC 1502 Basic Law Enforcement Academy- Module III
The course satisfies Level III training requirements of the Commission on Peace Officer Standards and Training (POST) Level III module. Topics include: leadership and ethics, community policing and problem solving, introduction to criminal law, investigative report writing, use of force, traffic enforcement, crimes scenes and forensics, arrest methods and defensive tactics, and firearms. POST certification #2970-00133. Pass/No Pass only.

Upon completion of this course, the student will be able to:

- explain the components of leadership, the responsibility of law enforcement officers to lead, and the impact of law enforcement leadership on the profession and the community.
- identify and discuss the freedoms and rights afforded to individuals under the U.S. Constitution, the Bill of Rights, and later amendments.
- describe the rules of evidence as they pertain to relevancy, types of evidence, evidence authentication and chain of custody.
- perform the steps of a preliminary criminal investigation.
- write a clear, concise, and organized report which documents the facts and activities of a criminal investigation.
- discuss the consequences of using unreasonable force, and the officer's legal and ethical responsibilities to intervene if the force being used by another peace officer is inappropriate or unlawful.
- demonstrate techniques to effectively direct and control traffic using hand signals, flashlights, and warning devices.
- demonstrate safe and effective handcuffing procedures, mechanics of control holds and takedown techniques, handgun retention techniques, and use of an impact weapon.
- demonstrate basic life support techniques.
- demonstrate the principles of handgun shooting, to include techniques to safely and effectively manipulate the semiautomatic pistol in both the left and right hand.

PSTC 1503 Basic Law Enforcement Academy- Module II

This course satisfies training requirements of the Commission on Peace Officer Standards and Training (POST) Module II. Topics include property crimes, crimes against persons, crimes against the justice system, laws of arrest, search and seizure, presentation of evidence, patrol techniques, vehicle pullovers, crimes in progress, lifetime fitness, and career preparation. POST certification #2970-00140. Pass/No Pass only.

Upon completion of this course, the student will be able to:

- distinguish between problem oriented policing (POP) and community policing (CP).
- identify the actions which should be taken during a preliminary investigation.
- describe a peace officer's authority, responsibility, and potential for liability in the areas of search and seizure law, as well as the protections provided by constitutional law, statutory law, and case law against unreasonable searches and seizures.
- demonstrate appropriate peace officer responses while testifying as a witness.
- describe the consequences for the use of unreasonable force on the officer, community perception, and public trust.
• demonstrate appropriate actions officers should take to maintain their own safety and the safety of others while on patrol.
• demonstrate handgun takeaway and retention techniques.
• demonstrate the safe and effective operation of specified firearms.
• identify the terminology, capabilities, exposure symptoms, and decontamination procedures in order to safely and effectively handle and deploy chemical agents and gas masks.
• discuss landmark events in the evolution of civil and human rights.

PSTC 1504 Basic Law Enforcement Academy- Module I

Units: 13.5 - 17
Hours: 149 - 190 hours LEC; 286 - 360 hours LAB
Prerequisite: PSTC 1503
Enrollment Limitation: Students must 1) be free of felony convictions 2) possess a valid California Driver's License 3) undergo a fingerprint and criminal history check 4) be a minimum of 18 years of age 5) be a United States high school graduate, pass the GED, pass the California High School Proficiency Examination, or have attained a two-year or four-year degree from an accredited college or university, and 6) complete a medical suitability examination.
Catalog Date: June 1, 2020

This course, the third in a three-part series of courses, satisfies training requirements of the Commission on Peace Officer Standards and Training (POST) for the Level I reserve or full-time regular peace officer. Topics include victimology, crimes against children, juvenile law and procedure, vehicle operations, crimes in progress, domestic violence, missing persons, traffic collision investigation, lifetime fitness, firearms and chemical agents, persons with disabilities, gang awareness, emergency management, interview and interrogations, courtroom testimony and emotional survival. Upon successful completion the students will possess a Certificate of Completion of the POST Basic Law Enforcement Academy. POST certification #2970-00150. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• discuss the officer's responsibility to provide ethical leadership in the law enforcement agency and in the community.
• demonstrate proficiency in the safe and proper application of control holds, handgun retention, and handgun take-away techniques.
• demonstrate proficiency in the safe and proper application of the carotid control hold and for aftercare.
• demonstrate proficiency in the delivery of safe and proper impact weapon strikes.
• demonstrate proficiency in the safe handling and use of specified firearms under a variety of conditions.
• demonstrate proficiency in victimology and crisis intervention.
• understand the officer's legal responsibilities, duties, and obligations when interacting with juveniles.
• demonstrate proficiency in first aid and CPR.
• demonstrate the ability to safely drive and control a law enforcement vehicle under emergency and pursuit conditions.
• demonstrate proficiency in conducting pedestrian stops.
• demonstrate proficiency in conducting vehicle pullovers under a variety of conditions.
• demonstrate proficiency in responding to and investigating suspicious persons and incidents.
• perform the tasks of an officer conducting preliminary investigations of crimes against property and persons.
• write an investigative crime report which is free of spelling and grammar errors.
• write a traffic collision report and draw a related traffic collision diagram.
• demonstrate proficiency in the administration of a DUI field sobriety test.
• demonstrate proficiency in contacting persons with disabilities.
• identify items commonly associated with illegal marijuana grows and clandestine labs.
• pass the POST-developed physical fitness work sample test battery (WSTB).
• pass the POST-approved arrest methods exercise tests.
• pass the POST-approved firearms tests.
• pass the POST-approved scenario tests.
PSTC 1505 California Highway Patrol Basic Law Enforcement Academy

This POST certified course is a consolidated program of training in criminal law, juvenile law, laws of evidence, administration of justice, community relations, investigation, traffic control and procedures, patrol procedures, defensive tactics, arrest control including handcuffing and weaponless defense, baton techniques, firearms, first aid and CPR, and vehicle operations. Pass/No Pass only.

Upon completion of this course, the student will be able to:

- discuss the objectives and responsibilities of each of the three components of the criminal justice system.
- discuss the roles and responsibilities of the peace officer in modern society.
- discuss the professional and ethical standards by which peace officer are held in order to maintain the public trust.
- describe the psychological trauma experienced by crime victims.
- identify techniques used to defuse crisis situations which result from people being victims of crime.
- differentiate between the letter of the law and spirit of the law, and between criminal and civil law.
- recall the statutory definitions, crime elements to arrest for, and classifications of general criminal statutes and specified property crimes, person crimes, and narcotic and alcohol-related crimes.
- describe the physical and behavioral indicators of child neglect and abuse.
- describe the common emotional and physical reactions victims experience and the pressures associated with reporting a sex crime.
- discuss the roles and responsibilities of peace officers regarding the protection of the rights of juveniles under California law.
- describe how specified drugs can affect normal behavior.
- recognize the existence of an illegal manufacturing/cultivating site for controlled substances based on observations and discovery, and how officers need to take appropriate safety precautions to protect themselves and the public from potential associated problems.
- identify and discuss amendments to the U.S. Constitution and similar sections of the California Constitution that are related to peace officer authority, liability, and responsibility they have in making arrests.
- differentiate the statutory rules regarding appropriate actions during a consensual encounter, detention, and arrest.
- understand that in order to develop admissible evidence while ensuring the constitutional rights of all individuals, peace officers must correctly follow standardized practices for conducting crime scene interviews and interrogations.
- understand the peace officer’s authority, responsibility, and potential for liability in the areas of search and seizure law, as well as the protections provided by constitutional law, statutory law, and case law against unreasonable searches and seizures.
- identify the rules and requirements for peace officers to obtain and execute a search warrant and of the legal requirements for warrantless searches.
- discuss the rules of evidence as they pertain to relevancy, types of evidence, authentication, and chain of custody.
- discuss the laws governing the use of force including the Fourth Amendment standard for determining the objective use of reasonable force, the circumstances under which a peace officer has the authority to use force, and the level of authority agency policies have regarding the use of force by a peace officer.
- write an investigative report that is well organized, includes facts needed to establish that a crime has been committed and all actions taken by officers were appropriate, and is relatively free or errors in sentence structure, grammar and other writing mechanics.
- demonstrate proficiency in the safe and proper operation of a law enforcement patrol vehicle while utilizing defensive driving principles and techniques under a variety of low and high speed conditions.
- demonstrate proficiency in the use of force to include problem-solving, decision making, legal authority/individual rights, officer safety, effective verbal and non-verbal communication skills, ethical action based upon professional values and expectations, and stress tolerance and emotional regulation.
- demonstrate proficiency in the use of effective communication, command presence, and appropriate physical control during the detention of a verbally uncooperative individual.

25 Units: 152 hours LEC; 894 hours LAB

Prerequisite: None.

Enrollment Limitation: Students must 1) be free of felony convictions 2) possess a valid California Driver’s License 3) undergo a fingerprint and criminal history check 4) be a minimum of 18 years of age 5) be a United States high school graduate, pass the GED, pass the California High School Proficiency Examination, or have attained a two-year or four-year degree from an accredited college or university, and 6) complete a medical suitability examination.

Catalog Date: June 1, 2020

This POST certified course is a consolidated program of training in criminal law, juvenile law, laws of evidence, administration of justice, community relations, investigation, traffic control and procedures, patrol procedures, defensive tactics, arrest control including handcuffing and weaponless defense, baton techniques, firearms, first aid and CPR, and vehicle operations. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- discuss the objectives and responsibilities of each of the three components of the criminal justice system.
- discuss the roles and responsibilities of the peace officer in modern society.
- discuss the professional and ethical standards by which peace officer are held in order to maintain the public trust.
- describe the psychological trauma experienced by crime victims.
- identify techniques used to defuse crisis situations which result from people being victims of crime.
- differentiate between the letter of the law and spirit of the law, and between criminal and civil law.
- recall the statutory definitions, crime elements to arrest for, and classifications of general criminal statutes and specified property crimes, person crimes, and narcotic and alcohol-related crimes.
- describe the physical and behavioral indicators of child neglect and abuse.
- describe the common emotional and physical reactions victims experience and the pressures associated with reporting a sex crime.
- discuss the roles and responsibilities of peace officers regarding the protection of the rights of juveniles under California law.
- describe how specified drugs can affect normal behavior.
- recognize the existence of an illegal manufacturing/cultivating site for controlled substances based on observations and discovery, and how officers need to take appropriate safety precautions to protect themselves and the public from potential associated problems.
- identify and discuss amendments to the U.S. Constitution and similar sections of the California Constitution that are related to peace officer authority, liability, and responsibility they have in making arrests.
- differentiate the statutory rules regarding appropriate actions during a consensual encounter, detention, and arrest.
- understand that in order to develop admissible evidence while ensuring the constitutional rights of all individuals, peace officers must correctly follow standardized practices for conducting crime scene interviews and interrogations.
- understand the peace officer’s authority, responsibility, and potential for liability in the areas of search and seizure law, as well as the protections provided by constitutional law, statutory law, and case law against unreasonable searches and seizures.
- identify the rules and requirements for peace officers to obtain and execute a search warrant and of the legal requirements for warrantless searches.
- discuss the rules of evidence as they pertain to relevancy, types of evidence, authentication, and chain of custody.
- discuss the laws governing the use of force including the Fourth Amendment standard for determining the objective use of reasonable force, the circumstances under which a peace officer has the authority to use force, and the level of authority agency policies have regarding the use of force by a peace officer.
- write an investigative report that is well organized, includes facts needed to establish that a crime has been committed and all actions taken by officers were appropriate, and is relatively free or errors in sentence structure, grammar and other writing mechanics.
- demonstrate proficiency in the safe and proper operation of a law enforcement patrol vehicle while utilizing defensive driving principles and techniques under a variety of low and high speed conditions.
- demonstrate proficiency in the use of force to include problem-solving, decision making, legal authority/individual rights, officer safety, effective verbal and non-verbal communication skills, ethical action based upon professional values and expectations, and stress tolerance and emotional regulation.
- demonstrate proficiency in the use of effective communication, command presence, and appropriate physical control during the detention of a verbally uncooperative individual.
demonstrate proficiency in responding to reports of suspicious persons.

- demonstrate proficiency in conducting safe and proper vehicle pullovers under a variety of conditions.
- demonstrate proficiency in employing effective tactics while responding to specified high-risk situations and critical incidents.
- understand the peace officer’s responsibility to keep the peace in order to prevent a civil matter from escalating into criminal activity that could threaten the safety of officers and the persons involved.
- demonstrate appropriate skills for defusing, mediating and resolving disputes in order to protect their safety and the safety of others, as well as prevent a dispute from escalating.
- understand the peace officer’s legal and professional obligations as well as the need for sensitivity and effective communication when responding to a missing persons investigation.
- perform the tasks associated with specified criminal investigations.
- demonstrate competency in effectively directing and controlling traffic using hand signals, flashlights, and warning devices.
- recall commonly used California Vehicle Code violations and the associated classifications.
- perform the tasks associated with a traffic collision investigation.
- understand definitions, laws, and procedures related to DUI arrests.
- explain the legal responsibilities of a peace officer in the care and custody of an arrested person from the time of arrest to the transfer of responsibility to a local detention facility.
- demonstrate physical proficiency in a law enforcement-related test battery.
- demonstrate competency in conducting safe and proper searching, handcuffing, and take-down techniques.
- demonstrate competency in applying the carotid restraint hold.
- demonstrate competency in handgun take-away and retention techniques.
- demonstrate competency in administering first aid/CPR.
- demonstrate competency in basic handgun and shotgun safety, mechanical functions, manipulations, and shooting accuracy under a variety of conditions.
- understand the laws regulating access and use of law enforcement information systems.
- recognize the behavioral and psychological indicators of mental illness in order to determine if an individual is a danger to others, a danger to self, or gravely disabled and to determine an appropriate response.
- discuss the indicators of gang involvement.
- recognize the risks presented by hazardous materials and the peace officer’s role in responding to hazardous materials incidents and the indicators and warning systems that identify specific dangers of hazardous materials.
- discuss the complexities and impact of cultural diversity within law enforcement agencies and California’s changing communities.
- discuss how to implement the Incident Command System (ICS) and its relationship to the Standardized Emergency Management System (SEMS) and the National Incident Management System (NIMS).

PSTC 1506 Sacramento Police Department Basic Academy

Units: 22 - 26
Hours: 251 hours LEC; 466 - 682 hours LAB
Prerequisite: None.
Enrollment Limitation: Students must 1) be free of felony convictions 2) possess a valid California Driver's License 3) undergo a fingerprint and criminal history check 4) be a minimum of 18 years of age 5) be a United States high school graduate, pass the GED, pass the California High School Proficiency Examination, or have attained a two-year or four-year degree from an accredited college or university, and 6) complete a medical suitability examination.
Catalog Date: June 1, 2020

This course presents a comprehensive program of training in law, ethics, community policing, vehicle operations, use of force, patrol techniques, firearms, traffic control and enforcement, criminal investigations, physical fitness, chemical agents, and first aid and CPR. Upon successful completion of the course, students receive a POST Basic Academy Certificate of Completion. This course is formerly known as SPD 1100. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:
• discuss the objectives and responsibilities of each of the three components of the criminal justice system.
• discuss the professional and ethical standards by which peace officers are held in order to maintain the public trust.
• discuss the roles and responsibilities of the peace officer in modern society.
• describe the psychological trauma experienced by crime victims.
• identify techniques used to defuse crisis situations which result from people being victims of crime.
• differentiate between the letter of the law and spirit of the law, and between criminal and civil law.
• recall the statutory definitions, crime elements to arrest for, and classifications of general criminal statutes and specified property crimes, person crimes, and narcotic and alcohol-related crimes.
• discuss the physical and behavioral indicators of child neglect and abuse.
• describe the common emotional and physical reactions victims experience and the pressures associated with reporting a sex crime.
• discuss the roles and responsibilities of peace officers regarding the protection of the rights of juveniles under California law.
• recognize how drugs can affect normal behavior.
• recognize the existence of an illegal manufacturing/cultivating site for controlled substances based on observations and discovery, and how officers need to take appropriate safety precautions to protect themselves and the public from potential associated problems.
• identify and discuss amendments to the U.S. Constitution and similar sections of the California Constitution that are related to the authority, liability, and responsibility they have in making arrests.
• differentiate the statutory rules regarding appropriate actions during a consensual encounter, detention, and arrest.
• understand that in order to develop admissible evidence while ensuring the constitutional rights of all individuals, peace officers must correctly follow standardized practices for conducting crime scene interviews and interrogations.
• understand the peace officer’s authority, responsibility, and potential for liability in the areas of search and seizure law, as well as the protections provided by constitutional law, statutory law, and case law against unreasonable searches and seizures.
• understand the rules and requirements for peace officers to obtain and execute a search warrant and of the legal requirements for warrantless searches.
• discuss the rules of evidence as they pertain to relevancy, types of evidence, authentication, and chain of custody.
• discuss the laws governing the use of force including the Fourth Amendment standard for determining objective reasonable force, the circumstances under which a peace officer has the authority to use force, and the level of authority agency policies have regarding the use of force by a peace officer.
• write an investigative report that is well organized, includes facts needed to establish that a crime has been committed and all actions taken by officers were appropriate, and is relatively free of errors in sentence structure, grammar and other writing mechanics.
• demonstrate proficiency in the safe and proper operation of a law enforcement patrol vehicle while utilizing defensive driving principles and techniques under a variety of low and high speed conditions.
• demonstrate proficiency in the use of force.
• demonstrate proficiency in responding to reports of suspicious persons.
• demonstrate proficiency in conducting safe and proper vehicle pullovers under a variety of conditions.
• demonstrate proficiency in employing effective and safe tactics and/wile responding to specified high-risk situations and critical incidents.
• understand the peace officer’s responsibility to keep the peace in order to prevent a civil matter from escalating into criminal activity that could threaten the safety of officers and the persons involved.
• demonstrate appropriate skills for defusing, mediating, and resolving disputes in order to protect their safety and the safety of others, as well as prevent a dispute from escalating.
• understand the peace officer’s legal and professional obligations as well as the need for sensitivity and effective communication when responding to a missing persons investigation.
• perform the tasks associated with specified criminal investigations.
• demonstrate competency in effectively directing and controlling traffic using hand signals, flashlights, and warning devices.
• recall commonly used California Vehicle Code violations and associated classifications.
• understand definitions, laws, and procedures related to DUI arrests.
• perform the tasks associated with a traffic collision investigation.
- explain the legal responsibilities of a peace officer in the care and custody of an arrested person from the time of arrest to the transfer of responsibility to a local detention facility.
- demonstrate physical proficiency in a law enforcement related test battery.
- demonstrate competency in conducting safe and proper searching, handcuffing, and take-down techniques.
- demonstrate competency in applying the carotid restraint hold.
- demonstrate competency in handgun take-away and retention techniques.
- demonstrate competency in administering first aid/CPR.
- demonstrate competency in basic handgun and shotgun safety, mechanical functions, manipulations, and shooting accuracy under a variety of conditions.
- understand the laws regulating access and use of law enforcement information systems.
- recognize the behavioral and psychological indicators of mental illness in order to determine if an individual is a danger to others, a danger to self, or gravely disabled and to determine an appropriate response.
- discuss the indicators of gang involvement.
- recognize the risks presented by hazardous materials and the peace officer's role in responding to hazardous materials incidents and the indicators and warning systems that identify specific dangers of hazardous materials.
- discuss the complexities and impact of cultural diversity within law enforcement agencies and California's changing communities.
- discuss how to implement the Incident Command System (ICS) and its relationship to the Standardized Emergency Management System (SEMS) and the National Incident Management System (NIMS).

PSTC 1507 Preparing for a Law Enforcement Career

Units: 0.5 - 0.75
Hours: 4 - 8 hours LEC; 16 - 24 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

This course introduces the student to requirements that must be met for application and acceptance into a California Peace Officer Standards and Training (POST) certified regular basic law enforcement academy. Topics include an overview of the academy training program and program standards, POST and legislatively mandated pre-academy testing, educational requirements, required clearances, reading and writing tests, physical skills tests, and availability of financial assistance through the community college. It also covers guidance in researching law enforcement agencies throughout the state and preparing for a law enforcement agency background and interview process. Field trips may be required. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- articulate the legal requirements for application and acceptance into a POST certified regular basic law enforcement academy.
- describe the recommended skill set for academy applicants.
- discuss the purpose and role of the law enforcement communication metric.
- identify behaviors consistent with law enforcement academy success.
- demonstrate written communication skills in a writing exercise.
- demonstrate oral communication skills in a mock interview.

PSTC 1512 POST Instructor Development - Intermediate Level 2

Units: 2
Hours: 40 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020

This course provides the skills necessary for obtaining level 2 instructor certification through California California Commission on Peace Officer Standards and Training (POST). Topics include learning theories, instructional design, student assessment, outcome-based learning, problem-based learning, facilitation skills, active learning, presentation skills, and critical thinking. Pass/No Pass only.
Student Learning Outcomes
Upon completion of this course, the student will be able to:

- design a lesson and/or learning activity that addresses learning styles, learning modalities, and the different audiences within the training environment.
- integrate assessment strategies that determine what students know, don't know, and need to know based on presented evidence.
- analyze the quality of critical thinking and problem solving in a lesson plan.
- explain the concept of problem based learning.

PSTC 1514 Academy Graduate Training - SPD

Units: 1.5 - 2
Hours: 28 - 34 hours LEC
Prerequisite: PSTC 1200 with a grade of "C" or better
Catalog Date: June 1, 2020

This course, designed for the new academy graduate, provides specific additional training in areas not covered in the POST Basic Academy. Topics include use of the intoxilyzer, in-car camera, field training overview and the robbery alarm monitor system. Pass/No Pass only.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- demonstrate the proper and effective use of the intoxilyzer.
- explain the M26 Taser device and demonstrate the necessary after force care following use on an individual.
- describe the purpose and function of the Internal Affairs Unit.
- describe the purpose and function of the Peace Officers' Association.

PSTC 1515 Academy Instructor Certification Course

Units: 1
Hours: 8 hours LEC; 32 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

This course is designed for instructors assigned to teach at a POST-certified basic law enforcement academy. Upon completion of the course, students receive a POST AICC certificate of completion. Topics include adult learning methodologies, facilitation skills, and the POST regular basic academy instructional design. Pass/No Pass only.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- define and apply adult learning concepts and principles in an educational setting.
- identify the roles and responsibilities of a basic academy instructor.
- design and integrate course curriculum and lesson plans with POST training and testing specifications.
- demonstrate knowledge of a variety of instructional techniques and a commitment to delivering entry-level training.
- compare and contrast a variety of instructor and student learning resources and training aids.

PSTC 1517 Academy Graduate Training

Units: 2
Hours: 41 hours LEC; 32 hours LAB
Prerequisite: California POST-certified basic law enforcement academy within 2 years or equivalent as determined by the Dean of Academy Instruction.

Note: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

Enrollment Limitation: Students must 1) be free of felony convictions; 2) possess a valid California Driver's License; 3) undergo a fingerprint and criminal history check; 4) be a minimum of 18 years of age; 5) be a United States high school graduate; pass the GED, pass the California High School
This course provides the recent POST-certified law enforcement academy graduate with additional training in topics specific to daily field operations. It is intended to bridge the academy and field training programs with a focus on enhancing the safety and well-being of law enforcement officers and the communities they serve. Topics include introduction to the field training program, internal affairs and the role of the police officers’ union, legal updates, fair and impartial policing, less lethal force options and deployment, crowd movement and control, court appearances, and work-life balance and wellness. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain the purpose and objectives of the field training program.
- define cultural competency and fair and impartial policing.
- explain effective techniques for cross-cultural communication.
- demonstrate proficiency in the use of various technology resources utilized in field operations.
- explain the appropriate circumstances for employing less lethal force options.
- recall potential infectious diseases and exposure treatment protocol.
- describe the internal affairs investigation process and the role of the police officers’ union.

PSTC 1520 POST Supervisor

| Units: | 2 |
| Hours: | 16 hours LEC; 64 hours LAB |
| Prerequisite: | POST-certified basic law enforcement academy or equivalent as determined by the Dean of Academy Instruction. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency. |
| Enrollment Limitation: | Students must 1) be free of felony convictions; 2) possess a valid California Driver's License; 3) undergo a fingerprint and criminal history check; 4) be a minimum of 18 years of age; 5) be a United States high school graduate; pass the GED, pass the California High School Proficiency Examination, or have attained a two-year or four-year degree from an accredited college or university; and 6) complete a medical suitability examination. |
| Catalog Date: | June 1, 2020 |

This course examines the legal, moral, and ethical responsibilities and challenges associated with first line field operations supervision specific to the law enforcement environment. Lectures, facilitated discussions, and student presentations emphasize the examination of case studies, reviews and updates of case and statutory law, situational leadership, followership, critical incidents and critical incident management, stress management, managing conflict, counseling, and problem solving. It includes examining personality profiles for effective team development and supervision, developing and conducting subordinate counseling sessions, and preparing performance evaluations and improvement programs. This course is certified by the California Commission on Peace Officer Standards and Training, POST #2970-00400. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- discuss the law enforcement supervisor's vicarious responsibility and liability for subordinate personnel.
- identify subordinate behavior that requires intervention, counseling, or disciplinary measures.
- develop a performance improvement plan for subordinate personnel.
- identify common types of stress experienced by on-duty law enforcement officers, signs and behaviors associated with stress, and resources for stress prevention and management.
- identify leader actions to manage difficult personalities.
- resolve workplace conflicts in accordance with state and federal law and within organizational parameters.

PSTC 1521 Supervisory (STC Format)

| Units: | 2 |
| Hours: | 24 hours LEC; 56 hours LAB |
| Prerequisite: | PSTC 1270, 1271, or 1273 |
| Catalog Date: | June 1, 2020 |
This course focuses on aspects of supervision specific to the field of corrections. This examination of supervision in the context of parole and probation environments will include ethics, problem solving, discipline, legal update, grievance procedures, and leadership. This course is accredited by the State of California's Standards and Training for Corrections (STC) with STC Certification #0218-011703. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- diagnose and document the performance of subordinate officers.
- define and apply the legal requirements involved in supervision.
- resolve employee work environment conflicts within the standards of organizational parameters.
- evaluate, research and recommend resolutions to employees' legal grievance procedures.

PSTC 1522 Supervisor Training -Non-Sworn

Units: 2
Hours: 40 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020

This course examines the roles and responsibilities of the non-sworn public safety first-line supervisor, focusing on ethical leadership, vicarious liability and sources of influence. Students will explore the use of effective communication in counseling, mentoring, recognizing training opportunities and performance evaluations. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- discuss the relationship between effective communication and ethical leadership.
- compare and contrast leadership techniques and select the appropriate technique for influencing the outcome of a given situation.
- evaluate subordinate employees for retention, additional responsibilities, commendation and promotion.
- recognize the need to counsel an employee and apply appropriate disciplinary measures.

PSTC 1525 Supervisory Update

Units: 0.5 - 1
Hours: 1 hours LEC; 23 - 39 hours LAB
Prerequisite: PSTC 1520
Catalog Date: June 1, 2020

This course is designed to provide the existing law enforcement supervisor with updated training on contemporary supervisory issues and techniques. Topics include leadership and ethics, tactical resources, legal issues, general orders, use of force and progressive discipline. This course is presented in educational partnership with the Sacramento Police Department and is accredited by the Commission on Peace Officer Standards and Training (POST) with POST Certification number #9270-1200 and #1039-1200. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- recognize issues in the transition from first line officer to supervisor.
- explain the need to provide reasonable accommodations for personnel, in compliance with the Americans with Disabilities Act (ADA).
- examine existing departmental policies and procedures for appropriate application and revision.
- describe progressive discipline and the processes for its application.
- prioritize the multiple tasks assigned to peace officers during their duty assignments.
PSTC 1531 Frontline Leadership SPD

This course is designed to enhance the leadership skills of line-level law enforcement personnel. Topics include characteristics of leadership, personal accountability, holding employees accountable, and ethical dilemmas in leadership.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- compare and contrast different styles of leadership.
- discuss how values influence decision-making.
- differentiate between discipline and punishment.
- identify behaviors that contradict ethical leadership.
- create a personal leadership development plan.
- develop and lead effective team building exercises.

PSTC 1533 Internal Affairs Investigation

This course introduces the issues and techniques associated with conducting Internal Affairs investigations in a law enforcement environment. Topics include the role and purpose of internal affairs, risk and liability assessment, role of internal affairs investigator, policy considerations and public employee rights. This course also explores the impact of internal investigations on employees, the organization and the public. This course is certified by the California Peace Officer Standards and Training (POST).

Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- discuss the roles and responsibilities of the internal affairs investigator.
- recall case law relative to internal affairs investigations.
- conduct a risk and liability assessment.
- identify public safety/law enforcement employee misconduct.
- conduct public safety/law enforcement internal affairs investigations.
- recognize challenges in conducting an internal affairs investigation.

PSTC 1534 Sergeant Training and Orientation Program (TOPS)

This course introduces the new police supervisor to the responsibilities and job requirements of the sergeant position. Emphasis is placed on leadership, handling of critical incidents, major crimes, internal affairs, and pursuit liability. Pass/No Pass only.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- define police department expectations of a new sergeant.
- explain the civil liability implications while supervising vehicle pursuits and other major incidents.
- apply sound leadership techniques.

PSTC 1542 Property and Evidence Room Management

Units: 1.25
Hours: 24 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020

This course covers the legal requirements, procedures, and basic responsibilities and techniques involved in the proper operation of a property room. Topics include property room problems and solutions, packaging, security, storage management, documentation, purging, dispositions, audits, and inventories.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- diagnose an agency property and evidence room systems and make recommendations for increased efficacy.
- critique internal controls related to intake, storage and disposal.
- analyze agency controls and author policy and procedures manuals.

PSTC 1550 Code Enforcement Officer

Units: 2
Hours: 36 hours LEC; 4 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

This course is designed for newly appointed code enforcement/peace officer who is assigned to enforce the codes of a city, county, or state. Topics include ethics, zoning laws, sub-standard housing, inspection protocol, report writing, case preparation, and administrative hearings. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- assess the laws and procedures related to code enforcement abatement and zoning.
- critique the protocol of inspections and determine the difference between sub-standard and safe housing.
- formulate the elements for case preparation and documentation for prosecution in court.

PSTC 1551 Code Enforcement Officer - Intermediate

Units: 2
Hours: 36 hours LEC; 4 hours LAB
Prerequisite: PSTC 1550
Catalog Date: June 1, 2020

This course is designed for code enforcement/peace officers with experience enforcing city, county, and state administrative codes. Topics include legal update, courtroom testimony, administrative hearings, tactical communication, use of pepper spray, problem oriented policing (POP), customer service, officer safety, and animal awareness. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:
- define recent changes to laws and procedures relative to code enforcement.
- evaluate possible communication techniques when contacting upset, angry or irrational subjects.
- investigate neighborhood code violations while using good customer service.
- recognize the potential hazards in dealing with domestic and/or wild animals.
- formulate an action plan to safely handle a dangerous animal.
- apply problem oriented policing strategies to neighborhood complaints.

**PSTC 1552 Code Enforcement Officer - Advanced**

Units: 2
Hours: 36 hours LEC; 4 hours LAB
Prerequisite: PSTC 1551
Catalog Date: June 1, 2020

This course covers advanced topics for code enforcement/peace officers. Topics include legal updates and personal safety, with a focus on vectors, molds, fire, electrical, and plumbing codes. Pass/No Pass only.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- identify the existence and type of mold present in various environments.
- research the differences between fire, electrical, plumbing and mechanical codes.
- formulate a rudimentary safety plan for an inspection and activate necessary techniques.

**PSTC 1555 Regulatory Investigative Techniques**

Units: 2
Hours: 40 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020

This course is designed for the law enforcement officer assigned to an investigative role within a state agency. The course focuses on techniques that enhance the investigator's ability to prepare a criminal or administrative cases for prosecution in a criminal or administrative hearing. Topics include roles and responsibilities, interview techniques, search warrants and report writing. Pass/No Pass only.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- discuss the roles and responsibilities of an investigator.
- compare and contrast an inspection warrant, subpoena duces tecum, and search warrant.
- analyze legal issues and apply the appropriate investigative technique.

**PSTC 1571 Field Training Officer**

Units: 2
Hours: 40 hours LEC
Prerequisite: POST certified basic law enforcement academy or equivalent as determined by the Dean of Academy Instruction. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

Enrollment Limitation: Students must 1) Be free of felony convictions; 2) possess a valid California Driver's License; 3) undergo a fingerprint and criminal history check; 4) be a minimum of 18 years of age; 5) be a United States high school graduate; pass the GED, pass the California High School Proficiency Examination, or have attained a two-year or four-year degree from an accredited college or university; and 6) complete a medical suitability examination.

Catalog Date: June 1, 2020

This course is designed for newly assigned personnel responsible for training entry-level law enforcement officers. Topics include field training program goals and objectives; the expectations, functions, and roles of the field training officer; legal and liability issues for field training officers; driver awareness and safety; interaction with
persons with mental illness or intellectual disability; teaching and training skills development; competency evaluation and documentation; intervention techniques; remediation; and test and scenario development strategies. Field Training Officer is certified by the California Commission on Peace Officer Standards and Training (POST), certification #2970-31725. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain the four goals of the law enforcement field training program.
- compare and contrast the basic law enforcement academy environment and the law enforcement training environment.
- analyze and evaluate leadership and ethical dilemmas common in the law enforcement and field training environment, and develop risk management strategies to reduce liability exposure for the trainee, trainer, and organization.
- design and deliver a course of competency-based remedial instruction.
- recognize behavioral cues and other indicators of people with mental illness or intellectual disability.
- employ strategies to effectively intervene and safely manage encounters involving people in crisis.
- identify common stressors that affect a law enforcement trainee's performance and the available resources to minimize the trainee's psychological, physical, and emotional stress.
- identify and discuss methods to evaluate and remediate a trainee's mental and physiological preparedness and ethical awareness for operating a vehicle under normal and emergency conditions.
- demonstrate appropriate and effective field training intervention strategies.
- analyze, evaluate, and impartially document a law enforcement trainee's performance against agency-established standards of core competencies.
- utilize the Situational Leadership concept and an ethical decision making model to prepare a recruit evaluation and remedial performance plan.

PSTC 1572 Field Training Officer - Update

Units: 1
Hours: 24 hours LEC
Prerequisite: PSTC 1571
Catalog Date: June 1, 2020

This course updates field training officers on new training methods, new policing methods, and legal liabilities. Topics include academy update, remediation methodologies, tactical communications, adult learning theories, ethics, liability, and supervision. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply the basic components of communication skills and techniques.
- evaluate and document employee performance.
- employ adult learning techniques to facilitate individual learning styles.

PSTC 1573 Field Training Program Supervisor, Administrator, Coordinator Course

Units: 1
Hours: 24 hours LEC
Prerequisite: POST certified basic law enforcement academy or equivalent as determined by the Dean of Academy Instruction. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.
Enrollment Limitation: Students must 1) Be free of felony convictions; 2) possess a valid California Driver's License; 3) undergo a fingerprint and criminal history check; 4) be a minimum of 18 years of age; 5) be a United States high school graduate; pass the GED, pass the California High School Proficiency Examination, or have attained a two-year or four-year degree from an accredited college or university; and 6) complete a medical suitability examination.
Catalog Date: June 1, 2020

This POST certified course is designed for personnel responsible for administering their law enforcement agency's Field Training Program. Topics include POST approved Field Training Program and manual, managing a training program, documentation and legal liability. Pass/No Pass only.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- diagnose an agency POST approved Field Training program.
- design an adult learning Field Training Program activity.
- prioritize the legal and liability issues within a training program.

**PSTC 1581 Volunteers in Partnership with the Sheriff - Module A**

Units: 1  
Hours: 26 hours LEC  
Prerequisite: None.  
Catalog Date: June 1, 2020  

This course is designed as an entry level course for individuals who desire to work for law enforcement in a volunteer capacity. Topics include peer support, basic law, scams and frauds, crime prevention and report writing. Pass/No Pass only.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- evaluate a fact pattern and apply a specific crime code to the pattern.
- locate and interpret a department's general orders.
- describe specific crime prevention techniques.

**PSTC 1582 VIPS Academy - Module B**

Units: 1  
Hours: 25 hours LEC  
Prerequisite: PSTC 1581  
Catalog Date: June 1, 2020  

This course is designed as the second of two courses to assist citizen volunteers to better understand the various aspects of the law enforcement community. Topics include traffic control, explosives, radio procedures, drugs and search and rescue techniques. Pass/No Pass only.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- compare and contrast gang dynamics to determine gang affiliation.
- categorize various drugs and drug paraphernalia to determine type, legality, or illegality.
- identify and report an explosive device.

**PSTC 1584 Life Skills - Power Program --Sac Sheriff**

Units: 1  
Hours: 26 hours LEC  
Prerequisite: None.  
Catalog Date: June 1, 2020  

This course is designed to assist those who have a criminal background in developing life skills. Course topics include Domestic Violence, Substance Abuse, Identifying Drug Problems, Anger Management, and Communication Techniques. Pass/No Pass only.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- discuss state laws and local rules regarding Domestic Violence.
- design a personal program regarding abstinence from substance abuse.
- evaluate effects of drug and alcohol use on children.
- create a personal plan for anger/stress management.
- develop interpersonal and communication skills by incorporating active listening techniques.
- implement a daily health and nutrition plan.

**PSTC 1585 Employment Training - Power Program - SSD**

**Units:** 1  
**Hours:** 26 hours LEC  
**Prerequisite:** None.  
**Catalog Date:** June 1, 2020

This course is designed to prepare those who have a criminal background in seeking employment. Course topics include completing employment applications and resumes, navigating the job interview and job seeking skills. Pass/No Pass only.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- prepare an employment application.
- compose an employment resume.
- respond to interview questions.
- develop an employment cover and thank-you letter.

**PSTC 1586 Citizens Academy - SPD**

**Units:** 1  
**Hours:** 12 hours LEC; 24 hours LAB  
**Prerequisite:** None.  
**Catalog Date:** June 1, 2020

This course provides a comprehensive overview of the criminal justice system. Topics include the role of the District Attorney, role of law enforcement and internal affairs, special challenges for the prosecution, race as a factor in the criminal justice system, the federal criminal justice system, anatomy of a criminal case, the judicial system, community focus and gangs, and building bridges and partnerships. Pass/No Pass only.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- explain the primary roles and responsibilities of Sacramento area law enforcement agencies and the District Attorney.
- recognize the importance of effective partnerships among communities and criminal justice agencies.
- analyze the benefits of achieving long term strategies and solutions to public safety and quality of life issues.

**PSTC 1602 Defensive Tactics Instructor**

**Units:** 1.25  
**Hours:** 80 hours LAB  
**Prerequisite:** POST certified basic law enforcement academy or equivalent as determined by the Dean of Academy Instruction. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.  
**Enrollment Limitation:** Students must 1) Be free of felony convictions; 2) possess a valid California Driver's License; 3) undergo a fingerprint and criminal history check; 4) be a minimum of 18 years of age; 5) be a United States high school graduate; pass the GED, pass the California High School Proficiency Examination, or have attained a two-year or four-year degree from an accredited college or university; and 6) complete a medical suitability examination.  
**Catalog Date:** June 1, 2020

This course introduces students with the requisite skills and knowledge to provide weaponless defense instruction in POST certified law enforcement and/or STC certified correctional environments. Instruction is provided in the areas of defense and liability issues for police and corrections, health and safety precautions for instructing manipulative skills, safe and proper application of control holds, take-down maneuvers and ground fighting. Pass/No Pass only.
Upon completion of this course, the student will be able to:

- discuss the instructor's role and associated liability for providing law enforcement/corrections agencies with instruction in weaponless defense.
- explain law enforcement/correction's use of weaponless defense tactics in the use force continuum.
- explain the proper and safe training conditions under which to provide instruction in weaponless defense.
- demonstrate instruction on the safe application of control holds, take-down techniques, and escape techniques.
- explain the safety hazards of utilizing the carotid restraint and the required after care associated with utilization of the technique.
- discuss the necessity for the proper documentation of the use of force.
- develop a POST and/or STC weaponless defense expanded course outline and lesson plan.
- evaluate a student's safe application of control holds, take-down techniques, and escape techniques.
- provide corrective instruction for a student's safe application of control holds, take-down techniques, and escape techniques.

PSTC 1603 Defensive Tactics Instructor- Advanced

This course provides students with advanced skills and knowledge for providing weaponless defense ground fighting instruction in POST certified law enforcement and/or STC certified corrections environments. Topics include legal updates, ground control, take-downs, wall defenses, escapes, and sustained resistance techniques. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- instruct, evaluate, and correct a student in the application of take-down techniques to a ground control.
- instruct, evaluate, and correct a student in the application of gun take-a ways.
- develop a POST and/or STC lesson plan for ground fighting.
- develop a departmental use of force policy.

PSTC 1604 Defensive Tactics Instructor Update

This course provides weaponless defense instructors with updates in techniques, tactics, and legal issues in contemporary policing. Topics include legal updates, control holds, take-downs, arrest tactics, searches, handcuffing, ground control, and expert witness testimony. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- discuss liability issues associated with providing weaponless defense training for law enforcement agencies.
* discuss relevant changes in statutory and case law pertaining to the use of force.
* demonstrate and evaluate gun retention techniques.
* demonstrate and evaluate take down and ground fighting techniques.
* demonstrate and discuss handcuffing techniques.
* discuss the challenges unique to testifying as an expert witness in weaponless defense.

**PSTC 1621 Impact Weapons Instructor**

**Units:** 1.25  
**Hours:** 80 hours LAB  
**Prerequisite:** POST certified basic law enforcement academy or equivalent as determined by the Dean of Academy Instruction. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.  
**Enrollment Limitation:** Students must 1) Be free of felony convictions; 2) possess a valid California Driver's License; 3) undergo a fingerprint and criminal history check; 4) be a minimum of 18 years of age; 5) be a United States high school graduate; pass the GED, pass the California High School Proficiency Examination, or have attained a two-year or four-year degree from an accredited college or university; and 6) complete a medical suitability examination.  
**Catalog Date:** June 1, 2020

This course introduces students to effective instructional design and methods for teaching a Peace Officers Standards and Training (POST) certified course in the use of impact weapons course in public safety environments. Topics include adult learning, aggression and suspect action, POST regulations for instructing, evaluating, and testing in the use of impact weapons and documentation per the POST Administrative Manual (PAM), relevant case law, legal issues, physical warm-ups, striking and blocking techniques with the baton and the yawara stick, personal body weapons, and confrontational exercises and evaluations. Pass/No Pass only.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

* describe how adults learn.
* identify the POST regulations that apply to the training, evaluation, testing, and documentation of impact weapons instruction in a law enforcement environment.
* identify liability issues in the use of impact weapons.
* demonstrate the safe, effective, and proper use of one or more law enforcement approved impact weapons.
* demonstrate the use of three different methods to instruct a student on the safe and proper use of a law enforcement approved impact weapon.
* evaluate and document a student's learning and performance in the use of one or more impact weapons that meets requirements of the PAM.
* develop and implement a POST expanded course outline and lesson plan.

**PSTC 1622 Impact Weapons Instructor - Update**

**Units:** 0.25  
**Hours:** 16 hours LAB  
**Prerequisite:** PSTC 1621  
**Enrollment Limitation:** Students must 1) Be free of felony convictions; 2) possess a valid California Driver's License; 3) undergo a fingerprint and criminal history check; 4) be a minimum of 18 years of age; 5) be a United States high school graduate; pass the GED, pass the California High School Proficiency Examination, or have attained a two-year or four-year degree from an accredited college or university; and 6) complete a medical suitability examination.  
**Catalog Date:** June 1, 2020

This course provides impact weapons instructors with updated skills and knowledge in the use of force and the accompanying legal issues in the public safety environment. Topics include review of baton use, striking techniques, and legal and liability updates. Pass/No Pass only.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

* evaluate liability issues regarding impact weapons.
* discuss the different strike zones of the body.
* demonstrate the use of various impact weapons while instructing.
* discuss changes in case law pertaining to the use of impact weapons.
• discuss changes in PAM regulations pertaining to the instruction, evaluation, and testing in the use of impact weapons.

PSTC 1625 Arrest Control and Baton Instructor - SPD

| Units: | 3 |
| Hours: | 42 hours LEC; 38 hours LAB |
| Prerequisite: | PSTC 1200 |
| Catalog Date: | June 1, 2020 |

This course provides law enforcement officers with the skills necessary to be certified as arrest control and baton instructors. Topics include principles of arrest control, legal issues, search fundamentals, handcuffing techniques and application, ground-fighting techniques, and carotid control hold. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• safely apply control holds and take down techniques.
• explain the hazards and first aid techniques of carotid restraint.
• compare and contrast various laws and liability issues associated with the use of force.
• safely apply take downs and ground control.
• identify liability issues associated with the use of impact weapons.
• effectively manipulate impact weapons for safe and legal use in the law enforcement environment.
• identify how adults learn.
• create a training plan.

PSTC 1640 Firearms Familiarization (PC 832)

| Units: | 1 |
| Hours: | 19 hours LEC; 5 hours LAB |
| Prerequisite: | None |

Enrollment Limitation: Students must 1) Be free of felony convictions; 2) possess a valid California Driver's License; 3) undergo a fingerprint and criminal history check; 4) be a minimum of 18 years of age; 5) be a United States high school graduate; pass the GED, pass the California High School Proficiency Examination, or have attained a two-year or four-year degree from an accredited college or university; and 6) complete a medical suitability examination.

Catalog Date: June 1, 2020

This POST certified course complies with California Penal Code 832. It provides a basic introduction to legal aspects of shooting and safety. Topics include handgun familiarization, safety, shooting principles, and live fire exercises. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• describe a handgun's nomenclature.
• manipulate a firearm in a safe manner.
• compare and contrast different shooting principles.

PSTC 1645 Force and Weaponry - Basic

| Units: | 1.5 |
| Hours: | 24 hours LEC; 16 hours LAB |
| Prerequisite: | PSTC 1273 |
| Catalog Date: | June 1, 2020 |

This course is designed for field probation officers who are required to carry firearms in the performance of their duties. Topics include day and night shooting, use of force, firearms safety, principles of arrest control, and tactical reloading. Pass/No Pass only.
Upon completion of this course, the student will be able to:

- assess the need for the use of force and select the appropriate level of force to be used.
- demonstrate techniques for the safe handling, loading, and unloading of firearms.
- employ a lawful and reasonable use of force defense against an armed assailant.
- demonstrate proficiency in weapon retention.

PSTC 1646 Force and Weaponry - Advanced

Units: 1
Hours: 16 hours LEC; 8 hours LAB
Prerequisite: PSTC 1645
Enrollment Limitation: Students must 1) Be free of felony convictions; 2) possess a valid California Driver's License; 3) undergo a fingerprint and criminal history check; 4) be a minimum of 18 years of age; 5) be a United States high school graduate; pass the GED, pass the California High School Proficiency Examination, or have attained a two-year or four-year degree from an accredited college or university; and 6) complete a medical suitability examination.
Catalog Date: June 1, 2020

This course provides an update for armed probation officers. Topics include legal issues, shoot/don't shoot, weapon retention, arrest and control, and weapon malfunctions. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply proper arrest and control procedures while arresting an individual.
- assess a situation to determine the level of force necessary to be used.
- employ proper safety techniques when using a firearm.

PSTC 1648 Firearms Tactical Rifle SSD

Units: 0.75
Hours: 10 hours LEC; 14 hours LAB
Prerequisite: POST certified basic law enforcement academy or equivalent as determined by the Dean of Academy Instruction. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.
Enrollment Limitation: Students must 1) Be free of felony convictions; 2) possess a valid California Driver's License; 3) undergo a fingerprint and criminal history check; 4) be a minimum of 18 years of age; 5) be a United States high school graduate; pass the GED, pass the California High School Proficiency Examination, or have attained a two-year or four-year degree from an accredited college or university; and 6) complete a medical suitability examination.
Catalog Date: June 1, 2020

This course builds upon the student's existing skills and knowledge in the legal, safe, and proper use of firearms in the law enforcement environment. Instruction includes the safe and proper handling of the long rifle, consideration of environmental factors, tactical shooting, tactical movement, and shooting under dim light conditions. This course is formerly known as SCSD 1221. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate the ability to safely and properly disassemble, assemble, and clean a patrol rifle.
- demonstrate the ability to safely and properly use a long rifle under a variety of lighting conditions.

PSTC 1650 Firearms Instructor

Units: 3
Hours: 48 hours LEC; 32 hours LAB
Prerequisite: PSTC 1683; POST certified basic law enforcement academy or equivalent as determined by the Dean of Academy Instruction. NOTE: Approval
This course is specifically designed to prepare experienced law enforcement personnel to teach firearms courses at the basic and in-service level. Topics include the role of the law enforcement firearms instructor, liability issues, instructor development, lesson plan development, basic marksmanship, shooter problem analysis, standard and non-traditional shooting positions, weapons transition, and tactical movement and cover. This course meets the minimum instructor certification requirements to be a POST pistol, rifle, and shotgun instructor. Successful completion of all portions of the course, including all course work and firearms qualifications, are mandatory to receive certification. Partial certification will not be allowed.


Upon completion of this course, the student will be able to:

- identify the four cardinal rules of firearms safety.
- identify the state and federal laws pertaining to the use of firearms.
- conduct an agency firearms training needs assessment.
- identify the roles of the firearms instructor.
- demonstrate proficiency with industry standard firearms and shooting practices, static and moving line drills.
- prepare a lesson plan, safety plan, and training diagram for the law enforcement academy recruit firearms qualifications course and the state mandated in-service requalification course.
- assess shooting problems and target analysis.
- evaluate and properly document student shooting performance and deficiencies.

### PSTC 1651 Firearms Instructor Update

**Units:** 0.5  
**Hours:** 2 hours LEC; 22 hours LAB  
**Prerequisite:** PSTC 1650  
**Enrollment Limitation:** Students must 1) Be free of felony convictions; 2) possess a valid California Driver's License; 3) undergo a fingerprint and criminal history check; 4) be a minimum of 18 years of age; 5) be a United States high school graduate; pass the GED, pass the California High School Proficiency Examination, or have attained a two-year or four-year degree from an accredited college or university; and 6) complete a medical suitability examination.

**Catalog Date:** June 1, 2020

This course is designed to further develop and update existing firearm instructors on instructional techniques, diagnostic interpretation, and target systems. This course is accredited by the Commission on Peace Officer Standards and Training (POST) with POST Certification #2970-21740 and the Standards and Training for Correction (STC) Program #0218-027422. This course is formerly known as PSTC 1258. Pass/No Pass only.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- diagnose sample problem shooter and develop an appropriate training plan.
- design a target system for various courses of fire.
- construct a training presentation for an individual to safely manipulate various weapons during hands-on application and under a variety of conditions.
- assess a law enforcement agency firearms and use of force policies to ensure they are contemporary and in compliance with state and local regulations.

### PSTC 1653 Firearms Instructor - Long Rifle

**Units:** 1.5  
**Hours:** 30 hours LEC; 10 hours LAB  
**Prerequisite:** PSTC 1650; POST-certified basic law enforcement academy or equivalent as determined by the Dean of Academy Instruction. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

**Enrollment Limitation:** Students must 1) Be free of felony convictions; 2) possess a valid California Driver's License; 3) undergo a fingerprint and criminal history check; 4) be a minimum of 18 years of age; 5) be a United States high school graduate; pass the GED, pass the California High School Proficiency Examination, or have attained a two-year or four-year degree from an accredited college or university; and 6) complete a medical suitability examination.

**Catalog Date:** June 1, 2020

This course is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Students must 1) Be free of felony convictions; 2) possess a valid California Driver's License; 3) undergo a fingerprint and criminal history check; 4) be a minimum of 18 years of age; 5) be a United States high school graduate; pass the GED, pass the California High School Proficiency Examination, or have attained a two-year or four-year degree from an accredited college or university; and 6) complete a medical suitability examination.

**Catalog Date:** June 1, 2020

This course is specifically designed to prepare experienced law enforcement personnel to teach firearms courses at the basic and in-service level. Topics include the role of the law enforcement firearms instructor, liability issues, instructor development, lesson plan development, basic marksmanship, shooter problem analysis, standard and non-traditional shooting positions, weapons transition, and tactical movement and cover. This course meets the minimum instructor certification requirements to be a POST pistol, rifle, and shotgun instructor. Successful completion of all portions of the course, including all course work and firearms qualifications, are mandatory to receive certification. Partial certification will not be allowed. POST certification 2970-21640. Pass/No Pass.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- identify the four cardinal rules of firearms safety.
- identify the state and federal laws pertaining to the use of firearms.
- conduct an agency firearms training needs assessment.
- identify the roles of the firearms instructor.
- demonstrate proficiency with industry standard firearms and shooting practices, static and moving line drills.
- prepare a lesson plan, safety plan, and training diagram for the law enforcement academy recruit firearms qualifications course and the state mandated in-service requalification course.
- assess shooting problems and target analysis.
- evaluate and properly document student shooting performance and deficiencies.

### PSTC 1651 Firearms Instructor Update

**Units:** 0.5  
**Hours:** 2 hours LEC; 22 hours LAB  
**Prerequisite:** PSTC 1650  
**Enrollment Limitation:** Students must 1) Be free of felony convictions; 2) possess a valid California Driver's License; 3) undergo a fingerprint and criminal history check; 4) be a minimum of 18 years of age; 5) be a United States high school graduate; pass the GED, pass the California High School Proficiency Examination, or have attained a two-year or four-year degree from an accredited college or university; and 6) complete a medical suitability examination.

**Catalog Date:** June 1, 2020

This course is designed to further develop and update existing firearm instructors on instructional techniques, diagnostic interpretation, and target systems. This course is accredited by the Commission on Peace Officer Standards and Training (POST) with POST Certification #2970-21740 and the Standards and Training for Correction (STC) Program #0218-027422. This course is formerly known as PSTC 1258. Pass/No Pass only.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- diagnose sample problem shooter and develop an appropriate training plan.
- design a target system for various courses of fire.
- construct a training presentation for an individual to safely manipulate various weapons during hands-on application and under a variety of conditions.
- assess a law enforcement agency firearms and use of force policies to ensure they are contemporary and in compliance with state and local regulations.

### PSTC 1653 Firearms Instructor - Long Rifle

**Units:** 1.5  
**Hours:** 30 hours LEC; 10 hours LAB  
**Prerequisite:** PSTC 1650; POST-certified basic law enforcement academy or equivalent as determined by the Dean of Academy Instruction. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

**Enrollment Limitation:** Students must 1) Be free of felony convictions; 2) possess a valid California Driver's License; 3) undergo a fingerprint and criminal history check; 4) be a minimum of 18 years of age; 5) be a United States high school graduate; pass the GED, pass the California High School Proficiency Examination, or have attained a two-year or four-year degree from an accredited college or university; and 6) complete a medical suitability examination.

**Catalog Date:** June 1, 2020

This course is not a guarantee state regulatory or licensing agencies will also grant equivalency.
This course is designed for existing law enforcement firearms instructors to develop into effective patrol rifle instructors in the AR15 platform patrol rifle. This will be accomplished through an understanding of the weapon, legal aspects, demonstrating proficiency with the weapon, as well as specific training in the teaching of a patrol rifle course. Topics include safety protocol, liability, nomenclature, weapon employment, and student presentations. Because this course is designed to provide practical hands-on training in police tactics and weapon usage, participants will engage in activities and exercises that include a risk of injury. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- discuss legal aspects and agency policy and procedures for use of the long rifle in day to day law enforcement activities.
- demonstrate the safe and proper use, cleaning and storage of the long rifle.
- prepare a safety plan, lesson plan and qualification course for the long rifle.
- demonstrate classroom, range, and firing line instruction for the use of the long rifle.
- evaluate and document a student's long-rifle shooting pattern/performance and any recommended corrective measures.

PSTC 1654 Firearms / Rifle Instructor - Update

Units: 0.5
Hours: 2 hours LEC; 22 hours LAB
Prerequisite: PSTC 1653
Enrollment Limitation: Students must be legally authorized to carry/possess the short-barreled rifle. Authorized persons are identified as "peace officer members of a police department, sheriff's office, marshal's office, the California Highway Patrol, the Department of Justice, or the Department of Corrections and Rehabilitation, when on duty and the use is authorized by the agency and is within the course and scope of their duties, and the officers have completed a training course in the use of these weapons certified by the Commission on Peace Officer Standards and Training."

Catalog Date: June 1, 2020

This course provides the POST-certified law enforcement rifle instructor with contemporary information on legal issues, liability issues, updated training techniques and skills assessment in the use of the short barreled patrol rifle. Topics include instructional techniques, close-quarter combat and active shooter techniques, weapon maintenance, and deployment shooting techniques. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- employ adult learning techniques while instructing law enforcement officers in the use of the patrol rifle.
- identify and analyze the legal aspects related to the use of a rifle and its deployment.
- evaluate an individual officer's proficiency with the patrol rifle and create a performance improvement program.

PSTC 1660 Public Safety Dispatcher - Basic (SPD)

Units: 6
Hours: 105 hours LEC; 15 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

This course is designed to introduce new dispatchers to the basic requirements of first responder dispatching. This course fulfills the requirement by Commission on Standards and Training for Peace Officers (POST). Topics include telephone procedures, radio procedures, stress management, criminal justice system and law. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply communication skills in a crucial situation.
- evaluate the need for a low enforcement response based upon a specific fact pattern.
- analyze information provided by a citizen and interpret it to a responding officer.
- evaluate specific information and apply the appropriate laws to the situation.
PSTC 1661 Public Safety Dispatcher - Advanced (SPD)

This course is designed for public safety dispatchers who have successfully completed the Public Safety Dispatcher Basic Course. Topics include local geography, databases, officer safety, system inquiries, telephone systems and practical exercises. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- deduce the correct geographical location and select the appropriate unit to dispatch.
- generate a computer aided dispatch inquiry for law enforcement information.
- compare and contrast specific facts to determine the appropriate incident codes.
- discuss the employee assistance/peer support program.

PSTC 1662 Radio Dispatch Academy (SPD)

This course increases the student's knowledge of radio procedures and technology, emergency dispatch, and telecommunications. Topics include radio equipment, radio codes, basic voice dispatch, special assistance commands, broadcast procedures, officer safety, and search patterns. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate a working knowledge of computer aided dispatch equipment.
- process traffic stops, subject stops, and on-view incidents using a computer aided dispatch system.
- demonstrate the dispatch of basic calls for police service.
- demonstrate the dispatch of emergency calls for service.

PSTC 1663 SPD Communications Training Program (CTP)

This course is designed to instruct dispatchers on the techniques for training newly assigned personnel to a communications center. Topics include leadership, training models, adult learning theories and practical exercises. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- compare and contrast the differences between the traditional dispatch models and the Communications Training Program (CTP).
- demonstrate teaching and evaluation methods used in the CTP program.
- analyze adult learning styles and describe how they impact the learning process.
- construct a learning matrix binder with relevant departmental operating procedures, regulations and other necessary materials.
PSTC 1671 Automated Field Reporting (AFR)

Units: 0.5
Hours: 4 hours LEC; 16 hours LAB
Prerequisite: PSTC 1660 (Public Safety Dispatcher - Basic (SPD)) or equivalent as determined by the Dean of academy instruction.
Catalog Date: June 1, 2020

This course builds upon students' existing skills, providing training and orientation to the law enforcement records management system. Topics include records management, tracking, data screens and terminology. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- compare and contrast the records management system and automated field reporting system.
- define the terminology used when using the records management system.

PSTC 1683 Continuing Professional Training for Peace Officers

Units: 0.25 - 1.5
Hours: 6 - 16 hours LEC
Prerequisite: California POST-certified basic law enforcement academy within two (2) years or equivalent as determined by the Dean of Academy Instruction (Chapter 11, California Code of Regulations, Section 1005). NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Enrollment Limitation: Students must 1) be free of felony convictions; 2) possess a valid California Driver's License; 3) undergo a fingerprint and criminal history check; 4) be a minimum of 18 years of age; 5) be a United States high school graduate; pass the GED, pass the California High School Proficiency Examination, or have attained a two-year or four-year degree from an accredited college or university; and 6) complete a medical suitability examination.
Catalog Date: June 1, 2020

This course is designed to meet the 2-year perishable skills training cycle requirements for California peace officers. Course content consists of instructional blocks which update and advance the student's existing knowledge and skill set associated with providing public safety in dynamic and multicultural environments. Instruction includes tactical communication, first aid/CPR update, tactical firearms, arrest and control, and may include additional topics determined by legislative mandates and/or regional needs. Formerly SCSD 1150. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify current mandated legislative training requirements for public safety personnel.
- demonstrate the safe and legal application of arrest methods and defensive tactics associated with the use of non-lethal force.
- demonstrate the current first aid/CPR/AED techniques that are legislatively mandated for public safety officers.
- demonstrate the proper storage, handling, cleaning, firing, and tactical movement techniques for the use of public safety agency approved on-duty firearms.
- demonstrate effective verbal and non-verbal communication skills that develop rapport, reduce conflict, and optimize safety for community members and public safety personnel.
- discuss the impact of new case and/or statutory law on contemporary and evolving issues in peacekeeping and law enforcement.

PSTC 1684 Continued Professional Training - Sacramento Police Department

Units: 0.25 - 2.5
Hours: 4 - 40 hours LEC; 4 - 40 hours LAB
Prerequisite: POST-certified basic law enforcement academy within two (2) years or equivalent as determined by the Dean of Academy Instruction (Chapter 11, California Code of Regulations, Section 1005). NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Enrollment Limitation: Students must 1) be free of felony convictions; 2) possess a valid California Driver's License; 3) undergo a fingerprint and criminal history check; 4) be a minimum of 18 years of age; 5) be a United States high school graduate; pass the GED, pass the California High School Proficiency Examination, or have attained a two-year or four-year degree from an accredited college or university; and 6) complete a medical suitability examination.
Catalog Date: June 1, 2020
This course updates and advances the student's existing knowledge and skill set associated with peacekeeping and law enforcement in contemporary society. Instruction in evolving issues includes the safe handling of firearms, tactical shooting, tactical movement, arrest and control, ground fighting, chemical weapons, non-lethal weapons, government codes, penal codes, vehicle codes, health and safety codes, welfare and institution codes, and interpersonal and tactical communication. This course is formerly known as SPD 1193. Pass/No Pass only.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- discuss how recent changes to case and statutory impact law enforcement policies and procedures, field operations, and police-community relations.
- demonstrate effective verbal and non-verbal communication skills to optimize community and officer safety.
- demonstrate the legislatively mandated and industry standard first aid/CPR/AED techniques.
- demonstrate the proper storage, handling, cleaning and firing techniques for agency approved on-duty firearms.

**PSTC 1685 Patrol Entry and Search Training- SPD**

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<th>Units:</th>
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<td>Hours:</td>
<td>3 hours LEC; 5 hours LAB</td>
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<tr>
<td>Prerequisite:</td>
<td>POST certified basic law enforcement academy or equivalent as determined by the Dean of Academy Instruction. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.</td>
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<tr>
<td>Enrollment Limitation:</td>
<td>Students must 1) Be free of felony convictions; 2) possess a valid California Driver's License; 3) undergo a fingerprint and criminal history check; 4) be a minimum of 18 years of age; 5) be a United States high school graduate; pass the GED, pass the California High School Proficiency Examination, or have attained a two-year or four-year degree from an accredited college or university; and 6) complete a medical suitability examination</td>
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<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
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</tbody>
</table>

This update course provides students with information on the various aspects of patrol entry and search techniques. Topics include firearms entry and search techniques in the law enforcement environment, including room clearing, three man bump, and team composition. This course is formerly known as SPD 1217. Pass/No Pass only.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- identify the officer safety aspects associated with the entering and searching a business or residence.
- explain safe handling of firearms in entry and search training situations.
- demonstrate law enforcement entry techniques.

**PSTC 1695 Media for the Public Information Officer or Public Affairs Officer**

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<thead>
<tr>
<th>Units:</th>
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<tbody>
<tr>
<td>Hours:</td>
<td>40 hours LEC</td>
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<td>Prerequisite:</td>
<td>None.</td>
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<td>Catalog Date:</td>
<td>June 1, 2020</td>
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</tbody>
</table>

This course is designed for the new Public Information Officer, Public Affairs Officer or individual whose responsibility it is to work with the media. Topics include legal issues, issue management, crisis and incident management, media management, interview training and writing for the media. Pass/No Pass only.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- apply laws affecting media relations and public safety.
- manage strategies and tactics for working with various types of media.
- evaluate opportunities and challenges in interacting with special interest groups.

**PSTC 1713 Special Weapons and Tactics - Commander**

| Units:   | 1.5  |
This course is designed for supervisors or command staff assigned responsibility for a SWAT unit. Topics include tactical entries, utilizing assault weapons, barricaded subjects, and conducting tactical rescues. This course was formerly known as SCSD 1232. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply leadership concepts in tactical situations.
- assess tactical situations and select appropriate responses such as team deployment, evacuation options, weapons selection, and/or use of chemical agents.
- recognize a critical incident and prepare a tactical response to the situation.

PSTC 1720 Defensive Driving

Units: 0.25
Hours: 8 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020

This course is designed to enhance the driving skills of public employees who are required to drive motor vehicles in the performance of their duties. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- manipulate a motor vehicle in a safe manner.
- apply appropriate techniques to control vehicle skids

PSTC 1722 Driver Training - Update

Units: 0.5
Hours: 6 hours LEC; 12 hours LAB
Prerequisite: POST certified basic law enforcement academy or equivalent as determined by the Dean of Academy Instruction. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Enrollment Limitation: "Students must 1) be free of felony convictions; 2) possess a valid California Driver's License; 3) undergo a fingerprint and criminal history check; 4) be a minimum of 18 years of age; 5) be a United States high school graduate; pass the GED, pass the California High School Proficiency Examination, or have attained a two-year or four-year degree from an accredited college or university; and 6) complete a medical suitability examination."

Catalog Date: June 1, 2020

This course is designed for law enforcement personnel to update them on new laws and refresh their driving skills. This is a Commission on Peace Officer Standards and Training (POST) mandate. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- compare and contrast legal immunities and liabilities affecting law enforcement personnel.
- employ appropriate emergency vehicle driving techniques under a variety of emergency and non-emergency situations.

PSTC 1729 Emergency Vehicle Operations Instructor (SSD/SPD)
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- recognize and discuss defensive driving factors.
- demonstrate Pursuit Immobilization Techniques (PIT).
- construct a skid pan and pursuit training program.
- compare and contrast emergency response and pursuit statistics.

PSTC 1734 Basic K9 Training

Units: 7
Hours: 8 hours LEC; 372 hours LAB
Prerequisite: POST-certified basic law enforcement academy or equivalent as determined by the Dean of Academy Instruction. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.
Enrollment Limitation: Students must 1) be free of felony convictions; 2) possess a valid California Driver's License; 3) undergo a fingerprint and criminal history check; 4) be a minimum of 18 years of age; 5) be a United States high school graduate; pass the GED, pass the California High School Proficiency Examination, or have attained a two-year or four-year degree from an accredited college or university; and 6) complete a medical suitability examination.
Catalog Date: June 1, 2020

This course provides law enforcement officers with skills and knowledge in areas of canine (K9) training and deployment. Topics include care at the home of the canine partner, canine behavior, obedience, obstacle and agility course work, field searches, narcotics and explosives detection, vehicle retention, and safety. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- define the canine learning process.
- apply appropriate canine training techniques.
- discuss obstacles typically encountered by a canine and canine handler.
- control the canine in a variety of field situations.
- demonstrate canine obedience training techniques.
- demonstrate field tracking and building searches using a canine partner.

PSTC 1744 Less Lethal Force Update- SPD

Units: 0.75
Hours: 12 hours LEC; 6 hours LAB
Prerequisite: POST certified basic law enforcement academy or equivalent as determined by the Dean of Academy Instruction. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.
Enrollment Limitation: Students must 1) be free of felony convictions; 2) possess a valid California Driver's License; 3) undergo a fingerprint and criminal history check; 4) be a minimum of 18 years of age; 5) be a United States high school graduate; pass the GED, pass the California High School Proficiency Examination, or have attained a two-year or four-year degree from an accredited college or university; and 6) complete a medical suitability examination.
Catalog Date: June 1, 2020

This update course on lethal force enhances the knowledge of personal safety and effectiveness of the officer assigned to patrol. Topics include pepper spray, use of baton, and carotid holds. This course is formerly known as SPD 1195. Pass/No Pass only.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- interpret use of force policies and applicable statutory and case laws.
- evaluate the appropriate level of force to use under a variety of circumstances and conditions.
- choose effective protocol for Taser deployment.

**PSTC 1745 Police Radar Operator (SPD)**

- **Units:** 0.5
- **Hours:** 32 hours LAB
- **Prerequisite:** POST certified basic law enforcement academy or equivalent as determined by the Dean of Academy Instruction. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency. Students who do not hold a POST basic certificate, or equivalent, may struggle in this course, because fundamental terms and concepts and laws basic to law enforcement will not be taught or explained.
- **Enrollment Limitation:** Students must 1) be free of felony convictions; 2) possess a valid California Driver's License; 3) undergo a fingerprint and criminal history check; 4) be a minimum of 18 years of age; 5) be a United States high school graduate; pass the GED, pass the California High School Proficiency Examination, or have attained a two-year or four-year degree from an accredited college or university; and 6) complete a medical suitability examination.
- **Catalog Date:** June 1, 2020

This course advances the student's existing knowledge and skill set in the area of traffic violation enforcement and in the proper use of police radar devices. Topics include speed enforcement, history and theory, vehicle code law and court decisions, moving radar operation, radar effects, and visual speed and range estimation. The course may meet at various off-campus locations. Pass/No Pass only.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- operate a police radar device as a stationary unit.
- demonstrate knowledge of laws affecting the operation of radar devices.
- evaluate a moving vehicle's speed and estimate the approximate speed.
- evaluate and interpret information in a clear and concise manner and testify in a court of law regarding the information.

**PSTC 1749 Officer Survival and Tactics**

- **Units:** 1
- **Hours:** 8 hours LEC; 32 hours LAB
- **Prerequisite:** POST certified basic law enforcement academy or equivalent as determined by the Dean of Academy Instruction. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.
- **Enrollment Limitation:** Students must 1) Be free of felony convictions; 2) possess a valid California Driver's License; 3) undergo a fingerprint and criminal history check; 4) be a minimum of 18 years of age; 5) be a United States high school graduate; pass the GED, pass the California High School Proficiency Examination, or have attained a two-year or four-year degree from an accredited college or university; and 6) complete a medical suitability examination.
- **Catalog Date:** June 1, 2020

This course is designed to advance the skill level of law enforcement personnel in the most current methods of field tactics and combative confrontations. Topics include officer survival techniques, handgun retention techniques, and defensive tactics. Pass/No Pass only.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- compare and contrast various defensive tactics and apply the appropriate technique for a give situation.
- apply safe searching techniques when searching a room.
- analyze a situation to determine if it is necessary to use deadly force.

**PSTC 1760 Basic Crime Prevention**

- **Units:** 2
- **Hours:** 40 hours LEC
This course is designed for new law enforcement personnel who provide basic crime prevention services for community members. Topics include physical hardware, alarm applications, use of environmental design, security surveys, community support, and program evaluation. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- define the purposes of neighborhood watch.
- plan a neighborhood watch program for a neighborhood.
- interpret the role of the police in the crime prevention process.
- construct a crime prevention survey program for a business.
- define the crime prevention process as it relates to the criminal justice system.

PSTC 1761 Crime Prevention Through Environmental Design

Units: 2
Hours: 40 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020

This course is designed for crime prevention personnel and city and county planners dealing with environmental designs. Topics include reviewing new construction submittals and its impact on law enforcement, community policing, problem solving and theory and process. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- describe the basic applications of Community Policing.
- compare and contrast CPTED theories.
- evaluate a specific site and apply CPTED theories.

PSTC 1763 High Rise Policing and Crime Prevention through Environmental Design

Units: 2
Hours: 40 hours LEC
Prerequisite: PSTC 1200
Catalog Date: June 1, 2020

This course provides participants with an awareness of the specific and unique considerations for designing high rise structures relative to preparing for, preventing, and responding to high rise incidents. Topics include infrastructure protection, critical assessment and management, crime prevention, physical security, mass evacuations and terror mitigation. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Compare and contrast the impact of weapons of mass destruction, explosive devices, and fires as they relate to high rise structures.
- Identify and explain at least two critical infrastructure components.
- Define the basic principles and strategies of Crime Prevention Through Environmental Design (CPTED) relative to high rise structures.

PSTC 1768 Community Oriented Policing

Units: 1
Hours: 24 hours LEC
This course is for new personnel assigned to work within Community Oriented Policing Programs (COPPS) and/or Problem Oriented Policing Program (POPPS). Topics include introduction to COPPS and POPPS, problem solving, facilitating community meetings, politics and Section 8 housing. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- compare and contrast COPPS and POPPS.
- facilitate a community meeting in a manner that reduces conflict as a result of politics and personal agendas.
- analyze information and/or data associated with a community problem and develop an appropriate response.
- evaluate the effectiveness of problem-solving efforts.

PSTC 1770 Basic Peer Support

Units: 0.5 - 1
Hours: 6 - 10 hours LEC; 18 - 30 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

This course introduces the skills required to provide basic peer support in the law enforcement environment. Topics include communication and listening skills, peer support methods, critical incidents and critical incident stress management, operational stress injury, the grief cycle, suicide prevention and intervention, peer support responses, and peer support program building. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain the mission and goals of a law enforcement peer support program.
- identify the three components of a critical incident.
- describe the physical, cognitive, behavioral, and emotional reactions and perceptual distortions commonly associated with critical incidents.
- discuss the impact and recognition of secondary trauma.
- demonstrate active listening skills.
- discuss the potential impact of critical incident stress on an individual's law enforcement career and family.
- delineate the principles of stress management.
- apply the ACE model for suicide prevention and intervention.

PSTC 1771 Faith in Crisis

Units: 1.5
Hours: 24 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020

This course provides volunteer crisis responders with the basic knowledge needed to provide appropriate support for survivors of violent crimes and critical incidents. Topics include local program background, structure, and code of ethics; operational procedures for local public safety agencies; local resources and referral agencies; occupational health, safety, and first aid; and mandated reporting requirements. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- list the types of events that tend to cause emotional trauma.
- describe normal physical, mental, emotional, behavioral, and spiritual reactions to a trauma.
• identify symptoms that indicate a traumatized person needs prompt attention from a medical professional.
• identify risk factors that may indicate a survivor should be encouraged to seek out a mental health professional.
• explain how providing effective crisis intervention as soon as possible after a traumatic incident can have a long-term effect on survivors’ lives.
• identify self-care techniques for volunteer crisis responders.

PSTC 1773 Basic Critical Incident Stress Management

Units: 1
Hours: 18 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020

This course examines a wide range of crisis intervention services, including pre-incident and post-incident crisis education, significant support services, crisis intervention for individuals, demobilizations after large-scale traumatic incidents, small group diffusing, and the group intervention known as Critical Incident Stress Debriefing (CISD). Pass/No Pass Only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• identify and explain crisis intervention services.
• demonstrate specific demobilizations and defusings.
• demonstrate specific interventions.
• prepare a simulated Critical Incident Stress Debriefing.

PSTC 1778 Interpersonal and Tactical Communications: Train the Trainer

Units: 1
Hours: 24 hours LEC
Prerequisite: PSTC 1200
Catalog Date: June 1, 2020

This course is designed for the individual who is assigned to or intends to teach Interpersonal and Tactical Communications. Topics include elements of communication, persuasion techniques, questioning techniques, adult learning concepts and lesson planning. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• demonstrate different communication techniques.
• apply methods of de-escalation using verbal and non-verbal communication.
• develop an an extended course outline and prepare a lesson plan for Tactical Communication.

PSTC 1780 Campus Law Enforcement

Units: 2
Hours: 36 hours LEC; 4 hours LAB
Prerequisite: Successful completion of a POST certified basic law enforcement academy within the last three years or current equivalent training as determined by the Dean of Academy Instruction. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency. Students who do not hold a POST basic certificate, or equivalent, may struggle in this course, because fundamental terms and concepts and laws basic to law enforcement will not be taught or explained.

Enrollment Limitation: Students must 1) be free of felony convictions; 2) possess a valid California Driver's License; 3) undergo a fingerprint and criminal history check; 4) be a minimum of 18 years of age; 5) be a United States high school graduate; pass the GED, pass the California High School Proficiency Examination, or have attained a two-year or four-year degree from an accredited college or university; and 6) complete a medical suitability examination.

Catalog Date: June 1, 2020

This course extends the student’s fundamental knowledge of and skill set in contemporary law enforcement and peacekeeping in diverse societies to include the
considerations and challenges unique to the campus environment. Topics include the roles and responsibilities of school police, mandatory reporting requirements, constitutional, case, and juvenile law specific to school campuses, situational and tactical awareness in the education setting, clique structure, gang culture, dynamics of student behavior, and application of crowd control, emergency management, and incident command principles on and around campus. This course is certified by the California Commission on Peace Officer Standards and Training (POST), #2970-22294. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain the school police officer’s role and responsibilities in the education environment.
- discuss the school police officer’s authority on and off duty.
- recognize student behavior as it relates to providing a safe educational environment, with a focus on gang culture, gang dynamics, and/or clique structure.
- recount the laws relative to search, seizure, and arrest on school campuses.
- discuss the school discipline process and privacy issues as they relate to student records.
- identify mandated reporting requirements and liability issues on and off campus.
- utilize communication skills to defuse conflict and obtain voluntary compliance.
- utilize age-appropriate mediation to resolve conflicts.
- identify dangerous and potentially dangerous situations, trespassers, and the time frame for potential problems to arise on and around the campus.
- summarize the school district’s responsibilities for managing disasters and emergencies.
- apply crime scene management and crowd control principles on and around campus.

PSTC 1781 School Resource Officer

Units: 2
Hours: 40 hours LEC
Prerequisite: PSTC 1200
Catalog Date: June 1, 2020

This course is designed for the officer assigned or newly assigned as a school resource officer. Topics include school law, mentoring, basic teaching skills, instructional techniques and constructing a course outline. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify and apply appropriate codes to individual and/or groups of students.
- compare and contrast gang affiliation indicia.
- develop a 2-4 hour course outline.

PSTC 1783 Campus Law Enforcement Supervisor

Units: 1.5
Hours: 28 hours LEC; 12 hours LAB
Prerequisite: PSTC 1780
Catalog Date: June 1, 2020

This course is designed to provide skills and knowledge for the campus law enforcement supervisor employed by a school district. Topics include the role and responsibilities of the campus supervisor, administrative processes, campus safety plans, violence mitigation, crowd control, disaster and emergency management, disciplinary and truancy hearings, legal update, and liability issues for campus supervisors. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain the role and responsibilities of the campus supervisor.
- explain legal issues and liabilities related to campus supervision.
• explain the importance of procedural justice.
• discuss the impact of technology on student behavior and campus life.
• develop a campus security plan.
• develop a campus emergency and disaster response plan.

PSTC 1787 School Security Officer

Units: 1
Hours: 24 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020

This course is designed for security officers and guards (watch-person, campus monitor, campus officer) employed by a school district (K-12 or California Community College) for more than 20 hours per week. Topics include roles and responsibilities, liability issues, conflict resolution and student behavior. This course is approved by Department of Consumer Affairs/Bureau of Security and Investigative Services, and the California Commission on Peace Officers Standards and Training (POST). Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• identify important points of campus law enforcement.
• identify appropriate laws and regulations related to search and seizure on school grounds.
• demonstrate knowledge of handling disasters and emergencies within the on-campus environment.

PSTC 1800 Interview and Interrogation Techniques

Units: 2
Hours: 36 hours LEC; 4 hours LAB
Prerequisite: POST certified basic law enforcement academy or equivalent as determined by the Dean of Academy Instruction. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant POST certified basic law enforcement academy or equivalent as determined by the Dean of Academy Instruction. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Enrollment Limitation: Students must 1) Be free of felony convictions; 2) possess a valid California Driver's License; 3) undergo a fingerprint and criminal history check; 4) be a minimum of 18 years of age; 5) be a United States high school graduate; pass the GED, pass the California High School Proficiency Examination, or have attained a two-year or four-year degree from an accredited college or university; and 6) complete a medical suitability examination.

Catalog Date: June 1, 2020

This course advances the law enforcement or corrections student's knowledge and skills set in legal and behavioral techniques associated with interview and interrogation. Topics include predictable behavior, free-format interviews, elimination interviews, polygraphs, and the Ten Step Plan for interviews and interrogations. This course is certified by the California Commission on Peace Officer Standards and Training (POST). #2970-31445 and Standards and Training for Corrections (STC), #0218-007921. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• compare and contrast attorney privileges specified in 5th and 6th Amendments.
• determine when to apply the Miranda Warning three-pronged test.
• conduct free format, cognitive, and elimination interviews.

PSTC 1801 Background Investigations

Units: 1.5 - 2
Hours: 32 - 40 hours LEC
Prerequisite: PSTC 1200
Catalog Date: June 1, 2020
This course is designed for law enforcement or civilian personnel who are responsible for conducting background investigations for the hiring of public safety personnel. Topics include the background process, psychological evaluations, interviewing techniques and documentation. This course is approved by the California Commission on Peace Officer Standards and Training (POST) and California Standards and Training for Corrections (STC). Pass/No Pass only.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- describe the instruments available to detect deception.
- apply the Commission on Peace Officers Standards and Training (POST) rules and regulations to the public safety background process.
- evaluate pre-employment applications for employment recommendation.

PSTC 1804 Informant Development and Maintenance

Units: 1
Hours: 24 hours LEC
Prerequisite: POST certified basic law enforcement academy or equivalent as determined by the Dean of Academy Instruction. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.
Enrollment Limitation: Students must 1) Be free of felony convictions; 2) possess a valid California Driver’s License; 3) undergo a fingerprint and criminal history check; 4) be a minimum of 18 years of age; 5) be a United States high school graduate; pass the GED, pass the California High School Proficiency Examination, or have attained a two-year or four-year degree from an accredited college or university; and 6) complete a medical suitability examination.
Catalog Date: June 1, 2020

This course advances students’ existing investigative skills, interview and interrogation skills, informant development and management, case management and the development and execution of search warrants. Topics include common problems when using informants, limitations on the use of informants, informant motives, informant policies, investigative strategies, and informants and ethics.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- discuss the most common problems encountered when using informants.
- identify and discuss the contemporary state and federal statutes related to developing confidential informants.
- discuss law enforcement agency policies relevant to informant development, vicarious liability and officer safety.
- describe the parameters for maintaining the confidentiality of informants.
- demonstrate interview techniques for recruiting and developing informants.
- demonstrate confidential informant case development, utilization and management in undercover scenarios.
- discuss the ethical issues associated with the use of informants.

PSTC 1806 Crime Analysis

Units: 1.5
Hours: 32 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020

This course is designed for the newly hired, promoted, or assigned crime analyst and/or supervisor responsible for law enforcement crime analysis functions with an agency. Topics include building a crime analysis unit, staffing, data collection and information dissemination. Pass/No Pass only.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- discuss the elements of crime analysis.
- collect and analyze information to construct crime patterns.
- evaluate and determine the appropriate distribution of crime analysis data.
PSTC 1807 Advanced Identification of Organized Criminal Street Gangs and Criminal Gang Activities

This course provides students with information and resource identification critical to the reduction of gang violence. Pass/No Pass only.

Upon completion of this course, the student will be able to:

- identify and document local organized criminal street gangs.
- identify the impact of criminal street gangs on communities.
- identify law enforcement and community partners impacted by organized criminal street gangs.

PSTC 1808 Advanced Organized Gang Investigations

This course enhances the skill level of law enforcement officers, probation and parole officers with information vital to reduce gang violence. Topics include identification and documentation of organized gang activity, proactive investigative techniques, developing an investigative plan, case initiation and operational planning, case organization and documentation, and multi-location and multi-jurisdictional search warrants.

Upon completion of this course, the student will be able to:

- identify and document local organized criminal street gangs.
- identify law enforcement, corrections and community partners impacted by organized criminal street gangs and gang violence.
- develop a strategy for providing gang education, gang prevention, and gang violence reduction.

PSTC 1812 Fingerprint Identification - Basic

This course is designed to provide basic instruction in fingerprint comparison and identification. Topics include ridge characteristics, basic pattern types, classifications and verifications. Pass/No Pass only.

Upon completion of this course, the student will be able to:

- evaluate basic fingerprint pattern types.
- classify a fingerprint based upon established procedures.
- compare and contrast a fingerprint to identify an individual.

PSTC 1813 Crime Scene and Forensic Photography of Physical Evidence
This course provides law enforcement crime scene investigators the skills needed to conduct forensic photography of physical evidence as well as conduct general crime scene photography. Topics include legal admissibility, photographic coverage, major crime scene photography, film speed, lighting techniques, and photographic equipment. Pass/No Pass only.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- explain the importance of documenting every photograph taken at a crime scene.
- demonstrate how to properly photograph a crime scene.
- recommend film suitable for crime scene and evidence photography.
- select proper camera settings to properly expose color and black and white film.

PSTC 1814 Advanced Latent Print Comparison & Identification

This advanced course is designed for the crime scene investigator or fingerprint technician to learn how to compare and identify latent/fragmentary prints to inked fingerprint and palm print impressions. This course is formerly known as PSTC 1821. Pass/No Pass only.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- explain the basis for the science of identification of friction ridge impressions and its historical background.
- discuss the embryonic development and characteristics of friction ridge skin.
- identify the various friction ridge formations and ridge flows found on the fingers, thumbs, and palmer surface of the hand.
- analyze and use the ridge flows and creases on the palmer surface of the hand to help locate and orient fragmentary friction ridge impressions for comparison to known impressions.
- identify the three phalanges of the fingers and the two phalanges of the thumbs and the phalangeal creases are commonly discovered.
- describe the various shapes of latent palm prints that will provide orientation clues for a comparison to a corresponding area in a known impression.
- discuss verification protocols, note taking, and documentation matters.
- develop proficiency with the ACE-V Scientific Method to compare and identify partial/fragmentary latent friction ridge impressions.
- understand the usefulness of charts to illustrate and identification by friction ridges to a jury.
- discuss what juries expect to see and hear from a latent fingerprint expert.
- develop a list of “qualification questions” and answers to use when testifying as an expert fingerprint witness in the future.
- take the I.A.I. Latent Print Examiner Certification test.
- take legible Complete Friction Ridge Exemplars.

PSTC 1820 Crime Scene Investigation - Basic

This course is designed for newly assigned law enforcement agency crime scene investigators who are responsible for conducting crime scene investigations. Topics
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- evaluate and preserve critical evidence.
- analyze and prepare documentation of a crime scene through photography and videography.
- apply court recognized procedures for handling and storage of evidence.
- compare and contrast bloodstain spatter.

PSTC 1852 Drug and Alcohol Recognition

Units: 1  
Hours: 24 hours LEC  
Prerequisite: PSTC 1200  
Catalog Date: June 1, 2020

This course provides law enforcement personnel with the knowledge and skills to evaluate the effects of drugs and alcohol on an individual and to provide expert testimony on the evaluation. Topics include legal codes, stimulants and depressants, investigative techniques and courtroom testimony. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- recognize and categorize the effects of different drugs on the human body.
- recognize objective symptoms of alcohol on the human body.
- compare and contrast the effects of alcohol between individuals at various levels of intoxication.
- administer legally approved field tests to determine the level of intoxication.

PSTC 1853 Integrated Narcotics Training

Units: 0.5 - 1  
Hours: 4 - 8 hours LEC; 32 - 36 hours LAB  
Prerequisite: POST certified basic law enforcement academy or equivalent as determined by the Dean of Academy Instruction. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Enrollment Limitation: Students must 1) Be free of felony convictions; 2) possess a valid California Driver's License; 3) undergo a fingerprint and criminal history check; 4) be a minimum of 18 years of age; 5) be a United States high school graduate; pass the GED, pass the California High School Proficiency Examination, or have attained a two-year or four-year degree from an accredited college or university; and 6) complete a medical suitability examination.

Catalog Date: June 1, 2020

This course advances the student's existing advanced investigative skills with specialized narcotics related training. Topics include ethics and integrity, surveillance techniques, undercover operations, and asset seizure. This course is formerly known as SPD 1237. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- recall updated case law, forfeiture procedures, and legal requirements for search warrants related to narcotic enforcement.
- differentiate between reliable and problematic informants.
- design and formulate a basic search warrant and affidavit.
- demonstrate basic fixed and moving surveillance techniques.

PSTC 1854 Drug Recognition Evaluator Course
This course enhances the skills of law enforcement personnel to evaluate and provide expert testimony on the effects of drugs and alcohol. Topics include psycho-physical tests, eye examinations, alcohol workshop, signs and symptoms, drugs in society, vehicle operation, drug classification process and procedures, nystagmus, convergence, pupil size and reaction to light, physiology and drugs, depressants, stimulants, physician's desk reference, hallucinogens, associative anesthetics, narcotic analgesics, inhalants, cannabis, report writing, curriculum vitae, and case preparation and testimony. Pass/No Pass only.

Upon completion of this course, the student will be able to:

- analyze objective symptoms of alcohol and drugs on the human body.
- administer legally approved field tests to determine the level of intoxication.
- recognize and categorize the effects of different drugs on the human body.
- collect evidence, complete a narrative report, and prepare a case for court.

### PSTC 1870 Disaster Preparedness

This course prepares students to respond to disasters and take the necessary steps to minimize loss of life and property. Topics include floods, hazardous materials, transportation disasters, wildfires, earthquakes, national security, and critical incidents. This course is formerly known as SCSD 1209. Pass/No Pass only.

Upon completion of this course, the student will be able to:

- describe the characteristics of the seven common disasters.
- identify and evaluate the basic hazards and problems law enforcement officers face when responding to and managing a disaster/critical incident.
- analyze law enforcement disaster plans.

### PSTC 1874 Traffic Collision Investigation - Intermediate

This course is designed to expand the investigative knowledge and skills of the traffic collision investigator. Topics include definitions and terminologies associated with minor and major collisions, measuring and diagramming the collision scene and speed computation. Pass/No Pass only.

Upon completion of this course, the student will be able to:

- diagram a collision for evidential purposes and courtroom presentation.
apply mathematical formulas from vehicle tire marks to determine speed.

prepare documents for courtroom testimony.

PSTC 1900 Traffic Collision - Basic

Units: 2
Hours: 40 hours LEC
Prerequisite: PSTC 1200
Catalog Date: June 1, 2020

This course provides in-depth instruction into the multiple disciplines of traffic collision investigation. Topics include scene management techniques and introduction to the Manual on Uniform Traffic Control Devices, highway engineering definitions, Nine-Cell Matrix, incident scene photography, primary collision factors, identification and documentation of physical evidence, measuring and diagramming methodology, use of the Northwestern University traffic template functions and nomographs, and an in-depth discussion on proper traffic collision documentation and Highway Patrol Manual 110.5, Collision Investigation Manual (CIM). This course satisfies the prerequisites for the Intermediate Collision Investigation course, as well as the requirements of Vehicle Code Section 40600.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify the primary collision factor of a traffic collision and justify the opinion based upon the collected facts and statements.
- identify, collect, and document physical evidence associated with traffic collisions.
- properly document a complex traffic collision, utilizing the Collision Investigation Manual (HPM 100.5), based on a felony DUI scenario.

PSTC 1902 Traffic Accident Reconstruction

Units: 4
Hours: 72 hours LEC; 8 hours LAB
Prerequisite: POST certified basic law enforcement academy or equivalent as determined by the Dean of Academy Instruction. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency. Students who do not hold a POST basic certificate, or equivalent, may struggle in this course, because fundamental terms and concepts and laws basic to law enforcement will not be taught or explained.

Enrollment Limitation: Students must 1) be free of felony convictions; 2) possess a valid California Driver's License; 3) undergo a fingerprint and criminal history check; 4) be a minimum of 18 years of age; 5) be a United States high school graduate; pass the GED, pass the California High School Proficiency Examination, or have attained a two-year or four-year degree from an accredited college or university; and 6) complete a medical suitability examination.

Catalog Date: June 1, 2020

This course advances the skill set of law enforcement personnel assigned to investigate traffic collisions. It covers the knowledge and skills needed to determine at-impact speeds of collision-involved vehicles and to draw conclusions of how and why the collision occurred. Topics include math and physics review, reconstruction principles, crush analysis, conservation of momentum analysis, heavy duty and articulated vehicles, motorcycle collision, vehicle vs. pedestrian, and bicycle collision analysis. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply basic math and physics principles involved in collision reconstruction.
- calculate slide to stop velocity and conduct critical speed scuff mark analysis.
- define the basic principles underlying the determination of speed change from collision damage.
- summarize the collision reconstruction process.
- formulate and support conclusions as to how and why a traffic accident occurred.

PSTC 1904 LIDAR Operator Course

Units: 0.5
Hours: 9 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020
This course covers the legal and technical use of light distance and ranging speed enforcement (LIDAR). It includes the history of LIDAR, applicable case law, and visual speed determination skills. May be taken two times for credit. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- explain the operational considerations when using LIDAR speed enforcement.
- cite the applicable case law regarding laser speed enforcement.

PSTC 1998 Work Experience in PSTC

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Sacramento Metropolitan Fire District (SMFD)
In This Section

[College Administrators](/2020-2021-catalog/administrators-faculty-and-staff/college-administrators)
Learn more about American River College's college administrators.

[Faculty and Staff](/2020-2021-catalog/administrators-faculty-and-staff/faculty-and-staff)
Learn more about American River College's college administrators.
President
Greene, Thomas (2014)
College President
B.S., Northern Illinois University
M.S., Northern Illinois University
Ph.D., University of Texas at Austin

Vice Presidents
Kaur, Kuldeep (2016)
Vice President of Administration
A.S., Heald Business College
B.S., University of Phoenix
MBA, National University

Stephenson, Jeffrey Wayne (2003)
Vice President of Student Services
B.M.S., Cincinnati Mortuary College
M.S., Western Illinois University Macomb
Ph.D., Capella University

Associate Vice Presidents
Booth, Derrick (2007)
Interim Associate Vice President, Workforce Development
B.S., CSU Chico
M.S., Ph.D., University of Washington

Funk, Chad (2009)
Associate Vice President, Student Services
A.A., Yuba College
B.A., CSU Sacramento
M.S., University of La Verne

Deans
Aguilar, Gary (1999)
Dean, Technical Education
B.A., California State Polytechnic University
M.A., University of Phoenix

Beckhorn, Nisha (2006)
Interim Dean, Student Services, Counseling & Transfer Services
B.S., UC Davis
M.S., CSU Sacramento

Daily, Nick (2019)
Interim Dean, Equity & Inclusion
M.A., College Student Services Administration, Oregon State University
B.A., Women’s & Gender Studies, University of Redlands

De Lapp, Jan (1999)
Dean, Health & Education
B.A., M.A., CSU Sacramento

Kobayashi, Hironobu (Frank) (2013)
Interim Vice President of Instruction
A.S., A.A., Santa Rosa Junior College
M.A., Stanford University
Ed.D., B.S., UC Davis
<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Years</th>
<th>Education</th>
</tr>
</thead>
</table>
| Gustafson, Bryon    | Dean, McClellan Center / SRPSTC            | 2020     | B.A., Excelsior College  
M.A., USC  
Ph.D., University of Colorado at Denver |
| Herndon, Doug       | Dean, English                              | 2015     | B.A., CSU Sacramento  
M.A., CSU Sacramento |
| Johnson, Joshua Moon| Dean, Student Services, Equity Programs & Pathways | 2017     | B.B.A, University of South Alabama  
M.A., University of Alabama  
M.A., Binghamton University, State University of NY  
Ed.D., Northern Illinois University |
| Mccormack, John     | Interim Associate Dean, Apprenticeship     | 2001     | A.A., Sierra College  
B.V.E. CSU Sacramento  
M.Ed., CSU Sacramento |
| Ostgaard, Kolleen   | Dean, Student Services, Support Programs   | 2011     | B.A., M.A., CSU Sacramento |
| Roy, Rina B.        | Dean, Science and Engineering              | 1991     | B.S.C., University of Calcutta, India  
Ph.D., University of Florida |
| Sullivan-torrez, Kat| Interim Dean, Kinesiology & Athletics      | 1997     | B.A., CSU Fresno  
M.A., Azusa Pacific University |
| Hartley, Gary       | Interim Dean, Learning Resources           | 2019     | B.A., Trinity College  
M.A., Trinity Divinity School  
Ed.D., ABD, Northern Illinois University |
| Hicks, Diana        | Dean, Humanities                           | 2001     | A.A., American River College  
B.A., M.A., CSU Sacramento |
| Karp, Adam          | Dean, Planning, Research & Technology      | 1999     | B.A., Ph.D., UC Davis |
| Milano, Angela      | Dean, Fine & Applied Arts                  | 2008     | B.A., Sonoma State University  
M.S., Texas A&M University |
| Reske, Marsha       | Dean, Distance Education and Virtual Education Center | 2001     | A.A., Santa Rosa Junior College  
B.S., State University of New York  
M.A., University of London  
M.S., Nova Southeastern University |
| Sorenson, Kathryn   | Interim Dean, Behavioral and Social Sciences | 2019    | Ph.D., University of Texas, Austin  
M.S., University of Texas, Arlington  
B.S., Baylor University |
| Windham, Adam       | Dean, Mathematics                          | 2019     | B.A., CSU Fresno  
M.S., San Francisco State University |
# Behavioral and Social Sciences

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<td>Murakami, Dean M.</td>
<td>1990</td>
<td>Psychology</td>
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Psychology
B.A., Trinity University, San Antonio
M.A., UC Santa Barbara
Ph.D., Oklahoma State University, Stillwater

Pearson, Rudy N. (1995)
History
B.S., Fresno Pacific College
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Rosario, Brian P. (2006)
Economics
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Scott, Margaret L. (2007)
Psychology
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Smith, Sara (2016)
History
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Sukkary-stolba, Soheir (1976)
Anthropology
B.A., Cairo University
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Unmack, Cynthia (2004)
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Wilkerson, Asha (2017)
Legal Assisting
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Business and Computer Science

Antos, Damon (2002)
Computer Information Science
B.S., Cal Poly
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Bennett, Heidi (2009)
Business Technology
A.A., Cosumnes River College
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Dumais, Laurence (1999)
Computer Information Science
A.A., San Jose City College
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M.S., Golden Gate University

Fox, David E. (1998)
Computer Information Science
A.A., Columbia College
B.S., CSU Stanislaus
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Gilbert-valencia, Daniel (2016)
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B.A., UC San Diego
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Padgett, Christopher D. (1998)
History
B.A., University of the Pacific
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Reynolds, Laurinda (2016)
Gerontology
A.A., Paradise Valley Community College
B.S., Northern Arizona University
M.A., University of Northern Colorado

Sacha, Jeffrey O. (2018)
Sociology
B.A., Gonzaga University
M.A., Ph.D., University of Southern California

Shimizu, Yuijiro (2006)
Research/Psychology
B.A., Simon Fraser University
M.A., Washington University

Scott, Margaret L. (2007)
Psychology
A.S., West Valley College
B.S., San Jose State University
M.A., CSU Sacramento

Stewart, Mark A. (1992)
Psychology
B.A., Brigham Young University
Ph.D. University of Notre Dame

Tabares, Tressa (2002)
Political Science
B.A., E. Connecticut State University
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History
B.A., UC Santa Cruz
M.A., Northeastern University

Worley, Katrina M. (2005)
Anthropology
B.A., M.A., CSU Sacramento

Auyeung, Tak (2000)
Computer Information Science
M.S., Ph.D., UC Davis

Condos, Marc (2002)
Business
B.S., CSU Fresno
M.A., CSU Sacramento

Fish, Melissa (2002)
Business Technology
B.A., Boston College
M.B.A., CSU Sacramento

Gaynaliy, Stephanie (2019)
Accounting
B.A., CSU Sacramento

Gonzalez, Robert (2000)
Business
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M.S., CSU Sacramento  
Gomez, Martin (2008)  
EOP&S/CARE  
B.A., UC Davis  
M.A., CSU Sacramento

M.S., CSU Long Beach  
Griffin, Robert (2017)  
Veterans Resource Center  
A.A. and A.S., Yuba Community College  
B.S., M.S., CSU Sacramento

Hardwick, Chanin (2008)  
Counseling  
B.A., UC Davis  
M.A., University of Phoenix

Jenkins, Arthur (2016)  
EOP&S  
B.A., University of the Pacific  
M.A., Alabama State University

Mays, Judy (2005)  
Counseling  
A.A., Bakersfield Community College  
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Ph.D., University of Texas

Mireles-tijero, Mayra (2019)  
Counseling  
M.S., CSU Sacramento

Moore, Reyna (2010)  
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B.A. & M.S., CSU Fresno

Nelson, Jessica (2008)  
Counseling  
B.S., CSU Chico  
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Queen, Kim (2019)  
Counseling  
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Counseling  
B.A., CSU Northridge  
M.S., San Francisco State University  
Ed.D., UC Davis

Reynolds, Tera (2015)  
Student Success/Pathways  
A.A., American River College  
B.S., CSU Sacramento  
M.S.W., CSU Sacramento  
Ed.D., CSU Sacramento

Roberts-law, Lisa E. (1991)  
Counseling  
B.A., University of Illinois  
M.S., Illinois State University

Scalzi, Jennifer (2007)  
Counseling  
A.A., American River College  
B.A., M.S., CSU Sacramento

Valdez, Judith (2015)  
EOP&S/CARE  
A.S., Porterville Community College  
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Whipple, Pamela (2014)  
Health and Wellness Center  
B.S.N., Michigan State University  
M.S.N., CSU Sacramento

Yatsenko, Tatiana (2015)  
EOP&S/CARE/NextUP  
A.A., American River College  
B.A., Tallinn State Conservatory of Music
English

Angelone, Michael (2008)
English
B.A., M.A., CSU Sacramento

Reading
B.A., UC Davis
M.A., San Francisco State University

Arellano, Catherine (2014)
English
A.A., Chabot College
B.A., M.A., UC Berkeley
M.F.A., University of Iowa

Barnard, Gina (2018)
English
B.A., UC Davis
M.F.A., San Diego State University

Bell, John T. (2003)
English
B.A., University of New Mexico
M.F.A., Wichita State University

Bertoglio, Nancy Ann (1996)
Reading
B.A., UC Davis
M.A., CSU Sacramento

Borcz, Robyn (2016)
Reading
M.A., CSU Sacramento

Bradford, Aaron (2015)
English
B.A., CSU, Long Beach
M.F.A., CSU, Long Beach

Clarke, Arlene G. (1989)
English
B.A., M.A., San Francisco State University
Ph.D., UC Berkeley

Cooper, Michaela B. (2005)
English
B.A. equiv., Eberhardt-Karls Universitaet, Tuebingen, Germany
B.A., CSU Sacramento
Ph.D., George Washington University

Corcoran, Amanda (2002)
English
B.A., M.A., Texas Tech University

Crowder, Michael (2017)
Writing
B.A., UC Davis
M.F.A, New School University

Diaz, Melissa (2015)
Writing
B.A., M.A., CSU Sacramento

Engler-lynch, Denise (2008)
English
B.A., Santa Clara University
M.A., Arizona State University

Gourdine, Traci L. (2000)
English
B.A., UC Davis
M.A., San Francisco State University

English
B.A., CSU Humboldt
M.A., CSU Sonoma

Hoffpaur, Carina (2016)
English
B.A., University of Wyoming
M.A., Ph.D., UC Santa Barbara

Howe, Susan R. (1996)
English
B.S., M.A., CSU Sacramento

Kiefer, Christian (2009)
English
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M.A., CSU Sacramento
Ph.D., UC Davis

Laflam, Jennifer (2014)
English
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Lee, Dennis J. (2007)
English
B.A., Miami University
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Leibrock, Rachel (2017)
Journalism
B.A. (2), CSU Sacramento
M.A., Mills College

Leung, Noue (2015)
Reading
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M.A., UC Davis

English
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Lovering, Janay (2013)
English
B.A., M.A., CSU SACRAMENTO

Lyman, Robert G. (2000)
English
A.A., American River College
B.A., M.A., CSU Sacramento

Merson, David N. (1998)
English
B.A., Westmont College
M.A., UC Davis

Morgan, Roxanne (2008)
Reading
B.A., University of Massachusetts
M.A., San Francisco State University

O'Brien, Kathleen (2012)
Pries, Shannon S. (2006)
English
B.A., M.A., CSU Sacramento
Ph.D., University of Oregon

Prieto, Caroline (2018)
Writing
IGETC Certificate, City College of San Francisco
B.A., English (Literature), San Francisco State University
M.A., English (Composition), San Francisco State University
Certificate, Teaching Postsecondary Reading, San Francisco State University

Roadcap, Gordon (2002)

English
B.A., Sonoma State University
M.A., San Francisco State University

Spurgeon, Michael L. (2005)

English
B.A., Colby College
M.F.A., University of Arizona, Tucson

Youngs, Cynthia A. (2001)

Reading
B.A., Winona State University
M.A., Oakland University, Michigan

Fine and Applied Arts

Arnfeld, Rebecca (2016)
Art History
B.A., UC Santa Barbara
M.A. (2), UC Davis

Burleson, Kathryn B. (1989)
Theatre Arts
B.A., CSU Sacramento
M.F.A., UC Davis

Cooley, Marie K. (1998)
Interior Design
A.A., College of the Sequoias
B.A., M.A., CSU Sacramento

Downs, Pamela (2008)
Theatre Arts
B.F.A., Southwest Missouri State University
M.F.A., UC Davis

Hamel, Linda (2003)
Art
M.A., CSU Sacramento
B.F.A., University of Illinois

Hamre, Susan (2009)
Music
B.A., Augustana College
M.M., CSU Northridge

Hughes, Ralph E. (1991)
Music
B.A., M.A., CSU Sacramento
D.M.A. (Conducting), University of South Carolina

LaPierre, Arthur (1997)
Music
A.A., Fullerton College
B.M., M.A., CSU Long Beach
D.A., University of Northern Colorado

Martinez, Craig (2008)
Art New Media
B.S., UC Davis

New, Donald E. (2006)
Interior Design
B.F.A., Otis Art Institute of Parsons School of Design

Roadcap, Gordon (2002)

English
B.A., Sonoma State University
M.A., San Francisco State University

Spurgeon, Michael L. (2005)

English
B.A., Colby College
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Art/Computer Graphics
B.A., M.A., CSU Sacramento

Russell, Gail (2002)
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Silva, Nancy (1988)
Theatre Arts
A.A. Orange Coast Junior College
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Stoehr, Matthew (2002)
Art New Media
B.F.A., State University of New York
M.F.A., Ohio University

Urkoefsky, Teresa (2000)
Hospitality Management
B.V.E., CSU
Graduate, California Culinary Academy

Williams, Samuel (2000)
Theatre Arts
B.A., Slippery Rock University, Philadelphia
M.F.A., UC Davis

Worsfold, Brandy (2007)
Art
B.A., Southwest Missouri State University
M.F.A., University of Florida

Health and Education

Nursing
B.S.N., Point Loma Nazarene University
M.A., University of Iowa
D.N.P., Case Western Reserve University

Bartoe, Timothy (2018)
Nursing
A.A., Cosumnes River College
A.S., Sacramento City College
B.S., Kaplan University
M.S.N., Kaplan University

Blaney, Julie (2015)
Nursing
B.S.N., West Texas University
M.S.N., Gonzaga University

Chou, Susan (2005)
Nutrition
B.A, B.S., M.S., Ph.D., UC Davis

Czaja, Diane (2017)
Respiratory Care
A.S., Ivy-Tech Community College
B.S., Purdue University

Garner, Cheri (2008)
Nursing
A.D.N., American River College
B.S.N., M.S.N. Ed, University of Phoenix

Gonsalves, Jana L. (2005)
Nutrition
B.S., Cal Poly
Ph.D., U.C. Davis

Parks, Judy (2008)
Culinary Arts
B.A., CSU Sacramento

Silva, Douglas (2015)
Culinary Arts
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Smith, Craig (1999)
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B.F.A., Southwest Missouri State University
M.F.A., University of Nebraska

Stoehr, Matthew (2002)
Art New Media
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M.F.A., Ohio University

Thompson, Steven (2000)
Music
B.M., Wichita State University
M.M., D.M.A., University of Southern California

Van Regenmorter, Merlyn (1999)
Music
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M.A., CSU Dominguez Hills
Ed.D., Argosy University

Wood, Patricia (2017)
Art
B.A., UC Davis
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Goold, Grant (1997)
Paramedic
B.A., CSU Sacramento
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**Humanities**

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Fertel, Kristine (2003)
English as a Second Language
B.A. UC Riverside
M.A., San Francisco State University

Haara, Erik (2017)
English as a Second Language
M.A., CSU Sacramento

Hess, Krista (1998)
English as a Second Language
B.A., M.A., CSU Sacramento

Holden, Dennis (1991)
Philosophy
B.A. UCLA
M.A., Ph.D., UC Irvine

English as a Second Language
B.A., UC Davis
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Komura, Keiko (1999)
English as a Second Language
A.A. Sacramento City College
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Limmaneebrasert, Oranit (2001)
English as a Second Language
B.A., Michigan State University
M.A., Ph.D., University of Hawaii

Lysinger, Diana (2017)
Foreign Languages
B.A./B.Ed., Lithuanian University of Educational Sciences
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Montgomery, Thoeung (2007)
English as a Second Language
A.A., Modesto Junior College
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Morrison, Brian (2019)
Deaf Culture & ASL Studies
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Rau, Mark, J. (2000)
English as a Second Language
B.A., University of Massachusetts
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Specker, Elizabeth (2008)
English as a Second Language
B.A., SUNY
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Valcu, Sanda (2007)
English as a Second Language
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Zangeneh-Lester, William (2015)
Humanities
A.A., Sierra College
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M.A., CSU Sacramento

Garcia-adams, Ines (2008)
Spanish
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Heiser, Ceydy (2002)
Spanish
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Hoggan, Patrick (2002)
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B.A., Brigham Young University
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Jones, Marie (2010)
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A.A., American River College
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M.A., CSU Sacramento

Jurach, Pamela K. (1994)
Speech
B.A., CSU Sacramento
M.A., Pennsylvania State University

LaMarr, Todd (2016)
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Lopez, David (2000)
Philosophy
A.A. Solano College
B.A., CSU Sacramento
M.A., Ph.D., UC Davis

Martinelli, Estre (2007)
Foreign Languages
B.A., CSU Chico
M.A., CSU Sacramento

Moran, Jeffrey (2019)
English as a Second Language
M.A., University of San Francisco

Pezone, Susan (2008)
English as a Second Language
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M.A., CSU Sacramento

Speech
B.A., M.A., UC Davis

Travis, Margaret (2019)
English as a Second Language
M.A., San Francisco State University

West-Oyedele, Erica (2018)
ASL/English Language Interpreting Preparation
A.A., American River College
B.A., CSU Sacramento
M.A., Western Oregon University
# Instruction and Learning Resources, Library, Distance Education/Virtual Education Center

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# Kinesiology and Athletics

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<td>A.A., American River College and Sacramento City College</td>
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Mathematics

Abdul, Alisher (1997)  
Mathematics  
B.S., National University  
M.S., Moscow St. University  
Ph.D., Moscow Institute of Technology & Physics  

Anishchenko, Lana (2018)  
Mathematics  
M.S., Tashkent State University  

Barcellos, Anthony (1987)  
Mathematics  
A.A., Porterville College  
B.S., California Institute of Technology  
M.S., CSU Fresno  
Ph.D., UC Davis  

Mathematics  
B.S., M.A.T., UC Davis  

Brock, Michelle (2012)  
Mathematics  
B.A., CSU Sacramento  
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Burke, John (2017)  
Mathematics  
B.S., University of Michigan  
M.A. and M.S., University of Colorado  

Butler, Trisha (2015)  
Mathematics  
B.S., M.S., University of Pittsburgh  

Chima Sanchez, Francisco (2019)  
Mathematics  
M.A., CSU Sacramento  

De Leon, Leonel (1991)  
Mathematics  
B.A., M.A., CSU Fresno  

Domokos, Cristina (2015)  
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Etgen, Benjamin (2004)  
Mathematics  
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M.A.T., UC Davis  

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B.S., M.A., MAT, UC Davis  

Halseth, Aileen (2000)  
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B.A., CSU Sacramento  
M.A.T., UC Davis  

Heeren, Christopher (2011)  
Mathematics  
B.A., M.A., CSU Sacramento  

Jones, Vincent (2012)  
Mathematics  
B.S., UC Davis  
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Kinoshita, Rory M. (2006)  
Mathematics  
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Lal, Rajinder (2016)  
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Lambdin, Jennae (2019)  
Kinesiology & Athletics  
M.A., University of the Pacific  

Lowden, Carson (2016)  
Kinesiology & Athletics  
B.S., UC Davis  
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Matsunami, Joline R. (1990)  
Kinesiology & Athletics  
A.A., Rio Hondo Community College  
B.S., Cal Poly  
M.A., Eastern Washington University  

Mccarroll, Sharleen (2003)  
Mathematics  
B.S., M.S., Cal Poly  

Messer, Carter-Ryan (2001)  
Mathematics  
M.A., B.S., UCLA  

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Kinesiology & Athletics  
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M.S., Fresno Pacific University  

Sullivan-Torrez, Kathleen (1997)  
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Andre, Paul (1996)  
Mathematics  
B.S., University of Minnesota  
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Barcellos, Anthony (1987)  
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Bredek-coyne, Cynthia (2008)  
Mathematics  
B.S., University of South Florida  
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Burke, John (2017)  
Mathematics  
B.S., University of Michigan  
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Caputo, Joseph (2018)  
Mathematics  
B.S., M.A., UC Davis  

Chima Sanchez, Francisco (2019)  
Mathematics  
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Mathematics  
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Mathematics  
B.S., M.A., MAT, UC Davis  

Halseth, Andrew (2002)  
Mathematics  
A.A., Solano College  
B.A., M.A., San Diego State University  

Heeren, Christopher (2011)  
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Jones, Vincent (2012)  
Mathematics  
B.S., UC Davis  
M.S., Texas A & M  

Kinoshita, Rory M. (2006)  
Mathematics  
B.S., Sonoma State University  
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Mathematics  
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Mathematics  
B.S., M.S., Cal Poly  

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Sullivan-Torrez, Kathleen (1997)  
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Overgard, Jayne (2016)  
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B.S., University of Wisconsin at Madison  
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Pico, Glenn (2010)  
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Rutaganira, Thomas (2000)  
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M.S., National University of Zaire  
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Scienc and Engineering

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Gorre, Charissa (2007)  
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Bekker, Slava (2018)  
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Eckerman, Pamela J. (1993)  
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Poague, Robin (2019)  
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Holmes, Michael (2018)  
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Aubert, John E. (1999)  
Geography  
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Bradshaw, Kathryn (2003)  
Biology  
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Eckerman, Pamela J. (1993)  
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Maddox, Michael W. (2006)
Chemistry
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Meador, Dianne (2003)
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Natural Resources/Science
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Ramones, Susan (2013)
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Roy, Deboleena (2001)
Chemistry
B.S., M.S., Jadavpur University, India
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B.S., Willamette University
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Smith, Lori (2000)
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Sweet, Michael (1999)
Biology
B.S., University of Iowa
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Thomsen, Charles E. (1999)
Geography
B.A., UCLA
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Torrano, Liz (2001)
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Jaecks, Glenn (2007)
Geology
B.S., University of Wisconsin
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Koskelo, Ilkka (2018)
Physics
M.S., UC Santa Barbara

Loucks, Stuart (2000)
Physics
B.S., M.S., UCLA

Martinez, Marlene (2004)
Biology
B.S., UC, Davis
Ph.D., UC Berkeley

Meadows, Chris (2009)
Chemistry
B.A., University of South Florida
Ph.D., UC Davis

Moreno, Minerva (1993)
Engineering
B.S., University of Morelos, Cuernavaca, Mexico
M.S., University of Waterloo, Ontario

Niedzinski, Edmund (2008)
Chemistry
B.S., University of Scranton
Ph.D., UC Davis

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Rivers, Lynn M. (2001)
Biology/Health Science
A.A., Mt. San Antonio College
B.S., Brigham Young University
M.A., CSU Chico
Ph.D., Texas Woman's University

Shahrok, Renee (1997)
Biology
B.S., M.S., UC Davis

Slutsky, Daniel (2008)
Biology
M.A., CSU Sacramento
B.S., Ph.D., UC Davis

Stewart, Daniel (2008)
Chemistry
A.A & A.S., Santa Rosa Junior College
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Telleen, Adam (2018)
Biology/Bio-Technology
B.S., UC Davis
Ph.D., UC Davis

Topinka, John (2008)
Biology
B.A., Carleton College
Ph.D., UC Davis

Van Den Bogert, Kevin (2018)
Engineering
M.S., UC Los Angeles
Ahmadi, Al (2008)  
Electronics Technology  
B.S., University of Oklahoma  
M.S., Golden Gate University

Andronas, Jennifer (2014)  
Automotive Technology  
A.S., Sierra College  
B.S., CSU Sacramento

Bensbashi, John (2009)  
Automotive Technology  
A.S., Sierra College  
B.S., CSU Sacramento

Beaushaw, Frank (2015)  
Diesel Technology  
A.S., American River College

Evangelisti, Fred (1998)  
Electronics Technology  
A.A., American River College  
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M.A.V.E., Consortium of CSU

French, Benjamin R. (2005)  
Automotive Technology  
A.S., Sierra Community College  
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George, Gary T. (2002)  
Electronics Technology  
A.A., Golden West College  
A.S., American River College  
B.S., Cal Poly, Pomona

Automotive Technology  
A.S., Sierra College  
B.S., CSU Sacramento

Jones, Stanley (2019)  
Horticulture  
M.S., Texas A&M University

McCormack, John (2001)  
Automotive Technology/Apprenticeship  
A.A., Sierra College  
B.V.E., CSU Sacramento  
M.Ed., CSU Sacramento

Messier, Christopher (2015)  
Welding Technology  
Certification, Cosumnes River College

Meyer, Jordan (2015)  
Electronics Technology  
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M.S., UC San Diego

Moore, Christopher (2012)  
Automotive Technology  
A.S., American River College

Reese, Mark Alan (2003)  
Welding Technology  
A.A., American River College  
B.V.E., CSU Sacramento  
IMET, CSU Sacramento

Design Technology  
B.S.M.E., UC Davis

Sichi, Cielo (2016)  
Horticulture  
B.S., California State Polytechnic University

Weckman, Craig (2008)  
Diesel/Clean Diesel Technology & Automotive Collision Technology  
B.V.E., CSU Sacramento  
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<td>2013</td>
<td>Work Experience &amp; Internships</td>
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<td>2017</td>
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<td>Career Education &amp; Workforce Development</td>
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Deaf Culture and American Sign Language Studies (/2020-2021-catalog/programs-of-study/list-of-programs/deaf-culture-and-american-sign-language-studies)
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