

AMERICAN RIVER COLLEGE

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www.arc.losrios.edu
Los Rios Community College District

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The information in this catalog was accurate as of March 23, 2012,
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In this section you will find:

- A welcome from the college president
- 2012-2013 academic calendar
- General information about the college
- Locations and maps



president's welcome



Welcome to American River College.

American River College is, as our vision statement makes clear, a learning community that enriches and transforms people's lives. Over the years, we have developed a statewide and national reputation for excellence, innovation, and a strong commitment to our students.

Your education is important to us, and we trust that the information in this catalog will help you make the best academic and career decisions.

A college catalog is just one decision-making tool. If you haven't already done so, I encourage you to make an appointment for a personal visit with a counselor to review your options and begin to build a plan that can take you toward achieving your goals. You can also get valuable information from instructional faculty and other college staff whose services are described on the following pages.

We value the diversity of people and ideas at American River College, and we enjoy that richness in an atmosphere of mutual respect and trust. You will find us willing to be your partners, whatever your educational goals, and we hope to hear from you about ways in which we might serve you even better.

Learning is a lifelong process, and we take that to heart. Whether you seek a training certificate, university transfer, or sharper job skills, we at American River College are here to provide those opportunities.

David Viar

President

2012-2013 academic calendar

summer session 2012

Instruction begins	June 11	Monday
Independence Day Holiday (College closed)	July 4	Monday
Instruction ends	August 10	Friday

fall semester 2012

Instruction begins	August 25	Saturday
Saturday and Sunday classes begin	August 25, 26	Saturday, Sunday
Labor Day Holiday (College closed)	September 3	Monday
Veterans Day Holiday (College closed)	November 12	Friday
Last day to drop full semester classes	November 20	Tuesday
Thanksgiving recess (College closed)	November 22-25	Thursday-Sunday
End of semester	December 20	Thursday
Winter Recess	December 21- January 1	Friday-Tuesday
Semester break	January 2-16	Wednesday-Wednesday

spring semester 2013

Instruction begins	January 19	Saturday
Saturday and Sunday classes begin	January 19, 20	Saturday, Sunday
King's Birthday Holiday (College closed)	January 21	Monday
Lincoln's Birthday Holiday (College closed)	February 15	Friday
Washington's Birthday Holiday (College closed)	February 18	Monday
Spring Recess (Limited office hours)	March 25-31	Monday-Sunday
Last day to drop full semester classes	April 21	Sunday
End of semester (Graduation)	May 22	Wednesday
Memorial Day Holiday (College closed)	May 27	Monday

Note: Fall and summer registration take place at the same time. A complete calendar, including important deadlines, can be found online. Application for enrollment can be completed online. Online (eServices) enrollment is available every day, including holidays, 7:00 a.m. to 11:30 p.m. for registration and adding and dropping classes, except when down due to maintenance.

about the college

Who we are

Founded in 1955, American River College is a two-year public community college that offers students the option of working toward a degree, certificate or transfer to a university or other institution. It is the largest institution of higher learning in the greater Sacramento area, with more students than either UC Davis or Sacramento State University, and has a strong reputation for its programs and leadership.

American River College is accredited by the Accrediting Commission for Community and Junior Colleges of the Western Association of Schools and Colleges [3402 Mendocino Ave., Santa Rosa, CA 95403 (707) 569-9177], an institutional accrediting body recognized by the Commission on Recognition of Postsecondary Accreditation and the U.S. Department of Education.

American River College does not discriminate on the grounds of race or ethnicity, nationality, religion, gender, sex, age, color, sexual orientation, marital status, or physical or mental disability.

History

American River College opened its doors as California's 61st public junior college in 1955. Its history, however, dates back to February 28, 1942, when Grant Union Junior College was established in Del Paso Heights to train civilian personnel for national service during World War II. In 1945 the name was changed to Grant Technical College.

In June 1954, voters agreed to the establishment of a new junior college district, followed by the approval of a \$3 million bond issue in November of that year. Grant Technical College ceased operation after 13 years and American River Junior College was born in the fall of 1955. For the first three years, classes were offered at the former Grant Technical College campus. However, soon after its first semester of classes had begun, the college purchased a 153-acre site known as the Cameron Ranch on which to construct a permanent campus. By October of 1958, when official dedication ceremonies were held, eight new building complexes had been erected among the magnificent oaks native to the area. Since that dedication the stately oak has been adopted as the official college symbol (including the campus seal).

In 1965 the college became a part of the Los Rios Community College District and became American River College. Today, along with Sacramento City College, Cosumnes River College, and Folsom Lake College, ARC is directed by a board of trustees elected by voters residing in the district.

Campus facilities development in the 1960s included Davies Hall, a three-story classroom and faculty office

building, and facilities for chemistry, physics, engineering, women's physical education, and technical education studies. The campus grew rapidly in the 1970s, including a three-story library, a horticulture complex, a child care center and counseling center.

The 1980s saw the completion of the Rose Marks open-air pavilion and a new bookstore (remodeled in the 1990s). Improvements since then include major remodeling of laboratories, a second child care center, and new facilities for Disabled Student Programs & Services, and instructional technology. In 2002, voters approved a multimillion bond measure that is funding construction and renovation of classrooms and laboratories, including a new Learning Resource Center, new or renovated facilities for Allied Health, Physical Education, and Performing Arts, and a new Natomas Educational Center. Another bond measure was passed in 2008, providing funds for the renovation and expansion of the Library (completed in 2010), and construction of a new Student Center (to be completed in 2012), as well as other projects in the near future.

With approximately 36,000 students, ARC is among the largest community colleges in the state. Looked upon as a leader in innovative programs and services, ARC transfers more students to UC Davis and CSU Sacramento than any other community college. Today, more than five decades after its founding, American River College continues its leadership role in higher education, as set down in its statement of vision, philosophy and mission (below).

Vision, philosophy and mission

ARC Vision

American River College is a premier learning community that transforms and enriches people's lives.

ARC Mission

American River College is a public community college granting certificates and associate degrees. Although the college serves people from a variety of geographical areas, it primarily serves the adult residents of the five-county Greater Sacramento region who are capable of benefiting from community college instruction.

ARC exists to ensure students identify their educational goals and needs and successfully accomplish student learning in the following broad educational areas:

- Developmental education to achieve basic foundation skills in reading, writing, mathematics, English as a Second Language, and learning and study skills which are necessary for students to succeed in college-level work.
- Career and technical education to achieve employment or enhanced career skills for job advancement.
- General education to achieve knowledge, skills and attitudes for post-secondary education success, personal enrichment, self-development, and a purposeful and meaningful life as a member of a global community.
- Lower division post-secondary education to achieve transfer to and success in obtaining a degree at a four-year post-secondary education institution.

ARC Values

Access

Students are the reason we are here and their education is our primary responsibility. Therefore we recognize that residents of the region are entitled to an opportunity to attend and to be successful in college.

Benefit of Education

Individuals and society benefit from citizens who achieve the full extent of their personal, intellectual, and physical ability; engage in critical and creative thinking; exhibit responsible citizenship; succeed in a competitive global work environment; and participate in lifelong learning.

Excellence

Excellence in instruction and student services is essential to develop the full potential of each student.

Leadership

Responsible leadership and service among all faculty, staff, and students are nurtured and encouraged so the college will be a leader for positive change, growth, and transformation in student oriented educational practices.

Student Learning Outcomes

Identification and assessment of student learning outcomes promotes and improves student success and the effective use of resources to create innovative and flexible learning opportunities.

Diversity

ARC is a community enriched by the experience of students, faculty, staff, and administrators from a variety of cultures, ethnic and economic backgrounds, ages and abilities. A commitment to providing and nurturing a safe environment for the free exchange of ideas with sensitivity, civility and mutual respect is essential.

Community Development

The curricular and co-curricular programs and services of the college benefit the region served through enhanced intellectual and physical growth, economic development, and exposure to the arts, sciences, and humanities.

Human Resources

Faculty and staff members are our most important resources and are entitled to a supportive collegial work environment that recognizes excellence, provides opportunities for professional development, service and leadership, and encourages meaningful involvement in an interest-based decision-making process.

Communication

Achievement of the ARC mission and vision requires an effective system of communication with internal and external constituencies that is based on honesty, trust, civility, and mutual respect.

Innovation and Risk Taking

Addressing challenges and change requires creativity, flexibility, and responsible risk-taking to achieve our vision, mission and goals.

Fiscal Responsibility

It is necessary to maintain a fiscally sound, efficient, and effective operation that achieves our mission within the resources available.

Evaluation

Efficient and effective accomplishment of the ARC mission, vision, and student learning outcomes requires regular and ongoing data-based evaluation.

Institutional Student Learning Outcomes

Upon achievement of his or her intended educational goal (degree, certificate, or set of courses) at American River College, a student will be able to:

- Employ strategies to work cooperatively and effectively with others.
- Demonstrate skills and behaviors which contribute to open and respectful communication of diverse ideas and beliefs.
- Locate and critically evaluate information to create informed responses to issues, problems, and challenges.
- Demonstrate and employ marketable skills and personal qualities for professional growth and career advancement.
- Utilize a variety of methods to communicate effectively.
- Recognize the value of lifelong learning for personal growth.
- Recognize the importance of contributing personal knowledge, resources, and skills for the benefit of the local and global community.

class locations

In addition to the college's main campus, college-credit classes are taught at several off-campus locations in the northern and northeastern areas of Sacramento County. Classes at the Mather, McClellan, and Natomas Centers offer the same credit as those taught on the main campus, and students can complete most degree requirements at the centers. Counseling, assessment, and other services are also available at those centers.

ARC main campus

4700 College Oak Dr.
 Sacramento, CA 95841
 Telephone: (916) 484-8011

Mather Center

10150 Missile Way, Mather, CA

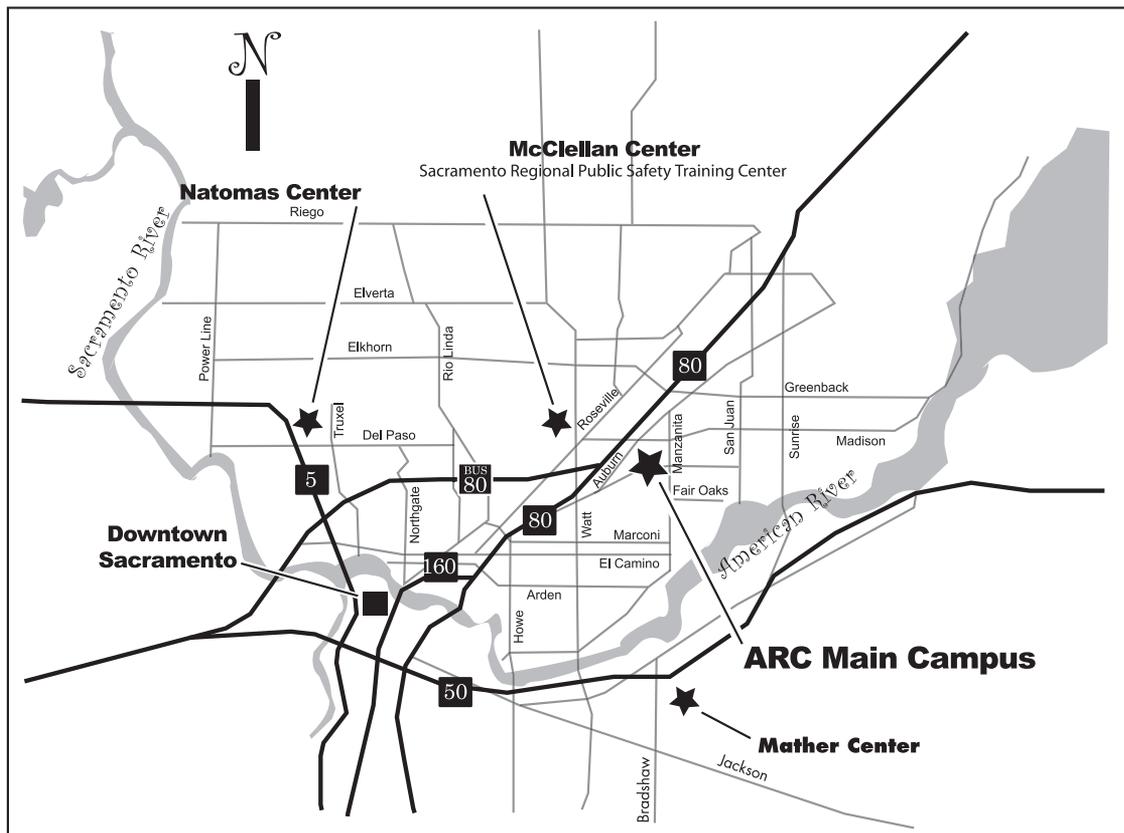
McClellan Center & Sacramento Regional Public Safety Training Center

5146 Arnold Avenue, Room 110A
 McClellan, CA 95652
 Telephone: (916) 570-5000
 Office Hours:
 Mon.-Thurs. 8:00 a.m.-6:00 p.m.
 Fri. 8:00 a.m.-5:00 p.m.

Natomas Education Center

2421 Del Paso Rd.
 Sacramento, CA 95835
 (916) 485-6000
 Office hours:
 Mon.-Thurs. 8:00 a.m.-7:00 p.m.
 Fri. 8:00 a.m.-5:00 p.m.
*Classes are also held in adjacent Inderkum High School:
 2500 New Market Dr. Sacramento, CA 95835*

See map below, showing the American River College service area and how to get to the off-campus centers.



In this section you will find:

- Application
- Assessment
- Orientation
- Counseling
- Registration
- Financial aid



your first four steps

You probably have many questions about becoming a student at American River College. You will find answers to these questions throughout this catalog, or through your discussion with your counselor, but as an incoming student, you need to be familiar with the four steps you will need to complete before enrolling in classes:

- Step 1. Application
- Step 2. Assessment
- Step 3. Orientation
- Step 4. Counseling

step 1. application

You may apply to ARC and enroll for classes here or at any of the other colleges in our district (including Cosumnes River College, Folsom Lake College, Sacramento City College) by going online to eServices through the ARC web site [www.arc.losrios.edu].

Personal assistance is available at the ARC eServices Center, located in Portable Village, room 605. Enrollment options are explained below.

Your online application will be processed quickly and you will soon receive information on how to proceed toward enrolling in classes.

Admissions eligibility

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, is eligible for admission to American River College. Non-high school graduates over 18 years of age, who demonstrate to the satisfaction of college authorities that they are able to profit by the instruction, may also be admitted.

First-time students

All first time college students need to complete the following steps before they may register:

1. Complete an application for admission online [www.arc.losrios.edu].
2. Take the appropriate assessment test. The ARC assessment test schedule is available at the Assessment Center (916-484-8423) and Counseling Center.
Note: Assessment for recommended class placement is based on more than test scores alone.
3. Complete the new student orientation, in person or online.
4. See a counselor for assistance in developing your educational plan.

Residence requirements

American River College is a public college under California law. The application for admission includes a statement of residence from which residency is determined. The law provides that a person can have only one residence. If you have resided in another state just prior to the residence determination date (the first day of the semester) – even if you had been a California resident previously – you may be considered a nonresident for purposes of enrollment fees. Residency is determined at the point of admission once a completed application is submitted to the Enrollment Services Office.

Out-of-state students may apply for reclassification to California resident by completing a reclassification application and providing sufficient documentation to support California residency. State requirements to become a California resident are described in the California Education Code and California Code of Regulations (Title 5).

Under California law, to be reclassified from a non-resident to a California resident, a student must clearly demonstrate:

1. physical presence in California,
2. intent to reside in California permanently, and
3. financial independence.

Please see the Enrollment Services office for the reclassification application and instructions.

If a student is erroneously determined to be a nonresident, and pays a tuition fee, the fee is refundable, provided acceptable proof of state residence is presented within the period for which the fee was paid. Refund requests will be processed only if accompanied by the receipt issued at the time of payment.

Fees are subject to change without notice upon approval by the trustees of the Los Rios Community College District, and pending approval by the state legislature and governor.

A nonresident student who has falsified residency information shall be excluded from classes upon notification, pending payment of the nonresident fee. Written notification may be given at any time. Students excluded because of falsification shall not be readmitted during the semester or summer session from which they were excluded, nor shall they be admitted to any following semester or summer session until all previously incurred nonresident tuition is paid.

All new transfer students

All new transfer students, except those transferring from Cosumnes River, Folsom Lake, and Sacramento City colleges, should complete the steps listed for first-time college students. Instead of a high school transcript, transfer students are required to mail official transcripts of all other previous college work to the Enrollment Services Office.

High school international baccalaureate program

American River College may award college credit for international baccalaureate (IB) higher level course completion with scores of 5, 6, or 7, if the course work is compatible with ARC's curriculum. Credit may only be granted upon evaluation and approval by individual academic departments in which the course exists. No credit will be granted for subsidiary level course work completed in the IB program.

Students must have successfully completed 12 units at ARC, and be in good standing before requesting college credit for IB higher-level course completion. A maximum of 15 units may be awarded for credit toward an A.A. or A.S. degree. Credit may not be earned for courses that duplicate credit already allowed for advanced placement exams. No grades are given, and course credit does not enter into computation of the student's GPA for transfer or graduation from ARC. Students requesting consideration for college credit are to have the IB North America Office forward an official report of their scores to the Enrollment Services Office at American River College.

Returning students

All students returning after an absence must complete an application for admission and must mail official transcripts of all other college work to the Enrollment Services office. Students should consult with a counselor before registering for classes; call the Counseling Center (484-8572) for an appointment.

International students

American River College welcomes international students from all over the world. Students who enter the U.S. on a non-immigrant visa are considered international students; however, there are different attendance requirements for each visa type. ARC is approved by the Bureau of Citizenship and Immigration Services (formerly, INS) to issue the I-20 for the F-1 Visa. Requirements for admission as an F-1 student include proof of proficiency in the English language, evidence of high school graduation, certification of financial ability, health examination to include evidence of freedom from tuberculosis, and medical insurance to cover emergencies while in the U.S.

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 be in compliance with F-1 visa requirements. For more information, contact International Students, at (916) 484-8774.

Non-resident applicants who are both citizens and residents of a foreign country shall be assessed a non-refundable application process fee of \$50. The application fee is due and payable with submission of the application for admission or readmission. International student applications will not be processed without payment of the fee. Fees are also assessed based on the number of units (credit hours) in which the student has enrolled. See the *Fees* section of this catalog for more information.

Advanced education for high school students

Courses that provide enrichment and advancement in educational experience may be offered on a limited basis to high school students who have demonstrated exemplary academic achievement. The student needs to be 16 years of age or have completed the sophomore year of high school prior to enrollment. Advanced education students may not take remedial classes, 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. Prospective advanced education students should bring to the ARC Counseling Center an 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, a written statement describing how the eligibility criteria are met and why they wish to take classes, and ARC assessment exam results if appropriate. This should be done as early as possible in the semester. The Advanced Education application process must be completed prior to the first day of instruction of the relevant term.

After the advanced education application has been approved by the ARC counselor, the student may register for classes. Students must enroll in person at eServices. Students must attend the first class session of the course. Late adds are usually not permitted. An advanced education student is not considered a continuing student when registering for classes for any subsequent semesters. Additional information can be obtained from the ARC Counseling Center. Call (916) 484-8572 for more information. A general overview of the Advanced Education program has been outlined here. *It is the responsibility of the advanced education student to become familiar with and aware of all the requirements, processes, deadlines, etc. pertaining to advanced education.*

Special resources for incoming students

CalWORKs Support Services

American River College assists students who are currently receiving TANF (formerly AFDC) funds in making the transition from public assistance to achieving strategically planned career goals. College staff work cooperatively with the Department of Human Assistance in Sacramento and surrounding counties to assist students in becoming more competitive job applicants. CalWORKs stands for California Work Opportunity and Responsibility to Kids. The center is located in the Student Services building.

Disabled Students Programs and Services

The goal of Disabled Students Programs and Services is to promote equal access to programs, services and facilities at American River College, thereby insuring students with disabilities have the opportunity to participate fully in campus activities. The philosophy of DSP&S is to encourage maximum independence, campus life involvement and personal empowerment throughout the academic experience. A variety of support services are available at no additional

cost to the student with a disability. Specialized counseling services, interpreters for the deaf, note takers, alternative media support, accessible furniture arrangements and test facilitators are provided upon request. An array of specialized equipment, including adapted computer hardware and software, are offered in an effort to accommodate most educational limitations.

Contact DSP&S for an appointment. A comprehensive resource guide listing all specialized services and equipment for students with disabilities may be obtained at Enrollment Services, the Counseling Center, the Health Center, and in the DSP&S office. For additional information, please contact DSP&S at (916) 484-8382 or 866-446-0050 (videophone). Materials in braille, large print or audio format are available upon request. A variety of academic accommodations and support services are available for students with disabilities. See the *While You are Here* section of this catalog for more information.

EOP&S/College Awareness/CARE Program

Extended Opportunity Programs and Services (EOP&S) is designed and funded by the State of California and the district to recruit and assist college students who show academic and financial need. EOP&S promotes student success with enrollment assistance, educational planning, tutoring and limited financial assistance. Participation is limited to California residents who are eligible to receive the Board of Governors Grant and have an academic need. The EOP&S office is located in the Student Services building. EOP&S-eligible students, who are single head of household TANF/AFDC recipients, may also be eligible to participate in the CARE (Cooperative Agencies Resources in Education) program.

Reentry and Veterans Information Center

The Reentry and Veterans Information Center, located in the Student Services building, serves men and women, including veterans, who after a period of absence have decided to return to school. Our peer mentors are ready to offer personalized support services that allow for a successful transition back to college. Our program offers help with registration, matriculation and applying for scholarships. We also offer weekly support groups, campus and community service referrals, career counseling, academic advising, personal counseling, student success workshops and opportunities to network with other returning students. No appointments are necessary. Call (916) 484-8391 or stop by. Visit our website at www.arc.losrios.edu/Support_Services/Re-Entry.htm.

Air Force Reserve Officer's Training Corps

The Air Force Reserve Officer's Training Corps (AFROTC) is an educational program providing training in leadership, management, communications and military proficiency on college and university campuses. It also provides an opportunity to obtain a commission as a second lieutenant in the Air Force and enter the active duty forces after you complete a bachelor's or a graduate degree. The skills you acquire will become valuable assets for any subsequent career you choose.

The program is normally four years long, but a flexible design allows students to complete the curriculum in as little as two years. Undergraduate scholarships are available, but are not necessary for participation. Until you accept a scholarship or enter your junior year of the program, you have no obligation to join the Air Force. There are no costs for AFROTC uniforms, books, or classes. Interested students, please contact the following department: For CSU Sacramento: <http://www.csus.edu/afrotc> (916) 278-7315; det088@maxwell.af.mil

Veterans

The ARC Veterans' Services desk is located at the Enrollment Services office in the Administration building. VA certifying officials assist students by appointment to verify enrollment to the Department of Veterans Affairs. New students who are eligible for benefits should visit the desk at least two months prior to the beginning of the semester. Continuing students are required to submit their schedules each semester for which they wish to receive payment. It is advisable to submit all paperwork and class schedules immediately after enrolling in courses. Please call or come in early to schedule an appointment, as certifications can take two to four weeks to process with the Department of Veterans Affairs.

Students may apply for evaluation of military service for college credit. A copy of the DD form 214 must be submitted to the desk for credit to be awarded. Veterans, reservists and active duty service members may also qualify for priority enrollment, as stipulated in the California Education Code, section 66025.8.

Military personnel and dependents

Military personnel who are stationed on active duty in California and their eligible dependents are granted resident classification. This resident classification will continue for the duration of the student's continuous enrollment.

Matriculation

Matriculation is a set of services that brings the college and the student together in a partnership agreement designed to help student's develop and achieve their educational goals. Students are more likely to succeed in college when they have an accurate assessment of their skills, clear educational goals and an understanding of the course selection and enrollment processes. Therefore, for the college, the agreement includes providing the following services:

1. An admission process
2. Orientation to college
3. Student Services
4. A curriculum or program of courses
5. Pre-enrollment basic skills assessment
6. Counseling and advisement on course selection
7. Opportunity to develop an educational plan
8. Continued monitoring of academic success with referral to support services when needed
9. Program of institutional research and evaluation

The student agrees to:

1. Identify an educational goal within a reasonable period of enrollment
2. Attend classes regularly and complete assigned coursework
3. Maintain progress toward an identified educational goal according to standards established by the college and the State of California
4. Use support services as needed
5. Consult with counselors and advisors when appropriate

How does the matriculation process work?

All new students and students who are attending American River College for the first time must complete the following matriculation steps:

1. Admissions

The application to attend American River College is available online through the college website (www.arc.losrios.edu) or may be downloaded and submitted in person at the college's eServices Center located on campus.

2. Assessment

All new students (new to college and/or new to ARC) and non-exempt students are required to complete basic skills assessment in mathematics and in English (reading and writing) or English as a Second Language (ESL). These assessments help students and counselors determine the appropriate course placements when developing an educational plan. Test dates and times are available on the college website (www.arc.losrios.edu/assess), in the Assessment Center located in the Student Services building or in the Counseling Center.

3. Orientation

Orientation is required for all new non-exempt students (see exemption criteria) planning to enroll at American River College. New student orientation may be completed online (<http://orientation.arc.losrios.edu>) at any time or through a limited number of in-person group sessions. Contact the Counseling Center for information and times when in-person group orientation sessions are available.

4. Counseling Services

Counseling services are available to new students upon completing the first three matriculation steps. Students meet with counselors for the purpose of discussing their goals and plans, understanding placement results, and to develop a student educational plan. Recent high school students are strongly advised to bring a copy of their high school transcripts with them to the counseling session.

5. Enrollment/Registration

Students who are brand new to college may enroll in classes, also called registering for classes, based on when the matriculation steps are completed. Registration is by priority assignment for students completing all of the matriculation steps at least six weeks in advance of the start of priority registration. Open registration begins approximately three weeks after the start of priority registration. For information on specific dates and times for priority and open registration, please contact Enrollment Services at (916) 484-8261.

Exemption criteria

Students can elect to not participate or be exempt from most or parts of the matriculation requirements based on the following criteria:

1. Student has completed an associate degree or higher.
2. Student satisfies at least two of the following:
 - identified a goal of upgrading job skills
 - enrolled for fewer than 12 units
 - concurrently enrolled in another postsecondary institution
 - declared no degree or occupational objective

Challenges to matriculation process

Exemptions

The college shall provide students with written and verbal information about the purpose of matriculation and the benefits of participation in each component. Students who wish to challenge any part or all of the matriculation process (orientation, assessment, or counseling) must meet with the matriculation coordinator or designated representative to discuss the reason and rationale for the challenge, or provide information to support the challenge.

In addition, students wishing to challenge specific matriculation services will be informed of their rights to participate in all other non-disputed components, and will be asked to sign a statement waiving their right to the matriculation services, thus providing acknowledgment to the college of receipt of the information above. All new American River College students are directed to participate in the matriculation process (Assessment, Orientation and Counseling) with the exception of those who meet exemption criteria.

step 2. assessment

Assessment tests provide information to counselors that can be useful in determining your readiness to enter a particular course. ARC's Assessment Center, located in the Student Services building, provides a variety of testing services to assist students with course placement in English (reading and writing), English as a Second Language, mathematics, and chemistry. Testing services are available free of charge at the Assessment Center to any prospective student who has completed ARC's application for admission.

The Assessment Center also provides testing for reading and mathematics competency which may satisfy the requirement for graduating with an Associate degree.

Current office hours and the testing schedule are available on the ARC Assessment Center website (www.arc.losrios.edu/assess) and at many student services offices.

step 3. orientation

Orientation provides new students with important information about college programs and services, including explanations of key concepts that will help a student do better in their first months at ARC, and thus get off to a good start toward completing their educational goals. Orientation can be done in person or online, and information on these options is sent to students after they have applied.

step 4. counseling

All entering students are asked to meet with a counselor, in order to establish an educational plan that suits the student's needs and goals. The primary goal of the Counseling Center is to provide learning opportunities for students to clarify their values and goals, to make decisions, and to develop self-esteem, self-confidence, and self-direction as related to educational objectives.

Toward this goal, a staff of competent, highly trained, and diversely experienced counselors are available to assist students in identifying their needs, assessing strengths, and overcoming barriers. Counselors may also assist students in the selection of appropriate programs of study relative to their chosen objectives. Educational objectives may include completion of a vocational program, transfer to four-year colleges and universities, enhancement of employment skills, or improvement of basic skills.

American River College's counseling services include academic counseling, educational counseling, career counseling, and personal counseling. Academic counseling includes program planning, determination of transfer requirements, course information for a degree and/or certificate. Educational counseling includes selection of a major, time management, study skills, and course selection. Career counseling includes assessment of skills, interests, values, and personality styles, test referral and interpretation, exploration of career goals based on personal assessment, development and implementation of career plan. Personal counseling, as related to success in college, includes self-awareness, interpersonal communication, stress management, relationship counseling, clarification and resolution of problem areas, and referral to on-campus and off-campus resources.

Counseling services are offered to day and evening students. Appointments may be made by telephone or in person. Counselors are also available on a drop-in basis in the Counseling Center, located in the east wing of the Administration Building. Call 484-8572 or visit [www.arc.losrios.edu/counsel].

For students attending classes at off-campus outreach centers, counseling appointments are also available at those locations. For Natomas Center, call (916) 485-6000; and for McClellan Center, call (916) 570-5000.

enrolling in classes

Once you have applied for admission, you may enroll in classes—also called registering or registration. Registration dates are listed online [www.arc.losrios.edu]. Students may register online during their designated registration appointment or during open enrollment using a web browser, or in person at the college's eServices Center. Be sure to check the college website for instructions. The schedule is available online, free of charge.

It is not desirable or possible for the college to offer each course of instruction every semester, and therefore many of the classes listed in this catalog are not offered each term. The student should check the schedule of classes to determine if a class is to be offered in a given term. When a course is known to be offered only in a given term, the catalog course description includes the information.

Auditing

American River College does not permit auditing. (Auditing is defined as attending a course without having enrolled, and without responsibility for completing assignments and without receiving a grade or credit.)

special programs

The following programs offer alternative methods for working toward your educational goal, and offer help to students in both enrolling and registering for classes.

Accelerated College Education (ACE)

ACE is an accelerated educational format for working adults to complete their education while meeting the demands of their busy lives, with classes meeting one evening per week and on Saturday. The program is made up of a pre-planned set of classes. Students enroll in two short-term classes every eight weeks during the semester, for a total of 12 units each semester.

Features of the ACE program include:

- Continue working while you complete your educational goals
- Qualify for more job advancement opportunities
- Prepare to transfer to a university and be prepared for the quarter system
- Start two new classes every eight weeks, meeting one evening a week and Saturdays at an off-campus center
- Join a highly motivated group of adults with similar goals
- Receive individual attention to help you along the way
- Work towards an A.A. degree

For more information, visit the ACE website (arc.losrios.edu/ace) or contact the ACE office [(916) 563-3281 or ACE@arc.losrios.edu].

Puente Program

The mission of the Puente Community College Program is to increase the number of educationally under-represented students who transfer to four-year colleges and universities, earn degrees, and return to the community as leaders and mentors. Classroom instruction includes a pre-transfer level composition course and a transfer-level English class. Each English class is linked with a Human Career Development class. The composition courses feature Mexican American/Latino literature.

Puente students meet regularly with a Puente counselor and are matched with a professionally and academically successful mentor from the community. Students also attend field trips to college campuses. All students are welcome to apply. To obtain a Student Information Form, call or visit the English area office in Davies Hall, 484-8101, or the Counseling Center, 484-8572. Students are admitted on an ongoing basis.

other helpful information

Childcare

Childcare is available to eligible students. See *Other Services in While You are Here* section.

Concurrent enrollment

Students enrolled at American River College may concurrently enroll for college credit at another institution. Students requesting to have completed units considered towards a degree or certificate at American River College must submit an official transcript to Enrollment Services. Concurrent enrollment at another accredited college may impact a student's eligibility for financial aid at American River College.

Housing

American River College does not provide residence housing. However, the Student Activities Office does have information available on roommates, shared housing, and available rentals. The college does not screen or approve student housing.

Insurance

Students are not covered by the district or college for medical insurance. Students should arrange for some type of medical insurance if they are not covered by parents or individual insurance policies. International students (F Visa) will be required to show evidence of approved health insurance coverage throughout the duration of their studies at American River College. Students needing information on Student Health Insurance plans are invited to visit the Health Center located in the Administration Building or call (916) 484-8383; or online [www.arc.losrios.edu/health].

Scholarships

ARC Foundation scholarships are offered to currently enrolled students working towards an associate degree and are awarded on the basis of academic excellence and promise of future achievement.

Financial need is a factor for some awards, but not all. In order to apply, students must have completed at least six units at ARC and at the time of application, be enrolled in six units. In 2011, over 200 scholarships totaling more than \$175,000 were awarded. The scholarship program runs from January through March each year. Scholarship monies are disbursed beginning the first day of classes of the fall semester (mid-August). The application is completed online [www.arc.losrios.edu/funds].

In addition to the ARC Foundation scholarships, many other scholarships are available from Sacramento-area, state, and national sources.

Student classification

Part-time: Student taking fewer than 12 units.

Full-time: Student taking 12 or more units.

Freshman/First year standing:

Student who has completed fewer than 30 units.

Sophomore/Second year standing:

Student who has completed 30 or more units.

Graduate: Student who has been awarded the Associate in Arts or Science degree, or a higher degree by an accredited college.

financial aid

The Financial Aid office is located in the Student Services Building, and administers financial aid in accordance with federal and state regulations and national policy. Funds are distributed to students who have documented financial need determined by the total resources available to them. See the Financial Aid web page for more information.

Parents have the primary responsibility for assisting the dependent student in meeting the cost of education. Financial aid is available to help meet the student's academic expenses.

Aid to independent students is available based on student contribution and the student's academic expenses.

The free application for federal student aid (FAFSA) is used to apply for campus-based aid and the Pell Grant/Student Loans. The application allows the government to calculate the expected family contribution. The student completes the FAFSA application listing American River College (001232) as the college of choice. The FAFSA is completed online at www.fafsa.gov.

In approximately 48 hours the student may view and print a copy of his or her Student Aid Report (SAR) at the FAFSA website. The college financial aid office will notify the student by email of the required documentation needed to complete the file. Documentation requested is confidential and must be furnished if the student is to receive aid. Students awarded financial aid are notified by email.

A student or parent may not foresee accurately the expenses involved in attending college, and may find themselves in financial difficulty. While students must determine their own budget, in keeping with needs and resources, the following is the average annual cost of education for financial aid students attending American River College:

COST OF ATTENDANCE AT ARC

	At Home	Away from Home
Board/Room	\$4,347	\$10,863
Books/Supplies	1,656	1,656
Transportation	1,206	1,206
Personal	3,114	2,853
Fees	1,104	1,104
Totals	\$11,427	\$17,682

This is an estimate and subject to change. Check the ARC Financial Aid web page for the most current cost of attendance.

Student eligibility requirements

There are a number of requirements that must be met before a student is considered eligible for financial aid. Students must:

- have financial need (except for unsubsidized student loans)
- be a U.S. citizen or eligible non-citizen
- not be in default on a Perkins Loan, National Direct Student Loan, Stafford Loan, Guaranteed Student Loan, PLUS Loan, or Supplemental Loan for Students (SLS)
- not owe a refund on a Pell Grant or Supplemental Educational Opportunity Grant
- be making satisfactory progress (financial aid and academic)
- agree to use any federal student aid received solely for educational purposes
- have not completed a BA/BS degree
- have a high school diploma, GED/proficiency certificate
- be enrolled in an eligible educational program of study
- submit all requested documentations to the financial aid office.

Reminder: Men are required to register with the Selective Service System upon reaching 18 years of age in order to be eligible for federal financial aid.

Many of these items are collected at the time students apply for financial aid. Before financial aid is awarded, the Financial Aid office will verify that a student is enrolled in an eligible program and that he or she is making satisfactory progress.

Satisfactory progress policy

In accordance with federal regulations, all students on financial aid are required to meet established standards of satisfactory academic progress, whether or not the student is a prior recipient of financial aid. Failure to meet federal standards will result in the denial of aid. American River College students are evaluated at least once per academic year. Students must:

1. Maintain progress—successfully complete at least 75% of units enrolled (Progress percentage = Total units with a grade of “F”, “W”, “I”, “IP” and “NC” or “NP” divided by the total units attempted. Must be 25% or less.)
2. Maintain a minimum of a 2.0 ARC cumulative grade point average (GPA).

Other conditions include:

- Students who have completed a degree will be denied financial aid (this also applies to foreign degrees).
- Students may attempt up to 72 units or 150% of units required towards their educational goal. Students who have attempted 72 units or 150% of units required will be denied aid.

Appeal

All students who are denied aid for lack of satisfactory progress may appeal the denial. Appeals are submitted in writing to the Financial Aid Office and evaluated by an appeals committee. Please refer to the academic progress requirements on the financial aid webpage. If an appeal has been denied by the committee, the student may submit a new appeal when the deficiency has been resolved. If an appeal is approved, the student's academic progress will be reviewed each term.

If you receive federal financial assistance and withdraw from class(es), you may be required to repay all or part of the financial assistance you received. Failure to repay this debt may result in your loss of future federal financial assistance, your academic transcript put on hold, and collection cost assessed by the Department of Education.

If you must withdraw from school, you must follow the appropriate withdrawal procedures explained elsewhere in this catalog. Some conditions apply to certain classes. Students are eligible for aid when enrolled in those courses required for an eligible degree or certificate.

Students who withdraw from all classes will have all future aid canceled and must go through a reinstatement process. Additionally, students may be required to repay any portion of unearned aid the college is required to return to the Department of Education.

Reinstatement

A student who is disqualified may have his/her eligibility reinstated by making up the unit shortage or raising the grade point average during a semester without financial aid. The units and semesters attempted without aid count toward the maximum number of units a student can attempt. Satisfactory academic progress will be reviewed upon request for reinstatement for Financial Aid.

Student loan payments

Loan checks are mailed to students in multiple disbursements. Students must be in good standing and be enrolled in a minimum of 6.0 units. Failure to successfully complete half-time status will result in subsequent disbursements for the following semester being cancelled. Note that first-time borrowers are subject to a 30-day disbursement hold on all federal loan checks.

Sources of student financial assistance

Note: General financial aid programs are need-based. Eligibility is determined by application.

Type	Federal	State
Grant	Pell Grant* Scholarships Supplemental Educational Opportunity Grant** Federal Work Study***	Cal Grants A, B, C#
Loan	Direct Student Loan****	
Employment	Federal Work Study***	

Not all Cal Grants are available to community college students.

* A federal entitlement grant program. Grant is determined by need, units enrolled, and status and academic progress.

** A federal grant-in-aid which does not have to be repaid. Grants may range from \$150 to \$600 depending on need and availability of funds. FAFSA application required.

*** A federal program which allows a student to earn part of their financial aid through a part-time job on campus. Need based, FAFSA application required.

**** Low-interest, long-term loan arranged directly through the Department of Education. May be half-time student. Repayment is deferred as long as the student is enrolled at least half time. Need based and must be awarded aid before applying for loan. Loan entrance counseling is required.

AP (Advanced Placement) and IB (International Baccalaureate) test scores

- Use of AP Test Scores for ARC Credit and GE determined by ARC policy. Use of AP Test Scores for IGETC determined by ARC and IGETC Policy.
- Use of AP test Scores for CSU GE Certification determined by CSU Policy (Lightly Shaded Area)

	AMERICAN RIVER COLLEGE					IGETC CERTIFICATION			CSU GE CERTIFICATION			
	Scores	ARC Course	Sem units	ARC GE Area #	Units For GE	Scores	IGETC Area	Sem units	Scores	CSU GE Area	Sem Units for GE Cert	CSU Sem Credits Earned
AP TEST												
Art History				1	3	3,4,5	3A or 3B	3	3,4,5	C1 or C2	3	6
Biology	3	BIOL 300	3	IV	4	3,4,5	5B with lab	4	3,4,5	B2 & B3 (lab)	4	6
Biology	4,5	BIOL 310*	4	IV	4	3,4,5	5B with lab	4	3,4,5	B2 & B3 (lab)	4	6
Biology	5	BIOL 400*	5	IV	5	3,4,5	5B with lab	4	3,4,5	B2 & B3 (lab)	4	6
Calculus AB	3,4,5	MATH 400	5	IIb	5	3,4,5	2A	3	3,4,5	B4	3	3#
Calculus BC	3,4,5	MATH 400/401	10	IIb	10	3,4,5	2A	3	3,4,5	B4	3	6#
Calculus BC/AB Subscore				IIb	3	3,4,5	2A	3	3,4,5	B4	3	3#
Chemistry (taken prior to Fall 09)	4,5	CHEM 305 or 400*	5	IV	5	3,4,5	5A with lab	4	3,4,5	B1 & B3 (lab)	6	6
Chemistry (taken Fall 09 or later)	4,5	CHEM 305 or 400*	5	IV	5	3,4,5	5A with lab	4	3,4,5	B1 & B3	4	6
Chinese Language & Culture				I	3	3,4,5	3B & 6A	3	3,4,5	C2	3	6
Comparative Government & Politics				vb	3	3,4,5	4	3	3,4,5	D	3	3
Computer Science A#									3,4,5,	NA	NA	3#
Computer Science AB#									3,4,5	NA	NA	6#
English Language	3,4,5	ENGWR 300	3	IIa	3	3,4,5	1A	3	3,4,5	A2	3	6
English Literature	3,4,5	ENGWR 300 & 301	6	IIa & IIb or I	6	3,4,5	1A or 3B	3	3,4,5	A2 & C2	6	6
Environmental Science - test taken prior to Fall 09				IV	3	3,4,5	5A (with lab)%	3	3,4,5	B1 & B3 or B2 & B3 (lab)	4	4
Environmental Science - test taken Fall 09 or later				IV	3	3,4,5	5A (with lab)%	3	3,4,5	B1 & B3 (lab)	4	4
European History				I or vb	3	3,4,5	3B or 4	3	3,4,5	C2 or D	3	6
French Language (taken prior to Fall 09)	3,4,5	FREN 401	4	I	4	3,4,5	3B & 6A	3	3,4,5	C2	6	6
French Language (taken Fall 09 or later)	3,4,5	FREN 401	4	I	4	3,4,5	3B & 6A	3	3,4,5	C2	3	6
French Literature (taken prior to Fall 09)				I	3	3,4,5	3B & 6A	3	3,4,5	C2	3	6
German Language (taken prior to Fall 09)	3,4,5	GERM 401	4	I	4	3,4,5	3B & 6A	3	3,4,5	C2	6	6
German	3,4,5	GERM	4	I	4	3,4,5	3B & 6A	3	3,4,5	C2	3	6
Human Geography				Vb	3	3,4,5	4	3	3,4,5	D	3	3
Italian Language & Culture				1	3	3,4,5	3B & 6A	3	3,4,5	C2	3	6
Japanese Language & Culture				1	3	3,4,5	3B & 6A	3	3,4,5	C2	3	6

AP (Advanced Placement) test scores (continued)

AP TEST	AMERICAN RIVER COLLEGE				IGETC CERTIFICATION			CSU GE CERTIFICATION				
	Scores	ARC Course	Sem units	ARC GE Area ##	Units For GE	Scores	IGETC Area	Sem units	Scores	CSU GE Area	Sem Units for GE Cert	CSU Sem Credits Earned
Latin Literature (taken prior to F 10)				1	3	3,4,5	3B & 6A	3	3,4,5	C2 F 09	3	6
Latin: Vergil				1	3	3,4,5	3B & 6A	3	3,4,5	C2	3	3
Macroeconomics	4,5	ECON 302	3	Vb	3	3,4,5	4	3	3,4,5	D	3	3
Microeconomics	4,5	ECON 304	3	Vb	3	3,4,5	4	3	3,4,5	D	3	3
Music Theory (taken prior to Fall 09)									3,4,5	C1	3	6
Physics B (taken prior to Fall 09)	3,4	PHYS 310 and 312* or 310	3 or 4	IV	4	3,4,5	5A with Lab	4	3,4,5	B1 & B3	6	6
Physics B (taken after Fall 09)	3,4	PHYS 310 and 312* or 310	3 or 4	IV	4	3,4,5	5A with Lab	4	3,4,5	B1 & B3 (lab)	4+	6+
Physics B (taken prior to Fall 09)	5	PHYS 350 or 410*	4	IV	4	3,4,5	5A with Lab	4	3,4,5	B1 & B3 (lab)	4+	6+
Physics C (electricity & magnetism)				IV	3	3,4,5	5A (with Lab) %	3	3,4,5	B1 & B3 (lab)	4+	4+
Physics C (mechanics)				IV	3	3,4,5	5A (with Lab) %	3	3,4,5	B1 & B3 (lab)	4+	4+
Psychology				Vb	3	3,4,5	4	3	3,4,5	D	3	3
Spanish Language (taken prior to Fall 09)	3,4,5	SPAN 401	4	I	4	3,4,5	3B & 6A	3	3,4,5	C2	6	6
Spanish Language (taken Fall 09 or later)	3,4,5	SPAN 401	4	I	3	3,4,5	3B & 6A	3	3,4,5	C2	3	6
Spanish Literature (taken prior to Fall 09)				I	3	3,4,5	3B & 6A	3	3,4,5	C2	6	6
Spanish Literature (taken Fall 09 or later)				I	3	3,4,5	3B & 6A	3	3,4,5	C2	3	6
Statistics	3,4,5	STAT 300	4	IIb	4	3,4,5	2A	3	3,4,5	B4	3	3
Studio Art									3,4,5	NA	NA	3
U.S. Government and Politics	4,5	POLS 301 or 302	3	Va or Vb	3	3,4,5	4 & US 2	3	3,4,5	D & US 2**	3	3
U.S. History	3,4,5	HIST 310 & 311	6	Va or I	3	3,4,5	3B or 4 & US 1	3	3,4,5	C2 or D & US 1	3	6
World History				Vb or I	3	3,4,5	3B or 4	3	3,4,5	C2 or D	3	6

* with department approval upon review of lab reports

*** Student needs to complete a course which covers Cal. State and Local Gov. in order to complete CSU American Institutions Requirement.

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

A Score of 3 or higher on the AP test qualifies the course to count for GE at ARC.

+ If a student passes more than one AP exam in Physics, only 6 units of credit may be applied to the baccalaureate, and only 4 units of credit may be applied to a certification of GE Breadth at a CSU campus.

IB test scores next page

GETTING STARTED

IB (International Baccalaureate) test scores

IB TEST	AMERICAN RIVER COLLEGE						IGETC CERTIFICATION				CSU GE CERTIFICATION			
	Scores	ARC Course	Sem Units	ARC GE Area	Units for ARC GE	Scores	IGETC Area	Sem Units	Scores	CSU GE Area	Sem units for GE Cert	Scores	Sem Units	
Biology HL	5,6,7			IV	3	5,6,7	5A (without lab)	3	5,6,7	B2	3	5,6,7	6	
Chemistry HL	5,6,7	CHEM 305* or 400*	5	IV	5	5,6,7	5A (without lab)	3	5,6,7	B1	3	5,6,7	6	
Economics HL	5,6,7	Econ 302 & 304	6	Vb	6	5,6,7	4	3	5,6,7	D	3	5,6,7	6	
Geography HL	5,6,7			Vb	3	5,6,7	4	3	5,6,7	D	3	5,6,7	6	
History (any region) HL	5,6,7			I or Vb	3	5,6,7	3B or 4	3	5,6,7	C2 or D	3	5,6,7	6	
Language A1** (any except English) HL						5,6,7	3B and 6A	3						
Language A2** (any except English) HL						5,6,7	3B and 6A	3						
Language A1 (any language) HL	5,6,7			I	3	5,6,7	3B	3	4	C2	3	4	6	
Language A2 (any language) HL	5,6,7			I	3	5,6,7	3B	3	4	C2	3	4	6	
Language B** (any language) HL						5,6,7	6A	3	4	NA	NA	4	6	
Mathematics HL or Further Mathematics SL	5,6,7	Math 400	5	IIb	5									
Mathematics HL	5,6,7			IIb	5	5,6,7	2A	3	4	B4	3	4	6	
Physics HL	5,6,7			IV	3	5,6,7	5A (without lab)	3	5	B1	3	5	6	
Psychology HL	5,6,7			Vb	3	5,6,7	4	3	5,6,7	D	3	5,6,7	3	
Theatre HL	5,6,7			I	3	5,6,7	3A	3	4	C1	3	4	6	

* With department approval upon review of lab reports.

** 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-speakers. Language A1 and A2 are advanced courses in literature for native and non-native speakers, respectively.

CLEP (College Level Examination Program) Test Scores

CLEP TEST	AMERICAN RIVER COLLEGE						IGETC CERTIFICATION			CSU GE CERTIFICATION		
	Scores	ARC Course	Sem Units	ARC GE Area	Units for ARC GE	Scores	IGETC Area	Sem Units	Scores	CSU GE Area	Sem units for GE Cert	Sem Units
American Govt.	50			Va	3				50	D8	3	3
American Literature	50			I	3				50	C2	3	3
Analyzing and Interpreting Literature	50			I	3				50	C2	3	3
Biology	50			IV	3				50	B2	3	3
Calculus	50	MATH 400	5	IIb	5				50	B4	3	3
Chemistry	50			IV	3				50	B1	3	3
College Algebra	50	MATH 120	5	IIb	5				50	B4	3	3
College Algebra - Trigonometry	50	MATH 330	3	IIb	3				50	B4	3	3
College Mathematics	50								50	NA	0	0
English Composition (no essay)	50								50	NA	0	0
English Composition (with essay)	50								50	NA	0	0
English Literature	50			I	3				50	C2	3	3
Financial Accounting	50								50	NA	0	3
French Level I*	50								50	NA	0	6
French Level II*	59			I	3				59	C2	3	12
Freshman College Composition	50								50	NA	0	0
German Level I	50								50	NA	0	6
German Level II	60			I	3				60	C2	3	12
History, US I	50			Va	3				50	D & US 1	3	3
History, US II	50			Va	3				50	D & US 1	3	3

* If a student passes more than one CLEP test in the same language other than English (e.g. two exams in French), then only one examination may be applied to the baccalaureate. For each test in a language other than English, a passing score of 50 is considered "Level I" and earns six units of baccalaureate credit; 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.

CLEP test scores continued next page

CLEP Test Scores (continued)

CLEP Test	AMERICAN RIVER COLLEGE						IGETC CERTIFICATION			CSU GE CERTIFICATION		
	Scores	ARC Course	Sem Units	ARC GE Area	Units for ARC GE	Scores	IGETC Area	Sem Units	Scores	CSU GE Area	Sem units for GE Cert	Sem Units
Human Growth & Development	50			IIb	3				50	E	3	3
Humanities	50			I	3				50	C2	3	3
Information Systems & Computer Applications	50								50	NA	0	3
Introduction to Educational Psychology	50								50	NA	0	3
Introduction to Business Law	50								50	NA	0	3
Introductory Psychology	50			Vb	3				50	D	3	3
Introductory Sociology	50			Vb	3				50	D	3	3
Natural Sciences	50			IV	3				50	B1 or B2	3	3
Pre-Calculus	50	MATH 370	5	IIb	5				50	B4	3	3
Principles of Accounting	50								50	NA	0	0
Principles of Macroeconomics	50			Vb	3				50	D	3	3
Principles of Management	50								50	NA	0	3
Principles of Marketing	50								50	NA	0	3
Principles of Microeconomics	50			Vb	3				50	D	3	3
Social Science & History	50								50	NA	0	0
Spanish Level I*	50								50	NA	0	6
Spanish Level II*	63			I	3				63	C2	3	12
Trigonometry	50	MATH 330	3	IIb	3				50	B4	3	3
Western Civilization I	50			I or Vb	3				50	C2 or D	3	3
Western Civilization II	50			Vb	3				50	D	3	4

* If a student passes more than one CLEP test in the same language other than English (e.g. two exams in French), then only one examination may be applied to the baccalaureate. For each test in a language other than English, a passing score of 50 is considered "Level I" and earns six units of baccalaureate credit; 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.

In this section you will find:

- Academic progress
- Fees
- Academic resources
- Student learning outcomes
- Campus life
- Campus security
- Student rights and responsibilities



educational progress

American River College's academic standards and resources are intended to support a successful learning experience for all students.

We offer many services to help students achieve their educational goals. Students enrolled in degree or certificate programs are expected to demonstrate satisfactory academic progress as defined by the following three general policy requirements:

- **Minimum Grade Point Average:** Students must achieve and maintain the required grade point average.
- **Credits Earned/Credits Attempted:** Students must complete a minimum percentage of attempted credits per quarter.
- **Degree/Certificate Completion:** Students must complete the degree or certificate within the maximum credit limit.

The college recognizes the unique and diverse backgrounds and needs of its students, and while all students are held to the same level of academic excellence, students with special circumstances may petition for special consideration. Students enrolled in special programs are also required to follow the requirements specified by their funding agency. In addition, students receiving federal and/or state financial aid must follow the Financial Aid Satisfactory Progress Policies.

academic standards

Good standing

In determining a student's eligibility to acquire or remain in good standing at American River College, both quality of performance and progress toward completion of objectives are considered. A student who completes 12 or more semester units, earns a 2.0 GPA on a 4.0 grading scale, and completes more than 50 percent of all enrolled units, merits good standing with the college. Students in good standing are limited to 18 units per semester. In exceptional cases, a student may initiate a petition with a counselor to exceed the 18-unit limit.

attendance requirements

Excessive absences

The Los Rios Community college District (LRCCD) attendance requirements are as follows: Per Policy P-2222, 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. Any student who is a no show shall be dropped from a class (CA Code of Regs., Title 5, 58004).

Non attendance at First Class

As stated in LRCCD Regulation R-2222, students who fail to attend the first session of a class may be dropped by the instructor.

Excessive Absence Defined

As stated in LRCCD 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 absence for that course.

No Shows

As stated in LRCCD R-2222, students who fail to attend the first session of a class may be dropped by the instructor.

In addition, students who have not attended at least one of the first three sessions of a class will be dropped as a "no show" following the third session of the class per Title 5 section 58004. If a class is scheduled for only one session per week, then students who have not attended at least one of the first two sessions of a class will be dropped as a "no show" following the second session of the course.

Change of address or name

Students must report a change of address immediately to Enrollment Services. Students will be held responsible for all misdirected mail if the address change was not provided. Change of name, social security number, and other information that would affect your student record must be reported in writing to the same office with the proper documents to substantiate the change.

grades and credit

Credit/Unit

The course grants units of credit based upon a relationship specified by the governing board between the number of units assigned to the course and the number of lecture and/or laboratory hours or performance criteria specified in the course outline. The course requires a minimum of three hours of student work per week, per unit, including class time and/or demonstrated competency, for each unit of credit, prorated for short-term, laboratory, and activity courses.

Grades and grade point average (GPA)

At the end of each semester or term, the college reports students' grades for every enrolled course. The grading standards, with their grade point equivalents, are as follows:

- A Excellent, 4 grade points per unit.
- B Good, 3 grade points per unit.
- C Satisfactory, 2 grade points per unit.
- D Passing, less than satisfactory, 1 grade point per unit.
- F Failing, 0 grade points, no units earned.
- CR Credit (C or better), not computed in GPA.
- *P Pass (C or better), not computed in GPA.

- NC No Credit (less than C), not computed in GPA but affects progress probation and dismissal.
- *NP No Pass (less than C), not computed in GPA but affects progress probation and dismissal.
- I Incomplete, not computed in GPA but affects progress probation and dismissal.
- IP In-progress, course transcends semester limitation.
- W Withdrawal, not computed in GPA, but affects progress probation and dismissal.

*Courses taken prior to June 30, 2008 will be noted on the student records as CR/NC (Credit/No Credit). Courses taken July 1, 2008 and in the future will be noted as P/NP (Pass/No Pass), per Title 5 section 55022.

$$\text{Grade Point Average (GPA)} = \frac{\text{Total grade points earned}}{\text{Total units attempted with a letter grade}}$$

$$\text{Progress Percentage} = \frac{\text{Total units with a W, I, and NC/NP}}{\text{Total units enrolled}}$$

Credit/pass – No credit/No pass grading

A student may elect that one course per semester be graded on a credit/pass or no credit/no pass basis. A petition to take a class credit/pass – no credit/no pass must be filed with Enrollment Services by the deadline as specified online. The equivalent of an A, B, or C received for the course will be recorded as CR/P, with units earned. The equivalent of a D or F will be recorded as NC/NP, with no units earned. Units attempted for credit/pass – no credit/no pass grades are not computed in the grade point average, but are used for determining progress probation and progress dismissal.

A student who has elected to be graded on a credit/pass – no credit/no pass basis may not have the CR/P or NC/NP changed to the letter grade (A, B, C, D, F). A maximum of 20 elected credit units may be applied toward the Associate in Arts or Science degree.

Grades of incomplete

An incomplete grade (I) may be assigned by the instructor when, in the judgment of the instructor, the student is unable to complete the requirements of a course before the end of the semester because of an unforeseeable emergency or other justifiable reason. To receive credit for the course, the incomplete work must be finished no later than one year from the end of the semester in which the incomplete was assigned. A final grade will be assigned when the work stipulated has been completed and evaluated, or when the time limit for completing the work has elapsed. A student receiving an incomplete may not re-enroll in the course. A student may petition for a time extension due to unusual circumstances.

Grades of in-progress

A grade of “in-progress” indicates that a course is still in progress and a final grade has yet to be assigned. A student receiving an in-progress grade must re-enroll in the course in the subsequent semester. Failure to re-enroll will result in an evaluative (letter) grade being assigned in lieu of the in-progress.

Withdrawal from class or college

A student may officially drop a class without notation (a “W” grade) on the permanent academic record/transcript prior to the point in which 20% of a class has occurred. These important dates are available at http://www.losrios.edu/lrd/lrd_calend.php. (click on the appropriate semester, then click on “Click here for more information, including start/end dates, drop/add dates”). 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 by staff in Enrollment Services.

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, 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

Military withdrawal is available for student 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.

Medical withdrawal

Medical withdrawals may be considered when supporting documentation is provided along with a student petition.

Withholding student records

The college reserves the right to withhold student transcripts and records and to deny future enrollment for any outstanding student obligation. The college reserves the right to evaluate high school diploma(s). The Vice President of Student Services or his/her designee may, at any time, request a copy of a high school transcript or other documentation to validate the authenticity of the high school diploma. The decision of the Vice President of Student Services or his/her designee is final and cannot be appealed. As provided in the Federal Register (Section 668.16) the college may withhold Financial Aid funds or require the student to take and pass an Ability to Benefit test as a requirement for receiving Financial Aid.

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 obtain credit in a course in which they are not formally enrolled. A student who wishes to challenge a course by examination must have successfully completed a minimum of 12 units at American River College with a grade of “C” or better.

Successful completion of a course by examination is recorded on the permanent record as a “P” grade. The “P” grade does not enter into the computation of the student’s grade point average. The units may not be used to satisfy the 12 unit residence requirement for graduation. A maximum of 15 units may be allowed by examination.

Note: Credit by examination is not applicable to all courses, and in some instances the process may require measures of evaluation. A student seeking credit by examination should consult the dean of the appropriate area to determine if credit by examination is allowed for a particular course.

Repetition of courses

Repetition of courses must be conducted in compliance with Title V Regulations, sections 55040 through 55046. A course may be repeated up to two times at any of the Los Rios colleges for which a notation of D, F, NC (No Credit), NP (No Pass) or W (Withdrawal) was earned. This regulation is effective across the district at all Los Rios colleges. If you took a course at any of the Los Rios colleges – American River, Cosumnes River, Folsom Lake or Sacramento City, this counts as one of your three attempts.

Exceptions to this regulation are as follows:

- 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 accidents, illness or other circumstances beyond the student’s control. This is a one-time exception.
- A student may repeat a course because there has been a significant lapse of time since the student previously took the course based on the established recency for

that course. Grades awarded for courses repeated under this circumstance shall not be counted when calculating a student’s grade point average. This is a one-time exception.

- Courses designated as “repeatable” are those listed as such in the college catalog and are designed to enhance students’ skills or performances through supervised repetition. These include: (a) courses where the content differs each time it is offered; (b) activity courses where the student continues or builds on skills or proficiencies by supervised repetition and practice in class; (c) courses in music, fine arts, theatre or dance which are part of a sequence of transfer courses. In all of these cases, students can take the course a maximum of four times.

Academic renewal without course repetition

A student may petition to have previous substandard work, (D’s, F’s, NC’s or NP’s), 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. The following conditions must apply:

1. A minimum of 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 Credit/Pass or better shall have been attained. The coursework must have been completed at a regionally accredited college.
2. Current educational objectives must be discussed with a counselor and the counselor’s recommendation must be included on the petition.
3. No more than 30 units of substandard grades may be discounted.
4. Under no circumstances may course work be discounted if it was used to fulfill requirements for a degree or certificate that has been granted.
5. 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.
6. Questions regarding this policy should be directed to the Dean of Enrollment Services.
7. Once elected, the academic renewal cannot be reversed.
8. Academic Renewal is not intended for courses that are required and/or will be repeated.

Academic renewal petitions are available in the Counseling Center.

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 1-99. Students may petition for a waiver to the thirty-unit limitation through a counselor. However, federal financial aid does not allow a student to receive aid for more than 30 remedial units.

College Level Examination Program (CLEP)

After completing 12 units at American River College, a student in good standing may submit qualifying scores on the College Level Examination Program (CLEP), except for English scores, to Enrollment Services to determine eligibility for college credit. Students should be aware that some two-year and four-year colleges have the right to accept, reject, or modify the CLEP units accepted by American River College. See CLEP chart in the *Getting Started* section for specific information.

College Entrance Examination Board (CEEB)

Students who earn acceptable scores will be awarded credit toward an A.A. or A.S. degree but grades are not awarded. Such course credit does not enter into computation of the GPA for transfer or graduation from ARC. Credit may not be earned for courses which duplicate credit already allowed for Advanced Placement Examinations. See AP (Advanced Placement) Test Scores chart in the *Getting Started* section for credit given and ARC course equivalencies. After successful completion of 12 units at American River College, a student in good standing may submit their official CEEB Advanced Placement Test scores to enrollment services for evaluation.

academic probation

A student is placed on academic probation if the student has attempted at least 12 units and earned a grade point average below 2.0 in all units that were graded. A student on academic probation may be subject to counselor intervention.

Progress probation

A student who has enrolled in a total of at least 12 semester units is placed on progress probation when the percentage of all units in which a student has enrolled, and for which entries of W, I and NC/NP are recorded, reaches or exceeds 50 percent of all units attempted. A student on progress probation may be subject to counselor intervention.

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 acquires good standing when the student's cumulative grade point average (GPA) is 2.0 or higher. A student on progress probation is removed from probation and placed in good standing status when the percentage of units with entries of W, I and NC/NP drops below fifty (50) percent of all units attempted. To see how GPA and progress percentage are calculated, see *Grades and grade point average (GPA)* in *While You are Here* section.

Academic dismissal

A student on academic probation is subject to dismissal when the student earns a cumulative grade point average of less than 2.0 in all graded units in at least three successive semesters.

progress dismissal

A student on progress probation is subject to dismissal if the percentage of units in which the student has been enrolled for which entries W, I and NC/NP are recorded reaches or exceeds 50 percent in at least three successive semesters.

Readmission following dismissal

A dismissed student may petition to the Dean of Student Services for permission to enroll if the student feels that the cause for dismissal reflects extenuating circumstances. The burden of written documentation in support of these circumstances remains with the student. A dismissed student must see a counselor to initiate a student petition.

academic honors

The distinction of Honors and High Honors is noted on a student's transcript for each semester in which a student has enrolled in 12 units or more, and has earned a grade point average (GPA) of at least 3.0 (Honors) or 3.5 or higher (High Honors). Students earning High Honors will be notified by mail of their eligibility to join the college honor society.

fees

Community College Enrollment fees are set by the California State Legislature. All fees are subject to change. The general enrollment fee for California residents was \$46 per unit, beginning Summer 2012, for all students as this catalog went to press. Should the California State Legislature increase enrollment fees, students who have registered for classes prior to any increase may be billed for the additional amount. For a full schedule of fees visit our web site [www.arc.losrios.edu].

Non-resident tuition

Students who have not established legal residence in California will be required to pay a tuition fee in the amount of \$254 per class unit (includes the Community College Enrollment Fee) at the time of registration.

International student application fee

Non-resident applicants who are both citizens and residents of a foreign country shall be assessed a non-refundable application process fee of \$50. The application fee is due and payable with submission of the application for admission or readmission. International student applications will not be processed without payment of the fee.

International student tuition

International students who are admitted with a foreign student visa will be required to pay a tuition fee in the amount of \$254 per class unit (includes the Community College Enrollment Fee). International students must enroll in a minimum of 12 units (full-time) and maintain good academic standing.

Student Access Card/Universal Transit Pass Fee

All students must pay this fee including those receiving BOG Fee Waivers. Students taking less than six units pay \$5.54, students taking six to 11.9 units pay \$11.08. Students taking 12 or more units pay \$16.62. BOG students will be charged half this amount. Exempted from this fee are students at the Public Safety Training Center, those who are part of the apprenticeship program, and UCD students taking classes at the Sacramento City College Davis Center.

If your Student Access Card is lost, stolen or damaged during the academic year in which it was issued, there will be a \$5.00 fee for replacement. There will be a \$20.00 fee to replace lost or stolen Student Access cards which have a UTP sticker attached.

Universal Transit Pass (UTP) stickers cannot be sold or transferred in accordance with California Penal Code 483 and the Los Rios Community College District's standards of Conduct (District Regulation R-2441). Violators will be cited for criminal misdemeanor and subject to academic discipline.

Instructional materials fee

Students may be required to provide instructional and other materials required for a credit/pass or no credit/no pass course. Instructional materials may be charged in certain courses.

Parking fee

See *Transportation* in *While You are Here* section.

Fee refunds

In order to qualify for an enrollment fee refund, students must drop a course by *Friday* of the second week of instruction for full-term courses or *Friday* of the first week of instruction for short-term courses, including summer session.

The student may file for the enrollment fee refund up to the last college day of instruction in any semester or summer session, provided the student has withdrawn from full-semester classes on or before the tenth college day of instruction, and from less-than-full-semester and summer session classes by the fifth day of the session. For specific dates and deadlines refer to the web site.

To qualify for a refund, the student must officially drop the class(es) online, at eServices, or Enrollment Services within

the time lines as specified online. The student must also file a refund application with the college business office by the last day of instruction in the semester or summer session in which class(es) were dropped.

Refund eligibility will be determined by the date the class(es) were dropped and the date the refund application is filed with the college business office.

Maintenance allowance

A California resident who resides more than 60 miles from the nearest public community college campus may file an application for a maintenance allowance in Enrollment Services. The rate of payment is determined by the State Chancellor's Office, and is issued to the parent or guardian of minor non-district students, and directly to adult non-district students and married minors. Payment is based on each day of full-time scheduled attendance.

academic resources

Athletic/Academic support services

Athletic/academic support service links student-athletes to academic support programs on the ARC campus. The academic support team will also provide follow-up on individual academic progress throughout the semester. This service is available to all student-athletes.

Beacon Program

Beacon tutoring sessions focus on working together with other students in a collaborative learning environment. The results show that students who work collaboratively learn faster and more efficiently, have greater retention, and feel more positive about the learning experience.

The Beacon group learning experience has a long history at ARC, and many students have benefited by getting better grades, better understanding of the course content, acquiring improved study skills, and by making new friends. The Beacon tutor is a student who took the same class with the same instructor, and who has gone through a tutor training course that helps them better manage the group learning environment. Beacon is not drop-in tutoring; students are expected to attend regularly throughout the semester. Beacon study group meet throughout the campus.

Career Center

The Career Center, located in the Student Services building, offers a wide array of resources and services at no cost to ARC students and alumni. The center provides students with interest assessments and helps them research career options, match academic majors with related job possibilities and search for internships. The center assists students and alumni who are planning a career change or just need access to online job postings.

Students can use interactive career guidance programs to research occupations and labor market trends. Monthly workshops are offered on developing job-seeking skills and strategies, resume writing, and effective interviewing techniques. Employment information is available to students through the on-line job posting system, LINCS. Current listings can be found at www.arc.losrios.edu/career – click on *Students*, then *Employment Opportunities*. For additional information call the center at 484-8492.

ESL Center

ESL (English as a Second Language) students at the 30 level and above who would like to improve their reading, writing, speaking and/or listening skills may enroll in ESL 97, ESLL 97, ESLR 97, and ESLW 97 and attend class in the ESL Center. Open Monday through Friday, the ESL Center is located in the Learning Resource Center. Students may work individually on workbooks, computers, or in small groups for conversation practice. Staff members are available to answer questions and review students' work. ESL 97 students do not need to be enrolled in any other ESL class. Each 97 class may be repeated for credit. All ESL 97 grades are Pass/NoPass.

Learning Resource Center

The Learning Resource Center (LRC) is a well-equipped, professionally-staffed facility that offers students a personal approach to academic success through small classes, independent study, individualized tutoring and alternative modes of learning.

The tutoring program is a specialized service of the LRC. The program provides individualized tutoring in most subjects for students who need academic assistance outside the classroom. In addition to individualized tutoring, the Beacon program offers group tutoring with an emphasis on collaborative learning. The small groups are led by trained tutors who have successfully completed the course for which they will be tutoring.

The Reading, Writing and English as a Second Language Centers are located in the LRC, as well, and provide an opportunity for students to enroll in individualized self-paced modules at a variety of skill levels. Additional programs housed in the LRC include Writing Across the Curriculum (WAC), Reading Across the Disciplines (RAD), and the Foreign Language Lab.

The ARC Learning Resource Center is unique because of the wide range of academic services available to students along with the latest in technology equipment.

Library

The ARC Library offers a welcoming learning environment that supports study, research, exploration, and academic growth. We provide services, materials, and instruction designed to help students find high-quality information and learn the research skills necessary to succeed in college and beyond. A popular study spot on campus, the library offers both individual and group study spaces, a large computer lab, and wi-fi access throughout the building. Students may use our computers for Library research and other school-related activities.

The ARC Library selects resources specifically tailored to the research needs of ARC students. Our online research databases provide students 24/7 access to thousands of full-text articles and e-books, as well as virtual art and music collections. We have a large book collection and students may borrow materials from other libraries through our Interlibrary Loan program. The library also offers DVDs, popular magazines and newspapers, and 2-hour use of textbooks for many of ARC's most popular classes.

Students working on research projects may want to get in touch with a librarian. Librarians are trained research experts who can help students find information and learn to use the ARC Library to its full potential. Students can get help from a librarian by visiting the library's Research Help Desk on a drop-in basis, scheduling an appointment in advance, calling, emailing, or sending a text or instant message. For more information, visit the library website, www.arc.losrios.edu/arclibrary.htm. Librarians are available whenever the library is open.

Students wishing to develop more advanced research skills may choose to enroll in a library course. All courses are taught by librarians and can be found in the Library pages of the *Programs of Study* section.

MESA (Mathematics, Engineering, and Science Achievement) Program

Are you studying for a career in science? Want to be a mathematician or computer scientist? Plan on being an engineer? MESA can help.

Students who have on-campus friends with similar interests and career goals, and who support and motivate each other toward learning, are more likely to succeed in college. The MESA program can connect you with just such a group of friends. In addition, tutoring, study groups, and academic advising is available to program participants provide the needed academic support to ensure success.

MESA is a statewide program that offers assistance to students preparing to transfer to a four-year institution to earn a degree in fields related to mathematics, science, or engineering. Participants must be eligible for financial aid or a fee waiver, and must be in the first generation of their family to earn a four-year college degree. For more information, go to [www.arc.losrios.edu/~mesa].

Reading Across the Disciplines (RAD) Center

The RAD program helps students meet their academic goals by improving their reading, and comprehension and study skills in their college courses. RAD students learn to annotate textbooks and research materials, paraphrase key ideas, read outlines and maps based on their class materials, read and understand graphics, master jargon, prepare for tests and analyze test items. The 1/2 unit RAD class meets for an hour once a week for 9 weeks. RAD works with students from all disciplines; students must be enrolled in another academic class to participate in RAD

Reading Center

The Reading Center offers individualized instruction in basic reading skills. Instructors, instructional assistants, and tutors work with students to improve their skills in reading comprehension and vocabulary acquisition, essay and textbook reading, and study skills. The course may be taken four times with different modules for a maximum of four units.

Science Study Skills Center

Students in science courses may acquire or improve their study strategies such as reading comprehension, vocabulary, note taking, paraphrasing, concept mapping, graphics interpretation, and test taking. Instructors, instructional assistants, and tutors assist students with individualized instructional modules. The selection of modules may vary depending on student need and skill level. Students must enroll in BIOL 490: Science Skills and Applications. Available Fall and Spring.

Tutoring Center

Available to any student enrolled in an ARC class. Peer tutors assist students – individually and in small groups – in courses the tutors have successfully completed. This service is free. Students must submit an application with the signature of the instructor who is teaching the course in which tutoring assistance is requested.

Writing Across the Curriculum (WAC) Center

The WAC program helps students from all academic disciplines improve their writing skills. Students learn to apply more effective prewriting, drafting, revising, and editing strategies. Students receive assistance with writing assignments for all classes. Students may also receive help with personal statements for scholarships and college transfer.

Writing Center

The Writing Center offers a three-unit lecture class, ENGWR 43, for students who assess below ENGWR 51 and need to work on basic writing skills in preparation for ENGWR 51. Individualized instruction is provided by instructors, instructional assistants, and student tutors.

other services

Bookstore

The college-operated bookstore is conveniently located adjacent to the college cafeteria. The bookstore carries all required textbooks, supplemental textbooks, and a wide variety of supplies and other items. In order to better serve students, the bookstore purchases used textbooks on a year-round basis. Visit the bookstore's web site at book.arc.losrios.edu. The bookstore is totally responsible for all of its operating costs, and any remaining profit is used to support instructional related programs and projects on campus.

Cafeteria

The college-operated cafeteria provides food service Monday through Friday, during most of the times that classes are in session. The cafeteria operates a limited service during summer. During summer, the cafeteria and kiosk are open Monday through Thursday.

Child Development Center

American River College operates childcare programs for parents who are continuing their education at ARC. The center serves toddlers starting at the age of 24 months and preschool children through the age of five. School-age childcare is only available during the summer session. Program options include part-time, full-time, mornings and afternoons. Fees for the program are based on a sliding scale set by the Department of Education, Child Development Division.

In the summer, care may be provided Monday through Thursday. Contact the center during the spring semester regarding the summer program.

The center is licensed by the Department of Social Services and accredited by the National Association for the Education of Young Children. Also, the center serves as a teaching laboratory for students in early childhood education, child development, child psychology and nursing programs. The center is staffed by Child Development Permit Teachers, who plan and implement developmentally-appropriate curriculum.

Applications are available each semester when the class schedules are published and must be picked up in person at the center. The center office is located in the Child Development Center [CDC 300] on the east side of campus, behind the cafeteria. For further information regarding the priority list, eligibility, fees and program hours, please call (916) 484-8651, or stop by the center.

Health Center

The Health Center is located in the administration building and is staffed by registered nurses. Services include health assessment and consultation with appropriate referral to community resources; blood pressure screening; tuberculosis (PPD) skin testing; immunizations: Hepatitis B, tetanus (Td & Tdap), and measles/mumps/rubella; annual flu clinic; reproductive health services and testing; health education, including classroom and campus wide presentations; smoking cessation; lactation room; and first aid and emergency care. All consultations are confidential. No appointment is necessary. Services are free except for immunizations and PPD tests. For more information please call (916) 484-8383.

Transfer Center

The Transfer Center provides to students and all staff the most current information to ensure a smooth transition to four-year colleges and universities. See *Transfer* section of this catalog for more on transfer options and about the center's services.

campus life center

Campus Life Center

The Campus Life Center coordinates student activities and leadership opportunities for the campus and is located in Portable Village, room 611 & 612. The office serves the campus community in providing support services for campus clubs and organizations, and providing information about a variety of student projects, student leadership, activities and initiatives that help to foster an inclusive campus community.

The Campus Life Center provides information about club activities, student involvement opportunities, distribution of material, publicity poster approval, general information, off-campus housing, *Student Rights & Responsibilities* and bike locker rental. A major responsibility of the staff of the Campus Life Center is to provide guidance and support services to the Associated Student Body officers and representatives in their endeavors to meet the needs of all students. Also, the staff assists students interested in other clubs, organizations and activities.

The Arts

The Fine and Applied Arts (FAA) programs at ARC are highly regarded and nationally recognized in Art, Art New Media, Fashion, Culinary Arts, Interior Design, Music, Commercial Music, Theatre and Film. With over 100 events each year, faculty and staff are committed to providing students and the community with quality academic programs that are designed to facilitate the degree seeking/transfer student, vocational student, return-to-learn student, or students who seek a creative activity to enhance their

college schedule. Many students and faculty have achieved not only national recognition but international notice of creative and technical skills.

The new state-of-the art theatre, classrooms, practice rooms, and professional-level recording studio is home to the Music and Theatre Departments. Performance opportunities include: plays and musicals, student directed one-acts, Music Circus internships, Fair Oaks Summer Theatre program, the ARC orchestra and chamber ensemble, as well as chamber singers, concert choir and many traditional and jazz vocal and instrumental ensembles. The James Kaneko gallery provides an on-going schedule of shows and exhibits, including works by students, faculty and highly regarded local artists.

Clubs and organizations

Chartered clubs on campus are organized around various special interests and promote participation in a variety of cultural, academic and social activities. Membership is open to all interested students. More information is available from the Campus Life Center.

College Hour

Each Thursday noon, the college schedules fewer classes in order to leave open time for special events, speakers, workshops, concerts and other activities.

Intercollegiate athletics

As part of our physical education program, ARC athletics hosts 20 intercollegiate athletic teams. Fall semester sports include cross country (men/women), football (men), golf (women), soccer (men/women), volleyball (women), water polo (men/women). Fall/spring sports include basketball (men/women). Spring semester sports include baseball (men), golf (men), softball (women), swimming and diving (men/women), tennis (men/women), and track and field (men/women).

Full-time students (12 or more units) who fulfill the requirements of both the Commission on Athletics and ARC are eligible to compete in freshman and sophomore years of intercollegiate athletic eligibility. With the aim of promoting both the athletic and academic success of our student-athletes, we have a full support service for athletic training/sports medicine needs and for academic advising and support.

ARC athletic teams are well respected among both the California community colleges and the four-year college and university systems. Our teams are always competitive, regularly qualifying for post-conference play. At ARC, the student athlete is always first, preparing and competing with integrity and good sportsmanship.

Student government

The Associated Student Body, through the approved charter, is the recognized student government body that represents students in all phases of college life. Student government maintains the link between the students and the administration, faculty, classified support staff, and the district's board of trustees. Participation in student government is a valuable educational experience available to students.

Student publications

The *Current*, the college newspaper, is published both in print and online (arc.current.com) by student staff, and the *American River Literary Review* is published each spring by students in English and Art New Media.

A weekly information sheet, *This Week*, is available every Monday. Important campus announcements are made through this publication which is distributed in bulletin boxes on campus and in the Campus Life Center.

transportation

Parking

Designated student parking areas are located in all parking lots on campus, except in parking lot E and the parking area in front of the Administration Building. (See *campus map at the back of this catalog*.)

All students wishing to park a motorized vehicle in designated student parking are subject to a parking fee. A parking permit (decal) may be purchased.

Automobiles: \$30 per semester; \$15 per summer session
Motorcycles: \$15 per semester; \$8 per summer session

Instead of a semester permit, students may purchase a daily parking ticket for \$1 from machines located in various parking lots, as indicated on the campus map. Students driving motorcycles are encouraged to use parking permits (decals), rather than daily parking tickets.

Parking by semester decal or daily parking ticket is enforced from 7:00 a.m. to 11:00 p.m., Monday through Thursday, and from 7:00 a.m. to 5:00 p.m. on Friday, whenever classes are in session. Vehicles not having a valid parking decal or daily parking ticket properly displayed will be given a parking citation.

Citations will also be issued for violations of campus parking and traffic regulations. A copy of campus parking/traffic regulations may be obtained from the Campus Police Office, or viewed on online [<http://police.losrios.edu/>].

Regional Transit

Sacramento Regional Transit currently serves American River College via four bus routes. Information is available online: on the ARC home page [www.arc.losrios.edu] use the "Quick Links" menu, then click on "Bus Routes." ARC students receive a substantial discount on fares for any bus or light rail service provided by Sacramento Regional Transit (not just for commuting to school), provided via the Universal Transit Pass fee that is assessed as part of the class enrollment process.

campus security

Safety at American River College is everybody's business. Students, staff and faculty are partners with the college in creating an atmosphere that is safe and encourages learning. American River College is a diverse community within a community. During the school year, we have over 36,000 students, 370 full-time faculty, over 365 part-time faculty and a support staff of 223 working together. At the same time, the college is very much a part of the greater Sacramento metropolitan area.

The college, in accordance with its mission statement, is a community center for lifelong learning through education, cultural, and recreational programs. Many community members visit and use the services the college offers seven days a week. The college strives to be accessible to the community and welcomes the use of its facilities.

No community, of course, can be totally risk-free in today's society. American River College strongly believes it has a major role in providing a safe learning environment, but, also, is realistic enough to recognize that students, staff and faculty must come together in a strong partnership and use common sense precautions to reduce the opportunity for criminal/anti-social activities. Crime happens in our society. We have no magical formula to stop it at our campus. Thefts, assaults and other crimes happen at American River just as at any other college campus.

To reduce the possibility that any student may be exposed to potential hazards, American River College has taken many steps, described herein, to reduce whatever risks there may be. All of us can further reduce risks by thinking about personal safety and taking common sense precautions.

Safety programs at American River College are under the direction of the Director of Administrative Services. We have a proactive approach to campus safety that is best viewed as education, prevention and our ability to respond to questionable events.

Education

The key to crime prevention is an awareness gained through education. At American River College, the College Police department, staff, faculty and students work together and take responsibility for their own safety and are ready to help others in time of need. This is a very potent force.

The vast majority of incidents on college campuses can be avoided if the college population recognizes they are potential victims and take basic precautions, such as using the “buddy system” when walking at night, locking car doors and not leaving valuables unattended. The College Police department is available to meet with groups or individuals and discuss anti-crime tactics or any anti-social activities.

American River encourages reporting of all crimes, even minor crimes, and any suspicious activity. The College Police department would rather have a hundred unfounded calls of suspicious activities than miss one call when a crime is occurring. We need to know about crimes that occur. If we are not informed of a crime, we cannot advise and help students and staff. Crimes occurring on campus should be reported immediately to a College Police Officer.

When appropriate, the College Police will contact the Sacramento Sheriff’s department for assistance and/or to conduct an investigation. A College Police report will be made; a copy of the report will be made available to the reporting individual provided he/she is the victim of the crime. Officers may be contacted by telephone or by

coming to the College Police office located on the west side of the Gym parking lot.

College police officers are available to address classes about prevention of crime. Additionally, the Associated Student Body has hosted forums on crime prevention at which outside experts as well as college police officers have offered common-sense approaches to avoid becoming a victim of a crime.

American River College offers a major in Chemical Dependency Studies which is accredited by the California Alcoholism and Drug Counselors Educational Program. American River College is committed to a drug-free campus. Violators will be subject to disciplinary procedures.

Forums are held throughout the year by the campus Health Center and Associated Student Body on issues of substance abuse. A special program, the Beaver Athletic Assistance Program, has been developed to offer support and advise to student athletes on drug and alcohol abuse. The college offers its facilities for weekly meetings of Alcoholics Anonymous and Narcotics Anonymous. These meetings are offered at times convenient for students and advertised widely to students.

This information is updated annually and is available to all students, employees and applicants. Additional information is available from College Police personnel. Any serious crime involving potential bodily harm will be reported promptly to staff and students.

ARC crime statistics 2008-2010
Los Rios Police Department

Offense type	On-campus			Non-campus bldgs.			Public property		
	2008	2009	2010	2008	2009	2010	2008	2009	2010
Aggravated assault	2	1	0	0	0	1	3	0	0
Arson	10	0	1	0	0	0	0	0	0
Burglary	9	4	1	0	1	1	0	0	0
Motor vehicle theft	11	4	13	1	0	1	0	0	0
Manslaughter-negligent	0	0	0	0	0	0	0	0	0
Murder & non-negligent manslaughter	0	0	0	0	0	0	0	0	0
Robbery	1	0	2	0	0	0	0	0	0
Sex offenses-forcible	0	2	0	0	0	0	0	0	0
Sex offenses-non-forcible	0	0	0	0	0	0	0	0	0
Liquor law violations (arrests)	0	2	9	0	0	0	0	0	0
Drug law violations (arrests)	2	0	6	0	0	1	1	0	0
Weapons possession (arrests)	2	4	2	0	0	0	0	0	0

***Natomas**

On-campus refers to crimes committed on the campus property, non-campus refers to crimes committed at all Outreach Centers and properties that are leased or rented by ARC for instructional purposes.

Non-campus bldgs. only include crimes that occurred in the specific areas and during the specific times used by ARC. It does not include public property.

Public property refers to those areas immediately adjacent to and accessible from the College, including streets, sidewalks, parking facilities, parks etc. It does not include private residences or businesses.

The Los Rios Community College District’s Annual Security Report for American River College includes statistics for the previous three years concerning reported crimes that occurred on-campus; in certain off-campus buildings or property owned by American River College; and on public property within, or immediately adjacent to and accessible from, the campus. The full report also includes institutional policies concerning campus security, such as policies concerning sexual assault, and other matters. This report is distributed /posted by October 1 each year. You can obtain a copy of this report by contacting the Los Rios Police Department at (916) 558-2365, or by accessing the following website: www.arc.losrios.edu/clery

Prevention

The college actively supports crime prevention through a number of programs. These include:

- **Emergency automotive assistance.** While not mechanics, campus police officers are equipped and trained to start cars with dead batteries or unlock non-electric car doors when keys have been left inside the automobile. Proper identification is required for the performance of these services.
- **Lighting.** A major effort has been made to upgrade the lighting in the interior of the campus to reduce areas of darkness. Continuing progress is being made on upgrading the lighting in campus parking lots.
- **Firearms.** Firearms are not permitted on campus except for professional law enforcement officers. Persons with firearms on campus will be subject to disciplinary action. (LRCCD Regulation 2441)
- **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. (LRCCD Policy 2443)
- **Emergency telephones.** Outdoor emergency telephones are strategically located throughout the campus. These phones are marked and easily identified by a blue light. When accessed, these emergency telephones will automatically connect the caller to the College Police department.
- **Illegal drugs.** 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. (LRCCD Policy 2441 and 2443)
- **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. (LRCCD Policy 2423)
- **Hate violence.** Any act of physical intimidation or physical harassment, physical force or physical violence, or the threat of physical force or physical violence, that is directed against any person or groups of persons, or the property of any person or group of persons because of the ethnicity, race, national origin, religion, sex, sexual orientation, disability, or political or religious beliefs of that person or group will not be tolerated. Appropriate action will be taken where evidence of hate violence is found.
- **Sexual assault.** In accord with California Education Code section 67385, students, faculty and staff who are victims of sexual assault committed at or upon the grounds of or upon off-campus grounds or facilities maintained by the college shall receive information and referral to treatment. The campus procedure relative to incidents of sexual assault is contained in student/staff handbooks, online and in the counseling and campus health centers.
- **Computer Related Crimes.** Tampering, interference, damage and unauthorized access to lawfully-created computer data and computer systems is a violation of Penal Code 502 (LRCCD Policy 2441.)

Response

The Los Rios Police Department employs P.O.S.T. certified police officers and community service officers who have public safety experience and are sworn peace officers under California Education Code 72330. While on campus, they are empowered to conduct investigations and make arrests for violations and infractions they observe. They are responsible to assist in providing a safe campus environment, detecting and reporting safety/fire hazards, enforcing traffic and parking regulations, and promoting crime prevention. All campus police officers have current certification in CPR and first aid.

The officers patrol in fully equipped vehicles and are dispatched through a central communication center. At those times when there is no dispatcher (after 10 p.m. and on weekends), the officers are available by cellular telephone at 764-7860.

The Los Rios Police Department coordinates its activities with the Sacramento Sheriffs department. All officers are in radio communication with the Sheriffs department while on duty.

non-discrimination policy

American River College, as part of the Los Rios Community College District, supports established polices to support learning and work environments that are free from discrimination, based upon sex, sexual orientation, age, race, color, religion, creed, national origin, ethnic group, marital or parental status, physical or mental disability, or any other unlawful consideration; sexual harassment; as well as providing for college premises that are drug and alcohol free. Our policies are rooted in established state and federal laws, and support a psychologically safe working environment for students, staff, and the community. Further information may found on the Los Rios website [www.losrios.edu/legal/GCpolreg.htm].

Students and employees who believe they have suffered discrimination based on any of the above reasons may file a complaint with the appropriate office:

Disciplinary Officer: Manuel Perez
Dean, Student Development 484-8924

Student Grievance Officer: Brenda Thames
Dean, Counseling and Student Services 484-8375

Equity Officer: Lisa Lawrenson
Associate Vice President, Instruction 484-8540

Sexual Harassment Officer: Lisa Lawrenson
Associate Vice President, Instruction 484-8540

Title IX Coordinator: Lisa Lawrenson
Associate Vice President, Instruction 484-8540

504 Coordinator: Robin Neal

Dean, Enrollment Services.....484-8171

Americans with Disabilities Act (ADA) Coordinator: Robin Neal

Dean, Enrollment Services.....484-8171

access to student records

The Los Rios Board of Trustees, in order to meet the provisions of the Family Rights and Privacy Act of 1974 and the Education Code, has established policies giving students access to certain designated records. A summary of the rights and procedures for access are contained in the Students Rights and Responsibilities section of the Los Rios Community College District Policy manual. Complete copies of the Act, Education Code, and Board policies are available in the offices of the Dean of Enrollment Services, and the Vice President, Student Services.

District Regulation 2265 provides for the release, without student consent, of specific student directory information (student name, date and place of birth, major field of study, participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, degrees and awards received, and most recent previous public or private school attended). In addition, federal law provides that representatives of the U.S. Department of Defense shall be provided a student's name, address and telephone number for recruitment purposes. Students have the right to refuse the release of directory information by submitting a written request to Enrollment Services.

student rights & responsibilities

I. Preamble

(Approved by the Los Rios Community College Board of Trustees, June 3, 1970, revised March 6, 1996).

The policy statement below, relating to students' rights and responsibilities is based upon three fundamental concepts:

- A. College students, citizens of the United States and foreign guests are members of the academic community. They have the same rights and freedoms that all citizens have as students, and must comply with federal and state laws and statutes. In addition, students must also comply with Los Rios Board policies and individual college rules and regulations.
- B. The president of a college in the district serves as the chief administrator of the college and is responsible for the overall supervision of the operation of the college in conformity with the directives and duties as defined by the district chancellor and consistent with the policies of the Board of Trustees.

- C. In any conflict relating to student discipline, students shall be informed in writing of charges to be brought against them and be given an opportunity to defend these charges.

II. Student rights

In the context of these concepts, students' rights consist of the following:

- A. 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 campus regulation. These publications shall do the following:
 1. 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.
 2. State on the editorial page that the opinions expressed are not necessarily those of the college or the student body.
- B. Students shall have the right to take stands on issues, the right to examine and discuss questions of interest to them, and the right to support causes by orderly means which are in harmony with the regular functioning of the institution.
- C. Students shall have the right to hear speakers on any subject and on-campus 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.
- D. Students shall have the right to form an organization around any particular interest; this right will include the freedom to organize and to join student organizations subject to published campus and district regulations.

- E. Students shall have the right to be informed on all campus 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 campus matters are relevant to students, the determination will be made by a campus-designated student, faculty, 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.
- F. 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.
- G. Students shall have the right of protection against prejudiced or capricious academic evaluation. At the same time, however, students are responsible for maintaining standards of academic performance established in advance for each course in which they are enrolled.
- H. Students shall have the right to file a grievance as outlined in the procedures of the District Student Grievance Policy, in the event of an alleged breach of their rights. (See Policy# P2412, R2412)

III. Student responsibilities

Admission to college assumes the expectation that the student will be a responsible member of the college community; will 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; and not interfere with legitimate college affairs. Students will assume the responsibility for their conduct. In the case of student conduct which 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 campus policy.

IV. Standards of Student Conduct

The California Education Code requires every community college governing board to adopt specific rules governing student behavior along with applicable penalties for violation of such rules and regulations. (Section 66300, Chapter 5 Rules of Student Conduct; E.C. 76030 Authority to suspend or expel.)

All students enrolling at American River College assume an obligation to abide by all College rules and regulations. These regulations are described in the Los Rios Community College District Board of Trustee Policies, Section 2400 Student Rights and Responsibilities/ 2440 Standards of

Conduct and Due Process. Students who choose not to abide by these standards will be subject to college sanctions and disciplinary measures.

The president of the college or administrative designee may authorize the suspension of a student for good cause (E.C. 76033) which is defined for numerous offenses which includes:

1. Continued disruptive behavior, continued willful disobedience, habitual profanity or vulgarity, or the open and persistent defiance of the authority of, or persistent abuse of, college personnel.
2. Assault, battery, or any threat of force or violence upon a student or college personnel.
3. Willful misconduct which results in injury or death to a student or college personnel or which results in cutting, defacing, or other injury to any real or personal property owned by the district.
4. The use, sale, or possession on campus of, or presence on campus under the influence of, any controlled substance, or any poison classified as such by Schedule D in Section 4160 of the Business and Professions Code.
5. Willful or persistent smoking in any area where smoking has been prohibited by law or by regulation of the governing board.
6. Persistent, serious misconduct where other means of correction have failed to bring about proper conduct.
7. Good cause is further defined, but is not limited to the following:
 - a. 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.
 - b. 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.
 - c. Theft of or non-accidental damage to property of the college or a member of the college community or campus visitor while on campus or at college-sponsored events.
 - d. Unauthorized entry to or use of college facilities.
 - e. Dishonesty, such as cheating, plagiarism or furnishing false information to the college, forgery, alteration or misuse of college documents, records or identifications.
 - f. 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.

- g. Use, possession, distribution or being under the influence of alcoholic beverages, narcotics or dangerous drugs on college property or at college-sponsored events.
 - h. Soliciting or assisting another to do any act which would subject a student to expulsion, suspension, probation, or other discipline pursuant to this policy.
 - i. Violation of any order of a College President, notice of which has been given prior to such violation, and when 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.
 - j. Attempting to do any of the causes for disciplinary action identified above.
8. **Computer-Related Crimes:** A student may be subject to disciplinary sanctions up to and including dismissal for commission of any computer-related crimes as specified in Section 502 of the Penal Code. Such crimes include, but are not limited to, the following:
- a. Knowingly access and without permission alter, damage, delete, destroy or otherwise use any data, computer system or computer network in order to either (a) devise or execute any scheme or artifice to defraud, deceive or extort, or (b) wrongfully control or obtain money, property or data.
 - b. Knowingly access and without permission take, copy or make use of any data from a computer, computer system or computer network, or take or copy any supporting documentation, whether existing or residing internal or external to a computer, computer system or computer network.
 - c. Knowingly and without permission use or cause to be used computer services.
 - d. Knowingly access and without permission add, alter, damage, delete or destroy any data, computer software or computer programs which reside or exist internal or external to a computer, computer system or computer network.
 - e. Knowingly and without permission disrupt or cause the disruption of computer services or deny or cause the denial of computer services to an authorized user of a computer, computer system or computer network.
 - f. Knowingly and without permission provide or assist in providing a means of accessing a computer, computer system or computer network in violation of this section.
 - g. Knowingly and without permission access or cause to be accessed any computer, computer system or computer network.
 - h. Knowingly introduce any computer contaminant into any computer, computer system or computer network.

No student shall be removed, suspended or expelled unless the conduct for which the student is disciplined is related to college activity or college attendance, or pursuant to Penal Code Section 502 or other laws specifically authorizing such.

V. Student Grievance Policy

The Student Grievance procedure shall be available to any student who believes an action or decision of the district or college staff has adversely affected his/her status, and/or rights as outlined under II. STUDENTS' RIGHTS. Grievances relating to grades are subject to Education Code 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 incompetency, shall be final.”

The complete text of the district’s policy, regulation, and timeline on Student Grievance is available in the office of the Dean of Student Development. Students who wish to exercise a grievance can receive policy and procedural steps from the Dean of Student Development.

The College Student Grievance Officer may assist the student in the procedural steps of a student grievance. The name and location of the College Student Grievance Officer can be obtained from the office of the Vice President, Student Services.

(Revised by Los Rios CCD Board of Trustees, July 8, 1992)

VI. Sexual harassment

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 work place 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

- A. 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:
1. Submission to the conduct is explicitly or implicitly made a term or a condition of an individual’s employment, academic status, or progress.
 2. Submission to, or rejection of, the conduct by the individual is used as the basis of employment or an academic decision affecting the individual.
 3. 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.

4. 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.
- B. For the purpose of further clarification, sexual harassment includes, but is not limited to:
1. 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.
 2. Continuing to express sexual interest after being informed that the interest is unwelcome. (Reciprocal attraction is not considered sexual harassment.)
 3. 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.
 4. 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.
 5. Offering favors or educational or employment benefits, such as grades or promotions, favorable performance evaluations, favorable assignments, favorable duties or shifts, recommendations, reclassification, etc., in exchange for sexual favors.

Complaint procedure and impact

Any individual who believes that he or she has been sexually harassed is encouraged to follow the complaint procedures as set forth in the District's Affirmative Action Regulation R-2423. Throughout the procedures, the College President and the College/District Affirmative Action Officers will insure that confidentiality will be maintained and that due process will be followed with respect to both parties.

In the case of a student, it shall not affect grades, class selection, or other matters pertaining to his or her status as a student. In a situation where evidence is found that an allegation of sexual harassment is brought solely for the purpose of vexation, the appropriate disciplinary action

will be taken. Sexual harassment policy, procedural steps and forms are available from the campus Equity Officer, Associate Vice President, Instruction at 484-8540.

VII. Student and family access to records

The Los Rios Board of Trustees, in order to meet the provisions of the Family Rights and Privacy Act of 1974 and the Education Code, has established policies giving students and parents of dependent students access to certain designated records. A summary of the rights and procedures for access are contained in the Students Rights and Responsibilities section of the Los Rios Community College District Policy manual. Complete copies of the Act, Education Code, and Board policies are available in the office of the Dean of Enrollment Services.

District Regulation 2265 provides for the release, without student consent, of Student Directory Information, i.e. student's name, date and place of birth, major field of study, participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, degrees and awards received, and most recent previous public or private school attended. In addition, federal law provides that representatives of the U.S. Department of Defense shall be provided a student's name, address and telephone number for recruitment purposes. *Students have the right to refuse the release of directory information by submitting a written statement to Enrollment Services.*

reporting sexual assault

1.0 Procedure

- 1.1 It is the objective of the College, in accord with EC67385, that students, faculty and staff who are victims of sexual assault committed at or upon the grounds of or upon off-campus grounds or facilities maintained by the College shall receive information and referral to treatment. This information shall be provided with sensitivity and in consideration of the personal needs of the victim.

2.0 Notification

- 2.1 Any student, faculty or staff member who is a victim of sexual assault at a College facility as defined above should notify the Campus Police Department. With the consent of the victim, the Campus Police Department will notify the Associate Vice President, Instruction and Campus Health Center.

3.0 Legal reporting

- 3.1 Pursuant to legal requirements the Campus Police Department will notify the appropriate local law enforcement agency of the reported sexual assault.

- 3.2 In accord with the Campus Crime Awareness and Security Act of 1990, the College, on an annual basis, shall notify students and employees of statistics concerning specific types of crime, including sexual assault. This notice shall be made through appropriate publications/mailings.
- 3.3 In case of violent crimes considered to be a threat to other students and employees, the College shall make timely reports, respecting the confidentiality of the victim, to the College community in a manner that will aid in the prevention of similar occurrences.

4.0 Campus services and resources

- 4.1 Upon notification of a sexual assault, the Campus Police Department will make available to the victim a description of campus resources and services available to the victim as well as appropriate off-campus services. This listing of resources and services shall be updated each September 1 or more frequently as required.
- 4.2 The listing of resources and services shall be available through the Campus Police Department, the Counseling Center and the Health Center.
- 4.3 A victim of sexual assault shall be provided with information about the existence of at least the following options: criminal prosecutions, civil prosecutions, the disciplinary process through the college, the availability of mediation, academic assistance alternatives, and mental health counseling.

5.0 Case management

- 5.1 A victim of sexual assault shall be kept informed by the College President/designee of the status of and disposition of any District/College disciplinary proceedings in connection with the sexual assault.
- 5.2 The Counseling Center and Health Center shall assist, upon request, the victim of sexual assault in dealing with academic difficulties that may arise because of the victimization and its impact.

6.0 Confidentiality and requests for information

- 6.1 The identity of a victim of sexual assault shall remain confidential unless otherwise prescribed by law. Requests for information regarding the sexual assault from the press, concerned students and parents will be handled by the College Public Information Office in accord with these regulations, the Family Educational Rights and Privacy Act applicable California Education and Administrative Code sections, and Los Rios Community College District Policy.

7.0 Dissemination of Procedure

- 7.1 These procedures shall be published in all student, faculty and staff handbooks and shall be given to any student or employee who is the victim of sexual assault.

drugs, alcohol & smoking policy

The abuse of illicit drugs and alcohol disrupts classes, compromises our physical and mental health, subjects us to criminal penalties, and impairs our ability to benefit from the learning experience. We therefore ask everyone to actively support the creation of 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. If you or someone you know is having problems with alcohol or drugs, contact the ARC Health Center for names of local agencies that can help.

District policy on drugs & alcohol

Los Rios Community College District policy 2443 states that the District "...is committed to maintaining a drug and alcohol free workplace in accordance with the requirements of the U.S. 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" [See: <http://www.losrios.edu/legal/Policies/P-2000/P-2443.htm>]

Legal sanctions

The LRCCD 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 of 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 (oz): 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

It is the American River College policy that no smoking be permitted inside buildings, or outside within 30 feet of building entrances. This policy is to be enforced through common courtesy.

illegal downloads & file sharing

American River College students are prohibited from using the Los Rios Community College District information network to illegally download or share music, video and all other copyrighted intellectual property. American River College supports the Higher Education Opportunity Act and Digital Millennium Copyright Act, including efforts to eliminate the illegal distribution of copyrighted material. Under the law, college administrators may be obligated to provide copyright holders with information about users of the FHDA information network who have violated the law.

Be aware that illegal forms of downloading and file sharing as well as the unauthorized distribution of copyrighted materials are violations of the law and may subject violators to academic sanctions from the college as well as criminal and civil penalties, including a lawsuit against you by the Recording Industry Association of America (RIAA). Learn more at www.campusdownloading.com. In addition to being illegal, file sharing drains the FHDA network's bandwidth, which slows computer connections for students and employees who are using the network for legitimate academic purposes and ultimately costs the college money.

The college has developed policies and consequences to ensure that students respect music and other forms of intellectual property as well as conduct responsible use of the Internet. Review these policies online (www.losrios.edu/legal/Policies/P-7000/P-7831.htm). There are plenty of easy, affordable ways to get music online legally. To protect their intellectual property, companies have licensed hundreds of digital partners who offer a range of legal downloading options, including download and subscription services, legitimate peer-to-peer services, video-on-demand, podcasts and CD kiosks. For a list of sources that offer legal downloading sites, visit the RIAA website (www.riaa.com).

In this section you will find:

- Degrees and certificates
- Graduation requirements
- General education requirements
- Detailed information on all programs leading to a degree or certificate



Please note:

A Catalog Addendum may be published twice during the academic year, listing new programs and changes to existing programs. To check on such updates, visit the college website [www.arc.losrios.edu] and on the home page left-hand menu, click on "College Catalog."

degrees and certificates

Students come to American River College to pursue many different educational goals. However, other than those who attend to take only a few classes, most students have one of three objectives: an associate degree, a certificate, and/or transfer to a four-year college or university.

Associate Degree Programs

American River College offers Associate in Arts (AA), Associate in Science (AS), Associate in Arts for Transfer (AA-T) and Associate in Science for Transfer (AS-T) degrees. Students receiving an AA or AS degree must complete all of the required courses for a major (from 18 to approximately 30 plus units), meet competency requirements, fulfill general education requirements, and complete sufficient electives to meet a minimum of 60 degree applicable units. Students receiving an AA-T or AS-T degree must complete all of the required courses for a major, complete either the CSU General Education Certification pattern or the Intersegmental General Education Transfer Curriculum (CSU option), and 60 CSU transferable units. All student wishing to obtain a degree from American River College need to petition early in their last semester for graduation.

Certificates of Achievement

The Certificate of Achievement certifies that a student has completed all required courses for a major and is prepared to enter the career designated on their certificate. Certificate programs have been developed with the assistance of business and industrial advisory committees to provide vocational training for students who are not necessarily seeking a college degree. A grade of "C" or better is required for each course leading to a Certificate of Achievement. A minimum of 12 units must be completed at American River College. Students wishing to obtain a Certificate of Achievement from American River College need to obtain a Petition For Certificate from the Counseling Office and submit it to Enrollment Services by the deadline dates noted in the calendar in the class schedule.

Accounting

Degree: A.A. - Accounting
 Certificates: Accounting
 Accounting Clerk
 Taxation

Administration of Justice

Degrees: A.S. - Administration of Justice
 A.S. for Transfer - Administration
 of Justice

Anthropology

Degree: A.S. - Anthropology

Apprenticeship

Degrees: Carpenter Apprenticeship
 Drywall/Lathing Apprenticeship
 Electrical Apprenticeship
 Ironworker Apprenticeship
 Sheet Metal Apprenticeship
 Sheet Metal Service Technician
 Apprenticeship
 Certificates: Carpenters Apprenticeship
 Drywall/Lathing Apprenticeship
 Electrical Apprenticeship
 Electrical Residential Apprenticeship
 Ironworker Apprenticeship
 Residential/Commercial Electrician
 Trainee
 Sheet Metal Apprenticeship
 Sheet Metal Residential
 Sheet Metal Service Technician
 Apprenticeship

Art

Degrees: A.A. - Art
 A.A. for Transfer - Studio Art
 Certificate: Freelance Photography

Art New Media

Degrees: A.A. - Art New Media
 A.A. - Technical Communications
 Certificates: Graphic Design
 Illustration
 3D Animation
 Web Design
 Technical Communications

Automotive Collision Technology

Degree: A.S. - Automotive Collision
 Technology
 Certificate: Automotive Collision Technology

Automotive Technology

Degrees: A.S. - Automotive Analysis
 A.S. - Automotive Component
 Service Technician
 A.S. - Automotive Technology
 Certificates: Air Conditioning Service
 Alternative Fuels
 Automotive Analysis
 Automotive Component Service
 Technician
 Automotive Service Technician
 Automotive Technology
 Extreme Tuner
 Parts and Service
 Transmission Service
 Undercar Service

Biology & Biotechnology

Degrees: A.S. - Biotechnology
 A.S. - General Science
 Certificate: Biotechnology

Business

Degrees: A.A. - Business Transfer
 A.A. - General Business
 A.A. - Small Business Management
 A.A. - Technical Communications
 Certificates: General Business
 Small Business Management
 Technical Communications

Business Technology

Degrees: A.A. - Administrative Professional
 Certificates: Administrative Assistant
 Law Office Assistant
 Office Administration
 Office Careers - Fast Track
 Office Technology
 Virtual Office Professional

Chemistry

Degree: A.S. - General Science

Computer Information Science

Degrees: A.S. - Computer Science
 A.S. - CIS: Computer Networking Management
 A.S. - CIS: Computer Programming
 A.S. - CIS: Database Management
 A.A. - CIS: Microcomputer Applications
 A.S. - CIS: PC Support Management
 A.S. - Information Systems Security
 A.A. - Technical Communications

Certificates: CIS: Computer Networking Management
 CIS: Database Management
 CIS: Microcomputer Applications
 CIS: PC Support
 CIS: Computer Programming
 Computer Information Security Essentials
 Information Systems Security
 Network Administration Essentials-Windows
 Technical Communications
 Web Developer
 Web Publishing

Design & Engineering Technology

Degrees: A.A. - Design Technology
 A.S. - Engineering: Transfer
 Option: Construction Management
 Option: Mechanical Engineering Technology

Certificates: Design Technology
 Engineering Technology

Diesel/Clean Diesel Technology

Degree: A.S. - Diesel Technology

Certificates: Clean Diesel Technology
 Diesel Technology

Early Childhood Education

Degrees: A.A. - Early Childhood Education
 A.A. for Transfer - Early Childhood Education

Certificates: Associate Teacher
 Culture and Diversity Specialist
 Infant Specialist
 Management Specialist
 Master Teacher
 School Age
 Site Supervisor
 Teacher

Electronics Technology

Degrees: A.S. - Electronic Systems Technology
 A.S. - Mechtronics

Certificates: Advanced Electronics and Telecommunications
 Biomedical Equipment Technology
 Digital Home Technology Integration
 Digital Repair & Upgrade Technician
 Electronic Systems Technology
 Fiber Optics
 Mechtronics
 Robotics
 Telecommunication Specialist

Energy

Certificates: Solar Energy Systems Design, Estimation, and Sales
 Solar Energy Technology

English

Degrees: A.A. - English

Fashion

Degrees: A.A. - Fashion Design
 A.A. - Fashion Merchandising

Certificates: Fashion Design
 Fashion Merchandising

Fire Technology

Degree: A.A. - Fire Technology

Certificate: Fire Technology

Foreign Languages

Degree: A.A. - Language Studies

Funeral Service Education

Degree: A.S. - Funeral Service Education

Geography/GIS

Degrees: A.S. - Geography
 A.S. - Geographic Information Systems (GIS)
 A.S. - General Science

Certificate: Geographic Information Systems (GIS)

Geology

Degrees: A.S. - General Science
 A.S. for Transfer - Geology

Gerontology

A.A. Gerontology Degree and Certificate concentrations:
 Business
 Case Management/Social Services
 Environmental Design
 Health Care
 Recreation
 Social Policy/Advocacy

Healthcare Interpreting

Certificate: Healthcare Interpreting

Honors

Certificate: Honors Transfer

Horticulture

Degrees: A.S. - Horticulture
 A.S. - Landscape Design Technology

Certificates: Horticulture
 Landscape Design Technology

Hospitality Management

Degree: A.A. - Culinary Arts/Restaurant Management

Certificates: Culinary Arts/Restaurant Management
 Restaurant Management
 Introductory Baking

Human Services

Degrees: A.A. - Human Services
 A.A. - Chemical Dependency Studies

Certificates: Human Services
 Chemical Dependency Studies

Interdisciplinary Studies

Degrees: A.A. - English Communication and Literature
 A.A. - History of Creative Arts
 A.A. - The Individual and Society

Certificates: CSU General Education
 Intersegmental General Education Transfer (IGETC)
 Honors Transfer

Interior Design

Degree: A.A. - Interior Planning & Design

Certificates: Kitchen and Bath Design
 Interior Retail Merchandising
 Para Professional Interior Planning and Design

Journalism

Degree: A.A. - Journalism and Mass Communication

Kinesiology and Athletics

Degrees: A.S. Physical Education
 A.S. Sports Medicine

Certificate: Fitness Specialist

Legal Assisting

Degree: A.A. - Legal Assisting

Certificates: Law Office Clerical Assistant
 Legal Assisting

Management

Degrees: A.A. - Management
 A.A. - Leadership

Certificates: Introduction to Leadership in Action
 Management
 Leadership

Degrees and Certificates *continued over*

degrees and certificates *continued*

Marketing

Degrees: A.A. - Advertising & Sales Promotion
A.A. - Marketing
A.A. - Retail Management
Certificate: Retail Management (WAFC)

Mathematics & Statistics

Degrees: A.S. - Mathematics
A.S. for Transfer - Mathematics
A.S. - Physical Science/Mathematics

Music

Degrees: A.A. - Music
A.A. - Commercial Music: Business
A.A. - Commercial Music: Recording
A.A. - Jazz Studies
Certificates: Commercial Music: Business
Commercial Music: Recording

Natural Resources

Degree: A.S. - Environmental Conservation
A.S. - General Science
Certificate: Environmental Conservation

Nursing & Allied Health

Degrees: A.S. - LVN to RN Career Mobility
A.S. - Registered Nursing
Certificates: Licensed Vocational Nurse (LVN) -
30-unit option

Nutrition & Foods

Certificate: Dietary Manager/Dietary Service
Supervisor

Paramedic

Degree: A.S. - Paramedic
Certificate: Paramedic

Physical Education (see Kinesiology)

Physical Science & Physics

Degrees: A.S. - Physical Science/Mathematics
A.S. - General Science
A.S. for Transfer - Physics

Political Science

Degree: A.A. - Political Science
Certificate: International Studies

Psychology

Degrees: A.A. - Psychology
A.A. for Transfer - Psychology

Public Safety

Certificate: POST Basic Law Enforcement
Academy - Modular Format

Other Offerings:

Law Enforcement In-Service
POST and STC Certified Courses
for Perishable Skills
POST and STC Certified Instructors
Courses
STC Certified Core Courses
Traffic Accident Investigations Series

Real Estate

Degree: A.A. - Real Estate
Certificate: Real Estate

Recreation

Degree: A.A. - Recreation Management

Respiratory Care

Degree: A.S. - Respiratory Care

Science - General

Degree: A.S. - General Science

Sign Language Studies

Degrees: A.A. - Sign Language Studies:
Business
A.A. - Sign Language Studies:
Human Services
A.A. - Interpreter Preparation
Program
Certificates: Sign Language Studies: Business
Sign Language Studies: Human
Services
Sign Language Studies: Interpreter
Preparation Program

Social Science

Degrees: A.A. - Social Science
A.A. - International Studies
Certificate: International Studies

Sociology

Degree: A.A. for Transfer - Sociology

Speech

Degree: A.A. for Transfer - Communication
Studies

Speech Language Pathology

Degree: A.S. - Speech - Language Pathology
Assistant

Student Government

Certificate: Leadership Development

Theatre Arts

Degrees: A.A. - Theatre Arts: Acting
A.A. - Theatre Arts: Technical
Certificates: Acting
Children's Theatre
Costuming
Film

Welding Technology

Degree: A.S. - Welding Technology
Certificates: Shielded Metal Arc Plate and Pipe
Welding Metallurgy and Inspection

Certificates of Completion

Certificates of Completion are intended to certify that students completing all required courses of a major are prepared to meet specific occupational needs, upgrade skills or for advancement in an existing career. A grade of “C” or better is required in each course leading to the Certificate of Completion issued by the department. The certificate requires completion of all courses listed in the required program of the student. Certificates of Completion require 17.99 units or less.

For certificates in Level 1 and 2, all units must be completed at American River College. For all certificates in Level 3, 12 units must be completed at American River College.

Level 1: 1-6 units

Level 2: 7-11 units

Level 3: 12-17.99 units

CERTIFICATE	LEVEL	CERTIFICATE	LEVEL	CERTIFICATE	LEVEL
Apprenticeship		Fashion		Nursing	
Green Pre-Apprenticeship	3	Apparel Construction	3	Certified Nurse Assistant	1
Green Technology Pre-Apprenticeship	2	Fashion Entrepreneur	3	Home Health Aide	1
Infrastructure Pre-Apprenticeship	2	Fashion Illustration	3		
Utilities Worker Pre-Apprenticeship	2	Fashion Retailing	3	Post Academy	
				Basic Law Enforcement Academy- Module I	3
Art		Gerontology		Basic Law Enforcement Academy- Module II	2
Sculpture	3	Activity Coordinator	2	Basic Law Enforcement Academy- Module III	2
		Social Service Designee	1		
Automotive Collision Technology		Horticulture		Theatre Arts	
Automotive Claims Estimator	3	Floristry	2	Musical Theatre	3
		Horticulture Skills	3	Technical Theatre	3
Business Technology		Landscape Design	2		
Office Assistant	1	Plant Production	2	Welding	
		Sustainable Landscape	3	Gas Metal Arc and Flux Cored Arc	
Diesel/Clean Diesel Technology				Welding Plate	2
Preventive Maintenance	3	Interior Design		Gas Tungsten Arc Plate and Pipe Welding	2
		Designed 4 Life	2	Welding Equipment Maintenance and	
Early Childhood Education		Green Building and Sustainable Design		Blueprint Interpretation	3
Assistant Teacher	1	for Interiors	2		
Family Child Care	2			Legal Assisting	
				Introduction to Law and Legal Research	1
Electronics Technology		Management			
Basic Electronics and Telecommunications	2	Leadership in Action: Psychology &			
		Team Facilitation	2		
English as a Second Language (ESL)		Leadership in Action: Systems Thinking	2		
Advanced Proficiency Certificate		Leadership in Action: Theory of			
in English as a Second Language	3	Knowledge/Prediction	2		
Advanced-High Proficiency Certificate		Leadership in Action: Variation and Statistics	1		
in English as a Second Language	3				
Intermediate Proficiency Certificate					
in English as a Second Language	3				

apprenticeship

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 the Joint Apprenticeship Training Committee (JATC) and the college. The JATC is composed of representatives from both labor and management. All apprenticeship programs are approved by the Division of Apprenticeship Standards of the California Department of Industrial Relations.

Enrollment in an apprenticeship course is limited to registered apprentices. Information on admission to apprenticeship status can be obtained from the local JATC having jurisdiction over the trade in which you are interested, or from the office of the Dean of Technical Education. Apprenticeship programs are available in:

- Carpenter
- Drywall/Lathing
- Electrical
- Ironworkers
- Sheet Metal

career and technical education

The pattern of Career and Technical Education (CTE) course offerings at American River College is designed to be as flexible as possible in meeting student needs. The college encourages CTE students to plan, with counselor assistance, a course of studies which will prepare the student for a career. Educational programs in this area offer a planned curriculum which can lead to either a certificate, an Associate degree, or transfer to a four-year college. Although many four-year colleges give full or partial credit for some specialized CTE courses, these programs are not primarily designed to satisfy transfer requirements. The student planning a career technical education major and wishing to transfer to a four-year college should plan a transfer program with the assistance of a college counselor.

cooperative work experience education & internship program

Cooperative Work Experience Education is an experiential, academic program which allows students to apply what they have learned in the classroom to a work environment. Upon completion of their Work Experience (WEXP) orientation course, students may earn



1-4 units of transferable credit with a letter grade. Work Experience serves: college interns, volunteers, and employees. Positions may be paid or unpaid.

WEXP internships & opportunities

Internships and volunteer experiences provide an opportunity for students to obtain work experience related to their academic or career goals. Internships assist students with developing technical skills, exploring possible career choices, building confidence, networking with people in the field, and transitioning for entry into a competitive labor market.

Students interested in internship referral assistance must apply two or more weeks before classes start through the program website [<http://wexp.losrios.edu>]. Students are required to participate in a weekly career management orientation (course). Units earned are determined by the amount of hours worked from the first week of instruction to the last week of instruction during an enrollment term, and success with completing required program forms and classroom assignments. Hours exclude the weekly orientation course (class time).

Employees

Work experience (WEXP) also assists our busy employed students who are interested in advancing within their existing work environment. Through WEXP and the approval of the student's employer supervisor, students can apply what they have learned in the classroom to their job and earn college credit.

Note: Courses may or may not satisfy lower division major preparation, general education, and/or elective requirements. Please meet with a counselor for specific course evaluation.

How the Co-op Work Experience and Internship Program works

There are two types of work experience options: occupational and general work experience.

Occupational work experience (298/498)

Occupational work experience provides students with opportunities to develop or add marketable skills related to their major study programs. These units may count towards the Area III GE pattern, and possible elective units or major units, **only WEXP 498 units are transferable to CSU.**

Eligible students should register for 1-4 units. A one unit minimum is required. For unpaid positions one unit of credit may be earned for each 60 hours worked. For paid positions, one unit of credit may be earned for each 75 hours worked. Units earned are determined by the amount of hours worked from the first week of instruction to the last week of instruction during an enrollment term, and success with completing required program forms and classroom assignments. Hours exclude the weekly orientation course (class time). A total of 16 units may be earned in Occupational Work Experience.

Students should also understand Work Experience requirements and unit limitations as defined by your major department requirements. Please talk to an advisor or faculty in your major department for more information.

General work experience (198)

General work experience education assists students in learning about the world of work and is open to all students regardless of major. Like occupational work experience, it is designed for students wanting to apply skills learned in the classroom to a work environment. These units may count towards the Area III GE pattern, and possible elective units or major units. **WEXP 198 units are NOT transferable.**

Eligible students should register for 1-3 units (Work Experience 198). A one unit minimum is required. For unpaid positions one unit of credit may be earned for each 60 hours worked. For paid positions, one unit of credit may be earned for each 75 hours worked. Units earned are determined by the amount of hours worked from the first week of instruction to the last week of instruction during an enrollment term, and success with completing program forms and classroom assignments. Hours exclude the weekly orientation course (class time). A total of 6 units may be earned in General Work Experience.

Work Experience students must:

- Be working in a paid or unpaid internship or job related to career goals. Students not currently in an internship opportunity who would like assistance should contact the Work Experience & Internship Program website at <http://wexp.losrios.edu/>
- Have a cooperating employer by the end of the third week of the full semester or first week of an eight week (or summer session) to remain in the weekly orientation (course).
- Establish new or expanded on-the-job learning objectives with employer's assistance that will be documented and evaluated.
- Attend a weekly career management orientation (course) or qualify for the "Returning Student" status. However, attendance is required for the first orientation meeting or as stated by the instructor.

NOTE: To assist in a successful experience and learning opportunity, students are recommended to have taken 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.

Work Experience (198/298/498) or (Subj) 298/498

WEXP has two student status types:

New Student Status:

- This is your first time in a Work Experience course.
- You are working in a paid or unpaid internship, job, or volunteer opportunity related to career goals.
- You must attend the weekly orientation (course) which meets once a week. This orientation will cover workforce/career transition issues and preparedness.

- Your grade and units are earned based on your hours completed, performance in the workplace (developing new skills), completion of required program paperwork, and classroom assignments.

Returning Student Status:

- You have completed a Work Experience course with a grade of "C" or better. (*Will be verified by instructor using unofficial transcripts.*)
- You are working in a paid or unpaid internship, job, or volunteer opportunity related to career goals.
- No weekly attendance is required for this status except for the first orientation meeting. However, you must establish new on-the-job learning objectives with your employer and complete all the necessary program forms as stated by your instructor.
- Your grade and units are earned based on your hours completed, performance in the workplace (developing new skills), completion of required program paperwork, and classroom assignments.

For more information, call 916.484.8182 or visit our website: <http://wexp.losrios.edu/>

Independent and special study

Students who are in good standing at American River College may pursue their studies and research beyond courses listed in the college catalog through Independent Study and/or Special Study. Units taken in either Independent or Special Study may not be transferable, however; the student should consult a counselor regarding a specific college or university's acceptance of these units. No more than one study may be taken per semester, except regularly scheduled special study classes.

Regular meetings between student and professor will be held; examinations or other measures of evaluation, field trips, term papers, and other assignments may be required by the professor.

Independent study

An opportunity for the student to extend classroom experience in a specific 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 the subject and secure approval. Only one independent study for each catalog course will be allowed.

Special study

An opportunity to pursue a study of special interest which is not specifically covered in established catalog courses. Such study is confined to the scope of college lower division, and community college programs. While enrollment in Special Study may be on an individual basis, from time to time a special study may be established to satisfy the needs of a particular group, offered on a scheduled basis for

enrollment through the regular registration process. To qualify for Special Study, the student should have completed college courses basic to the study, or have had actual field experience or special training in the field of study. Credit to a four-unit maximum is given. Note that four-year colleges and universities may not accept more than one special study in a subject and may limit the total number of special study units accepted. No more than 12 special study units may be used to fulfill graduation requirements at American River College.

Application

To apply for Independent or Special Study, a student first discusses the study with the professor who will supervise the study and with the area dean. The student then completes the petition and course description forms with the assistance of the professor, who will process the petition. If it receives final approval, the student is registered in the course and receives a grade as in any regularly scheduled course. Petition for Independent or Special Study must be filed by the deadline published in the class schedule in the semester in which the study is to be completed.

course numbering

Under the numbering system which went into effect in 2003, non-transfer and transfer courses are clearly distinguished by specific number ranges (100-299 for non-transfer courses; 300-499 for transfer courses). In most departments, courses are now numbered in prerequisite order (MATH 25, 32, 100, 120, & 300, for example).

- | | |
|---------|---|
| 1-99 | Basic Skills and Developmental courses are numbered 1-99. They are not acceptable for associate degree or transfer credit. |
| 100-299 | College-level, non-transfer courses are numbered 100-299. They are primarily occupational or technical and meet associate degree requirements such as apprenticeships and fire technology. Some are acceptable for transfer by four-year institutions offering degrees in similar subject matter. Check with your counselor. |
| 300-499 | College-level, transfer courses are numbered 300-499. They meet requirements for associate degrees and are generally accepted for transfer to four-year institutions to meet major, general education, breadth, or elective credit requirements. Check with your counselors regarding transferability of course to the University of California, private colleges, and out-of-state universities. |

1000-1999 Courses at the 1000 level are typically continuing education courses for working professionals who need to update their skills for employment or licensure. The number range 1000-1999 also includes contract education courses offered by the Sacramento Regional Public Safety Training Center and other college units. The 1000 number may also be used for tutoring and other attendance-only courses such as Supervised Tutoring (e.g., HSER 1000 or HCD 1000), and for block scheduling purposes (e.g., Learning Community courses).

graduation

American River College has one graduation ceremony each year, at the end of spring semester in May. August and December graduates, and May candidates, may participate in this commencement exercise. All students who are eligible for the Associate in Arts or Science degree must petition by the deadline dates noted in the calendar in the class schedule. Notification of eligibility to participate in the graduation ceremony is done by mail through the Dean of Enrollment Services office no later than May 1.

Catalog rights and related requirements

For purposes of graduation from any of the colleges of the Los Rios District, students who remain in attendance in one regular session (quarter, semester or summer session) at any California community college, or any combination of California community colleges, campuses of the California State University, the University of California, or any accredited institution of higher education, 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, or
2. Requirements in effect at the time the student originally enrolled in an accredited college or university, or
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 semester, quarter, or summer session in each calendar year. Absence for attendance at another accredited institution shall not be considered an interruption in attendance.

ARC graduation requirements 2012-2013

American River College grants the degree of Associate in Arts or Associate in Science. Requirements for the degree conform to the laws and regulations of the California Community Colleges Board of Governors and the Los Rios Community College District Board of Trustees.

Students may graduate from American River College with the Associate in Arts or the Associate in Science Degree by fulfilling the following five (5) requirements:

1. Satisfactory completion of 60 units of collegiate work (excluding 200 – 299 numbered courses taken Fall 1989 – Spring 2003, 1-99 numbered courses & courses numbered 1,000 or higher taken after Spring 2003) 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 a two-year Major Program of Study offered at American River College (Minimum 18 units). Courses used to complete major requirements must be completed with a grade of 'C' or better.
3. Completion of ARC's general education requirements with a minimum GPA of 2.0 in courses used for general education (21 unit minimum) or possession of a Baccalaureate Degree or higher from a *regionally accredited college or university in the U.S.
4. All students who wish to receive an A.A. or A.S. degree from American River College must demonstrate competency in writing, reading and mathematics as listed below.
5. Students are held to the graduation requirements in place when they begin college as long as they maintain their catalog rights.

A. WRITTEN EXPRESSION COMPETENCY is satisfied by the following:

a.	Complete with a C or better in one of the following courses BUS 310; ENGWR 300, 480; ESLW 340.
b.	Complete an equivalent college writing course taken at a *regionally accredited college in the U.S. with a grade of C or better.
c.	Possession of an BA/BS or higher from a *regionally accredited college in the U.S.

B. READING COMPETENCY is satisfied by one of the following:

a.	Complete with a C or better of one of the following courses: ENGRD 310, 312; ESLR 340.
b.	Complete with a C or better of an equivalent college level reading course at a *regionally accredited college in the U.S.
c.	Possess an AA/AS or higher from a *regionally accredited college in the U.S.
d.	Achieving a qualifying score on a college level reading examination administered by a Los Rios Assessment Center. Only 2 attempts are permitted district-wide on this test.

C. MATHEMATICS COMPETENCY is satisfied by one of the following:

a.	Complete one of the following with a 'C' or better: MATH 110, 120, 124, 125, 129, 300, 310, 320, 325, 330, 340, 342, 344, 350, 351, 370, 400, 401, 402, 410, 420; PHIL 325; PSYC 330; STAT 300, 305
b.	Complete an equivalent course with a C or better at a *regionally accredited college in the U.S.
c.	Obtain a satisfactory score on a Los Rios Math Competency Test.
d.	Possess a BA/BS or higher from a *regionally accredited college in the U.S.

The graduation competencies listed apply only to those students who first enrolled in this college on or after Fall 2011. Students who have catalog rights that predate Fall 2011 may satisfy the graduation competencies pursuant to their catalog rights.

ARC general education requirements 2012-2013

I. Humanities – One course from the following (3 units minimum):

ART 300, 312, 320, 322, 324, 339,430, 440; ARTH 300, 302, 308, 310, 322[#], 333, 334; ARTNM 305, 310, 331; ARTPH, 300, 340; ECE 361, 363; ENGLT 300, 304, 308[#], 310, 311, 320, 321, 327[#], 338[#], 340, 341, 345, 360, 370, 372[#], 374[#], 376[#], 378, 380, 382, 392,403, 494; FASHN 330; FREN 401, 402, 411, 412; GERM 401, 402, 411, 412; HIST 300*, 302*, 305*, 307[#], 308[#], 364*, 365*, 399*, 480*, 481*; HUM 300, 301, 302[#] 310, 320[#], 326, 330[#], 360, 365; IDES 310, 312; ITAL 401, 402, 411; JAPAN 401, 402; MUFHL 300, 308, 310, 311, 315[#], 321, 330[#] 400; MUSM 370; PHIL 300, 310, 315, 330, 331, 350, 353, 354, 360; RUSS 401, 402, SILA 305, 306, 315, 316; SPAN 401, 402, 411, 412; TA 300, 302, 303, 306[#], 310, 312, 314, 315, 318[#], 320, 350, 406, 435, 480

II. Language & Rationality – Two courses (6 units minimum):

a. One course from the following: (3 units minimum)

BUS 310; ENGWR 300, 480; ESLW 340;

b. One additional course from the following: (3 units minimum)

ANTH 341[#]; AT 105; BUS 105; CISA 305, 315, 320; CISC 300*; CISP 300, 315, 320, 350, 360, 400, 440; ET 310, 311; ENGCW 400, 430; ENGED 305, ENGRD 310, 312; ENGWR 301, 302, 330, 342, 481, 482; ESL 350; GEOG 330, 375; JOUR 300; MGMT 360; MATH 120, 124, 125, 129, 300, 310, 320, 325, 330, 340, 342, 344, 350, 370, 400; PHIL 320, 324; PSYC 330; SPEECH 301, 323,331, 361; STAT 300, 305; WELD 140

III. Living Skills – (3 units minimum):

a. One Physical Education activity course with one of the following prefixes:

ADAPT, DANCE, FITNS, PACT, TMACT, SPORT

b. Life Development Skills: Minimum of 2 units from the following:

AT 107; BIOT 308; BUS 320[#]; CISC 300*; ECE 330, 350; ECON 320[#]; ENGED 320, 322, 324; ET 250; GERON 300, 330, 334; HCD 160, 310, 318, 330, 331, 336; HEED 300, 352; HIST 399* HSER 340; INDIS 325; LIBR 310, 318, 325; MATH 315; NUTRI 300*, 302*, 305; PSYC 340, 342, 354, 356, 358, 359, 370*, 378, 379, 390, 400, 481; SOC 335⁺; SPEECH 321; WELD 150; all ARC courses numbered 198, 298 & 498

IV. Natural Science – One course from the following (3 units minimum):

ANTH 300, 303, 480; ASTR 300, 310, 320, 330, BIOL 102, 103, 115, 116, 300, 303, 305, 310, 350, 352, 370, 400, 430, 431, 482; CHEM 305, 309, 310, 325, 334, 400; ENERGY 303; ET 303; FT 304; GEOG 300, 305, 306, 307, 308; GEOL 300, 305, 310, 320, 325, 330, 342, 345; HEED 308, HORT 300; NATR 300, 302, 303 304, 320, 330, 332; NUTRI 300*, 302*; PHYS 310, 311, 312, 350, 410; PS 300, PSYC 310

V. Social & Behavioral Sciences – (6 units minimum):

a. AMERICAN INSTITUTIONS: One course from the following: (3 units minimum)

HIST 310, 311, 318, 320[#], 321[#], 323[#], 325[#], 327, 330[#], 483, 484; POLS 301, 481.

b. SOCIAL/BEHAVIORAL SCIENCES: One additional course from the following (3 units minimum)

ADMJ 300, 302[#],304,320; ANTH 310[#], 315[#], 320, 330[#], 333[#], 334[#], 341[#]; BUS 110, 300, 320*, 330[#], 345; ECE 312, 314, 430[#]; ECON 302, 304, 320; GEOG 310[#], 320[#], 322[#]; GERON 302; HIST 300*, 302*, 305*, 307[#], 308[#], 340, 341, 343, 364*, 365*, 367, 373, 480*, 481*, 494; HSER 330[#]; JOUR 310, 320[#]; MGMT 374; NATR 307; POLS 302, 310, 320,322, 330, 332; PSYC 300, 305, 320, 361[#], 365[#], 370*, 372, 373, 374, 383, 415, 480; SILA 330[#]; SOC 300, 301, 318, 320[#], 325, 342[#], 350; SOCS 310, 312

VI. Ethnic/Multicultural Studies – (3 units minimum)

ADMJ 302[#]; ANTH 310[#], 315[#], 330[#], 333[#], 334[#], 341[#]; ARTH 322[#]; BIOL 322; BUS 330[#]; DANCE 300[#]; ECE 430[#]; ENGLT 327[#], 338[#], 372[#], 374[#], 376[#]; GEOG 310[#], 320[#], 322[#]; HIST 307[#], 308[#], 320[#], 321[#], 323[#], 325[#], 330[#]; HUM 302[#], 320[#], 330[#]; HSER 330[#]; JOUR 320[#]; MUFHL 315[#], 330[#]; NUTRI 310; PSYC 361[#], 365[#]; SILA 330[#]; SOC 320[#], 342[#]; SPEECH 325; TA 306[#], 318[#]

Note:

* Courses appearing in more than one category may be used to satisfy only one category.

These multicultural courses can also satisfy general education category requirements.

student learning outcomes

(General Education)

The primary function of education is to transmit from each generation to the next the knowledge and skills requisite to enlarge the comprehension of our place in the universe. General Education gives breadth to the college experience, enhances the ability to learn and develops critical thinking skills.

American River College is committed to the principle of providing general education which includes: Humanities, Languages and Rationality, Living Skills, Natural Sciences, Social and Behavioral Sciences and Ethnic/Multicultural Studies. All of these are basic and necessary to participate in and contribute to a balanced life in a democratic society that is diverse in its social, cultural and educational backgrounds.

I. Humanities

At the completion of the Humanities general education requirement, the student will be able to:

- Identify values of a culture as expressed through its art or language; or
- Employ concepts or theories of a subfield of the humanities to analyze and evaluate works produced within that subfield; or
- Analyze and interpret events or artistic/linguistic works in light of historical forces/patterns; or
- Assess works produced within a subfield of the humanities as critical commentaries of culture.

II. Language and Rationality

At the completion of the English Composition portion of the Language and Rationality general education requirement, the student will be able to:

- Demonstrate effective expository and persuasive writing skills using the rules of standard written English in a written assignment of at least 1,000 words.
- Employ an academically recognized format (e.g., Modern Language Association, American Psychological Association, etc.) in a research paper.
- Revise, proofread and edit written work.

At the completion of the Communication and Analytical Thinking portion of the Language and Rationality general education requirement, the student will be able to:

- Organize and analyze information relevant to a problem or issue.
- Develop and interpret a conceptual, visual, oral or physical representation of a problem or issue.
- Develop a reasoned solution to a problem.
- Defend a position or explain a solution, using appropriate language and/or notation.
- Evaluate arguments, algorithms and/or solutions.
- Apply learned problem-solving skills to new situations.
- Distinguish the form of an argument from its content.

III. Living Skills

At the completion of the Living Skills general education requirement, the student will be able to:

- Identify and apply skills and knowledge necessary to function capably as an individual within society to achieve academic, career, and/or personal success as a lifelong learner.
- Formulate and monitor progress toward achieving well-defined goals that lead to one's personal, social, physical, and emotional well-being through the process of on-going self-evaluation, personal awareness and self-motivation.
- Demonstrate personal management skills such as planning, time management, coping with anxiety, and the ability to work cooperatively with others.
- Recognize and explain the relationships between the social and physical environment with regards to human behavior, relationships, sexuality, nutrition, physical fitness, health, and stress management.
- Apply successful techniques for exploring and/or resolving conflicts and dealing with differences in a variety of settings.

IV. Natural Science

At the completion of the Natural Science general education requirement, 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.
- Recall basic definitions and fundamental theories of an introductory natural science.
- Analyze a wide variety of natural phenomena using basic definitions and fundamental theories of an introductory natural science.
- Apply appropriate quantitative and qualitative methods to interpret and analyze pertinent data.
- Recognize ethical components of scientific decision making and apply personal and social values within the process of decision making in scientific endeavors.

V. Social and Behavioral Sciences

a. American Institutions:

At the completion of the American Institutions portion of the Social and Behavioral Science general education requirement, the student will be able to:

- Critique the constitutions of the United States and California, and other founding documents.
- Analyze the relationships of individuals, groups, and societies at the federal, state and local levels, including conflict resolution and the establishment of governing processes.
- Evaluate significant events in the entire area now included in the United States of America, including historical and ongoing influences of social, cultural, and economic groups, and regions they inhabit.

- Assess the influence of the aforementioned groups on domestic and foreign affairs within a framework of politics, economics, social movements, and geography.
- b. Social/Behavioral Sciences:
At the completion of the Introductory Methods portion of the Social and Behavioral Science general education requirement, the student will be able to:
 - Differentiate and evaluate the methods of inquiry and evidence used in the behavioral and social sciences.
 - Critically assess the dynamic interaction between individuals and societies, and compare the functioning of subgroups within and between different societies.

VI. Ethnic/Multicultural Studies

At the completion of the Ethnic/Multicultural Studies general education requirement, the student will be able to:

- Examine one's own culture from a removed perspective.
- Examine various cultures/ethnicities through the authentic voices/perspectives of those same cultures.
- Investigate how several cultural/ethnic groups have interacted through time.
- Analyze how the concepts of ethnicity, ethnocentrism, and racism shape and explain ethnic experience.
- Synthesize 1 & 2 into an appraisal of one's own identity within local cultural contexts.

prerequisites, corequisites and advisories

It is the intent of American River College to guide students into courses in which they will have the greatest chance for academic success. Therefore, you will find courses that have prerequisites, corequisites or advisories in their description. The definitions for prerequisites, corequisites and advisories are:

- a) "Prerequisite" means a course that a student is required to take and pass in order to demonstrate readiness for enrollment in another course or educational program.
- b) "Corequisite" means a course that a student is required to take in the same session as another course.
- c) "Advisory on recommended preparation" means that a student is advised, but not required, to take a specific course before or in conjunction with enrollment in another course or educational program.

Prerequisite verification

Students enrolled in courses that have a prerequisite will be asked to provide verification to the instructor that they have met the prerequisite. Verification can consist of a counselor verification form or student copy of a grade report (unofficial transcript.) Corequisite verification requires a student registration printout. Students should bring verification with them to the first class meeting. Students trying to add a class that is full need to provide verification before the instructor will issue a permission number for enrollment. It is the student's responsibility to verify that he or she has completed the prerequisite or has the required skills.

Prerequisite challenge procedure

Students who do not meet a prerequisite should seek counseling advice for making an appropriate course selection, prior to enrolling in Associate degree credit courses. If you feel that you can meet the requirements, or one of the conditions below exists, then you can challenge a prerequisite. A Prerequisite Challenge Form may be obtained from the appropriate division, or the Counseling Center. The form will explain what you must do. Criteria for challenging a course are:

- 1) You have knowledge or ability to succeed in the course without the prerequisite.
- 2) The course which provides the prerequisite is not readily available.
- 3) You believe that the prerequisite is discriminatory or being applied in that manner.
- 4) You believe that the prerequisite was established in violation of regulations and/or the established district-approved policy and procedures.

Once you have completed the challenge procedure, your challenge will be reviewed by a department's Prerequisite Challenge Committee. You will be informed in writing of the committee's determination within five working days of the review. Working days consist of days that faculty are on campus and classes are in session. If you register for a class and do not meet the prerequisite, the instructor has the right to drop you from the class.

Area: Business & Computer Science
 Dean: Dr. Derrick Booth
 Phone: (916) 484-8361
 Counseling: (916) 484-8572

Degree: A.A. - Accounting
 Certificates: Accounting
 Accounting Clerk
 Taxation

DEGREES AND CERTIFICATES

Accounting Degree

The Accounting degree focuses on preparation for careers in various accounting professions. The program develops a common foundation in accounting and business, and provides various courses covering both fundamental and specialized accounting topics to meet individual career goals.

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 Opportunities

The Accounting degree is designed for a variety of student objectives. The degree includes courses required for immediate employment in accounting positions. Also, these 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.

Requirements for Degree	36 Units
ACCT 103 Intermediate Accounting - Part I.....	4
ACCT 104 Intermediate Accounting - Part II.....	4
ACCT 107 Auditing.....	3
ACCT 111 Cost Accounting.....	3
ACCT 301 Financial Accounting (4).....	4
or ACCT 481 Honors Financial Accounting (4)	
ACCT 311 Managerial Accounting (4).....	4
or ACCT 482 Honors Managerial Accounting (4)	
ACCT 361 Ethics, Fraud, and Legal Issues for Accountants.....	3
BUS 110 Business Economics (3).....	3
or ECON 302 Principles of Macroeconomics (3)	
And a minimum of 8 units from the following:	8
ACCT 101 Fundamentals of College Accounting (3)	
ACCT 108 Careers in Accounting (2)	
ACCT 121 Payroll Accounting (3)	
ACCT 124 Individual Income Tax Return Preparation (1)	
ACCT 125 Federal and State Taxation (4)	
ACCT 127 Volunteer Income Tax Assistance (VITA) (2)	
ACCT 128 Taxation of Corporations, Partnerships, Estates, and Trusts (4)	
ACCT 153 Governmental Accounting (3)	

ACCT 341	Computerized Accounting (2)
ACCT 343	Computer Spreadsheet Applications for Accounting (2)

Associate Degree Requirements: 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

Accounting Certificate

The Accounting certificate provides occupational training and preparation for entry level clerical and technical positions in various accounting careers. The program provides a strong background in fundamental accounting concepts and typical accounting computer applications. In addition, the program provides various specialized accounting topics to meet career individual goals.

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 law and ethics into accounting functions
- apply accounting standards and techniques to one or more specialized areas of accounting.

Career Opportunities

The Accounting certificate includes courses required for immediate employment in accounting positions. Also, these 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.

Requirements for Certificate	36 Units
ACCT 103 Intermediate Accounting - Part I.....	4
ACCT 104 Intermediate Accounting - Part II.....	4
ACCT 107 Auditing.....	3
ACCT 111 Cost Accounting.....	3
ACCT 301 Financial Accounting (4).....	4
or ACCT 481 Honors Financial Accounting (4)	
ACCT 311 Managerial Accounting (4).....	4
or ACCT 482 Honors Managerial Accounting (4)	
ACCT 361 Ethics, Fraud, and Legal Issues for Accountants.....	3
BUS 110 Business Economics (3).....	3
or ECON 302 Principles of Macroeconomics (3)	

(continued on next page)

(Accounting Certificate continued)

And a minimum of 8 units from the following:8

ACCT 101	Fundamentals of College Accounting (3)	3
ACCT 108	Careers in Accounting (2)	2
ACCT 121	Payroll Accounting (3)	3
ACCT 124	Individual Income Tax Return Preparation (1)	1
ACCT 125	Federal and State Taxation (4)	4
ACCT 127	Volunteer Income Tax Assistance (VITA) (2)	2
ACCT 128	Taxation of Corporations, Partnerships, Estates, and Trusts (4)	4
ACCT 153	Governmental Accounting (3)	3
ACCT 341	Computerized Accounting (2)	2
ACCT 343	Computer Spreadsheet Applications for Accounting (2)	2

Accounting Clerk Certificate

The Accounting Clerk 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.

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 all appropriate reports
- maintain small business records using accounting computer programs
- incorporate basic business and communications skills into the accounting workplace

Requirements for Certificate	18 Units
ACCT 101	Fundamentals of College Accounting.....3
ACCT 121	Payroll Accounting3
ACCT 341	Computerized Accounting2
BUS 105	Business Mathematics3
BUS 310	Business Communications.....3
CISA 315	Introduction to Electronic Spreadsheets2
A minimum of 2 units from the following:2	
ACCT 108	Careers in Accounting (2)
ACCT 343	Computer Spreadsheet Applications for Accounting (2)
ACCT 498	Work Experience in Accounting (1 - 4)
BUSTEC 310	Introduction to Word/Information Processing (1 - 3)
CISA 305	Beginning Word Processing (2)

Taxation Certificate

The Taxation certificate is designed to provide occupational training and continuing education in the areas of tax preparation and consulting. Courses in this program provide a background in personal, corporate, partnership, and estate taxes, as well as work experience in the field of taxation. Practical experience is obtained through required participation in the Volunteer Income Tax Assistance (VITA) program.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- assemble federal and California individual income tax returns.
- prepare federal and California corporate and partnership income tax returns.
- produce federal estate, gift, and trust tax returns.
- research federal and state tax issues.

- advise and assist clients with federal and state income tax returns and tax planning.

Requirements for Certificate	13 Units
ACCT 125	Federal and State Taxation4
ACCT 128	Taxation of Corporations, Partnerships, Estates, and Trusts4
ACCT 301	Financial Accounting4
A minimum of 1 unit from the following: 1 ¹	
ACCT 498	Work Experience in Accounting (1-4)
BUS 498	Work Experience in Business (1-4)
WEXP 498	Work Experience in (Subject) (1-4)
ACCT 127	Volunteer Income Tax Assistance (VITA) (2)

¹Enrollment in ACCT 498, BUS 498, or WEXP 498 with income tax work experience may be substituted with approval of the VITA coordinator.

Accounting

ACCT 101 Fundamentals of College Accounting 3 Units
Advisory: BUS 105 or MATH 100; and ENGRD 102 or 103; and ENGRD 116 or ESLR 320 and ESLW 320
Hours: 54 hours LEC

This is an introductory course in small business accounting. It 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 and balance sheets are prepared and analyzed. Additional topics include cash management and bank reconciliations, sales and purchase discounts, sales taxes, and payroll. This course is required for accounting degree and certificate candidates.

ACCT 103 Intermediate Accounting – Part I 4 Units
Prerequisite: ACCT 301 with a grade of “C” or better
Hours: 72 hours LEC

This course continues the study and evaluation of financial statements with emphasis on cash flows, receivables, liabilities, inventory, and long-term assets. This course is typically offered in the Fall semester only.

ACCT 104 Intermediate Accounting – Part II 4 Units
Prerequisite: ACCT 301 with a grade of “C” or better
Advisory: ACCT 103
Hours: 72 hours LEC

This course continues the study and evaluation of financial statements with emphasis on long-term assets, equity, income tax, and financial statement evaluation. This course is typically offered in the Spring semester only.

ACCT 107 Auditing 3 Units
Prerequisite: ACCT 301 with a grade of “C” or better
Advisory: ACCT 103 and 104
Hours: 54 hours LEC

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.

ACCT 108 Careers in Accounting**2 Units***Hours: 36 hours LEC*

This course covers the role of the accountant in today's business environment, the different jobs accountants do, and the types of employment opportunities available for accountants in public, private for-profit, private non-profit, and governmental accounting. Topics include the outlook for careers in accounting, what employers look for in employees, what employers look for in accountants, how people prepare to become accountants, and the licenses for accountants in various areas of the profession. This course is typically offered fall semester only.

ACCT 109 Professional Ethics for Accountants **1 Unit***Prerequisite: ACCT 301 with a grade of "C" or better**Advisory: ACCT 107**Hours: 18 hours LEC*

This course provides a framework for ethics in the accounting profession. Topics include ethics of accountants, auditors, and organizations including ethical expectations, professional responsibilities, and ethical decision making. The course emphasizes the California Accountancy Act, including the impact of statutes, regulations, and cases on current practice situations. The provisions of the American Institute of Certified Public Accountants (AICPA) Code of Professional Conduct are reviewed and examined through rulings and cases. High-profile cases, including Enron, and other ethical lapses are evaluated. Codes of conduct from the Institute of Management Accountants and Institute of Internal Auditors are reviewed, evaluated, and compared to those of the AICPA.

ACCT 111 Cost Accounting**3 Units***Prerequisite: ACCT 311 with a grade of "C" or better**Hours: 54 hours LEC*

This course is a continuation of managerial and cost accounting systems. Emphasis is placed on the development of quantitative information needed by managers for analyzing, planning, operating, and controlling manufacturing and service related businesses. This course is usually offered Spring semester only.

ACCT 121 Payroll Accounting**3 Units***Prerequisite: ACCT 101, 301, or 481 with a grade of "C" or better**Hours: 54 hours LEC*

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.

ACCT 124 Individual Income Tax Return Preparation**1 Unit***Hours: 18 hours LEC*

This course covers basic income tax concepts, laws, and regulations, with a focus on preparing federal and California individual income tax returns. Topics include filing status, exemptions, gross income, adjustments, standard and itemized deductions, credits, payments, tax planning strategies, and electronic tax return preparation and submission. Students interested in California Tax Education Council certification should complete ACCT 125.

ACCT 125 Federal and State Taxation**4 Units***Hours: 72 hours LEC*

This course covers federal and California tax regulations pertaining to individual returns. Topics include filing of returns, income and adjustments, itemized deductions, and gains and losses. It meets the qualifying education requirement of the California Tax Education Council.

ACCT 127 Volunteer Income Tax Assistance (VITA)**2 Units***Prerequisite: ACCT 124 or 125 with a grade of "C" or better**Hours: 24 hours LEC; 36 hours LAB*

This course prepares students to qualify as tax preparers and conduct and manage a Volunteer Income Tax Assistance (VITA) program recognized by the Internal Revenue Service (IRS). Students assist taxpayer-clients in the preparation and electronic filing of both federal and California income tax returns. This course may be taken two times for credit as long as the course is taken at a different IRS training level.

ACCT 128 Taxation of Corporations, Partnerships, Estates, and Trusts **4 Units***Prerequisite: ACCT 125 and 301 with grades of "C" or better**Hours: 72 hours LEC*

This course provides a continuing study of federal and state 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 related party transactions, filing requirements, differences in book and taxable income, tax computation, available credits, tax elections, and working with the Internal Revenue Service on tax administration matters.

ACCT 131 Fundamental Payroll Administration**1.5 Units***Advisory: ACCT 101; ENGWR 102 or 103 and ENGRD 116 OR**ESLR 320 and ESLW 320; ESLL 320; MATH 100 or BUS 105**Hours: 27 hours LEC*

This course covers the core activities that pertain to payroll processing under the Fair Labor Standards Act (FLSA) and Federal tax law. Topics include exempt and non-exempt employee classifications, overtime pay requirements, Federal Income Tax withholding calculations, box by box instructions for Federal Form W-2, and accounting related payroll transactions.

ACCT 132 Intermediate Payroll Administration**1.5 Units***Prerequisite: ACCT 131 with a grade of "C" or better**Advisory: ACCT 101; ENGWR 102 or 103 and ENGRD 116 OR**ESLR 320 and ESLW 320; ESLL 320; MATH 100 or BUS 105**Hours: 27 hours LEC*

This course covers the intermediate payroll skills and expands knowledge and application skills in the areas of Federal law and regulatory compliance. Topics include the employer-employee relationship, taxable and nontaxable compensation, recordkeeping and record retention, paying the employee, involuntary deductions and depositing and reporting withheld taxes.

ACCT 133 Advanced Payroll Administration **1.5 Units***Prerequisite: ACCT 132 with a grade of "C" or better**Advisory: ACCT 101; ENGWR 102 or 103 and ENGRD 116 OR**ESLR 320 and ESLW 320; ESLL 320; MATH 100 or BUS 105**Hours: 27 hours LEC*

This course addresses the application skills and knowledge necessary for advanced level work in the payroll field. Topics include an emphasis on enforcement and penalties for employers, health, welfare, and retirement benefits, unemployment insurance, Sarbanes-Oxley compliance, accounting financial statements, payroll systems and technology, managing a payroll department, and payroll for U.S. employees abroad and aliens in the U.S.

ACCT 134 California Payroll Administration 1.5 Units

Prerequisite: ACCT 131 with a grade of "C" or better
Advisory: ACCT 101; ENGWR 102 or 103 and ENGRD 116 OR ESLR 320 and ESLW 320; ESLL 320; MATH 100 or BUS 105
Hours: 27 hours LEC

This course addresses the complex knowledge necessary for processing payroll for employees in the state of California based on the state's strict wage and hour requirements. Topics include an emphasis on Department of Industrial Relations enforcement guidelines, calculating overtime based on state wage and hour laws, garnishment guidelines, state disability, state income tax withholding, state unemployment, and alternative work weeks.

ACCT 153 Governmental Accounting 3 Units

Prerequisite: ACCT 301 or 481 with a grade of "C" or better
Advisory: ENGWR 102 and ENGRD 116, OR ESLR 320 and ESLW 320; ESLL 320; MATH 100 or BUS 105
Hours: 54 hours LEC

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.

ACCT 301 Financial Accounting 4 Units

Advisory: ACCT 101; ENGWR 102 and ENGRD 116 OR ESLR 320 and ESLW 320; MATH 100 or BUS 105
Course Transferable to UC/CSU
Hours: 72 hours LEC

This course covers accounting systems and the preparation and interpretation of financial statements primarily for external uses by stockholders, creditors, regulators, and other stakeholders. It includes accounting for assets, liabilities, equity, revenues, and expenses. Accounting systems, internal control, forms of business organization, and financial statement analysis tools are also discussed. This course is not open to students who have taken ACCT 481.

ACCT 311 Managerial Accounting 4 Units

Prerequisite: ACCT 301 or 481 with a grade of "C" or better
Course Transferable to UC/CSU
Hours: 72 hours LEC

This course covers accounting information used by managers, sources of this information, and how this information is used by managers in making business decisions. Topics include cost concepts and reporting of costs, costing systems, the analysis and use of cost information in decision-making, cost-volume-profit analysis, contribution margin, profit planning and capital budgeting, standard costs, and financial statement analysis. This course is not open to students who have taken ACCT 482.

ACCT 341 Computerized Accounting 2 Units

Prerequisite: ACCT 101 or 301 with a grade of "C" or better
Course Transferable to CSU
Hours: 27 hours LEC; 27 hours LAB

This course emphasizes the major areas of a computerized accounting system, general ledger, revenues and accounts receivable, expenses and accounts payable, fixed assets and depreciation, payroll, banking and bank reconciliations, job costing, adjusting and closing entries, and financial statements. It provides practical experience in the use of master files, transactions, and reports. Individual sections of this course use software designed for small businesses such as QuickBooks, Peachtree, or other contemporary accounting systems.

ACCT 343 Computer Spreadsheet Applications for Accounting 2 Units

Corequisite: ACCT 301 or 481
Advisory: CISA 315; ENGWR 102 and ENGRD 116 OR ESLR 320 and ESLW 320; ESLL 320; MATH 100 or BUS 105
Course Transferable to CSU
Hours: 27 hours LEC; 27 hours LAB

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.

ACCT 361 Ethics, Fraud, and Legal Issues for Accountants 3 Units

Advisory: ACCT 107 and 301
Course Transferable to CSU
Hours: 54 hours LEC

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.

ACCT 481 Honors Financial Accounting 4 Units

Prerequisite: Placement into ENGWR 480 through the assessment process
Advisory: ACCT 101; MATH 100 or BUS 105
Course Transferable to UC/CSU
Hours: 72 hours LEC

This course covers accounting systems and the preparation and interpretation of financial statements primarily for external uses by stockholders, creditors, regulators, and other stakeholders. It includes accounting for assets, liabilities, equity, revenues, and expenses. Emphasis is placed on examination, development, and use of accounting systems, internal controls, and resulting financial statements. Special consideration will be given to financial statement analysis tools and the impact of ethics and fraud on financial reporting. This course provides enhanced exposure to Financial Accounting curriculum appropriate for the intensive study of the Honors Program. This course is not open to students who have already completed ACCT 301.

ACCT 482 Honors Managerial Accounting 4 Units

Prerequisite: ACCT 301 (Financial Accounting) with a grade of "C" or better and placement into ENGWR 480, or ACCT 481 (Honors Financial Accounting) with a grade of "C" or better
Course Transferable to UC/CSU
Hours: 72 hours LEC

This course continues the study of accounting with coverage of accounting information used by managers, sources of this information, and how this information is used by managers in making business decisions. Topics include cost concepts and reporting of costs, costing systems, the analysis and use of cost information in decision-making, cost-volume-profit analysis, contribution margin, profit planning and capital budgeting, standard costs, and financial statement analysis. This course provides enhanced exposure to Financial Accounting curriculum appropriate for the intensive study of the Honors Program. This course is not open to students who have already completed ACCT 311.

ACCT 498 Work Experience in Accounting 1-4 Units

Prerequisite: None

Enrollment Limitation: Must be enrolled in a minimum of 7 units at ARC

General Education: AA/AS Area III(b)

Course Transferable to CSU

Hours: 18 hours LEC; 225 hours LAB

This course is supervised work experience in accounting for the purpose of practical experience in accounting careers. Students must be employed in a paid or volunteer work experience environment. This course may be taken twice for a maximum of 8 units.

Finance**FIN 310 Financial Planning – Insurance 3 Units**

Advisory: BUS 320

Course Transferable to CSU

Hours: 54 hours LEC

This course introduces risk management and insurance decisions in personal financial planning. Topics include insurance for life, health, disability, property and liability risks, as well as annuities, group insurance, and long term care.

FIN 320 Financial Planning – Investments 3 Units

Advisory: BUS 320

Course Transferable to CSU

Hours: 54 hours LEC

This course introduces investment planning in the personal financial planning process. The course covers the various types of securities traded in financial markets, investment theory and practice, portfolio construction and management, and investment strategies and tactics.

FIN 330 Financial Planning – Retirement Planning 3 Units

Advisory: BUS 320

Course Transferable to CSU

Hours: 54 hours LEC

This course introduces retirement planning in the personal financial planning process. The course provides an understanding of public and private retirement plans. The public plans include Social Security, Medicare and Medicaid. The private plans include defined benefit and defined contribution plans and their regulatory provisions. Additional topics include the issues that individuals face in retirement such as life-style choices and medical issues.

FIN 350 Financial Planning – Estate planning 3 Units

Advisory: BUS 320

Course Transferable to CSU

Hours: 54 hours LEC

This course focuses on the efficient conservation and transfer of wealth, consistent with the individual's goals. The legal, tax, financial and non-financial aspects of estate planning are covered, including trusts, wills, probate, advanced directives, charitable giving, wealth transfers and related taxes.

FIN 380 Financial Planning – The Comprehensive Financial Plan 2 Units

Prerequisite: ACCT 125, FIN 310, FIN 320, FIN 330, and FIN 350 with grades of "C" or better

Advisory: CISC 300

Course Transferable to CSU

Hours: 27 hours LEC; 27 hours LAB

This is a capstone course in financial planning for individuals. Skills and knowledge from all previous courses in individual financial planning are utilized to develop a comprehensive financial plan for an individual or family. The end product of the course is a comprehensive financial plan prepared using financial planning software.

Property Tax**PROPTX 310 Introduction to Appraising for Property Tax Purposes 1.5 Units**

Course Transferable to CSU

Hours: 30 hours LEC

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.

PROPTX 311 Appraisal of Machinery & Equipment 1.5 Units

Course Transferable to CSU

Hours: 32 hours LEC

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.

Dean: James Thompson
 Director: Jerry Manduca
 Phone: (916) 570-5000
 Counseling: (916) 484-8572

Degree: A.S. - Administration of Justice
 A.S. for Transfer Degree - Administration of Justice

DEGREES

Administration of Justice Degree

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.

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 Opportunities

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).

Requirements for Degree	24 Units
ADMJ 300 Introduction to Administration of Justice.....	3
ADMJ 302 Community Relations: Multicultural Issues.....	3
ADMJ 304 Juvenile Delinquency	3
ADMJ 320 Concepts of Criminal Law	3
ADMJ 322 Criminal Procedures.....	3
ADMJ 323 Legal Aspects of Evidence	3
ADMJ 330 Criminal Investigation.....	3
A minimum of 3 units from the following:	3
ADMJ 331 Patrol Procedures (3)	
ADMJ 340 Introduction to Correctional Services (3)	

Associate Degree Requirements: 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.

Administration of Justice A.S. for Transfer Degree

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.

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.

(continued on next page)

(Administration of Justice A.S. for Transfer Degree continued)

- 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 Opportunities

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).

Requirements for Degree	18 Units
ADMJ 300 Introduction to Administration of Justice.....	3
ADMJ 320 Concepts of Criminal Law	3
A minimum of 6 units from the following:	6
ADMJ 304 Juvenile Delinquency (3)	
ADMJ 323 Legal Aspects of Evidence (3)	
ADMJ 330 Criminal Investigation (3)	
ADMJ 340 Introduction to Correctional Services (3)	
A minimum of 6 units from the following:	6
PSYC 300 General Principles (3)	
SOC 300 Introductory Sociology (3)	
STAT 300 Introduction to Probability and Statistics (4)	

Associate in Science for Transfer Degree Requirements: 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.

Administration of Justice

ADMJ 300 Introduction to Administration of Justice 3 Units

Advisory: ENGWR 102; or placement through the assessment process.
General Education: AA/AS Area V(b); CSU Area D8; IGETC Area 4H
Course Transferable to UC/CSU
Hours: 54 hours LEC

This course introduces students to the characteristics of the American criminal justice system. Emphasis is placed on examining due process, U.S. Constitutional Rights, criminal activity, crime causation, domestic and international criminal threats, law enforcement response to criminal activity, future law enforcement trends, components of the American justice system, courts and correctional services with an emphasis on ethics and leadership.

ADMJ 302 Community Relations: Multicultural Issues 3 Units

Advisory: ENGWR 102 or ESLW 320
General Education: AA/AS Area V(b); AA/AS Area VI; CSU Area D3; CSU Area D7
Course Transferable to CSU
Hours: 54 hours LEC

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.

ADMJ 304 Juvenile Delinquency 3 Units

Advisory: ENGWR 102; or placement through the assessment process.
General Education: AA/AS Area V(b); CSU Area D0
Course Transferable to CSU
Hours: 54 hours LEC

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.

ADMJ 320 Concepts of Criminal Law 3 Units

Advisory: ENGWR 102; or placement through the assessment process.
General Education: AA/AS Area V(b); CSU Area D8; IGETC Area 4H
Course Transferable to UC/CSU
Hours: 54 hours LEC

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.

ADMJ 322 Criminal Procedures 3 Units

Advisory: ENGWR 102; or placement through the assessment process.

Course Transferable to CSU

Hours: 54 hours LEC

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.

ADMJ 323 Legal Aspects of Evidence 3 Units

Advisory: ENGWR 102; or placement through the assessment process.

Course Transferable to CSU

Hours: 54 hours LEC

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, direct and circumstantial evidence.

ADMJ 330 Criminal Investigation 3 Units

Advisory: ENGWR 102 or ESLW 320

Course Transferable to CSU

Hours: 54 hours LEC

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 organizations.

ADMJ 331 Patrol Procedures 3 Units

Advisory: ENGWR 102; or placement through the assessment process.

Course Transferable to CSU

Hours: 54 hours LEC

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.

ADMJ 340 Introduction to Correctional Services 3 Units

Advisory: ENGWR 102; or placement through the assessment process.

Course Transferable to CSU

Hours: 54 hours LEC

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.

Area: Behavioral & Social Sciences
 Dean: Carol Pottorff
 Phone: (916) 484-8283
 Counseling: (916) 484-8572

Degree: A.S. - Anthropology

Anthropology Degree

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.

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 Opportunities

The A.S. 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, exploration, and museum management to the analysis of cultures, linguistics, forensics, primatology, teaching, and consulting with governmental and educational institutions.

Requirements for Degree	18 Units
ANTH 300 Physical Anthropology (3)	3
or ANTH 480 Honors Physical Anthropology (3)	
ANTH 301 Physical Anthropology Laboratory.....	1
ANTH 310 Cultural Anthropology.....	3
ANTH 320 Introduction to Archaeology and World Preshistory	3
And a minimum of 8 units from the following:	8
ANTH 303 Introduction to Forensic Anthropology (3)	
ANTH 311 Cultural Anthropology Discussion (1)	
ANTH 312 Anthropology of Gender (1)	
ANTH 315 Cultures in Focus (3)	
ANTH 330 Magic, Witchcraft, and Religion (3)	
ANTH 333 American Indians of California (3)	
ANTH 334 Native Peoples of North American (3)	
ANTH 335 Research Methods in Anthropology (3)	
ANTH 341 Introduction to Linguistics (3)	
ANTH 370 Primatology (3)	
ANTH 372 Primatology Field Studies (2)	
ANTH 494 Topics in Anthropology (1-3)	

Associate Degree Requirements: 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.

Anthropology

ANTH 300 Physical Anthropology 3 Units

Advisory: ENGWR 102 or 103, and ENGRD 116; OR ESLR 320 and ESLW 320; OR placement through assessment process.

General Education: AA/AS Area IV; CSU Area B2; IGETC Area 5B
Course Transferable to UC/CSU

Hours: 54 hours LEC

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 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 the course.

ANTH 301 Physical Anthropology Laboratory 1 Unit

Corequisite: ANTH 300

General Education: CSU Area B2; CSU Area B3; IGETC Area 5C
Course Transferable to UC/CSU

Hours: 54 hours LAB

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.

ANTH 303 Introduction to Forensic Anthropology 3 Units

Advisory: ENGWR 102 or 103, and ENGRD 116; OR ESLR 320 and ESLW 320; OR placement through assessment process. ANTH 300 and 301; OR BIOL 102; OR BIOL 115; OR BIOL 430.

General Education: AA/AS Area IV; CSU Area B2; IGETC Area 5B
Course Transferable to UC/CSU

Hours: 54 hours LEC

This course is an overview of forensic anthropology which is 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.

ANTH 310 Cultural Anthropology 3 Units

Advisory: ENGWR 102 or 103, and ENGRD 116; OR ESLR 320 and ESLW 320; OR placement through assessment process.

General Education: AA/AS Area V(b); AA/AS Area VI; CSU Area D1; IGETC Area 4A

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course is an introduction to the various customs, traditions, and forms of social organizations in both Western and non-Western societies. Multicultural perspectives are examined for such topics including subsistence methods, belief and religious system, linguistics, trade and economic systems, arts, kinship systems, marriage and family systems, technology, and changes due to internal and external forces.

ANTH 311 Cultural Anthropology Discussion 1 Unit

Prerequisite: None

Advisory: ANTH 310.

Course Transferable to CSU

Hours: 18 hours LEC

This course provides opportunities to discuss issues relevant to cultural anthropology and explore non-western cultures using the anthropological literature. The applicability of terms such as “ethnocentrism” and “cultural relativity” is examined.

ANTH 312 Anthropology of Gender 1 Unit

Prerequisite: None

Advisory: ANTH 310

Course Transferable to CSU

Hours: 18 hours LEC

This course examines the contributions of anthropologists to the field of gender studies. The course deals with topics relevant to gender issues from a cross-cultural perspective. Gender issues are studied as they relate to family, social groups, and the concept of “self”.

ANTH 315 Cultures in Focus 3 Units

Advisory: ENGWR 102 or 103, and ENGRD 116; OR ESLR 320 and ESLW 320; OR placement through assessment process.

General Education: AA/AS Area V(b) and VI; CSU Area D1; IGETC Area 4A

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course provides information regarding development issues in emerging countries of the world. The course examines the historical and cultural context of development and diversity in pluralistic societies. Globalization and technological changes are examined as they influence ideological aspects of culture. Problems such as overpopulation, underemployment, famine, and women’s issues, are discussed within their cultural context.

ANTH 320 Introduction to Archaeology and World Prehistory 3 Units

Advisory: ENGWR 102 or 103, and ENGRD 116; OR ESLR 320 and ESLW 320; OR placement through assessment process.

General Education: AA/AS Area V(b); CSU Area D1; IGETC Area 4A

Course Transferable to UC/CSU

Hours: 54 hours LEC

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 is emphasized. The challenges and achievements of non-literate and traditional cultures, diverse communities, and social classes over time are also explored.

ANTH 330 Magic, Witchcraft, and Religion 3 Units

Advisory: ENGWR 102 or 103, and ENGRD 116; OR ESLR 320 and ESLW 320; OR placement through assessment process.

General Education: AA/AS Area V(b) and Area VI; CSU Area D1; IGETC Area 4A

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course is a cross-cultural study of the forms and functions of supernatural beliefs and associated rituals in traditional societies of Africa, Asia, aboriginal Australia, Oceania, South America, Native North America and elsewhere. Attention is also given to world religions. Emphasis is on understanding the role of beliefs and rituals within their given social contexts, as well as on a broader comparison to derive insight into the general functions of beliefs and rituals in human life.

ANTH 333 American Indians of California 3 Units

Advisory: ENGWR 102 or 103, and ENGRD 116; OR ESLR 320 and ESLW 320; OR placement through assessment process.

General Education: AA/AS Area V(b); AA/AS Area VI; CSU Area D1; CSU Area D3; IGETC Area 4A

Course Transferable to UC/CSU

Hours: 54 hours LEC

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.

ANTH 334 Native Peoples of North America 3 Units

Advisory: ENGWR 102 or 103, and ENGRD 116; OR ESLR 320 and ESLW 320; OR placement through assessment process.

General Education: AA/AS Area V(b); AA/AS Area VI; CSU Area D1; IGETC Area 4A

Course Transferable to UC/CSU

Hours: 54 hours LEC

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.

ANTH 335 Research Methods in Anthropology 3 Units

Prerequisite: ANTH 300 or 310 with a grade of “C” or better

Course Transferable to CSU

Hours: 54 hours LEC

This course introduces research methods for the field of anthropology. Familiarization with specific observational research methods and the practical application of these methods in a contemporary setting is emphasized. Field trips may be required.

ANTH 341 Introduction to Linguistics 3 Units

Advisory: ENGWR 102 or 103, and ENGRD 116; OR ESLR 320 and ESLW 320; OR placement through assessment process.

General Education: AA/AS Area V(b); AA/AS Area II(b); AA/AS Area VI; CSU Area D1; IGETC Area 4A

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course explores the role of language in social interaction and world view construction. In addition, it examines minority languages and dialects, bilingualism, literacy, and the social motivation of language change. Analytical techniques of socio-cultural linguistics are examined.

ANTH 370 Primatology**3 Units***Advisory: ANTH 300**Course Transferable to UC/CSU**Hours: 54 hours LEC*

This course provides an analysis of non-human 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.

ANTH 372 Primatology Field Studies**2 Units***Prerequisite: None**Advisory: ANTH 300**Course Transferable to CSU**Hours: 36 hours LEC*

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 studies may focus on the ChimpanZoo Program under the Jane Goodall Institute. Field trips will be required.

ANTH 480 Honors Physical Anthropology**3 Units***Prerequisite: Placement into ENGWR 480 through the assessment process**General Education: AAJAS Area IV; CSU Area B2; IGETC Area 5B**Course Transferable to UC/CSU**Hours: 54 hours LEC*

This course is an introduction to the science of physical anthropology. This seminar-style honors course 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. The following topics are included in the course: evolutionary theory, heredity, human variation, taxonomy and behavior of the living primate and the fossil evidence of human evolution. This course is not open to students who have completed ANTH 300.

ANTH 494 Topics in Anthropology**1-3 Units***Advisory: ENGWR 102 or 103, and ENGRD 116; OR ESLR 320 and ESLW 320; OR placement through assessment process.**Course Transferable to CSU**Hours: 54 hours LEC*

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. This course may be taken four times on a different topic.

Area: Apprenticeship
 Coordinator: Rene Green
 Phone: (916) 484-8337
 Counseling: (916) 484-8572

A.A. Degree: Carpenter Apprenticeship
 Drywall/Lathing Apprenticeship
 Electrical Apprenticeship
 Ironworker Apprenticeship
 Sheet Metal Apprenticeship
 Sheet Metal Service Technician
 Apprenticeship

Certificates: Carpenters Apprenticeship
 Drywall/Lathing Apprenticeship
 Electrical Apprenticeship
 Electrical Residential Apprenticeship
 Ironworker Apprenticeship
 Residential/Commercial Electrician Trainee
 Sheet Metal Apprenticeship
 Sheet Metal Residential
 Sheet Metal Service Technician
 Apprenticeship

Certificate of Completion offered by the department:
 Green Pre-Apprenticeship
 Green Technology Pre-Apprenticeship
 Infrastructure Pre-Apprenticeship
 Utilities Worker Pre-Apprenticeship

American River College conducts, in cooperation with the local construction unions, a number of apprenticeship programs (most of which can lead to an Associates of Arts degree). An apprenticeship program is a formal system of career training from two to five years that combines paid employment, on-the-job training and job related college level instruction in order to develop highly skilled workers.

Apprenticeship programs are a cooperative effort between the Joint Apprenticeship Training Committee (JATC) and the college. The JATC is composed of representatives from both labor and management from each apprenticeship area and their purpose is to oversee apprenticeship training. All American River College apprenticeship programs are approved by the Division of Apprenticeship Standards of the California Department of Industrial Relations.

Enrollment in an apprenticeship course is limited to registered apprentices, however anyone meeting the apprenticeship requirements can apply for acceptance. Information on admission to apprenticeship programs can be obtained from the local JATC having jurisdiction over the trade in which you are interested. Listed below are the program types and contact persons.

DEGREES AND CERTIFICATES

Carpenter Apprenticeship

The Carpenter Apprenticeship 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.

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 Opportunities

Upon completion of the Carpenter Apprenticeship degree or certificate, students may find employment in the following sectors: government, residential and commercial construction and maintenance, utilities, and facilities management.

For more information, contact:
 Program Director
 8000 Chadbourne Rd, Suite A
 Fairfield, CA 95485
 (707) 399-2880

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(Carpenter Apprenticeship continued)

Requirements	Degree or Certificate	36.3 Units
CARPT 102	Worker Safety and Tool Skills	1.4
CARPT 104	The Apprentice and the Trade	2
CARPT 110	Foundations and Floors	1
CARPT 112	Structural Framing	1
CARPT 114	Form Detailing, Construction & Erection	1
CARPT 120	Exterior Finish	1
CARPT 122	Interior Finish	1
CARPT 130	Layout/Leveling Construction Site Practice	1
CARPT 140	Interior Systems	1.3
CARPT 142	Engineered Structural Systems	1
CARPT 150	Concrete - Precast and Prestressed	1
CARPT 160	Blueprint Reading-Residential	1.3
CARPT 162	Blueprint Reading-Commercial	1.3
CARPT 170	Roof Framing	1
CARPT 180	Stair Building	1
CARPT 190	Introduction to Welding and Cutting	1
CARPT 200	Construction Mathematics & Introduction to Working Drawing	2
And a minimum of 16 units from the following:		16
CARPT 298	Work Experience in Carpenters Apprenticeship (1 - 4)	

Associate Degree Requirements: 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.

Drywall/Lathing Apprenticeship

The Drywall/Lathing Apprenticeship 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, metal framing, blueprint reading, exterior/interior wall finishes, welding, residential and commercial construction process, building codes, estimation, and various construction topics.

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, layout, 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, verbal and written information.

Career Opportunities

Upon completion of the Drywall/Lathing Apprenticeship degree, 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.

For more information contact:
 Program Director
 8000 Chadbourne Rd, Suite A
 Fairfield, CA 95485
 (707) 399-2880

Requirements	Degree or Certificate	41 Units
DRLTH 100	Introduction to the Trade	2
DRLTH 102	Basic Applications	1.5
DRLTH 105	Mathematics for Drywall/Lathers	2
DRLTH 110	Residential Metal Framing	1.5
DRLTH 112	Doors, Windows, Exterior Systems/Building Documents	1.5
DRLTH 120	Blueprint Reading I	1.5
DRLTH 121	Blueprint Reading II	1.5
DRLTH 122	Blueprint Reading III	1.5
DRLTH 130	Welding I	1.5
DRLTH 131	Welding II	1.5
DRLTH 140	Exterior/Advanced Fire Control System and Partitions	1.5
DRLTH 142	Exterior Systems and Trims	1.5
DRLTH 150	Interior Metal Lathing System, Sound Control	1.5
DRLTH 160	Ceilings, Shaft Protection and Demountable Partitions	1.5
DRLTH 162	Arches, Furring and Advanced Systems	1.5
DRLTH 170	Advanced Construction Techniques	1.5
And a minimum of 16 units from the following:		16
DRLTH 298	Work Experience Drywall/Lathing Apprenticeship (1 - 4)	

Associate Degree Requirements: 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.

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.

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 mathematics in calculating ac and 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.
- describe functions of instrumentation in industrial process control systems.

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(Electrical Apprenticeship continued)

Career Opportunities

Upon completion of the electrical program, students may find employment in the following industry sectors: government, commercial and industrial construction and maintenance, utilities, and facilities management. With the degree, students may further their career as licensed contractors.

For more information contact:

Program Director
2836 El Centro Rd.
Sacramento, CA 95833
(916) 646-6688

Requirements for Degree or Certificate		50.7 Units
ELECT 110	Electrical Apprenticeship I	5
ELECT 111	Electrical Apprenticeship II	3.3
ELECT 120	Electrical Apprenticeship III	3.3
ELECT 121	Electrical Apprenticeship IV	3.3
ELECT 130	Electrical Apprenticeship V	3.3
ELECT 131	Electrical Apprenticeship VI	3.3
ELECT 140	Electrical Apprenticeship VII	3.3
ELECT 141	Electrical Apprenticeship VIII	3.3
ELECT 150	Electrical Apprenticeship IX	3.3
ELECT 151	Electrical Apprenticeship X	3.3
And a minimum of 16 units from the following:		16
ELECT 298	Work Experience in Electricians Apprenticeship	

Associate Degree Requirements: 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.

Electrical Residential Apprenticeship

This is a three year, six semester certificated Electrical Residential Apprenticeship Program. The program concentrates on training apprentices to the specific levels required for residential and light commercial construction sites and has been approved by the State of California Department of Apprenticeship Standards.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- apply residential electrical safety procedures to the work-site.
- analyze, interpret, and apply the National Electric Codes to residential and light commercial construction.
- analyze and install transformers and control panels.
- analyze and install low voltage systems such as TV, phone, burglar alarms, and HVAC control wiring.
- analyze and interpret residential construction blueprints.
- apply electrical mathematics in calculating resistance, voltage, and amperes in AC/DC series, parallel, and series parallel circuits.

Career Opportunities

Upon completion of the Electrical Residential Apprenticeship program, students may find employment in the following industry sectors: government, residential, and light commercial construction and maintenance.

Enrollment Eligibility

To be eligible for enrollment in the program, the student must meet the following criteria:

- Must be a Registered Electrical Residential Apprentice

Requirements for Certificate		18 Units
ELRES 100	Electrical Residential Apprenticeship I	3
ELRES 101	Electrical Residential Apprenticeship II	3
ELRES 110	Electrical Residential Apprenticeship III	3
ELRES 111	Electrical Residential Apprenticeship IV	3
ELRES 120	Electrical Residential Apprenticeship V	3
ELRES 121	Electrical Residential Apprenticeship VI	3

Ironworker Apprenticeship

The Ironworker Apprenticeship Program has training for Field Ironworkers and Reinforcing Ironworkers. Training is provided in major ironworker components to Division of Apprenticeship Standards (DAS) guidelines.

For more information contact:

Program Director
3524 51st Ave
Sacramento, CA 95823
(916) 428-7420

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 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.

Requirements for Degree or Certificate		41-41.5 Units
IW 100	Orientation and History of the Trade	1.5
IW 110	Mixed Base	1.5
IW 120	Rigging	1.5
IW 130	Reinforcing I	1.5
IW 131	Reinforcing II/Post Tensioning	1.5
IW 140	Precast Concrete and Metal Buildings	1.5
IW 150	Welding I	1.5
IW 151	Welding II	1.5
IW 152	Welding III	1.5
IW 160	Lead Hazard	1.5
IW 170	Structural I	1.5
IW 171	Structural II	1.5
IW 180	Architectural/Ornamental I	1.5
IW 181	Architectural/Ornamental II (1.5)	1.5-2
or IW 184	Detailing I (2)	
IW 182	Architectural/Ornamental III (1.5)	1.5
or IW 185	Detailing II (1.5)	
IW 183	The History of Ironworkers	2.5
And a minimum of 16 units from the following:		16
IW 298	Work Experience in Ironworkers Apprenticeship (4)	

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(Ironworker Apprenticeship continued)

Associate Degree Requirements: 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.

Residential/Commercial Electrician Trainee Certificate

The Residential/Commercial Electrician 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 HVAC systems. The program complies with state regulations to become an Electrician Trainee.

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 Opportunities

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.

Requirements for Certificate		28.5 Units
ELECT 210	Electrician Trainee I	4
ELECT 211	Electrician Trainee II	4
ELECT 220	Electrician Trainee III	4
ELECT 221	Electrician Trainee IV	4
ELECT 230	Electrician Trainee V	4
ELECT 231	Electrician Trainee VI	4
ELECT 280	Electrical Workers State Certification Preparation	4.5

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.

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 Opportunities

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.

For more information contact:
 Program Director
 1624 Silica Avenue
 Sacramento, CA 95815
 (916) 922-9381

Requirements for Degree or Certificate		54 Units
SHME 100	Sheet Metal Apprenticeship I	3.3
SHME 101	Sheet Metal Apprenticeship II	3.3
SHME 110	Sheet Metal Apprenticeship III	3.3
SHME 111	Sheet Metal Apprenticeship IV	3.3
SHME 120	Sheet Metal Apprenticeship V	3.3
SHME 121	Sheet Metal Apprenticeship VI	3.3
SHME 130	Sheet Metal Apprenticeship VII	3.3
SHME 131	Sheet Metal Apprenticeship VIII	3.3
SHME 140	Sheet Metal Apprenticeship IX	3.3
SHME 141	Sheet Metal Apprenticeship X	3.3
SHME 150	Sheet Metal Welding I	2.5
SHME 151	Sheet Metal Welding II	2.5
A minimum of 16 units from the following:		16
SHME 298	Work Experience in Sheet Metal Apprenticeship (1 - 4)	

Associate Degree Requirements: 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.

Sheet Metal Residential Apprenticeship

This is a two-year, four-semester certificated Sheet Metal Residential Apprenticeship Program. The program concentrates on training apprentices to the specific levels required for residential and light commercial construction sites and has been approved by the State of California Department of Apprenticeship Standards.

Career Opportunities

Upon completion of the Sheet Metal Residential Apprenticeship program, students may find employment in the following industry sectors: government, residential, and light commercial construction and maintenance.

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(Sheet Metal Residential Apprenticeship continued)

Enrollment Eligibility

To be eligible for enrollment in the program, the student must meet the following criteria:

- Must be a Registered Sheet Metal Residential Apprentice

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- apply safety procedures on residential job-sites.
- analyze and interpret residential construction blueprints.
- apply construction mathematics in calculating pattern development of sheet metal products.
- identify various metals, gages, fasteners, and sealants used in sheet metal fabrication.
- design and size a residential duct system.
- demonstrate proper soldering on sheet metal fabrication.

Requirements for Certificate		28 Units
SMRA 100	Sheet Metal Residential Apprenticeship I	3
SMRA 101	Sheet Metal Residential Apprenticeship II	3
SMRA 110	Sheet Metal Residential Apprenticeship III	3
SMRA 111	Sheet Metal Residential Apprenticeship IV	3
A minimum of 16 units from the following:		16
SHME 298	Work Experience in Sheet Metal Apprenticeship (1 - 4)	

Sheet Metal Service Technician Apprenticeship

The Sheet Metal Service Technician Apprenticeship Associate of Arts and 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.

Career Opportunities

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.

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.

Requirements for Degree or Certificate		54.2 Units
SHME 100	Sheet Metal Apprenticeship I	3.3
SHME 101	Sheet Metal Apprenticeship II	3.3
SHME 110	Sheet Metal Apprenticeship III	3.3
SHME 111	Sheet Metal Apprenticeship IV	3.3
SMTEC 100	Sheet Metal Service Technician Apprenticeship I	2.5
SMTEC 101	Sheet Metal Service Technician Apprenticeship II	2.5
SMTEC 110	Sheet Metal Service Technician Apprenticeship III	2.5
SMTEC 111	Sheet Metal Service Technician Apprenticeship IV	2.5
SMTEC 120	Sheet Metal Service Technician Apprenticeship V	2.5
SMTEC 121	Sheet Metal Service Technician Apprenticeship VI	2.5
SMTEC 130	Sheet Metal Service Technician Apprenticeship VII	2.5
SMTEC 131	Sheet Metal Service Technician Apprenticeship VIII	2.5
SMTEC 140	Sheet Metal Service Technician Apprenticeship IX	2.5
SMTEC 141	Sheet Metal Service Technician Apprenticeship X	2.5
A minimum of 16 units from the following:		16
SHME 298	Work Experience in Sheet Metal Apprenticeship (1 - 4)	

Associate Degree Requirements: 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.

CERTIFICATES OF COMPLETION (offered by the department)

Green 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.

Student Learning Outcomes

Upon completion of this program, 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.
- 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.
- explain safety regulations and safe working conditions for apprenticeship training.
- describe basic skills required for the construction of roads, bridges, levees, and rail.
- identify green building procedures used within infrastructure projects.

Requirements for Certificate		16 Units
PREAP 111	Infrastructure Pre-Apprenticeship	7
PREAP 141	Green Technology Pre-Apprenticeship	7
A minimum of 2 units from the following:		2
FITNS 358	Workforce Wellness (1)	

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.

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.

Requirements for Certificate 8 Units

FITNS 358	Workforce Wellness	1
PREAP 141	Green Technology Pre-Apprenticeship.....	7

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.

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.

Requirements for Certificate 8 Units

FITNS 358	Workforce Wellness	1
PREAP 111	Infrastructure Pre-Apprenticeship	7

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, and apprenticeship preparation.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- explain electrical fundamentals and apply formulas such as Ohm's and Watt's Law.
- define industry 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 training.
- describe effective conflict resolution methods.
- describe the functions of transformers, electrical generators, and electrical equipment.

Requirements for Certificate 11 Units

FITNS 358	Workforce Wellness	1
PREAP 122	Pre-Apprenticeship for Utility Workers	10

Pre-Apprenticeship

PREAP 111 Infrastructure Pre-Apprenticeship 7 Units

Corequisite: FITNS 358

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

Enrollment Limitation: Students must have a high school diploma or GED.

Hours: 77 hours LEC; 147 hours LAB

This course provides an introduction to transportation infrastructure apprenticeship. 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.

PREAP 122 Pre-Apprenticeship for Utility Workers 10 Units

Hours: 130 hours LEC; 153 hours LAB

This course provides entry-level employment skills for the utility industry. Topics include applications of electronic, electrical, and gas principles and their applications in the utility industry. It also covers safety as applied to utility workers, computerized work orders, and two-way radio communication. Additionally, reading, interpreting, and applying technical information to solve work-related problems are presented. Field trips are required.

PREAP 141 Green Technology Pre-Apprenticeship 7 Units

Corequisite: FITNS 358

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.

Enrollment Limitation: Students must have a high school diploma or GED.

Hours: 77 hours LEC; 147 hours LAB

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.

Area: Fine & Applied Arts
 Dean: Dr. Adam Karp
 Phone: (916) 484-8433
 Counseling: (916) 484-8572

Degree: A.A. - Art
 A.A. for Transfer - Studio Art
 Certificate: Freelance Photography
 Certificates of Completion offered by the department:
 Sculpture

DEGREES AND CERTIFICATES

Art Degree

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.

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 Opportunities

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.

Requirements for Degree	32-33 Units
ART 300 Elementary Drawing and Composition.....	3
ART 320 Design: Fundamentals (3)	3
or ARTNM 310 Design: Fundamentals (3)	
ART 370 Three Dimensional Design.....	3
ART 442 Art Gallery Operations (2).....	2 - 3
or ART 444 Art Gallery and Portfolio Preparation (3)	
ARTH 302 Art: Stone Age Through the Middle Ages	3
ARTH 308 Renaissance Tradition in Art (3)	3
or ARTH 310 Modern Art (3)	

And a minimum of 15 units from the following:15

ART 302	Elementary Drawing and Composition (3)
ART 304	Figure Drawing and Composition (3)
ART 305	Figure Drawing and Composition (3)
ART 306	Facial Expression and Anatomy (3)
ART 314	Introduction to Illustration (3)
ART 322	Design: Image and Content (3)
ART 323	Design: Color Theory (3)
ART 324	Collage and Assemblage (3)
ART 327	Painting (3)
ART 328	Painting (3)
ART 329	Painting II (3)
ART 336	Watercolor Painting (3)
ART 337	Intermediate Watercolor Painting (3)
ART 361	Printmaking: Survey (3)
ART 371	Foundry Casting for Sculpture (3)
ART 372	Sculpture (3)
ART 373	Intermediate Sculpture (3)
ART 375	Figure Sculpture (3)
ART 382	Metal Design: Emphasis In Mixed Media (3)
ART 383	Metal Design: Emphasis In Fabrication (3)
ART 384	Metal Design: Emphasis In Casting (3)
ART 390	Ceramics (3)
ART 391	Intermediate Ceramics (3)
ART 397	Alternative Firing Processes In Ceramics (3)
ART 398	Ceramic Murals and Tiles (3)
ART 420	Film Making (2)
ART 422	Film Making (3)
ART 430	Art and Children (3)
ART 432	Art for Children Practicum (2 - 4)
ART 440	Artists' Materials and Techniques (3)
ARTH 300	Introduction to Art (3)
ARTH 322	Art History of the Non-Western World (3)
ARTH 333	Introduction to Islamic Art (3)
ARTH 334	International Contemporary Art (3)
ARTPH 300	Basic Art Photography (3)
ARTPH 305	Digital Photography (3)
ARTPH 310	Intermediate Photography (3)
ARTPH 322	Color Photography (3)
ARTPH 340	Alternative Process Photography (3)
ARTPH 350	Documentary Photography (3)
ARTPH 360	Studio Lighting (3)
ARTPH 370	Fashion, Wedding, and Portrait Photography (3)
ARTPH 490	Photography Lab (1)

Associate Degree Requirements: 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.

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.

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(Freelance Photography Certificate continued)

Career Opportunities

Job opportunities include, but are not limited to, studio assistant, studio photographer, freelance photographer, editorial photographer, stock photographer, and photo lab manager.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- select appropriate digital and film camera equipment and software for a given client-based shooting assignments
- utilize a variety of studio lighting techniques for fine art photography or commercial photography
- evaluate digital and film photographs for aesthetic quality
- compare and contrast historical works of art as they relate to an overall formal assessment of photography
- design and create photographic compositions using the principles of visual organization: unity, balance, harmony-variety, rhythm, pattern, proportion/scale, movement and economy
- develop portfolios of photographs for specific clients
- organize a work flow for storing and editing photographs
- apply design knowledge and skill in the use of photo editing on the computer
- develop a plan for launching a career in freelance photography

Requirements for Certificate		30 Units
ART 320	Design: Fundamentals	3
ARTH 300	Introduction to Art	3
ARTNM 328 or ARTPH 315	Digital Photo Imagery - PhotoShop Basics (3) Trends in Software and Social Media for Photographers (3)	3
ARTPH 300 or ARTPH 340	Basic Art Photography (3) Alternative Process Photography (3)	3
ARTPH 305	Digital Photography	3
ARTPH 310	Intermediate Photography	3
ARTPH 322	Color Photography	3
ARTPH 370 or ARTPH 350	Fashion, Wedding, and Portrait Photography (3) Documentary Photography (3)	3
ARTPH 360	Studio Lighting	3
ARTPH 375	Freelance Photography Careers	2
ARTPH 490	Photography Lab	1

Studio Art A.A. for Transfer Degree

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.

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 Opportunities

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.

Requirements for Degree		24 Units
ART 300	Elementary Drawing and Composition	3
ART 320	Design: Fundamentals (3)	3
or ARTNM 310	Design: Fundamentals (3)	3
ART 370	Three Dimensional Design	3
ARTH 302	Art: Stone Age Through the Middle Ages (3)	3
or ARTH 322	Art History of the Non-Western World (3)	3
ARTH 308	Renaissance Tradition in Art	3
Select a total of 9 units from three different categories below		9
Drawing:		
ART 302	Elementary Drawing and Composition (3)	3
or ART 304	Figure Drawing and Composition (3)	3
Color Theory:		
ART 323	Design: Color Theory (3)	3
Painting:		
ART 327	Painting (3)	3
or ART 336	Watercolor Painting (3)	3
Printmaking:		
ART 361	Printmaking: Survey (3)	3
Sculpture:		
ART 372	Sculpture (3)	3
Applied Design:		
ART 383	Metal Design: Emphasis In Fabrication (3)	3
or ART 384	Metal Design: Emphasis In Casting (3)	3
Ceramics:		
ART 390	Ceramics (3)	3
Digital Art:		
ARTNM 328	Digital Photo Imagery - PhotoShop Basics (3)	3
Photography:		
ARTPH 300	Basic Art Photography (3)	3
or ARTPH 305	Digital Photography (3)	3

Associate in Arts for Transfer Degree Requirements: The Associate in Arts in Studio Art Degree for Transfer 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.

CERTIFICATE OF COMPLETION (offered by the department)

Sculpture Certificate

This certificate provides training for beginning careers in metal fabrication and sculpture. Topics include basic skills necessary for entry level fabrication positions or small studio businesses in sculpture.

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 skill in 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.
- apply safety standards to each welding process.
- demonstrate proper welding techniques for each welding process.
- evaluate blue print drawings as they relate to foundry casting.
- define the properties of sculptural form and space.
- develop creative abilities and individual expression through problem-solving assignments.
- 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.

Requirements for Certificate	12.5 - 15 Units
ART 320 Design: Fundamentals	3
ART 122 Introduction to Ornamental Iron.....	0.5 - 3 ¹
ART 371 Foundry Casting for Sculpture	3
ART 372 Sculpture.....	3
ART 373 Intermediate Sculpture.....	3
WELD 300 Introduction to Welding	3

¹A minimum of 3 units in Art 122 are required to acquire certificate.

Art

ART 120 Introduction to Metal Fabrication and Sculpture .5-3 Units

Hours: 36 hours LEC; 54 hours LAB

This course covers metal sculpture techniques, design principles and materials used for sculpture, 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. Different artists and topics are covered each semester. ART 120 and/or WELD 104 may be taken 4 times for a total of 6 units.

ART 122 Introduction to Ornamental Iron .5-3 Units

Prerequisite: None

Hours: 36 hours LEC; 54 hours LAB

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. Different artists and topics are covered each semester. This course may be taken 4 times for a total of 6 units.

ART 292 Pace Topics In Art 1 Unit

Hours: 18 hours LEC

This course is designed for students in the Partnership to Assure College Entry Program (PACE). It offers high school students a first experience in college art-making using both 2-D and 3-D techniques. Through a variety of activities, students learn how the principles of art-making are developed from observing nature and self-exploration.

ART 294 Topics in Art .5-4 Units

Hours: 36 hours LEC; 108 hours LAB

This course is designed to give students an opportunity to study topics in art not included in current course offerings. It may be taken four times with no duplication of topics.

ART 300 Elementary Drawing and Composition 3 Units

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.

General Education: AA/AS Area I; CSU Area C1

Course Transferable to UC/CSU

Hours: 36 hours LEC; 54 hours LAB

This course introduces observational drawing and composition. Development of the ability to perceive and define shape, contour, volume, space, and value using a variety of drawing media and subject matter is emphasized. It focuses on the clarity of observational skills and the ability to translate three-dimensional form and space into two-dimensional drawings. Field trips may be required.

ART 302 Elementary Drawing and Composition 3 Units

Prerequisite: ART 300 with a grade of "C" or better

Course Transferable to UC/CSU

Hours: 36 hours LEC; 54 hours LAB

This course further develops the skills and concepts introduced in ART 300. Relationships between formal elements such as line, shape, color, texture, value, perspective, and spatial relationships are covered. Emphasis is placed on creative use of materials. It also includes critiques of student, historical, and contemporary works of art. Field trips may be required.

ART 304 Figure Drawing and Composition 3 Units

Prerequisite: ART 300 with a grade of "C" or better
Course Transferable to UC/CSU
Hours: 36 hours LEC; 54 hours LAB

This course introduces and explores the understanding of the human form and structure based upon studying the history and traditions of the human figure in art. Skills are developed by drawing the nude figure from direct observation. Topics include analysis of proportion, human anatomy, and the relationship of the figure to space. Projects using a variety of line, shape, value, texture, and composition are emphasized. Field trips may be required. This course may be taken twice for credit with different emphasis of focus each time.

ART 305 Figure Drawing and Composition 3 Units

Prerequisite: ART 304 with a grade of "C" or better.
Course Transferable to UC/CSU
Hours: 36 hours LEC; 54 hours LAB

This is a combined lecture and lab class where the human figure is studied directly and in historical context. Students will study the structure, proportion, and relationship of the nude figure to compositional space and color. Students will study great works of figurative based art and will practice subjective responses to a multitude of aesthetic theories. This course may be taken twice for credit.

ART 306 Facial Expression and Anatomy 3 Units

Same As: ARTNM 320
Prerequisite: ART 300 with a grade of "C" or better
Advisory: ART 304
Course Transferable to CSU
Hours: 36 hours LEC; 54 hours LAB

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 will be addressed through a series of 2D and 3D projects. Not open to students who have taken ARTNM 320.

ART 312 Portrait Drawing 3 Units

Prerequisite: ART 300 with a grade of "C" or better
Advisory: ART 304
General Education: AA/AS Area I
Course Transferable to CSU
Hours: 36 hours LEC; 54 hours LAB

This course introduces and explores the human image in portraiture. Emphasis is on developing the skills needed to portray specific individuals, rather than a generalized image of people. This is primarily a practice course focusing on technique building, but also included are the history and traditions of portraiture. Field trips may be required. This course may be taken 2 times for credit.

ART 314 Introduction to Illustration 3 Units

Same As: ARTNM 370
Prerequisite: ART 300 with a grade of "C" or better
Course Transferable to CSU
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.

ART 317 Character Design 3 Units

Same As: ARTNM 372
Prerequisite: ART 302 with a grade of "C" or better
Advisory: ART 304 and ARTNM 302
Course Transferable to CSU
Hours: 36 hours LEC; 54 hours LAB

This course introduces the visual development of characters including anatomical structure, environment, social and psychological concerns, and costume. Both digital and traditional media are applied. This course covers the graphical development of characters for animation, games, comics, graphic novels, children's books, and illustrated novels. ARTNM 372 and/or ART 317 may be taken two times for credit covering different characters.

ART 320 Design: Fundamentals 3 Units

Same As: ARTNM 310
Advisory: ENGR 102 and ENGRD 116; OR ESLR 320 and ESLW 320
General Education: AA/AS Area I; CSU Area C1
Course Transferable to UC/CSU
Hours: 36 hours LEC; 54 hours LAB

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.

ART 322 Design: Image and Content 3 Units

Prerequisite: ART 320 with a grade of "C" or better
General Education: AA/AS Area I
Course Transferable to UC/CSU
Hours: 36 hours LEC; 54 hours LAB

This course will present problems in organizing the elements of design (line, shape, form, color, texture) into creative visual expressions. Emphasis is placed on the relationship between design (image) and content (ideas and feelings). Discussion and criticism of problems utilizing a variety of media will be included.

ART 323 Design: Color Theory 3 Units

Prerequisite: ART 320 with a grade of "C" or better
Course Transferable to UC/CSU
Hours: 36 hours LEC; 54 hours LAB

This course covers studio problems in the use and understanding of color, including its application to works of art, interior design and graphics, basics of color theory and color interchange. It also includes image and composition as related to the use of color both functionally and creatively. Field trips may be required.

ART 324 Collage and Assemblage 3 Units

Advisory: ENGR 102 or 103, ESLL 320 or ESLR 320 or ESLW 320 or placement through assessment process
General Education: AA/AS Area I; CSU Area C1
Course Transferable to CSU
Hours: 36 hours LEC; 54 hours LAB

This course investigates the alteration and creation of a dimensional surface with found and constructed materials. Topics on the history of collage and assemblage and the application of historical and contemporary techniques and concepts provide the impetus for production of works of art. Development of a personal visual language is fundamental to this course.

ART 327 Painting**3 Units**

Prerequisite: ART 300 or 320 with a grade of "C" or better
Course Transferable to UC/CSU
Hours: 36 hours LEC; 54 hours LAB

This course introduces basic techniques and materials of painting. Included is the survey of historical and contemporary development of painting with emphasis on technical skills and self expression. Field trips may be required. This course may be taken twice for credit.

ART 328 Painting**3 Units**

Prerequisite: ART 327 with a grade of "C" or better
Course Transferable to UC/CSU
Hours: 36 hours LEC; 54 hours LAB

This course is a continuation of ART 327. It covers artistic style, style development and general and specific criticism in painting. Different artists and topics are covered each semester. This course may be taken twice for credit. Field trips may be required.

ART 329 Painting II**3 Units**

Prerequisite: ART 327 with a grade of "C" or better
Course Transferable to UC/CSU
Hours: 36 hours LEC; 54 hours LAB

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. This course may be taken twice for credit.

ART 336 Watercolor Painting**3 Units**

Prerequisite: ART 300 or 320 with a grade of "C" or better
Course Transferable to UC/CSU
Hours: 36 hours LEC; 54 hours LAB

This course is an introduction to the medium of transparent watercolor. It covers techniques of brush painting, traditional and contemporary approaches to composition, color relationships, and artistic style in watercolor. Different artists and topics are covered each semester. This course may be taken twice for credit.

ART 337 Intermediate Watercolor Painting**3 Units**

Prerequisite: ART 336 with a grade of "C" or better
Course Transferable to UC/CSU
Hours: 36 hours LEC; 54 hours LAB

This is an intermediate watercolor course. It includes an in-depth study of contemporary methods and concepts in transparent watercolor. Emphasis is given to different approaches to watercolor, as well as composition, technical problems and solutions, and individual style development. Each semester different artists are discussed to illustrate concepts and techniques. Field trips may be required. This course may be taken twice.

ART 339 Media Studio I: Pigment-Based Media**3 Units**

Same As: ARTNM 331
General Education: AA/AS Area I
Course Transferable to CSU
Hours: 36 hours LEC; 54 hours LAB

This course combines the materials and techniques used in both new media technology and traditional art practices and explores a wide variety of ideas, tools, and resources associated with pigment-based media. Topics include history, theory, and practice surrounding digital and traditional image generation, as well as 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. ART 339 and/or ARTNM 331 may be taken a total of 4 times for credit using different techniques.

ART 361 Printmaking: Survey**3 Units**

Prerequisite: None
Course Transferable to UC/CSU
Hours: 36 hours LEC; 54 hours LAB

This course covers various printmaking techniques, which may include relief printing (wood, linoleum, collograph, and rubber), monotype, stencil (silkscreen printing), and repetitive stencil printing. Each semester different artists and/or visual examples are discussed. Field trips may be required. This course may be taken twice.

ART 370 Three Dimensional Design**3 Units**

Advisory: ENGWR 102 or 103 and ENGRD 116 or ESLR 320, ESLL 320, ESLW 320, or placement through assessment process.
General Education: CSU Area C1
Course Transferable to UC/CSU
Hours: 36 hours LEC; 54 hours LAB

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; wire, plaster, cardboard and paper. May be taken twice for credit.

ART 371 Foundry Casting for Sculpture**3 Units**

Prerequisite: None
Course Transferable to CSU
Hours: 36 hours LEC; 54 hours LAB

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. This course may be taken four times for credit.

ART 372 Sculpture**3 Units**

Advisory: ENGWR 102 or 103 and ENGRD 116 or ESLR 320, ESLL 320, ESLW 320, or placement through assessment process.
General Education: CSU Area C1
Course Transferable to UC/CSU
Hours: 36 hours LEC; 54 hours LAB

This course provides basic practice in the expressive use of form and color in three-dimensional space using traditional additive and subtractive media such as clay and plaster, as well as constructive media such as wood, found objects, and other materials. The 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.

ART 373 Intermediate Sculpture 3 Units

Prerequisite: ART 372 with a grade of "C" or better
Advisory: ENGWR 102 or 103 and ENGRD 116 or ESLR 320, ESLL 320, ESLW 320, or placement through assessment process.
Course Transferable to UC/CSU
Hours: 36 hours LEC; 54 hours LAB

This is an intermediate course in the practice of the expressive use of form and color in three-dimensional space. It utilizes traditional additive and subtractive media such as clay and plaster, as well as constructive media such as metal, wood, found objects, and other materials. It 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. It develops the ability to process visual information and create expressive objects in three dimensions.

ART 374 Sculpture Lab 1-2 Units

Corequisite: ART 120, 122, 324, 370, 371, 372, 373, or 375
Course Transferable to UC/CSU
Hours: 108 hours LAB

This course offers laboratory experience to assist in completing complex sculpture projects. The course focuses on the development of a personal creative vision furthering technical skills and complex problem solving. It may be taken four times for credit.

ART 375 Figure Sculpture 3 Units

Prerequisite: None
Advisory: ART 304.
Course Transferable to UC/CSU
Hours: 36 hours LEC; 54 hours LAB

This course introduces figure sculpture, using the live nude model as a reference. It will develop an understanding of the human form as it relates to both modern and traditional sculpture. These concepts will be developed by making studio projects using a variety of sculptural material. The projects will combine new understanding of human form with imagination, for a more complete expression of technique and creativity. May be taken twice for credit.

ART 382 Metal Design: Emphasis in Mixed Media 3 Units

Prerequisite: None
Advisory: ENGWR 102 or 103 and ENGRD 116 or ESLR 320, ESLL 320, ESLW 320, or placement through assessment process.
Course Transferable to CSU
Hours: 36 hours LEC; 54 hours LAB

This course covers contemporary approaches to mixed media in small metal sculpture and jewelry. Basic small glasswork, enameling, plastics, etching, reticulation and granulation will be studied. May be taken twice for credit.

ART 383 Metal Design: Emphasis In Fabrication 3 Units

Course Transferable to CSU
Hours: 36 hours LEC; 54 hours LAB

This course covers contemporary approaches to fabrication for bench jewelry repair and manufacturing. Jewelry projects utilize processes of fabrication including soldering, forming, stone setting and cutting of metals. Basic use of tools and techniques for use with jeweler's metals are covered. This course may be taken twice for credit.

ART 384 Metal Design: Emphasis In Casting 3 Units

Course Transferable to CSU
Hours: 36 hours LEC; 54 hours LAB

This course covers contemporary approaches to casting techniques, mold making, and wax patterns used for jewelry repair and production. Aspects of metal casting for small-scale jewelry and jewelry-part replacement are studied. Basic methods and techniques for wax working, kiln burnout, centrifugal, vacuum and gravity casting, vulcanized rubber molds and metal finishing are emphasized. This course may be taken twice for credit.

ART 385 Metal Arts Lab 1-2 Units

Prerequisite: None
Corequisite: Current enrollment in ART 382 or 383 or 384.
Course Transferable to CSU
Hours: 108 hours LAB

This course offers laboratory experience to assist in completing complex metal art projects. The course focuses on the development of a personal creative vision furthering technical skills, and complex problem solving. May be taken three times.

ART 390 Ceramics 3 Units

General Education: CSU Area C1
Course Transferable to UC/CSU
Hours: 36 hours LEC; 54 hours LAB

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.

ART 391 Intermediate Ceramics 3 Units

Prerequisite: ART 390 with a grade of "C" or better
Course Transferable to UC/CSU
Hours: 36 hours LEC; 54 hours LAB

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. This course may be taken twice for credit.

ART 392 Ceramic Lab 1-2 Units

Corequisite: Currently enrolled in ART 390, 391, 397, or 398.
Course Transferable to UC/CSU
Hours: 108 hours LAB

This course offers laboratory experience to assist in completing complex ceramic projects. It focuses on the development of personal creative vision, furthering technical skills, and complex problem solving. This course may be taken four times for credit. UC credit granted only if taken concurrently with ART 390 or 391.

ART 397 Alternative Firing Processes in Ceramics 3 Units

Prerequisite: ART 390 with a grade of "C" or better
Course Transferable to CSU
Hours: 36 hours LEC; 54 hours LAB

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. This course may be taken four times for credit.

ART 398 Ceramic Murals and Tiles 3 Units

Prerequisite: ART 390 with a grade of "C" or better

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This is a course in 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. Different artists, techniques, and projects are explored each semester. This course may be taken four times for credit.

ART 420 Film Making 2 Units

General Education: CSU Area C1

Course Transferable to UC/CSU

Hours: 18 hours LEC; 54 hours LAB

This course involves discussion and studio participation relating to the structural, technical and intellectual aspects of film making. Work by contemporary film makers will be used to supplement class lectures and criticism. The student choosing to make an individual film must furnish camera, film and processing. Equipment and materials are supplied for students participating in a group film.

ART 422 Film Making 3 Units

Prerequisite: Art 420 with a grade of "C" or better.

Course Transferable to UC/CSU

Hours: 36 hours LEC; 72 hours LAB

This course is a continuation of Art 29A. It is designed for the more serious filmmaking student who will be given the opportunity to explore the motion picture medium more extensively. The student choosing to make an individual film must furnish camera, film and processing. Equipment and materials are supplied for students participating in a group film.

ART 430 Art and Children 3 Units

Advisory: ENGWR 102 or 103 and ENGRD 116 or ESLR 320, ESLL 320, ESLW 320, or placement through assessment process.

General Education: AA/AS Area I; CSU Area C1

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course introduces the use of artists' materials and techniques appropriate for teaching art to children. It includes the study of art history, movements, concepts, and techniques of creating drawings, paintings, and sculptures to inform classroom instruction with children.

ART 432 Art for Children Practicum 2-4 Units

Prerequisite: ART 320; ART 300; and one Art History (ARTH) course.

Course Transferable to CSU

Hours: 36 hours LEC; 108 hours LAB

This practicum class provides students with the opportunity to participate in preschools, elementary or junior high schools and to work with credential lead teachers as "art tutors."

ART 440 Artists' Materials and Techniques 3 Units

Advisory: ENGWR 102 or 103, ESLL 320 or ESLR 320 or ESLW 320 or placement through assessment process

General Education: AA/AS Area I

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course focuses on developing and analyzing media used in the creation of paintings and drawings. Information about the various materials, their relationship to personal imagery and style, in both traditional and contemporary painting and drawing is emphasized. Study in the composition of pigments, paints, oil mediums, inks, dyes, pastel, crayon, fresco and other artists' materials (egg tempera, silver point, encaustic) are fundamental to the course. Included are the use of tools and materials in constructing painting supports and carriers, and techniques of matting and framing art work.

ART 442 Art Gallery Operations 2 Units

Prerequisite: Two college art courses.

Course Transferable to CSU

Hours: 18 hours LEC; 54 hours LAB

This course covers gallery preparation and maintenance for students grounded in fundamentals of the visual arts. It involves experience in planning and installing exhibitions.

ART 444 Art Gallery and Portfolio Preparation 3 Units

Prerequisite: ART 442 with a grade of "C" or better.

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

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 (portfolio management). Emphasis is on the selection of exhibitions, announcements, and receptions in addition to photographing art and preparing artists' statements and resumes. Field trips to galleries and museums are required. This course may be taken twice for credit.

ART 470 Art Lab 1-2 Units

Coverequisite: ART 300, 302, 304, 305, 306, 314, 320, 322, 323, 324, 327, 328, 329, 336, 337, 361, or 440

Course Transferable to CSU

Hours: 108 hours LAB

This course offers laboratory experience to assist in completing complex art projects. The course focuses on the development of a personal creative vision, furthering technical skills and complex problem-solving. It may be taken four times for credit with differing co-requisites and/or projects.

ART 494 Topics in Art .5-4 Units

Prerequisite: None

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course is designed to offer an opportunity to study topics not included in current course offerings. Practicing artisans will present hands-on workshops demonstrating their craft. Topics may include bronze casting, glass blowing, and air brush painting. This course may be taken 4 times for a maximum of 6 units.

Art History

ARTH 300 Introduction to Art 3 Units

Advisory: ENGWR 102 or 103 and ENGRD 116 or ESLR 320, ESLL 320, ESLW 320, or placement through assessment process.
General Education: AA/AS Area I; CSU Area C1; IGETC Area 3A
Course Transferable to UC/CSU
Hours: 54 hours LEC

This course is a survey 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.

ARTH 302 Art: Stone Age Through the Middle Ages 3 Units

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; OR placement through assessment process.
General Education: AA/AS Area I; CSU Area C1; IGETC Area 3A
Course Transferable to UC/CSU
Hours: 54 hours LEC

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.

ARTH 308 Renaissance Tradition in Art 3 Units

Advisory: ENGWR 102 or 103 and ENGRD 116 or ESLR 320, ESLL 320, ESLW 320, or placement through assessment process.
General Education: AA/AS Area I; CSU Area C1; IGETC Area 3A
Course Transferable to UC/CSU
Hours: 54 hours LEC

This course is a study of painting, sculpture and architecture of European and U.S. cultures from the 14th century early Renaissance to the 19th century pre-Impressionist period. Outstanding art works of each major period are discussed, analyzed, and placed within an historical context.

ARTH 310 Modern Art 3 Units

Advisory: ENGWR 102 or 103 and ENGRD 116 or ESLR 320, ESLL 320, ESLW 320, or placement through assessment process.
General Education: AA/AS Area I; CSU Area C1; IGETC Area 3A
Course Transferable to UC/CSU
Hours: 54 hours LEC

This course is a study and discussion of the historical evolution of fine arts from the 1850s through the 1970s. Examples showing the relationships between various techniques and styles in Modern Art are analyzed. Field trips to art galleries or museums may be required.

ARTH 322 Art History of the Non-Western World 3 Units

Advisory: ENGWR 102 or 103 and ENGRD 116 or ESLR 320, ESLL 320, ESLW 320, or placement through assessment process.
General Education: AA/AS Area I; AA/AS Area VI; CSU Area C1; IGETC Area 3A
Course Transferable to UC/CSU
Hours: 54 hours LEC

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 visitations to art galleries and museums are required.

ARTH 333 Introduction to Islamic Art 3 Units

General Education: AA/AS Area I; CSU Area C1; IGETC Area 3A
Course Transferable to UC/CSU
Hours: 54 hours LEC

This course studies the art and culture of Islam. It primarily focuses on Islamic art and architecture and provides fundamental information on the formation of Islamic art, its history and philosophy. It identifies works of art produced by artists from Muslim countries and regions. This course includes but is not limited to visual examples from Arabic, Persian and Indian cultures. Field trips may be required.

ARTH 334 International Contemporary Art 3 Units

General Education: AA/AS Area I; CSU Area C1; IGETC Area 3A
Course Transferable to UC/CSU
Hours: 54 hours LEC

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. Social and political commentary in art are another primary focus. A field trip to a local art exhibition may be required.

Art Photography

ARTPH 300 Basic Art Photography 3 Units

Advisory: ENGWR 102 or 103, ESLL 320 or ESLR 320 or ESLW 320 or placement through assessment process
General Education: AA/AS Area I; CSU Area C1
Course Transferable to UC/CSU
Hours: 36 hours LEC; 54 hours LAB

This course consists of a structured examination of the formal and technical aspects of 35mm photography. Topics include critiques of major movements in the history of photography and contemporary silver process artists. A problem-solving approach is utilized to explore compositional ideas. Camera operation, black and white film developing, and printmaking are covered. Digital photography concepts are introduced. A 35mm single lens reflex (SLR) camera as well as darkroom and portfolio supplies are required. Processing chemicals are provided.

ARTPH 305 Digital Photography 3 Units

Advisory: ARTNM 302
Course Transferable to UC/CSU
Hours: 36 hours LEC; 54 hours LAB

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, re-writable CD's and memory devices are required. Field trips may be required.

ARTPH 310 Intermediate Photography 3 Units

Prerequisite: ARTPH 300 or 305 with a grade of "C" or better
Course Transferable to CSU
Hours: 36 hours LEC; 54 hours LAB

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) camera or digital camera with manual options as well as darkroom and portfolio supplies are required. Different artists and topics are covered each semester. This course may be taken twice for credit.

ARTPH 315 Trends in Software and Social Media for Photographers 3 Units

Advisory: ENGWR 102 and ENGRD 116 with grades of "C" or better; OR ESLL 320 and ESLW 320 with grades of "C" or better.

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

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. It may be taken 4 times for credit on different software versions.

ARTPH 322 Color Photography 3 Units

Prerequisite: ARTPH 300 and 305 with grades of "C" or better

Course Transferable to UC/CSU

Hours: 36 hours LEC; 54 hours LAB

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, 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.

ARTPH 340 Alternative Process Photography 3 Units

Advisory: ENGWR 102 or 103, ESLL 320 or ESLR 320 or ESLW 320; or placement through assessment process.

General Education: AA/AS Area I

Course Transferable to UC/CSU

Hours: 36 hours LEC; 54 hours LAB

This course covers photographic printing processes produced in sunlight. No camera is necessary. Processes such as kallitype, cyanotype, Van Dyke brown printing, and gum printing are covered. It includes the history of photographic processes from the daguerreotype to the digital age. Negatives are produced from digital transparencies, xerox transparencies, ortho-litho film and natural objects. Printing on paper, fabric, wood and ceramics is covered. Papers and printing surfaces, brushes, memory storage devices and safety glasses are required. Field trips may be required. Different topics, artists, and processes are covered each semester. This course may be taken twice for credit.

ARTPH 350 Documentary Photography 3 Units

Prerequisite: ARTPH 300 or 305 with a grade of "C" or better

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course provides instruction in documentary photography and photojournalism techniques. Film developing, printing and digital processing 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 with manual options as well as darkroom and portfolio supplies are required. Field trips may be required.

ARTPH 360 Studio Lighting 3 Units

Prerequisite: ARTPH 300 or 305 with a grade of "C" or better

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course is a study in studio lighting techniques used in photography. Topics include lighting ratios, correct exposure using an electronic flash, basic portraiture, advertising, choice of camera formats and film, 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 with manual option as well as darkroom and portfolio supplies are required. Field trips are required.

ARTPH 370 Fashion, Wedding, and Portrait Photography 3 Units

Prerequisite: ARTPH 300 or 305 with a grade of "C" or better

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

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. It also includes studio portrait lighting and styling techniques specific to fashion, wedding, and portrait photography. Wedding photo-journalism is also covered. A 35mm single lens reflex (SLR) film camera or digital camera with manual options and darkroom supplies are required. Fashion shoots are required. Field trips may be required.

ARTPH 375 Freelance Photography Careers 2 Units

Advisory: ENGWR 102 and ENGRD 116 with grade of "C" or better; OR ESLL 320 or ESLW 320 with grade of "C" or better

Course Transferable to CSU

Hours: 36 hours LEC

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. Preparing, presenting, and implementing freelance photography career plans are covered.

ARTPH 490 Photography Lab 1 Unit

Corequisite: Concurrent enrollment in: ARTPH 300, ARTPH 305, ARTPH 310, ARTPH 320, ARTPH 340, ARTPH 350, ARTPH 360, ARTPH 370, or ARTPH 495.

Course Transferable to UC/CSU

Hours: 54 hours LAB

This course offers additional lab hours to more fully develop creative vision and technical skills. It provides additional assistance in assignments and portfolio development. It may be taken four times for credit with differing photography co-requisites.

Area: Fine & Applied Arts
 Dean: Dr. Adam Karp
 Phone: (916) 484-8433
 Counseling: (916) 484-8572

Degree: A.A. - Art New Media
 A.A. - Technical Communications
 Certificates: Graphic Design
 Illustration
 3D Animation
 Web Design
 Technical Communications

DEGREES AND CERTIFICATES

Art New Media Degree

The Art New Media program emphasizes visual arts produced in a digital environment. While all new media are intimately linked to new technology, it is essential for a designer or artist to have a strong foundation in the fundamentals of visual art. Course work includes a wide spectrum of studies in traditional and new media fundamentals relevant to art and design.

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

Requirements for Degree 40.5 Units

ART 300	Elementary Drawing and Composition.....	3
ART 320	Design: Fundamentals (3)	3
or ARTNM 310	Design: Fundamentals (3)	
ART 323	Design: Color Theory.....	3
ARTH 310	Modern Art	3
ARTNM 302	Digital Basics for Art New Media	1.5
ARTNM 305	History of Graphic Design	3
And a minimum of 24 units from the following:		24

ART 306	Facial Expression and Anatomy (3)	
or ARTNM 320	Facial Expression and Anatomy (3)	
ARTNM 303	Graphic Design: Typography (3)	
ARTNM 324	Digital Design (3)	
ARTNM 325	Intermediate Digital Design (3)	
ARTNM 326	Digital Painting (3)	
ARTNM 328	Digital Photo Imagery - PhotoShop Basics (3)	
ARTNM 330	Intermediate Digital Photo Imagery (3)	
ARTNM 332	Digital Video (3)	
ARTNM 352	Design for Publication (3)	
ARTNM 354	Digital Prepress (3)	
ARTNM 356	Advanced Projects In Graphic Design (3)	
ARTNM 358	College Magazine: Art Selection and Editing (1 - 2)	
ARTNM 359	College Magazine: Design and Production (3)	
ARTNM 370	Introduction to Illustration (3)	
or ART 314	Introduction to Illustration (3)	
ARTNM 401	Introduction to Web Design (3)	
or CISW 307	Introduction to Web Development and Design (3)	
ARTNM 402	Intermediate Web Design (3)	
ARTNM 404	Interactive Basics (3)	
ARTNM 405	Digital 2D Animation (3)	
ARTNM 410	Interactive Projects (4)	
ARTNM 420	Introduction to 3D Modeling (3)	
ARTNM 421	3D Character Modeling and Riggin (3)	

ARTNM 422	3D Character Animation (3)
ARTNM 423	3D Texturing (3)
ARTNM 431	3D Short Production (3)
ARTNM 450	Portfolio for Art New Media (3)
CISW 300	Web Publishing (3)
WEXP 498	Work Experience in (Subject) (1 - 4)

Associate Degree Requirements: 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.

Graphic Design Certificate

The Graphic Design certificate offers a curriculum utilizing software applications, industry-standard hardware as well as developing the typographic/fundamental and technical skills necessary for today's workplace. This certificate 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. Students are encouraged to continue their studies in graphic design at a four year college, or encouraged to choose an entry level position in the graphic design industry.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- analyze and formulate visual communication ideas using graphic design principles and standards
- justify the historical role of typography as a communication device and know how the graphic design field fits into today's multimedia environment
- create and assemble two-dimensional media projects taking into account form, composition, color and heirarchy of information
- manage and use technological tools used by the graphic design industry, being able to use the right tool for the right job
- evaluate problems generated by clients and execute visual responses through research, thumbnails, roughs, design development and presentation

Requirements for Certificate 38.5-41.5 Units

ART 323	Design: Color Theory	3
ARTNM 302	Digital Basics for Art New Media	1.5
ARTNM 303	Graphic Design: Typography	3
ARTNM 305	History of Graphic Design	3
ARTNM 310	Design: Fundamentals (3)	3
or ART 320	Design: Fundamentals (3)	
ARTNM 324	Digital Design	3
ARTNM 325	Intermediate Digital Design	3
ARTNM 328	Digital Photo Imagery - PhotoShop Basics	3

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(Graphic Design Certificate continued)

ARTNM 330	Intermediate Digital Photo Imagery	3
ARTNM 352	Design for Publication	3
ARTNM 354	Digital Prepress	3
ARTNM 356	Advanced Projects In Graphic Design	3
ARTNM 450	Portfolio for Art New Media	3
WEXP 498	Work Experience in (Subject)	1 - 4

Illustration Certificate

The Illustration certificate combines a strong foundation of traditional fine arts courses and courses using digital media. Illustration skills are used in animation and concept and character development as well as the traditional areas of editorial, advertising, technical and book illustration.

This certificate focuses on drawing and painting skills in both the traditional and digital environments. Students are encouraged to continue their studies in illustration at a four year college, or encouraged to choose an entry level position in the illustration industry.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- create drawn and painted objects and the human figure from direct observation
- analyze the principles of color theory
- assess the most effective color harmony to enhance the viewer's understanding of the content of an illustration or animation
- synthesize concepts of modern art history and apply them to illustrations and animation effectively communicate within contemporary culture
- create images utilizing traditional and/or digital media
- conceive visual solutions for a client within a defined timeframe

Requirements for Certificate **37.5 Units**

ART 300	Elementary Drawing and Composition.....	3
ART 304	Figure Drawing and Composition	3
ART 323	Design: Color Theory.....	3
ART 327	Painting (3).....	3
or ART 336	Watercolor Painting (3)	
ARTH 310	Modern Art	3
ARTNM 302	Digital Basics for Art New Media.....	1.5
ARTNM 310	Design: Fundamentals (3)	3
or ART 320	Design: Fundamentals (3)	
ARTNM 324	Digital Design.....	3
ARTNM 326	Digital Painting	3
ARTNM 370	Introduction to Illustration (3).....	3
or ART 314	Introduction to Illustration (3)	
ARTNM 404	Interactive Basics.....	3
ARTNM 405	Digital 2D Animation	3
ARTNM 450	Portfolio for Art New Media	3

3D Animation Certificate

The 3D Animation certificate combines a strong foundation of traditional fine arts courses and courses using digital media. 3D animation skills are used in the film, game, broadcast, and web industries. This certificate focuses on drawing, sculptural, and photographic skills in the traditional and digital environments. Students are encouraged to continue their studies in 3D animation at a four-year college or to choose an entry level position in the 3D animation industry.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Create digital models from direct observation
- Analyze traditional sculpture and photography techniques
- Analyze the principles of animation
- Assess the most effective harmony of space and form to enhance the viewer's understanding of the content of a 3D digital stage or animation
- Synthesize concepts of modern art history and apply them to 3D short films
- Synthesize contemporary 3D animation techniques

Requirements for Certificate **40.5-43.5 Units**

ART 300	Elementary Drawing and Composition.....	3
ART 304	Figure Drawing and Composition	3
ART 375	Figure Sculpture	3
ART 420	Film Making	2
ARTNM 302	Digital Basics for Art New Media.....	1.5
ARTNM 320	Facial Expression and Anatomy (3)	3
or ART 306	Facial Expression and Anatomy (3)	
ARTNM 326	Digital Painting.....	3
ARTNM 328	Digital Photo Imagery - PhotoShop Basics	3
ARTNM 420	Introduction to 3D Modeling.....	3
ARTNM 421	3D Character Modeling and Rigging.....	3
ARTNM 422	3D Character Animation	3
ARTNM 423	3D Texturing.....	3
ARTNM 431	3D Short Production	3
ARTNM 450	Portfolio for Art New Media	3
WEXP 498	Work Experience in (Subject).....	1 - 4

Web Design Certificate

The Web Design certificate incorporates graphic design, multimedia, and web technology through the fundamentals of design and industry standard software applications. This certificate focuses on the visual aspect of web design. Web design skills are used in business, government, educational institutions, and the entertainment industry. Students are encouraged to continue their studies in interactive design at a four year college, or encouraged to choose an entry level position in the web design industry.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- assemble complex static and dynamic web pages/web sites using current technology
- design complex static and dynamic web pages/web sites using visual design concepts
- evaluate content needs for target audience
- assess the most effective navigation flow
- create digital layout utilizing traditional and/or digital methods
- conceive visual solutions for a client within a defined timeframe

Requirements for Certificate **42.5-45.5 Units**

ARTNM 302	Digital Basics for Art New Media.....	1.5
ARTNM 310	Design: Fundamentals (3)	3
or ART 320	Design: Fundamentals (3)	
ARTNM 324	Digital Design.....	3
ARTNM 325	Intermediate Digital Design.....	3
ARTNM 328	Digital Photo Imagery - PhotoShop Basics	3
ARTNM 330	Intermediate Digital Photo Imagery	3
ARTNM 332	Digital Video	3

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(Web Design Certificate continued)

ARTNM 352	Design for Publication.....	3
ARTNM 401	Introduction to Web Design (3)	3
or CISW 307	Introduction to Web Development and Design (3)	
ARTNM 402	Intermediate Web Design.....	3
ARTNM 404	Interactive Basics (3).....	3
or CISW 365	Interactive Multimedia Basics (3)	
ARTNM 410	Interactive Projects	4
ARTNM 450	Portfolio for Art New Media	3
CISW 300	Web Publishing	3
WEXP 498	Work Experience in (Subject).....	1 - 4

Technical Communications Degree

The Technical Communications degree program is an interdisciplinary course of study designed to prepared 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.

Career Opportunities

Technical communicators may be employed in a variety of occupations in government, scientific firms, nonprofits, natural resources, finance, education, and high tech.

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.

Requirements for Degree 32 Units

CISA 305	Beginning Word Processing	2
CISW 300	Web Publishing	3
ENGWR 342	Introduction to Technical/Professional Communication ...	3
ENGWR 344	Technical/Professional Communication: Writing Reports ...	1.5
ENGWR 348	Technical/Professional Communication: Plain English	1.5
ENGWR 350	Technical/Professional Communication: Proposal Writing.....	1.5
ENGWR 352	Technical/Professional Communication: Writing Technical Manuals	3
ENGWR 353	Technical/Professional Communication: Developing Help Systems.....	1.5
JOUR 300	Newswriting and Reporting.....	3

And a minimum of 12 units from the following: 12

ARTNM 328	Digital Photo Imagery - PhotoShop Basics (3)
ARTNM 330	Intermediate Digital Photo Imagery (3)
ARTNM 352	Design for Publication (3)
or [CISA 330	Desktop Publishing (2)
and CISA 331	Intermediate Desktop Publishing (2)]

ARTNM 401	Introduction to Web Design (3)
or CISW 307	Introduction to Web Development and Design (3)
ARTNM 402	Intermediate Web Design (3)
ARTNM 404	Interactive Basics (3)
CISW 310	Advanced Web Publishing (4)

Associate Degree Requirements: 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.

Technical Communications Certificate

The Technical Communications certificate offers an interdisciplinary program of courses in writing, 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.

Career Opportunities

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.

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 printed pages and online screens that communicate organizations' values, enhance readability, and are easy to use.
- demonstrate basic skills in the use of key word processing, page design, help development, and web design applications.
- evaluate organizations' communication goals with technical writing ethics in mind.

Requirements for Certificate 21.5-22.5 Units

ARTNM 352	Design for Publication (3)	3 - 4
or [CISA 330	Desktop Publishing (2)	
and CISA 331	Intermediate Desktop Publishing (2)]	
CISA 305	Beginning Word Processing	2
CISW 300	Web Publishing	3
ENGWR 342	Introduction to Technical/Professional Communication.....	3
ENGWR 352	Technical/Professional Communication: Writing Technical Manuals	3
ENGWR 353	Technical/Professional Communication: Developing Help Systems.....	1.5

And a minimum of 6 units from the following: 6

ARTNM 328	Digital Photo Imagery - PhotoShop Basics (3)
ARTNM 330	Intermediate Digital Photo Imagery (3)
ARTNM 401	Introduction to Web Design (3)
ARTNM 402	Intermediate Web Design (3)
ARTNM 404	Interactive Basics (3)
CISW 307	Introduction to Web Development and Design (3)
CISW 310	Advanced Web Publishing (4)

Art New Media

ARTNM 302 Digital Basics for Art New Media 1.5 Units

Prerequisite: None

Course Transferable to CSU

Hours: 18 hours LEC; 27 hours LAB

This course is an introduction to the digital environment for Art New Media. Topics of MAC OS, digital vocabulary, scanning, saving and file formats will be included. Distinctions between vector, bitmap, and page layout applications will be made using Adobe Illustrator, Adobe Photoshop, and Adobe InDesign.

ARTNM 303 Graphic Design: Typography 3 Units

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

Graphic design is the art of visual communication and this course introduces the tools and concepts of visual thinking, with an emphasis on the potential of typography as an effective communications tool. Historical overviews, portfolio development and client presentation paired with the terminology and visual language of design are applied through the creation and evaluation of individual projects.

ARTNM 305 History of Graphic Design 3 Units

General Education: AA/AS Area I; CSU Area C1

Course Transferable to CSU

Hours: 54 hours LEC

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. An analysis of design from a wide range of sources and cultures is a primary focus.

ARTNM 310 Design: Fundamentals 3 Units

Same As: ART 320

Advisory: ENGWR 102 and ENGRD 116; OR ESLR 320 and ESLW 320

General Education: AA/AS Area I; CSU Area C1

Course Transferable to UC/CSU

Hours: 36 hours LEC; 54 hours LAB

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 ART 320.

ARTNM 320 Facial Expression and Anatomy 3 Units

Same As: ART 306

Prerequisite: ART 300 with a grade of "C" or better

Advisory: ART 304

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

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 will be addressed through a series of 2D and 3D projects. This course is not open to students who have taken ART 306.

ARTNM 324 Digital Design 3 Units

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; and ART 300 or 320 and ARTNM 302

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course is an introduction to fundamental design principles using the basic tools of Adobe Illustrator. Design skills and the tools of the software application are applied to produce individual portfolio quality projects. This course may be taken four times on different versions.

ARTNM 325 Intermediate Digital Design 3 Units

Prerequisite: ARTNM 324 with a grade of "C" or better.

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course is a continuation of ARTNM 324. It defines the elements of graphic design, such as typography, gestalt, dominance, hierarchy, balance, and color. These issues are applied to the typographic tools and imaging capabilities of Adobe Illustrator. Concepts emphasize typographic design and the relationship between type and image.

ARTNM 326 Digital Painting 3 Units

Prerequisite: None

Advisory: ARTNM 302, ART 300.

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course introduces the basic operating principles of Corel Painter to create and manipulate images. The fundamental skills of drawing and painting will be applied to individual portfolio quality projects. This course may be taken four times on different platforms.

ARTNM 328 Digital Photo Imagery – PhotoShop Basics 3 Units

Advisory: ART 320; CISC 300 (Macintosh); 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.

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course is an introduction to computer-based photographic imaging using the basic operating principles of Adobe PhotoShop. Topics include color field variation, retouching, and the integration of graphics and photographs. The tools of the software application are applied to produce individual portfolio quality projects. This course may be taken four times for credit on a different version.

ARTNM 330 Intermediate Digital Photo Imagery 3 Units

Prerequisite: ARTNM 328 with a grade of "C" or better; or placement through the assessment process.

Course Transferable to UC/CSU

Hours: 36 hours LEC; 54 hours LAB

This course addresses the intermediate techniques of digital photo imagery. 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. This course may be taken four times for credit on a different software package or version.

**ARTNM 331 Media Studio I:
Pigment-Based Media 3 Units**

Same As: ART 339

General Education: AA/AS Area I

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course combines the materials and techniques used in both new media technology and traditional art practices and explores a wide variety of ideas, tools, and resources associated with pigment-based media. Topics include history, theory, and practice surrounding digital and traditional image generation, as well as 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. ARTNM 331 and/or ART 339 may be taken a total of 4 times for credit using different techniques.

ARTNM 332 Digital Video 3 Units

Prerequisite: None

Advisory: ARTNM 302 and 328

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course applies the principles of cinematography to the production of digital video. Software applications such as Adobe Premiere and Adobe After Effects, will be employed to capture/import, edit and produce high-end visual productions. The course includes transitions, multiple layers, alpha channels and composite blue screen segments. Evaluation of multimedia projects containing video segments in terms of design esthetics and technical and technical competence will also be included. This course may be taken four times on a different software package or version.

ARTNM 352 Design for Publication 3 Units

Advisory: ART 320 or ARTNM 310 AND ARTNM 302

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

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 promotionals, such as fliers, posters, and brochures is also included. This course may be taken four times on different software versions.

ARTNM 354 Digital Prepress 3 Units

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

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

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. This course may be taken four times for credit on different software or software versions.

ARTNM 355 Packaging Design 3 Units

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course introduces the basic principles of package design using multiple software applications. Emphasis is on applying graphic design principles and elements in the development of three dimensional products. Projects are created emphasizing the application of visual identity elements, such as branding and color themes that would be effective in the commercial marketing environment. A portfolio of professional level projects is developed and presented.

**ARTNM 356 Advanced Projects
In Graphic Design 3 Units**

Prerequisite: None

Advisory: ARTNM 324, 328, and 352

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course covers project development and multiple software applications. Emphasis will be placed on project analysis, research, production, and presentation. Projects will be produced through the integration of major graphics applications in page layout, vector based graphics and digital imaging. A portfolio of professional level projects will be developed and presented.

**ARTNM 358 College Magazine:
Art Selection and Editing 1-2 Units**

Advisory: ARTH 300 and ARTNM 302

Course Transferable to CSU

Hours: 24 hours LEC; 36 hours LAB

This course introduces production techniques and evaluation criteria for art submissions for a college level magazine. Techniques for print quality photography of art are demonstrated. Criteria for the selection of artwork are defined and applied to the editing process. Art works such as drawing, painting, photography, sculpture, jewelry, ceramics and digital media are selected and digitized for production. These images are used as visual content for the American River Review. This course may be taken two times for credit.

**ARTNM 359 College Magazine:
Design and Production 3 Units**

Prerequisite: None

Advisory: ARTNM 302, 324, 328, 352, or 354

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course is for the design and production of the American River Review. It incorporates creative writing from the English program and visual art from Fine Arts and Art New Media as the content for the college magazine, American River Review. Practical experience with layout is offered, establishing an esthetic relationship between the literary content and the visual image. Print production issues are addressed through the digital preparation of the magazine for print distribution. This course may be taken twice for credit.

ARTNM 370 Introduction to Illustration 3 Units

Same As: ART 314

Prerequisite: ART 300 with a grade of "C" or better

Course Transferable to CSU

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 ART 314.

ARTNM 372 Character Design**3 Units***Same As: ART 317**Prerequisite: ART 302 with a grade of "C" or better**Advisory: ART 304 and ARTNM 302**Course Transferable to CSU**Hours: 36 hours LEC; 54 hours LAB*

This course introduces the visual development of characters including anatomical structure, environment, social and psychological concerns, and costume. Both digital and traditional media are applied. This course covers the graphical development of characters for animation, games, comics, graphic novels, children's books, and illustrated novels. ARTNM 372 and/or ART 317 may be taken two times for credit covering different characters.

ARTNM 401 Introduction to Web Design**3 Units***Course Transferable to CSU**Hours: 36 hours LEC; 54 hours LAB*

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. The course introduces the basics of layout for visual communication by tightly integrating the design concepts with technical execution in a web environment. Industry-standard authoring tools are applied. Meaning and validity of interactivity are closely examined. This course may be taken 4 times for credit on different platforms or software versions.

ARTNM 402 Intermediate Web Design**3 Units***Prerequisite: ARTNM 328, ARTNM 401, or CISW 307 with a grade of "C" or better; or placement through the assessment process.**Advisory: ARTNM 330 and CISW 300**Course Transferable to CSU**Hours: 36 hours LEC; 54 hours LAB*

This course covers production and intermediate design processes for the web with an emphasis on visual design. Various industry standard software applications are employed 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. This course may be taken four times on a different software package or version.

ARTNM 404 Interactive Basics**3 Units***Advisory: ARTNM 324 or 402**Course Transferable to CSU**Hours: 36 hours LEC; 54 hours LAB*

This course introduces the design and delivery of Flash-based rich interactive content suitable for immersive graphical experiences across personal computers, mobile devices, and screens. Topics include generating interactivity between vector-based graphics, animation and movies, and the integration of sound, raster graphics, and 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 rich media projects. This course may be taken 4 times for credit on different platforms or software versions.

ARTNM 405 Digital 2D Animation**3 Units***Prerequisite: None**Advisory: ART 300 and ARTNM 302**Course Transferable to CSU**Hours: 36 hours LEC; 54 hours LAB*

The course studies techniques in 2D animation and 2D character animation incorporating sound and effects, using industry standard software. Animation topics include 2D animation structure and concepts on the development of a story and storyboard, the use of the timeline and stage, the development of content, imagery and graphics, frame by frame animation (cell animation), rotoscope, digital tweening, camera moves, camera angles, cuts and transitions. Character animation techniques include movement and walk cycles, facial expressions and lip-sync. Projects can be published on the Web, CD-Rom, and video. The course may be taken four times for credit on a different software version.

ARTNM 410 Interactive Projects**4 Units***Prerequisite: ARTNM 401, 402, or 404 with a grade of "C" or better**Advisory: ARTNM 324 and 328**Course Transferable to CSU**Hours: 54 hours LEC; 54 hours LAB*

This course focuses on designing real-world interactive projects, often times multimedia in nature. Projects assigned are multifaceted real-world projects from the community, or simulated projects that approach the complexity that individuals would be expected to encounter in the interactive multimedia design industry. Standard design processes of pre-production, production, and post-production including client meetings, the construction of a design brief, content analysis and strategy, building of a prototype, information architecture, interactivity, testing, advertising, and delivery of product are discussed in detail.

ARTNM 420 Introduction to 3D Modeling**3 Units***Advisory: ART 320, ART 370, ARTNM 302, ARTNM 310, or ARTNM 370**Course Transferable to CSU**Hours: 36 hours LEC; 54 hours LAB*

This course introduces computer 3D modeling, lighting, and rendering, using industry standard software. The primary focus of this course is modeling using polygons, surfaces, and curves. Other areas of focus include studio lighting and simulated lighting, such as global illumination and color bleeding, to produce quality demo reel renders of the models. Software application tools are applied to produce images for use in fine art, design, broadcast, film, games, and the Web. This course may be taken four times for credit on different software versions.

ARTNM 421 3D Character Modeling and Rigging**3 Units***Prerequisite: ARTNM 420 with a grade of "C" or better**Advisory: ART 375**Course Transferable to CSU**Hours: 36 hours LEC; 54 hours LAB*

This course is a continuation of ARTNM 420. Human character modeling techniques are analyzed and applied. Techniques for creating animation controls, commonly known as rigging, are applied to create a digital marionette. Full body and facial character animation controls are examined. Industry issues, such as the topology flow of human anatomy and rig interfacing for animators, are developed. This course may be taken four times for credit on different software packages or versions.

ARTNM 422 3D Character Animation 3 Units

Prerequisite: ARTNM 420 with a grade of "C" or better

Advisory: ART 375 and DANCE 330

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course provides character animation techniques using industry standard software. The traditional principles from the golden years of Disney Studios are applied and translated to the computer generated 3D (CG 3D) environment; also to characters that walk, breathe, and act according to the twelve principles of animation. In addition, topics of focus are weight, thought process, and the wave principle. Technical issues, such as walking along an uneven ground and locomotion around obstacles, are addressed. This course may be taken four times for credit on different software packages or versions.

ARTNM 423 Special Effects and Texturing in 3D Animation 3 Units

Prerequisite: ARTNM 420 with a grade of "C" or better

Advisory: ARTNM 326

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course provides complex texturing techniques and special effects using industry standard software. Scenes are created using texture mapping and shader trees, and atmospheres created using particles and volumetrics. Animation topics such as explosions and the breaking of objects are included. This class may be taken four times for credit on different software packages or versions.

ARTNM 431 3D Short Production 3 Units

Prerequisite: ARTNM 420 with a grade of "C" or better

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

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 on-line markets, small business CG 3D logo, as well as visualization projects in the medical, invention, architectural, and landscaping fields.

ARTNM 450 Portfolio for Art New Media 3 Units

Prerequisite: Completion of 9 units from one Art New Media Certificate with a grade of "C" or better.

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course provides the fundamentals of designing and assembling an Art New Media portfolio of art and/or graphic works. Topics include techniques for presenting and photo-documenting the work and developing a resume.

ARTNM 498 Work Experience in Art New Media 1-4 Units

Advisory: ENGRD 116, ENGWR 102, ENGWR 103, ESLR 320, or ESLW 320

Enrollment Limitation: Students must be in a paid or non-paid internship, volunteer position, or job related to art new media. Students are advised to consult with the Art New Media Department faculty to review specific certificate and degree work experience requirements.

General Education: AA/AS Area III(b)

Course Transferable to CSU

Hours: 300 hours LAB

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 required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to fulfill a weekly orientation and 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. The weekly orientation is required for first time participants; returning participants are not required to attend the orientation weekly but are required to meet with the instructor as needed to complete all program forms and assignments. Work Experience may be taken for a total of 16 units when there are new or expanded learning objectives.

Area: Science and Engineering
 Dean: Dr. Rina Roy
 Phone: (916) 484-8107
 Counseling: (916) 484-8572

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, and a laboratory. All courses comply with general education transfer requirements.

Astronomy

ASTR 300 Introduction to Astronomy 3 Units

Advisory: MATH 100 with a grade of "C" or better, AND ENGWR 102 and ENGRD 116 with a grade of "C" or better OR ESLL 320 and ESLR 320 and ESLW 320 with a grade of "C" or better.
General Education: AA/AS Area IV; CSU Area B1; IGETC Area 5A
Course Transferable to UC/CSU
Hours: 54 hours LEC

This course covers modern astronomical theories, utilizing history, observations, reading, and discussion. It also includes changing conceptions of the cosmos, the planets, the universe of stars and galaxies, and cosmic evolution.

ASTR 310 The Solar System 3 Units

Advisory: MATH 100 with a grade of "C" or better, AND ENGWR 102 and ENGRD 116 with a grade of "C" or better OR ESLL 320 and ESLR 320 and ESLW 320 with a grade of "C" or better.
General Education: AA/AS Area IV; CSU Area B1; IGETC Area 5A
Course Transferable to UC/CSU
Hours: 54 hours LEC

This course explores the nature and evolution of the solar system. Topics include the nighttime 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.

ASTR 320 Stars, Galaxies, and Cosmology 3 Units

Advisory: MATH 100 with a grade of "C" or better, AND ENGWR 102 and ENGRD 116 with a grade of "C" or better OR ESLL 320 and ESLR 320 and ESLW 320 with a grade of "C" or better.
General Education: AA/AS Area IV; CSU Area B1; IGETC Area 5A
Course Transferable to UC/CSU
Hours: 54 hours LEC

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.

ASTR 330 Introduction to Astrobiology 3 Units

Advisory: MATH 100 with a grade of "C" or better, AND ENGWR 102 and ENGRD 116 with a grade of "C" or better OR ESLL 320 and ESLR 320 and ESLW 320 with a grade of "C" or better.
General Education: AA/AS Area IV; CSU Area B1; IGETC Area 5A
Course Transferable to UC/CSU
Hours: 54 hours LEC

This course explores the possibility of life beyond the Earth. Topics include the origin and evolution of life on Earth, the formation 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.

ASTR 400 Astronomy Laboratory 1 Unit

Corequisite: ASTR 300, 310, or 320
General Education: CSU Area B1; CSU Area B3; IGETC Area 5C
Course Transferable to UC/CSU
Hours: 54 hours LAB

This course covers the practical use of a telescope for both visual observation and astrotopography. Topics include identifying constellations, collecting and interpreting scientific data, and the use of sky charts and handbooks to plan observation. Night field trips are required.

ASTR 480 Honors Introduction to Astronomy 1 Unit

Prerequisite: Cumulative GPA of 3.0 or above; ENGWR 300 or 480, and MATH 330 with a grade of "C" or better.
Corequisite: ASTR 300, 310, or 320
Course Transferable to UC/CSU
Hours: 18 hours LEC

This course is an introduction to current topics in astronomy. It is intended for students with a serious interest in astronomy and requires the ability to apply mathematical and conceptual reasoning to astronomical systems. The course utilizes problem solving, reading, and discussion in a seminar format. Previous knowledge of physics and astronomy is assumed.

Area: Technical Education
 Dean: Gabriel Meehan
 Phone: (916) 484-8354
 Counseling: (916) 484-8572
<http://wserver.arc.losrios.edu/~tech/>

Degree: A.S. - Automotive Collision Technology
 Certificates: Automotive Collision Technology
 Certificates of Completion offered by the department:
 Automotive Claims Estimator

Automotive Collision Technology Degree and Certificate

The Automotive Collision Technology degree provides a 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 and steering, and electrical. The certificate prepares the student for employment as a multi-tasked technician (mechanical, frame, body, and refinish).

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 Opportunities

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.

Requirements for Degree or Certificate		33.5 Units
ACT 110	Component Repairs.....	4
ACT 120	Non-Structural Repair	4
ACT 130	Structural Repair	4
ACT 140	Automotive Refinishing.....	4
ACT 161	Automotive Collision Software Systems, Estimating I.....	4
AT 310	Heating and Air-Conditioning Systems.....	4
AT 311	Suspension and Steering Systems.....	4
AT 312	Automotive Electrical Systems.....	4
WELD 103	Gas Metal Arc Welding of Sheet Steel	1.5

Associate Degree Requirements: 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.

CERTIFICATE OF COMPLETION (offered by the department)

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.

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
- create and edit documents using appropriate word processing functions

Career Opportunities

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.

Requirements for Certificate		16 Units
ACT 110	Component Repairs.....	4
ACT 120	Non-Structural Repair	4
ACT 161	Automotive Collision Software Systems, Estimating I.....	4
BUS 212	Marketing for Small Businesses.....	1
BUS 218	Management Skills for the Small Business.....	1
BUS 224	Customer Service.....	1

A minimum of 1 unit from the following: 1¹

BUSTEC 300 Beginning Keyboarding/Applications (1 - 3)

¹Keyboard proficiency test. This program can be completed in 15 units if student passes keyboarding test.

Automotive Collision Technology

ACT 110 Component Repairs **4 Units**

Hours: 54 hours LEC; 54 hours LAB

This course provides the technical information and hands-on experience to perform repairs to collision damaged vehicles. Topics covered are to correctly and safely remove, inspect, replace and align, bolt-on body components. It also covers the protection of mechanical and electrical systems, removal of damaged parts, anchoring theory and techniques applicable to damaged vehicles. Interpretation of damage analysis reports and types of collision damage are covered. 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. This ARC/I-CAR alliance course prepares students for Automotive Service Excellence (ASE) testing and National Automotive Technicians Education Foundation (NATEF) training standards.

ACT 120 Non-Structural Repair **4 Units**

Hours: 54 hours LEC; 54 hours LAB

This course provides the technical information and hands-on experience to perform limited and supervised repairs to collision damaged vehicles. It covers the principles and theory of automotive collision repair including procedures for replacement of door skins and quarter panels. Additionally, metal straightening theory, and techniques for steel and aluminum, and making repair versus replacement decisions are covered. Measuring systems techniques and their use in diagnosing and correcting collision damage are also presented. 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. This ARC/I-CAR alliance courses also prepares for Automotive Service Excellence (ASE) testing and National Automotive Technicians Educational Foundation (NATEF) training standards.

ACT 130 Structural Repair **4 Units**

Hours: 54 hours LEC; 54 hours LAB

This course covers principles and theory of automotive collision repair including component alignment, component replacement, structural panel repair or replacement, and chassis/frame alignment. Sectioning and full-panel replacement techniques and procedures are covered. Practical applications are emphasized. Students enrolled in the Collision Technology program at American River College (ARC) may be eligible to apply for Inter-Conference on Automotive Repair (I-CAR) points. This ARC/I-CAR alliance courses also prepares students for Automotive Service Excellence (ASE) testing and National Automotive Technicians Education Foundation (NATEF) training standards.

ACT 140 Automotive Refinishing **4 Units**

Hours: 54 hours LEC; 54 hours LAB

This course covers the principles and theories of paint finish application, tinting and blending, color evaluation, color adjustments, and evaluating color mismatch problems. Topics include paint application techniques, restoration of corrosion protection, blending procedures, new and emerging paint technologies, color identification, and interpreting vehicle color codes. It also addresses compliance with rules and regulations as determined by Occupational Safety and Health Administration (OSHA), Environmental Protection Agency (EPA), Clean Air Act, and Volatile Organic Compound (VOC). 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. This ARC/I-CAR alliance courses also prepares student for Automate Service Excellence (ASE) testing and National Automotive Technicians Education Foundation (NATEF) training standards.

ACT 150 Hot Rod Fabrication and Customization: Hot Rod Frames **4 Units**

Prerequisite: ACT 110, 120, 130, and 140 with grades of "C" or better

Hours: 54 hours LEC; 54 hours LAB

This course covers the principles and theories of hot rod chassis design, development, and construction. Extensive bracket and frame fabrication and welding are emphasized.

ACT 152 Hot Rod Fabrication and Customization: Hot Rod Suspensions **4 Units**

Prerequisite: ACT 110, 120, 130, and 140 with grades of "C" or better

Hours: 54 hours LEC; 54 hours LAB

This course covers the principles and theories of hot rod suspension design, development, and construction. Topics include big brakes and air suspensions.

ACT 154 Hot Rod Fabrication and Customization: Hot Rod Engine/Transmissions **4 Units**

Prerequisite: ACT 110, 120, 130, and 140 with grades of "C" or better

Hours: 54 hours LEC; 54 hours LAB

This course covers the principles and theories of hot rod engines and transmissions. Topics include engine performance tuning and transmission selection.

ACT 156 Hot Rod Fabrication and Customization: Hot Rod Refinish **4 Units**

Prerequisite: ACT 110, 120, 130, and 140 with grades of "C" or better

Hours: 54 hours LEC; 54 hours LAB

This course covers the principles and theories of hot rod custom show-quality automotive finishes. Topics include primers, color coats, special effects, clear coats, and polishing.

ACT 161 Automotive Collision Software Systems, Estimating I **4 Units**

Hours: 54 hours LEC; 54 hours LAB

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.

Area: Technical Education
 Dean: Gabriel Meehan
 Phone: (916) 484-8354
 Counseling: (916) 484-8572
 www.arc.losrios.edu/autotech
 www.patc.biz



Degree: A.S. - Automotive Analysis
 A.S. - Automotive Component Service Technician
 A.S. - Automotive Technology

Certificates: Air Conditioning Service
 Alternative Fuels and Green Vehicle Technology
 Automotive Analysis
 Automotive Component Service Technician
 Automotive Service Technician
 Automotive Technology
 Extreme Tuner
 Parts and Service
 Transmission Service
 Undercar Service

For additional Automotive programs see:
 Automotive Collision Technology Program
 Diesel Technology Program

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:

- NATEF certified in: brakes, electrical/electronic systems, engine performance, suspension and steering, automatic transmission/transaxle, engine repair, heating and air conditioning, manual drive trains and axles.
- 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.

DEGREES AND CERTIFICATES

Automotive Analysis Degree and Certificate

This Automotive Analysis degree and certificate prepares the student for entry level employment as a smog and driveability service technician. The program also prepares the student for Automotive Service Excellence (ASE) certification in Engine Repair A1, Automatic Transmissions/Transaxles A2, Electrical A6, Engine Performance A8, Advanced Engine Performance L1 along with the California Enhanced Area (EA) Smog Check License.

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, transmissions, brakes, suspension, electrical, air conditioning, emission control and computerized engine controls.
- identify and follow manufacture 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.
- demonstrate the skills and knowledge to analyze, diagnose, and repair automotive engines, automatic and manual transmissions, suspension systems, braking systems, electrical systems, fuel delivery systems, ignition systems, emissions control systems and computerized engine controls.

Career Opportunities

Automotive Technician; Smog Check Technician

Requirements for Degree or Certificate	52 Units
1st Semester	
AT 100	Technical Basics for the Automotive Professional2
AT 105	Mathematics for Automotive Technology3
AT 180	Automotive Data Acquisition3
2nd Semester	
AT 110	Automotive Brakes4
AT 311	Suspension and Steering Systems4
AT 312	Automotive Electrical Systems4
3rd Semester	
AT 130	Manual Drive Trains and Axles4
AT 313	Automatic Transmission and Transaxles4
AT 314	Automotive Engine Repair4
4th Semester	
AT 310	Heating and Air-Conditioning Systems4
AT 322	Engine Performance & Electronic Engine Controls6
Final Semester	
AT 315	Advanced Automotive Electrical Systems4
AT 323	Clean Air Car Course6

Associate Degree Requirements: 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.

Automotive Component Service Technician Degree and Certificate

This degree or certificate prepares the student for employment repairing of various automobile components including those requiring computer technology.

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 a automotive shop.
- demonstrate safe work practices in the auto shop.

Career Opportunities

Employment as a technician, shop foreman, service manager for new car dealers, automotive repair shops, fleet operators.

Requirements for Degree or Certificate		40 Units
AT 100	Technical Basics for the Automotive Professional	2
AT 105	Mathematics for Automotive Technology	3
AT 110	Automotive Brakes	4
AT 130	Manual Drive Trains and Axles	4
AT 140	Advanced Automotive Skill and Speed Development ...	4
AT 180	Automotive Data Acquisition	3
AT 310	Heating and Air-Conditioning Systems	4
AT 311	Suspension and Steering Systems	4
AT 312	Automotive Electrical Systems	4
AT 313	Automatic Transmission and Transaxles	4
AT 314	Automotive Engine Repair	4

Associate Degree Requirements: 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.

Automotive Technology Degree and Certificate

This program prepares the student for an entry level position in the automotive industry with emphasis on engine management systems, emission controls, and complete automotive systems diagnosis and repair. The program also prepares the student for all 9 Automotive Service Excellence (ASE) certifications including Advanced Engine Performance (L-1) as well as the state Enhanced Area (EA) Smog Certification Test.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- apply algebraic and mathematical concepts essential to and for 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, cdroms, and text sources.
- analyze, diagnose, and repair automotive electrical and electronic systems to ASE performance level.

- diagnose, trouble shoot, 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 EA smog certification.

Requirements for Degree or Certificate		60 Units
AT 100	Technical Basics for the Automotive Professional	2
AT 105	Mathematics for Automotive Technology	3
AT 110	Automotive Brakes	4
AT 130	Manual Drive Trains and Axles	4
AT 180	Automotive Data Acquisition	3
AT 310	Heating and Air-Conditioning Systems	4
AT 311	Suspension and Steering Systems	4
AT 312	Automotive Electrical Systems	4
AT 313	Automatic Transmission and Transaxles	4
AT 314	Automotive Engine Repair	4
AT 320	Engine Performance Technology	12
AT 321	Engine Performance Technology	12

Associate Degree Requirements: 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.

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.

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.

Requirements for Certificate		16 Units
AT 100	Technical Basics for the Automotive Professional	2
AT 105	Mathematics for Automotive Technology	3
AT 180	Automotive Data Acquisition	3
AT 310	Heating and Air-Conditioning Systems	4
AT 312	Automotive Electrical Systems	4

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.

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 Opportunities

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.

Requirements for Certificate 22 Units

AT 100	Technical Basics for the Automotive Professional	2
AT 307	Biodiesel Technology.....	4
AT 309	Introduction to Hybrid and Electric Vehicle Technology....	4
AT 312	Automotive Electrical Systems.....	4
AT 315	Advanced Automotive Electrical Systems	4
AT 316	Alternative Fuels and Advanced Technology Vehicles ...	4

Automotive Service Technician Certificate

This certificate prepares the student for an entry-level position in the automotive industry. It also prepares the student for Automotive Service Excellence (ASE) certifications in Automotive Brakes, Manual Drive Trains and Axles, Heating and Air-Conditioning Systems, Suspension and Steering Systems, Electrical Systems, Automatic Transmission and Transaxles, and Automotive Engine Repair.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- apply essential algebraic and mathematical concepts in the automotive industry.
- operate equipment and tools safely.
- evaluate, adjust, test and diagnose brake components/system malfunctions.
- diagnose, assess and repair manual transmission and transaxles.
- locate, download, and analyze technical manuals from the Internet, CDROM, and text sources.
- diagnose and troubleshoot basic Air Conditioning systems.
- diagnose malfunctions and disassemble, inspect, clean and reassemble all components of the steering and suspension systems in accordance with service manual procedures.
- diagnose and repair electrical systems at industry ASE performance standard levels.
- diagnose and assess transmission and transaxle mechanical, electrical and hydraulic systems.

- repair and diagnose engines at ASE performance standard levels.

Career Opportunities

The Automotive Service Technician certificate prepares the student for entry level-positions in the fields of Auto Technician, Auto/Truck Specialist, Field Service, Sales Representative, Tune-up and Electrical Specialist.

Requirements for Certificate 36 Units

AT 100	Technical Basics for the Automotive Professional	2
AT 105	Mathematics for Automotive Technology	3
AT 110	Automotive Brakes	4
AT 130	Manual Drive Trains and Axles	4
AT 180	Automotive Data Acquisition	3
AT 310	Heating and Air-Conditioning Systems	4
AT 311	Suspension and Steering Systems	4
AT 312	Automotive Electrical Systems	4
AT 313	Automatic Transmission and Transaxles	4
AT 314	Automotive Engine Repair	4

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.

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 Opportunities

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.

Requirements for Certificate 34 Units

AT 100	Technical Basics for the Automotive Professional	2
AT 110	Automotive Brakes	4
AT 130	Manual Drive Trains and Axles.....	4
AT 311	Suspension and Steering Systems.....	4
AT 312	Automotive Electrical Systems.....	4
AT 314	Automotive Engine Repair	4
AT 316	Alternative Fuels and Advanced Technology Vehicles....	4
AT 325	Performance Evaluation and Planning	4
AT 327	Advanced Motorsports.....	4

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.

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 Opportunities

Various entry level positions in the automotive parts and service industry, such as service writers and parts specialists.

Requirements for Certificate	17 Units
AT 100 Technical Basics for the Automotive Professional	2
AT 105 Mathematics for Automotive Technology	3
AT 107 Employability Skills for Technical Careers	2
AT 143 Automotive Parts	3
AT 146 Automotive Service Advising	3
AT 180 Automotive Data Acquisition	3
And a minimum of 1 unit from the following:	1
AT 298 Work Experience in Automotive Technology (1 - 4)	

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.

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 Opportunities

Entry-level positions in automatic transmission, clutch, and drive-train repair.

Requirements for Certificate	28 Units
AT 100 Technical Basics for the Automotive Professional	2
AT 105 Mathematics for Automotive Technology	3
AT 130 Manual Drive Trains and Axles	4
AT 140 Advanced Automotive Skill and Speed Development	4
AT 180 Automotive Data Acquisition	3
AT 312 Automotive Electrical Systems	4
AT 313 Automatic Transmission and Transaxles	4
AT 317 Advanced Drivetrain	4

Undercar Service Certificate

The Undercar Service certificate provides entry-level training to perform repairs in automotive suspension, brake and exhaust service facilities.

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 Opportunities

This certificate provides students with knowledge for entry-level careers in the automotive suspension, brake and exhaust repair facilities.

Requirements for Certificate:	19 Units
AT 100 Technical Basics for the Automotive Professional	2
AT 106 Automotive Shop Operations	2
AT 110 Automotive Brakes	4
AT 145 Automotive Exhaust System	4
AT 180 Automotive Data Acquisition	3
AT 311 Suspension and Steering Systems	4

Automotive Technology

AT 100 Technical Basics for the Automotive Professional 2 Units

Prerequisite: None

Hours: 36 hours LEC; 27 hours LAB

This course presents theoretical and practical training for entry-level automotive technicians. It presents basic automotive diagnosis and service procedures used in automotive shops. Lab 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.

AT 105 Mathematics for Automotive Technology 3 Units

Corequisite: AT 100

General Education: AA/AS Area II(b)

Hours: 54 hours LEC

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.

AT 106 Automotive Shop Operations 2 Units*Hours: 36 hours LEC*

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.

AT 107 Employability Skills for Technical Careers 2 Units*Same As: ET 250 and WELD 150*

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)**Hours: 36 hours LEC*

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.

AT 108 Successful Automobile Selling Skills 1.5 Units*Hours: 27 hours LEC*

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.

AT 110 Automotive Brakes 4 Units*Corequisite: AT 100 and 180**Hours: 54 hours LEC; 54 hours LAB*

This course covers theory, design, adjustment and repair or overhaul of brake systems and components. Operation of power and hand devices used in the servicing of brake systems and components is covered. This course meets Automotive Service Excellence (ASE) A5 standards.

AT 130 Manual Drive Trains and Axles 4 Units*Corequisite: AT 100 and 180**Hours: 54 hours LEC; 54 hours LAB*

This course covers the basics of manual transmission and transaxles principles 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.

AT 140 Advanced Automotive Skill and Speed Development 4 Units*Prerequisite: None**Corequisite: AT 110, 130, 311, 312, and 314.**Hours: 54 hours LEC; 54 hours LAB*

This course covers automotive heavy component diagnosis and repair, including engine and transmission removal and replacement, as well as in-car engine repairs, adjustments, and service. This course may be taken four times requiring a different project every semester.

AT 143 Automotive Parts 3 Units*Corequisite: AT 100**Hours: 45 hours LEC; 27 hours LAB*

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.

AT 145 Automotive Exhaust System 4 Units*Prerequisite: AT 100 with a grade of "C" or better**Hours: 54 hours LEC; 54 hours LAB*

This course is an introduction to the principles and service of exhaust systems, including pipe bending, cutting, welding, installation, repair, and inspection. It prepares students for the Automotive Service Excellence (ASE X1) exhaust systems test, which is required for the ASE Under-Car Specialist Certificate. Different welding techniques are covered each semester. This course may be taken three times with a different technique.

AT 146 Automotive Service Advising 3 Units*Corequisite: AT 180**Advisory: AT 100**Hours: 45 hours LEC; 27 hours LAB*

This course introduces the basic requirements needed to perform the duties of an automotive service advisor. 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 understanding of small business operations.

AT 156 Light Duty Diesel/ Green Diesel Technology 4 Units*Prerequisite: AT 312 and 314 with grades of "C" or better**Hours: 54 hours LEC; 54 hours LAB*

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.

AT 157 Advanced Light Duty Diesel/ Green Diesel Technology 4 Units*Prerequisite: AT 156 with a grade of "C" or better**Hours: 54 hours LEC; 54 hours LAB*

This course focuses on late-model turbo-charged light duty diesel vehicles operating on low sulfur, biodiesel, or alternative fuels. Topics include computer controlled injection and emission control systems, sensors, actuators, computer modules, exhaust gas recirculation systems (EGR), particulate traps, selective catalytic reduction systems (SCR) 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.

AT 172 BAR A-6 Alternative - Electrical and Electronic Systems Training 1.5 Units

Prerequisite: None
Hours: 27 hours LEC

This course is an intensive Bureau of Automotive Repair-approved review of automotive electrical/electronic systems. It partially satisfies ASE certification requirements when applying for a Smog Check Technician license.

AT 173 BAR A-8 Alternative - Engine Performance Systems 1.5 Units

Hours: 27 hours LEC

This course is an intensive Bureau of Automotive Repair (BAR) approved review of automotive engine performance offered as an alternative to the ASE A8 certification. The ASE A8 or alternative certification is a prerequisite required to qualify for the Smog Check Technician licensing exam.

AT 174 BAR Approved L1 Alternative-Advanced Engine Performance/Emission Systems 2 Units

Prerequisite: None
Advisory: AT 312 and AT 321 or 322, or engine performance experience in the automotive field.
Hours: 36 hours LEC

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 System Diagnostics, and I/M Failure Diagnosis. The BAR L1 Alternative test is administered at the end of the class. This course may be taken four times. Credit/No Credit only.

AT 176 Bureau of Automotive Repair (BAR) Emissions Update 1 Unit

Hours: 18 hours LEC

This course is required for all licensed smog technicians who need to meet California emissions controls smog license renewal standards. This course may be taken four times for credit.

AT 179 Snap-On MODIS ' Automotive Diagnostic Use and Operation .5 Unit

Hours: 9 hours LEC

This course explores the functionality and capability of Snap-On's Modular Diagnostic System (MODIS) to improve the technician's diagnostic expertise when confronted with vehicle performance complaints, emission failures, or any other On-Board computer related problem.

AT 180 Automotive Data Acquisition 3 Units

Hours: 54 hours LEC

This course covers the skills needed to adequately retrieve and apply automotive data acquisition, including on-line technical manuals, CD-ROM based 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.

AT 190 Advanced Student Projects 2 Units

Prerequisite: AT 100 with a grade of "C" or better
Hours: 108 hours LAB

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. This course may be taken four times for credit on different projects.

AT 251 Automotive Electronic Accessories and Installation 3 Units

Same As: ET 251

Corequisite: AT 312 or ET 302
Hours: 36 hours LEC; 54 hours LAB

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. Topics related to this course cover the areas for the certification testing required to become a qualified Mobile Electronics Certified Professional (MECP) installer. A field trip is required. This course is not open to students who have taken ET 251.

AT 294 Topics in Automotive Technology .5-3 Units

Hours: 54 hours LEC; 162 hours LAB

This course provides opportunity to study current topics in automotive technology that are not included in existing courses. It may be taken four times for a maximum of six units, provided there is no duplication of topics.

AT 298 Work Experience in Automotive Technology 1-4 Units

Advisory: AT 100

Enrollment Limitation: Be in a paid or non-paid internship, volunteer opportunity or job related to the automotive industry.
General Education: AA/AS Area III(b)
Hours: 300 hours LAB

This course provides students with opportunities to develop marketable skills in preparation for employment in the automotive field. It is designed for students interested in work experience and/or internships in the automotive industry. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Rigor is ensured through the development of appropriate level learning objectives set between the student and the employer. During the course of the semester, the student is required to fulfill a weekly orientation and 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. The weekly orientation is required for first time participants, returning participants are not required to attend the weekly orientation but are required to meet with the instructor as needed to complete all program forms and assignments. WEXP 298 may be taken for a total of 16 units when there are new or expanded learning objectives. Students can earn a total of 16 Work Experience units.

**AT 301 Small Gas Engines,
Outdoor Power Equipment 4 Units**

Same As: HORT 330

Course Transferable to CSU

Hours: 54 hours LEC; 54 hours LAB

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. AT 301 and/or HORT 330 may be taken two times for credit for a maximum of 8 units, using different equipment.

AT 307 Biodiesel Technology 4 Units

Corequisite: AT 100

Course Transferable to CSU

Hours: 54 hours LEC; 54 hours LAB

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.

**AT 309 Introduction to Hybrid and
Electric Vehicle Technology 4 Units**

Prerequisite: AT 315 with a grade of "C" or better

Advisory: AT 110, 310, 313, 314, and 322

Course Transferable to CSU

Hours: 54 hours LEC; 54 hours LAB

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 have previous field experience before taking this course.

**AT 310 Heating and
Air-Conditioning Systems 4 Units**

Prerequisite: None

Corequisite: AT 100

Course Transferable to CSU

Hours: 54 hours LEC; 54 hours LAB

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.

AT 311 Suspension and Steering Systems 4 Units

Prerequisite: None

Corequisite: AT 100

Course Transferable to CSU

Hours: 54 hours LEC; 54 hours LAB

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.

AT 312 Automotive Electrical Systems 4 Units

Corequisite: AT 100, 105, and 180

Course Transferable to CSU

Hours: 54 hours LEC; 54 hours LAB

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. This course meets Automotive Service Excellence (ASE) certification standards for the A6 electrical certification with completion of AT 315 and either AT 320 or AT 322.

**AT 313 Automatic Transmission
and Transaxles 4 Units**

Corequisite: AT 100

Course Transferable to CSU

Hours: 54 hours LEC; 54 hours LAB

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.

AT 314 Automotive Engine Repair 4 Units

Prerequisite: None

Corequisite: AT 100 and 105

Course Transferable to CSU

Hours: 54 hours LEC; 54 hours LAB

This course covers the principles, operation and diagnosis of automotive engines including basic engine operation and construction, parts identification and location, engine disassembly procedures, engine diagnosis using metric and English measurement systems, engine repair and rebuilding procedures, and engine reassembly procedures. Completion of AT 314 and either AT 320 or AT 322 meets Automotive Service Excellence (ASE) A1 standards.

**AT 315 Advanced Automotive
Electrical Systems 4 Units**

Prerequisite: AT 180 and 312 with grades of "C" or better

Course Transferable to CSU

Hours: 54 hours LEC; 54 hours LAB

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. This course meets Automotive Service Excellence (ASE) certification standards for the A6 electrical certification with the completion of AT 312 and either AT 320 or AT 322. It is recommended that a student take the basic electrical, brakes, and air conditioning courses or have previous field experience before taking this course.

**AT 316 Alternative Fuels and
Advanced Technology Vehicles 4 Units**

Corequisite: AT 100 or 150

Course Transferable to CSU

Hours: 54 hours LEC; 54 hours LAB

This course provides an overview of existing fuels (hydrocarbon), renewable/sustainable alternative fuels, gaseous, and future fuels. It covers how they function in various fuel delivery systems, including hybrid, by examining the history, chemistry, production, and practicality of each. Field trips may be required.

Area: Science and Engineering
 Dean: Dr. Rina Roy
 Phone: (916) 484-8107
 Counseling: (916) 484-8572

Degree: A.S. - Biotechnology
 A.S. - General Science
 Certificate: Biotechnology

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 long list of lecture and laboratory courses for majors and non-majors alike, whether for vocational training, transfer, or merely general interest.

DEGREES AND CERTIFICATES

Biotechnology Degree

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.

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 Opportunities

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.

Requirements for Degree	29-35 Units
BIOL 400 Principles of Biology (5)	4 - 5
or BIOL 440 General Microbiology (4)	
or BIOL 442 General Bacteriology (5)	
BIOT 301 Biotechnology and Human Health	3
BIOT 307 Biotechnology and Society	2
BIOT 311 Biotechnology Laboratory Methods - Molecular Techniques	2
BIOT 312 Biotechnology Laboratory Methods - Microbial and Cell Culture Techniques.....	2
[CHEM 305 Introduction to Chemistry (5)	5 - 10
and CHEM 306 Introduction to Chemistry (5)]	
or CHEM 309 Integrated General, Organic, and Biological Chemistry (5)	
or [CHEM 400 General Chemistry (5)	
and CHEM 401 General Chemistry (5)]	
ENGWR 300 College Composition	3
ENGWR 301 College Composition and Literature (3)	3
or ENGWR 302 Advanced Composition and Critical Thinking (3)	
or ENGWR 342 Introduction to Technical/Professional Communication (3)	
STAT 300 Introduction to Probability and Statistics	4
And a minimum of 1 unit from the following:	1
BIOT 498 Work Experience in Biotechnology (1 - 4)	
or BIOT 305 Introduction to Bioinformatics (1)	

Associate Degree Requirements: 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.

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.

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.

(continued on next page)

(Biotechnology Certificate continued)

Career Opportunities

This program 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.

<u>Requirements for Certificate</u>	<u>24-26 Units</u>
BIOL 303 Survey of Biology (4).....	4 - 5
or BIOL 310 General Biology (4)	
or BIOL 400 Principles of Biology (5)	
or BIOL 440 General Microbiology (4)	
or BIOL 442 General Bacteriology (5)	
BIOT 301 Biotechnology and Human Health	3
BIOT 311 Biotechnology Laboratory Methods - Molecular Techniques	2
BIOT 312 Biotechnology Laboratory Methods - Microbial and Cell Culture Techniques.....	2
CHEM 305 Introduction to Chemistry (5)	5
or CHEM 309 Integrated General, Organic, and Biological Chemistry (5)	
or CHEM 400 General Chemistry (5)	
ENGWR 300 College Composition	3
MATH 120 Intermediate Algebra (5).....	4 - 5
or STAT 300 Introduction to Probability and Statistics (4)	
And a minimum of 1 unit from the following:	1
BIOT 498 Work Experience in Biotechnology (1 - 4)	
or BIOT 307 Biotechnology and Society (2)	
or BIOT 305 Introduction to Bioinformatics (1)	

General Science Degree

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.

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.
- describe the basic definitions and fundamental theories of an introductory 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.
- recognize ethical components of scientific decision making and apply personal and social values within the process of decision making in scientific endeavors.

<u>Requirements for Degree</u>	<u>18 Units</u>
A minimum of 18 units from the following:	18
Transfer level science courses including one laboratory course in a physical science and one laboratory course in a biological science. Courses may be selected from anthropology (physical), astronomy, biology, biotechnology, chemistry, geography (physical), geology, natural resources, physical science, physics, and psychology (biological).	

Associate Degree Requirements: 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.

Biology

BIOL 102 Essentials of Human Anatomy and Physiology 4 Units

*General Education: AA/AS Area IV
Hours: 54 hours LEC; 54 hours LAB*

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. Activities include simple physiology experiments and demonstrations, and using models and simple dissections to learn anatomy. It meets the minimum requirements for licensed vocational nursing, paramedic, gerontology, and funeral services programs.

BIOL 103 Human Anatomy for Funeral Services 4 Units

*Corequisite: FSE 100
Enrollment Limitation: An off-site clinical laboratory component of the course will require an enrollment limitation including - a background check, drug screening, and testing for hepatitis B.
General Education: AA/AS Area IV
Hours: 54 hours LEC; 54 hours LAB*

This course is an intensive study of the structure of the human body including the four major tissue types and the following organ systems: integumentary, skeletal, muscular, nervous, cardiovascular, respiratory, digestive, urinary, and reproductive. Laboratory assignments develop skills of observation, investigation, and identification of selected structures. The dissection of a human cadaver emphasizes the regions and structures relevant to embalming techniques. This course is designed for students preparing for a career in funeral service.

BIOL 115 Basic Anatomy and Physiology 3 Units

*General Education: AA/AS Area IV
Hours: 54 hours LEC*

This course provides instruction involving basic human anatomy and physiology of the skin, skeletal, muscular, nervous, circulatory, and lymphatic systems. It is designed for medical assistants, medical secretaries, medical transcriptionists, and hazardous materials technicians. BIOL 115 and 116 compose a complete study of the basic anatomy and physiology of the human body.

BIOL 116 Basic Anatomy and Physiology 3 Units

*General Education: AA/AS Area IV
Hours: 54 hours LEC*

This course provides instruction involving basic human anatomy and physiology. This course is designed for medical assisting majors, medical secretaries, and other health-related technologies. It covers body organization, basic chemistry, cells, and tissues. In addition, BIOL 116 covers respiratory, digestive, urinary, endocrine, and reproductive systems. Either BIOL 115 OR 116 may be taken first, however, both courses are necessary for a complete study of human anatomy and physiology

BIOL 130 Microbiology for Funeral Services 3 Units

Prerequisite: CHEM 130 with a grade of "C" or better

Corequisite: FSE 111, 140, and 155

Advisory: BIOL 300

Hours: 54 hours LEC

This course provides a survey of the basic principles of microbiology. It relates these principles to funeral service education especially as they pertain to disinfection, community health, infectious disease, and embalming practice.

BIOL 300 The Foundations of Biology 3 Units

General Education: AA/AS Area IV; CSU Area B2; IGETC Area 5B

Course Transferable to UC/CSU

Hours: 54 hours LEC

This non-science majors course covers basic biological principles and how they relate to humans. Concepts include an introduction to the philosophy of science. Basic cell chemistry, structure, and physiology are covered. 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. This course is not open to students who have completed BIOL 310.

BIOL 303 Survey of Biology 4 Units

General Education: AA/AS Area IV; CSU Area B2; CSU Area B3;

IGETC Area 5B; IGETC Area 5C

Course Transferable to UC/CSU

Hours: 54 hours LEC; 54 hours LAB

This course covers biological principles with emphasis on a survey of the major groups of organisms and a comparison of the structure and function of their cells, tissues, and organ systems. Ecology, genetics, and evolution are included. Plant and animal dissection are included as part of the laboratory activities. This course is appropriate for liberal studies, elementary education, environmental studies, recreation and other related majors. Field trips are required.

BIOL 305 Natural History 4 Units

Advisory: ENGRD 116 (*Proficient Reading*) and ENGWR 102 (*Proficient Writing*) with a grade of "C" or better; OR ESLR 320 (*Advanced-Low Reading*) and ESLW 320 (*Advanced-Low Writing*) with a grade of "C" or better.

General Education: AA/AS Area IV; CSU Area B2; CSU Area B3;

IGETC Area 5B; IGETC Area 5C

Course Transferable to UC/CSU

Hours: 54 hours LEC; 54 hours LAB

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, emphasis is placed on 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.

BIOL 310 General Biology 4 Units

General Education: AA/AS Area IV; CSU Area B2; CSU Area B3;

IGETC Area 5B; IGETC Area 5C

Course Transferable to UC/CSU

Hours: 54 hours LEC; 54 hours LAB

This non-science majors laboratory course covers basic biological principles and how they relate to humans. Concepts included are cell chemistry, structure, and physiology; genetics (transmission and molecular); biotechnology; human body systems; evolution; reproduction and development; ecology; and human impacts on the environment. This course is not open to students who have completed BIOL 300.

BIOL 320 Field Botany 3 Units

Prerequisite: None

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course covers identification, sight recognition and ecological relationships of native vascular plants of California. Plant keys and principles of taxonomy are stressed to develop proficiency in identification of plant species. This course covers some of society's historical uses of native plants. Frequent field trips and a plant collection are required.

BIOL 322 Ethnobotany 3 Units

General Education: AA/AS Area VI

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

The focus of this introductory course is 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 and plant use will be emphasized. An analysis of ethnicity and ethnocentrism is included.

BIOL 330 Natural History of Insects 3 Units

Prerequisite: None

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course provides an introduction to the science of Entomology. Approximately 75% of all known species of animals are insects, therefore, they often have a profound effect on human civilization. This class details their great variety, structures and function, habitats, and their significance to plants and animals, including humans. Opportunities for field investigations will be provided.

BIOL 332 Introduction to Ornithology 3 Units

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 the assessment process.

Course Transferable to CSU

Hours: 18 hours LEC; 108 hours LAB

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.

BIOL 342 The New Plagues: New and Ancient Infectious Diseases Threatening World Health 3 Units

Advisory: ENGWR 102 (*Proficient Writing*) and ENGRD 116 (*Proficient Reading*) with a grade of "C" or better; OR ESLR 320 (*Advanced-Low Reading*) and ESLW 320 (*Advanced-Low Writing*) with a grade of "C" or better.

General Education: CSU Area B2; IGETC Area 5B

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course explores the biology, epidemiology, and pathology of selected pathogens such as prions, viruses, bacteria, protozoa, 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.

BIOL 350 Environmental Biology 3 Units

General Education: AA/AS Area IV; CSU Area B2; IGETC Area 5B
Course Transferable to UC/CSU
Hours: 54 hours LEC

This course provides a broad overview of the natural environment using fundamental biological and ecological principles. Major topics include the cultural history of environmentalism, the role of science in investigating environmental impacts, ecosystem structure and function, and the concept of biodiversity. Human impacts on the plant and animals of forest, grassland, river, desert, tropical, marine and polar systems are covered with a specific focus on California landscapes and global biodiversity hotspots. This course provides the scientific background to analyze major global and regional environmental problems and to discuss the scientific techniques used to solve them. Field trips are required.

BIOL 352 Conservation Biology 3 Units

General Education: AA/AS Area IV; CSU Area B2; IGETC Area 5B
Course Transferable to UC/CSU
Hours: 54 hours LEC

This introductory course covers biological and ecological principles involved in understanding and analyzing environmental problems and exploring scientifically sound conservation techniques. Major topics include the nature of science, population dynamics and distributions, evolution and species extinctions, biodiversity, ecosystem functions, and the interdependence between humans and our environment. This course places emphasis on scientific processes and methodology. Statewide and local environments will be highlighted. Field trips and a semester project may be required.

BIOL 370 Introduction to Marine Environment 4 Units

General Education: AA/AS Area IV; CSU Area B2; CSU Area B3; IGETC Area 5B; IGETC Area 5C
Course Transferable to UC/CSU
Hours: 54 hours LEC; 54 hours LAB

This course is an introduction to oceanography and marine biology. It includes the study of sea water, marine geology, marine algae, marine vertebrate and invertebrate animals, and the ecology of various marine zones. Field trips focusing on the Central California coast are required.

BIOL 390 Natural History Field Study .5-4 Units

Prerequisite: None
Course Transferable to CSU
Hours: 24 hours LEC; 144 hours LAB

This course covers the ecology and natural history of specific areas (mountains, deserts, tide pools, etc.). Course content will vary according to field destination but may include topics in botany, zoology, marine biology, conservation, and natural history. Field study methodology and tools may also be covered. Students will be responsible for providing their own lodging or camping equipment and meals when needed. Field trips required. This course may be taken up to four times for a maximum of eight units.

BIOL 400 Principles of Biology 5 Units

Prerequisite: CHEM 400 with a grade 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; OR placement through assessment process.
General Education: AA/AS Area IV; CSU Area B2; CSU Area B3; IGETC Area 5B; IGETC Area 5C
Course Transferable to UC/CSU
Hours: 54 hours LEC; 108 hours LAB

This is an introductory course covering biological concepts important for a general understanding and background for biology majors and pre-professional students. 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.

BIOL 410 Principles of Botany 5 Units

Prerequisite: BIOL 400 with a grade of "C" or better
General Education: CSU Area B2; CSU Area B3; IGETC Area 5B; IGETC Area 5C
Course Transferable to UC/CSU
Hours: 54 hours LEC; 108 hours LAB

This course covers the general principles of botany for science majors. The emphasis is on anatomy, morphology, life cycles, embryology and physiology of plants and a plant kingdom survey. All laboratory work includes instructor directed lecture-discussions consisting of an introduction and analysis of the data and idea covered. One field trip is required.

BIOL 420 Principles of Zoology 5 Units

Prerequisite: BIOL 400 with a grade of "C" or better
General Education: CSU Area B2; CSU Area B3; IGETC Area 5B; IGETC Area 5C
Course Transferable to UC/CSU
Hours: 54 hours LEC; 108 hours LAB

This course covers general principles of zoology. Topics covered include a survey of the animal kingdom, embryology, evolution, genetics, systematics, and comparative anatomy and physiology. One or two field trips per semester are required.

BIOL 430 Anatomy and Physiology 5 Units

Prerequisite: CHEM 305, 309, or 400 with a grade of "C" or better
General Education: AA/AS Area IV; CSU Area B2; CSU Area B3; IGETC Area 5B; IGETC Area 5C
Course Transferable to UC/CSU
Hours: 54 hours LEC; 108 hours LAB

This course covers the principles of human anatomy and physiology, emphasizing the integration of structure and function. The topics covered are anatomical terminology, chemistry, cells, histology, articulations, and the integumentary, skeletal, muscular and nervous systems. Both BIOL 430 and BIOL 431 must be taken to study all of the major body systems.

BIOL 431 Anatomy and Physiology 5 Units

Prerequisite: BIOL 430 with a grade of "C" or better
General Education: AA/AS Area IV
Course Transferable to UC/CSU
Hours: 54 hours LEC; 108 hours LAB

This course covers the principles of human anatomy and physiology, emphasizing the integration of structure and function. It includes the following systems: cardiovascular, lymphatic, respiratory, digestive, urinary, endocrine and reproductive. Both BIOL 430 and 431 must be taken to study all of the major body systems.

BIOL 440 General Microbiology 4 Units

Prerequisite: CHEM 305, 309, 310, or 400 with a grade of "C" or better

General Education: CSU Area B2; CSU Area B3; IGETC Area 5B; IGETC Area 5C

Course Transferable to UC/CSU

Hours: 54 hours LEC; 72 hours LAB

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.

BIOL 442 General Bacteriology 5 Units

Prerequisite: CHEM 306 (Introduction to Chemistry), OR 309 (Integrated General, Organic, and Biological Chemistry), OR 400 (General Chemistry) with a grade of "C" or better; OR CHEM 305 (Introduction to Chemistry) AND BIOL 300 (The Foundations of Biology), or 303 (Survey of Biology), or 310 (General Biology) with a grade of "C" or better

General Education: CSU Area B2; CSU Area B3; IGETC Area 5B; IGETC Area 5C

Course Transferable to UC/CSU

Hours: 54 hours LEC; 108 hours LAB

This course provides a survey of bacteria, viruses, fungi, protozoa, and helminths that are associated with human infectious diseases. It examines their cellular and molecular structure, physiology, metabolism, and genetics. Laboratory work introduces methods for cultivating and characterizing microorganisms.

BIOL 482 Honors Marine Biology 4 Units

Prerequisite: Placement into ENGWR 480 through the assessment process.

General Education: AA/AS Area IV; CSU Area B2; CSU Area B3; IGETC Area 5B; IGETC Area 5C

Course Transferable to UC/CSU

Hours: 54 hours LEC; 54 hours LAB

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. The course is not open to students who have completed BIOL 370.

BIOL 490 Science Skills and Applications .5 Units

Corequisite: Current enrollment in a science, nutrition or nursing course.

Course Transferable to CSU

Hours: 27 hours LAB

This course offers individualized instructional modules designed to acquire or improve reading skills in the various science classes and in the nursing program. A partial list of skills may include the following: textbook comprehension, principles of learning and retention, note taking, annotating, discipline-based vocabulary, paraphrasing, reading graphics, test taking, and problem solving. Registration is open through the tenth week of the semester. This course may be taken four times for credit with a different co-requisite course. Pass/No Pass only.

Biotechnology**BIOT 301 Biotechnology and Human Health 3 Units**

Prerequisite: BIOL 300, BIOL 303, BIOL 310, BIOL 400, BIOL 440, BIOL 442, or BIOT 307 with a grade of "C" or better

Course Transferable to CSU

Hours: 54 hours LEC

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.

BIOT 305 Introduction to Bioinformatics 1 Unit

Prerequisite: BIOL 310 or 400 with a grade of "C" or better

Advisory: CISC 305

Course Transferable to CSU

Hours: 14 hours LEC; 14 hours LAB

This course includes topics on biology databases, search and retrieval programs, structure/function analysis of biological molecules, DNA sequence alignment and analysis, and applications of these technologies.

BIOT 306 Computer Applications in Bioinformatics 3 Units

Prerequisite: BIOT 305 with a grade of "C" or better

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course introduces computation concepts and methods used in bioinformatics. It addresses issues in genomics and proteomics, such as sequence alignment, gene recognition and regulation, and protein modeling. The course examines software and programming tools used to access and manipulate biological database information, especially nucleic acid and protein data.

BIOT 307 Biotechnology and Society 2 Units

Prerequisite: None

Course Transferable to UC/CSU

Hours: 36 hours LEC

This course focuses on the emerging impact of biotechnology on society. Basic concepts in biotechnology are introduced in a non-technical manner to explore advances in medicine, agriculture, and other fields. Public perception and ethical issues in biotechnology are also emphasized.

BIOT 308 Exploratory Field Experience in Biotechnology Education 3 Units

Prerequisite: BIOL 303, 310, or 400 with a grade of "C" or better

Enrollment Limitation: Current TB clearance is required prior to work in schools. Fingerprinting may also be required.

General Education: AA/AS Area III(b)

Course Transferable to UC/CSU

Hours: 36 hours LEC; 54 hours LAB

This course is an education-based field experience in biotechnology and bioinformatics that allows students to explore science teaching as a career choice. Students are assigned to area high schools to observe and assist in a science classroom. Students have the opportunity to learn and practice important biotechnology and bioinformatics teaching skills and to examine social and educational issues related to the school environment. Field trips and off-site activities are required for this course.

**BIOT 311 Biotechnology Laboratory Methods –
Molecular Techniques 2 Units**

Prerequisite: BIOL 300, BIOL 303, BIOL 310, BIOL 400, BIOL 440, BIOL 442, or BIOT 307 with a grade of “C” or better

Course Transferable to CSU

Hours: 18 hours LEC; 54 hours LAB

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.

**BIOT 312 Biotechnology Laboratory Methods –
Microbial and Cell Culture
Techniques 2 Units**

Prerequisite: BIOL 300, BIOL 303, BIOL 310, BIOL 400, BIOL 440, BIOL 442, or BIOT 307 with a grade of “C” or better

Course Transferable to CSU

Hours: 18 hours LEC; 54 hours LAB

This course covers basic concepts and techniques to work effectively in a bioscience laboratory. Topics include media preparation, microbial and plant cell culture techniques, biosafety guidelines, and DNA and enzyme diagnostic techniques.

BIOT 498 Work Experience in Biotechnology 1-4 Units

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.

Enrollment Limitation: Be in a paid or non-paid internship, volunteer opportunity or job related to biotechnology. Students are advised to consult with the Biotechnology Department faculty to review specific certificate and degree work experience requirements.

General Education: AA/AS Area III(b)

Course Transferable to CSU

Hours: 300 hours LAB

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 required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to fulfill a weekly orientation and 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. The weekly orientation is required for first time participants, returning participants are not required to attend the orientation but are required to meet with the instructor as needed to complete all program forms and assignments. Work Experience may be taken for a total of 16 units when there are new or expanded learning objectives.

Area: Business & Computer Science
 Dean: Dr. Derrick Booth
 Phone: (916) 484-8361
 Counseling: (916) 484-8572

Degrees: A.A. - Business Transfer
 A.A. - General Business
 A.A. - Small Business Management
 A.A. - Technical Communications
 Certificates: General Business
 Small Business Management
 Technical Communications

DEGREES AND CERTIFICATES

Business Transfer Degree

This business degree program is designed for those who plan to transfer to a four-year university. It meets the common core of lower-division courses required by most colleges and universities. The program includes coursework that is essential for entry-level positions and enhances the knowledge base of those who are seeking career progression.

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.
- develop leadership skills that are effective in managing a multicultural workforce.
- analyze practical business problems and utilize research and critical thinking to evaluate and recommend 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 create relevant business documents.

Career Opportunities

Account executive, analyst, bank employee, buyer, clerk, data-entry clerk, data-entry specialist, entrepreneur, financial planner, government service, insurance representative, investment counselor, manager, market research, office assistant, public administration, purchasing agent, retail/industrial sales, stockbroker.

Requirements for Degree		34 Units
ACCT 301	Financial Accounting	4
ACCT 311	Managerial Accounting	4
BUS 300	Introduction to Business	3
BUS 340	Business Law (3)	3
or BUS 345	Law and Society (3)	
CISA 305	Beginning Word Processing	2
CISA 315	Introduction to Electronic Spreadsheets	2
ECON 302	Principles of Macroeconomics	3
ECON 304	Principles of Microeconomics	3
MATH 340	Calculus for Business and Economics (3)	3
or MATH 342	Modern Business Mathematics (3)	
And a minimum of 7 units from the following:		7
ACCT 343	Computer Spreadsheet Applications for Accounting (2)	
or ACCT 341	Computerized Accounting (2)	

BUS 320	Concepts in Personal Finance (3)
BUS 330	Managing Diversity in the Workplace (3)
CISA 318	Exploring Spreadsheet Software (1)
CISA 320	Introduction to Database Management (1)
CISA 330	Desktop Publishing (2)
CISC 308	Exploring Computer Environments and the Internet (1)
CISC 350	Introduction to Data Communications (1)
or CISC 305	Introduction to the Internet (1)
MGMT 304	Introduction to Management Functions (3)
or MGMT 300	Introduction to Leadership in Action (3)
MKT 300	Principles of Marketing (3)

Associate Degree Requirements: The Business Transfer 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.

General Business Degree

The General Business A.A. degree is designed to provide a strong foundation for those entering into a variety of business fields in the private and public sector. The program includes coursework that is essential for entry-level positions and enhances the knowledge base of those who are seeking career progression.

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.
- 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 Opportunities

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.

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(General Business Degree continued)

Requirements for Degree		32-35 Units
ACCT 101	Fundamentals of College Accounting (3)	3 - 4
or ACCT 301	Financial Accounting (4)	
BUS 105	Business Mathematics	3
BUS 110	Business Economics (3)	3
or ECON 302	Principles of Macroeconomics (3)	
BUS 300	Introduction to Business	3
BUS 310	Business Communications	3
BUS 320	Concepts in Personal Finance	3
BUS 340	Business Law (3)	3
or BUS 345	Law and Society (3)	
CISA 305	Beginning Word Processing (2)	1-2
or CISA 308	Exploring Word Processing and Presentation Software (1)	
CISA 315	Introduction to Electronic Spreadsheets (2)	1-2
or CISA 318	Exploring Spreadsheet Software (1)	
MKT 300	Principles of Marketing	3
And a minimum of 6 units from the following:		6 ¹

BUS, MGMT, MKT, RE courses not used to fulfill other requirements for the degree
¹Work Experience (498) courses are limited to 3 units maximum towards degree requirements.

Associate 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

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.

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.

Requirements for Certificate		24-25 Units
ACCT 101	Fundamentals of College Accounting (3)	3 - 4
or ACCT 301	Financial Accounting (4)	
BUS 300	Introduction to Business	3
BUS 310	Business Communications	3
BUS 340	Business Law	3
CISC 300	Computer Familiarization	1
MGMT 304	Introduction to Management Functions	3
MKT 300	Principles of Marketing	3
And a minimum of 5 units from the following:		5
BUS 210	The Business Plan (1)	
BUS 212	Marketing for Small Businesses (1)	
BUS 214	Financing a Small Business (1)	
BUS 216	Essential Records for the Small Business (1)	

BUS 218	Management Skills for the Small Business (1)
BUS 224	Customer Service (1)
BUS 330	Managing Diversity in the Workplace (3)
BUS 350	Small Business Management/Entrepreneurship (3)
CISA 305	Beginning Word Processing (2)
CISA 315	Introduction to Electronic Spreadsheets (2)
CISA 320	Introduction to Database Management (1)
CISA 340	Presentation Graphics (2)
MGMT 362	Techniques of Management (3)

Small Business Management Degree

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.

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.

Requirements for Degree		33-34 Units
ACCT 101	Fundamentals of College Accounting (3)	3 - 4
or ACCT 301	Financial Accounting (4)	
BUS 105	Business Mathematics	3
BUS 110	Business Economics (3)	3
or ECON 302	Principles of Macroeconomics (3)	
BUS 300	Introduction to Business	3
BUS 340	Business Law	3
BUS 350	Small Business Management/Entrepreneurship	3
MGMT 304	Introduction to Management Functions (3)	3
or MGMT 362	Techniques of Management (3)	
MKT 300	Principles of Marketing	3
MKT 312	Retailing	3
And a minimum of 3 units from the following:		3
ACCT 341	Computerized Accounting (2)	
ACCT 343	Computer Spreadsheet Applications for Accounting (2)	
BUSTEC 305	Introduction to Office Technology (1)	
BUSTEC 310	Introduction to Word/Information Processing (1 - 3)	
One or more Computer Information Science courses		
And a minimum of 3 units from the following:		3
BUS 210	The Business Plan (1)	
BUS 212	Marketing for Small Businesses (1)	
BUS 214	Financing a Small Business (1)	
BUS 216	Essential Records for the Small Business (1)	
BUS 218	Management Skills for the Small Business (1)	
BUS 220	Retailing and Merchandising for the Small Business (1)	
BUS 224	Customer Service (1)	
BUS 228	Selling Techniques for the Small Business (1)	

Associate Degree Requirements: 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.

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 their entrepreneurial skills, recognize opportunities, and learn the basics of starting and managing a small business.

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(Small Business Management Certificate continued)

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.

Requirements for Certificate 24-25 Units

ACCT 101	Fundamentals of College Accounting (3)	3 - 4
or ACCT 301	Financial Accounting (4)	
BUS 210	The Business Plan	1
BUS 212	Marketing for Small Businesses	1
BUS 214	Financing a Small Business	1
BUS 216	Essential Records for the Small Business	1
BUS 340	Business Law	3
BUS 350	Small Business Management/Entrepreneurship	3
CISC 300	Computer Familiarization	1
MKT 300	Principles of Marketing	3
And a minimum of 7 units from the following:		7
ACCT 121	Payroll Accounting (3)	
ACCT 341	Computerized Accounting (2)	
BUS 218	Management Skills for the Small Business (1)	
BUS 220	Retailing and Merchandising for the Small Business (1)	
BUS 224	Customer Service (1)	
BUS 228	Selling Techniques for the Small Business (1)	
MKT 312	Retailing (3)	
MKT 314	Advertising (3)	
Any CIS course		

Technical Communications Degree

The Technical Communications degree program 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.

Career Opportunities

Technical communicators may be employed in a variety of occupations in government, scientific firms, nonprofits, natural resources, finance, education, and high tech.

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.

Requirements for Degree 32 Units

CISA 305	Beginning Word Processing	2
CISW 300	Web Publishing	3
ENGWR 342	Introduction to Technical/Professional Communication	3
ENGWR 344	Technical/Professional Communication: Writing Reports	1.5
ENGWR 348	Technical/Professional Communication: Plain English	1.5
ENGWR 350	Technical/Professional Communication: Proposal Writing	1.5
ENGWR 352	Technical/Professional Communication: Writing Technical Manuals	3
ENGWR 353	Technical/Professional Communication: Developing Help Systems	1.5
JOUR 300	Newsriting and Reporting	3
And a minimum of 12 units from the following:		12
ARTNM 328	Digital Photo Imagery - PhotoShop Basics (3)	
ARTNM 330	Intermediate Digital Photo Imagery (3)	
ARTNM 352	Design for Publication (3)	
or [CISA 330	Desktop Publishing (2)	
and CISA 331	Intermediate Desktop Publishing (2)]	
CISW 307	Introduction to Web Development and Design (3)	
or ARTNM 401	Introduction to Web Development and Design (3)	
ARTNM 402	Intermediate Web Design (3)	
ARTNM 404	Interactive Multimedia Basics (3)	
CISW 310	Advanced Web Publishing (4)	

Associate Degree Requirements: 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.

Technical Communications Certificate

The Technical Communications certificate offers an interdisciplinary program of courses in writing, 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.

Career Opportunities

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.

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 printed pages and online screens that communicate organizations' values, enhance readability, and are easy to use.
- demonstrate basic skills in the use of key word processing, page design, help development, and web design applications.
- evaluate organizations' communication goals with technical writing ethics in mind.

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(Technical Communications Certificate continued)

Requirements for Certificate 21.5-22.5 Units

ARTNM 352	Design for Publication (3)	3- 4
or CISA 330	Desktop Publishing (2)	
and CISA 331	Intermediate Desktop Publishing (2)	
CISA 305	Beginning Word Processing	2
CISW 300	Web Publishing	3
ENGWR 342	Introduction to Technical/Professional Communication	3
ENGWR 352	Technical/Professional Communication: Writing Technical Manuals	3
ENGWR 353	Technical/Professional Communication: Developing Help Systems	1.5
And a minimum of 6 units from the following:		
ARTNM 328	Digital Photo Imagery - PhotoShop Basics (3)	
ARTNM 330	Intermediate Digital Photo Imagery (3)	
ARTNM 401	Introduction to Web Development and Design (3)	
ARTNM 402	Intermediate Web Design (3)	
ARTNM 404	Interactive Multimedia Basics (3)	
CISW 307	Introduction to Web Development and Design (3)	
CISW 310	Advanced Web Publishing (4)	

Business

BUS 100 English for the Professional 3 Units

Prerequisite: ENGWR 51 and ENGRD 15, or ESLR 310 and ESLW 310 with a grade of "C" or better; or placement through the assessment process.

Advisory: BUSTEC 300

Hours: 54 hours LEC

This course is designed to prepare the student for business communication. 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 document formatting. Emphasis is placed on 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. This course is required of all business technology majors and recommended for all business majors.

BUS 105 Business Mathematics 3 Units

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.

General Education: AA/AS Area II(b)

Hours: 54 hours LEC

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.

BUS 110 Business Economics 3 Units

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.

General Education: AA/AS Area V(b)

Hours: 54 hours LEC

This course is designed for two-year Accounting, Business, Computer Information, Marketing, and Real Estate majors. Both microeconomic and macroeconomic theory will be covered with the emphasis towards applications. Does not meet ECON 302 or 304 requirements for transfer students.

BUS 210 The Business Plan 1 Unit

Advisory: BUS 350; 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.

Hours: 18 hours LEC

This course offers an organized, step-by-step approach to preparing a business plan. All sections of the business plan are covered.

BUS 212 Marketing for Small Businesses 1 Unit

Advisory: BUS 350; 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.

Hours: 18 hours LEC

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.

BUS 214 Financing a Small Business 1 Unit

Prerequisite: None

Advisory: ENGWR 51 and ENGRD 15, or ESLR 310 and ESLW 310; BUS 105, 350.

Hours: 18 hours LEC

This course covers sources and ways of raising capital for small businesses. It will explore 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.

BUS 216 Essential Records for the Small Business 1 Unit

Prerequisite: None

Advisory: ENGWR 51 and ENGRD 15, or ESLR 310 and ESLW 310; BUS 105, 350.

Hours: 18 hours LEC

This course emphasizes the various types of records that small businesses must keep. The focus will be upon financial, employment, and tax records. Simple, easy-to-use record-keeping systems will be covered.

BUS 218 Management Skills for the Small Business 1 Unit

Prerequisite: None

Advisory: ENGWR 51 and ENGRD 15, or ESLR 310 and ESLW 310; BUS 105, 350.

Hours: 18 hours LEC

A small business owner must understand and motivate others to help the business reach its objectives. This course covers such functions as planning and organizing work flow, delegating responsibilities, understanding leadership styles, decision making, stress and time management, and working with employee organizations.

BUS 220 Retailing and Merchandising for the Small Business 1 Unit

Prerequisite: None

Advisory: ENGWR 51 and ENGRD 15, or ESLR 310 and ESLW 310; BUS 105, 350.

Hours: 18 hours LEC

This course will emphasize retailing concepts, such as inventory control and turnover rates, selecting merchandise sources, using trade and cash discounts, pricing, markup and markdown, and shrinkage control. Students will also learn how to develop a merchandising plan, inventory control system, and assess consumer behavior and demographics.

BUS 224 Customer Service 1 Unit

Prerequisite: None

Advisory: ENGWR 51 and ENGRD 15, or ESLR 310 and ESLW 310; BUS 105, 350.

Hours: 18 hours LEC

This course is a study of the principles involved in building an effective customer service team. Customer service activities in business, government, and other service industries will be examined so that improved customer service will be emphasized.

BUS 228 Selling Techniques for the Small Business 1 Unit

Prerequisite: None

Advisory: ENGWR 51 and ENGRD 15, or ESLR 310 and ESLW 310; BUS 350, MKT 300.

Hours: 18 hours LEC

This class will focus on those skills that will aid an individual to become a professional salesperson. The skills presented will be those that will aid both product and service salespeople. This course is recommended for anyone who might have to use some sales techniques in any business, industry, or government position.

BUS 250 Survey of International Business 3 Units

Prerequisite: None

Advisory: BUS 300.

Hours: 54 hours LEC

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 operation of multi-national corporations.

BUS 294 Topics in Business .5-4 Units

Hours: 72 hours LEC

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. This course may be taken four times for a maximum of six units, provided there is no duplication of topics.

BUS 300 Introduction to Business 3 Units

Advisory: ENGWR 102 or 103, and ENGRD 116; OR ESLR 320 and ESLW 320.

General Education: AA/AS Area V(b)

Course Transferable to UC/CSU

Hours: 54 hours LEC

This survey course covers a multitude of business subject 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.

BUS 310 Business Communications 3 Units

Prerequisite: BUS 100 or ENGWR 102 with a grade of "C" or better; or placement through the assessment process.

Advisory: BUSTEC 300

General Education: AA/AS Area II(a)

Course Transferable to CSU

Hours: 54 hours LEC

This course focuses on the concepts, strategies, and principles of effective communication in business situations. Tools to communicate effectively in a fast-paced technological, global marketplace are emphasized. The course provides opportunities to create, edit, evaluate, and critique business documents and reports. A formal research paper using analytical skills, graphics, and the ability to draw conclusions and make recommendations is required. An oral business presentation with visuals is prepared and delivered.

BUS 320 Concepts in Personal Finance 3 Units

Same As: ECON 320

Advisory: ENGWR 102 or 103, and ENGRD 116;

OR ESLR 320 and ESLW 320.

General Education: AA/AS Area V(b); AA/AS Area III(b);

CSU Area D2

Course Transferable to CSU

Hours: 54 hours LEC

This course covers how to analyze financial affairs for lifelong decision making. It examines the basics of financial planning and the analysis and decision making in areas of budgeting, taxes, borrowing, money management, insurance, investments, and retirement.

This course is not open to students who have completed ECON 320.

BUS 330 Managing Diversity in the Workplace 3 Units

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.

General Education: AA/AS Area V(b); AA/AS Area VI; CSU Area D3

Course Transferable to CSU

Hours: 54 hours LEC

The course examines the leadership skills and abilities needed to manage a multicultural workplace. A primary focus is placed upon 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.

BUS 340 Business Law 3 Units

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.

Course Transferable to UC/CSU

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.

BUS 345 Law and Society 3 Units

Same As: POLS 332

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.

General Education: AA/AS Area V(b); CSU Area D8; IGETC Area 4H

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course is an introduction to the Anglo-American Common Law System with emphasis upon the nature and purpose of law. The evolution of legal concepts as a reflection of the social environment, and the basic organization and functioning of the American judicial system will be presented from a theoretical rather than a practical view point through analysis of selected cases and reading materials. This course is not open to students who have completed POLS 332.

**BUS 350 Small Business Management/
Entrepreneurship 3 Units**

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.
Course Transferable to CSU
Hours: 54 hours LEC

This course provides an overview of the various elements involved in starting and operating a small business. It introduces such topics as 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.

BUS 498 Work Experience in Business 1-4 Units

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.
Enrollment Limitation: Be in a paid or non-paid internship, volunteer opportunity, or job related to Business. Students are advised to consult with the Business Department faculty to review specific certificate and degree work experience requirements.
General Education: AA/AS Area III(b)
Course Transferable to CSU
Hours: 300 hours LAB

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 required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to fulfill a weekly orientation and 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. The weekly orientation is required for first time participants; returning participants are not required to attend the orientation weekly but are required to meet with the instructor as needed to complete all program forms and assignments. Work Experience may be taken for a total of 16 units when there are new or expanded learning objectives.

Area: Business & Computer Science
 Dean: Dr. Derrick Booth
 Phone: (916) 484-8361
 Counseling: (916) 484-8572

Degrees: A.A. - Administrative Professional
 Certificates: Administrative Assistant
 Law Office Clerical Assistant
 Office Administration
 Office Careers - Fast Track
 Office Technology
 Virtual Office Professional
 Certificates of Completion offered by the department:
 Office Assistant

DEGREES AND CERTIFICATES

Administrative Professional Degree

The administrative assistant associate degree program 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.

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 Opportunities

Typical career opportunities include clerical, administrative support, and executive assistant positions with private industry, non-profit organizations, and government entities.

Requirements for Degree	31-32 Units
ACCT 101 Fundamentals of College Accounting (3) 3 - 4 or ACCT 301 Financial Accounting (4)	
BUS 300 Introduction to Business	3
BUS 310 Business Communications.....	3
BUSTEC 101 Computer Keyboarding: 10-Key.....	1
BUSTEC 110 Business Procedures for Professional Success.....	3
BUSTEC 126 Outlook: Basics (1)	1
or CISA 126 Outlook: Basics (1)	
BUSTEC 127 Outlook: Tools (1)	1
or CISA 127 Outlook: Tools (1)	
BUSTEC 305 Introduction to Office Technology	1
BUSTEC 313 Presentations for the Business Professional	2
BUSTEC 332 Integrated Business Projects.....	3
CISA 315 Introduction to Electronic Spreadsheets.....	2
CISA 320 Introduction to Database Management	1

MGMT 300 Introduction to Leadership in Action (3).....	3
or MGMT 304 Introduction to Management Functions (3)	
And a minimum of 3 units from the following:	3
BUSTEC 300 Beginning Keyboarding/Applications (1 - 3)	
And a minimum of 3 units from the following:	3
BUSTEC 310 Introduction to Word/Information Processing (1 - 3)	

Associate Degree Requirements: The Administrative Assistant 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.

Administrative Assistant Certificate

This certificate develops interpersonal, organizational, and technical skills for advancement in administrative support and office management positions. Course topics include verbal and written communication, document processing, office technology, office procedures, organizational and time management skills, supervision, critical thinking, and problem solving.

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, basic financial data, and customer service.
- analyze multiple business projects and integrate office technologies and procedures to complete the required tasks.
- create, revise, and evaluate verbal and written business messages demonstrating business communication techniques.
- utilize critical thinking, problem solving, and organizational management skills to work independently and in a group to manage and complete administrative tasks.

Career Opportunities

Typical career opportunities include clerical, administrative support, and executive assistant positions within private industry, non-profit organizations, and government entities.

Requirements for Certificate	21-23 Units
ACCT 101 Fundamentals of College Accounting (3)	3 - 4
or ACCT 301 Financial Accounting (4)	
BUS 310 Business Communications.....	3
BUSTEC 101 Computer Keyboarding: 10-Key.....	1
BUSTEC 110 Business Procedures for Professional Success.....	3
BUSTEC 127 Outlook: Tools (1)	1
or CISA 127 Outlook: Tools (1)	
BUSTEC 305 Introduction to Office Technology	1
CISA 315 Introduction to Electronic Spreadsheets (2).....	1 - 2
or CISA 320 Introduction to Database Management (1)	

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(Administrative Assistant Certificate continued)

MGMT 300	Introduction to Leadership in Action (3).....	3
or MGMT 304	Introduction to Management Functions (3)	
And a minimum of 2 units from the following:		
BUSTEC 300	Beginning Keyboarding/Applications (1 - 3)	2
And a minimum of 3 units from the following:		
BUSTEC 310	Introduction to Word/Information Processing (1 - 3)	3

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.

Completion of the Law Office Assistant Certificate does not qualify the holder under California state law as a Legal Assistant or paralegal.

Student Learning Outcomes

Upon completion of this certificate 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 Opportunities

Typical career opportunities are entry-level clerical positions in a law office. In order to become a Legal Assistant/ Paralegal, see the program requirements for the A.A. or Certificate in Legal Assisting.

Requirements for Certificate		16 Units
LA 300	Introduction to Law and the American Legal System.....	3
LA 350	Law Office Management.....	3
BUSTEC 100	Keyboarding Skills (1 -3).....	1 - 3 ¹
or BUSTEC 300	Beginning Keyboarding/Applications (1 -3)	
BUSTEC 122	Workplace Behavior and Communication Technologies.....	3
BUSTEC 305	Introduction to Office Technology.....	1
BUSTEC 310	Introduction to Word/Information Processing.....	1 - 3 ²

¹A total of 3 units from these courses must be taken.

²Must be taken for 3 units.

Office Administration Certificate

This certificate provides the skills needed for entry-level office positions in business and industry. The course work emphasizes workforce skills in generating financial statements, formatting business correspondence, writing effectively, organizing business information, communicating with individuals, and working on teams.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- complete a variety of accounting transactions.
- produce financial documents.
- compose and format business documents.
- apply administrative principles to facilitate positive workflow and productivity.

- follow proper procedures and guidelines in resolving conflict situations.
- use current business technology and software successfully and competently in the workplace.

Career Opportunities

Typical career opportunities include titles such as office administrator, office assistant, office associate, office clerk, office manager, office support, and office planner.

Requirements for Certificate		21-22 Units
ACCT 101	Fundamentals of College Accounting (3)	3 - 4
or ACCT 301	Financial Accounting (4)	
BUS 100	English for the Professional	3
BUSTEC 101	Computer Keyboarding: 10-Key	1
BUSTEC 110	Business Procedures for Professional Success.....	3
BUSTEC 122	Workplace Behavior and Communication Technologies	3
BUSTEC 126	Outlook: Basics (1)	1
or CISA 126	Outlook: Basics (1)	
BUSTEC 305	Introduction to Office Technology	1
And a minimum of 3 units from the following:		
BUSTEC 300	Beginning Keyboarding/Applications (1 - 3)	3
And a minimum of 3 units from the following:		
BUSTEC 310	Introduction to Word/Information Processing (1 - 3)	3

Office Careers: Fast Track Certificate

This fast track certificate offers the skills necessary to be successful in office careers. The course work includes mastering basic technology skills, identifying and developing interpersonal skills for the workplace, and exploring career opportunities through an internship or work experience program.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- evaluate business documents using business/industry formatting and accuracy standards.
- perform keyboarding tasks successfully in the workplace.
- communicate effectively in a work environment.
- interact successfully with a diverse population in the workplace.
- perform office tasks using business technologies and effective writing skills.
- apply proper procedures and guidelines in resolving conflict.

Career Opportunities

Typical career opportunities include titles such as office assistant, office associate, office clerk, office manager, and office support.

Requirements for Certificate		23 Units
BUS 100	English for the Professional	3
BUSTEC 101	Computer Keyboarding: 10-Key	1
BUSTEC 122	Workplace Behavior and Communication Technologies	3
BUSTEC 126	Outlook: Basics (1)	1
or CISA 126	Outlook: Basics (1)	
BUSTEC 305	Introduction to Office Technology	1
BUSTEC 350	Virtual Office Careers and Technologies	3
And a minimum of 2 units from the following:		
BUS 498	Work Experience in Business (1 - 4)	2
And a minimum of 3 units from the following:		
BUSTEC 300	Beginning Keyboarding/Applications (1 - 3)	3

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(Office Careers: Fast Track Certificate continued)

And a minimum of 2 units from the following:2

BUSTEC 310 Introduction to Word/Information Processing (1 - 3)

CISA 305 Beginning Word Processing (2)

And a minimum of 4 units from the following:4

BUSTEC 100 Keyboarding Skills (1 - 3)

BUSTEC 127 Outlook: Tools (1)

or CISA 127 Outlook: Tools (1)

CISA 315 Introduction to Electronic Spreadsheets (2)

CISA 320 Introduction to Database Management (1)

CISA 340 Presentation Graphics (2)

CISC 305 Introduction to the Internet (1)

CISC 320 Operating Systems (1)

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.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- compose and format business documents.
- demonstrate critical thinking and effective writing techniques.
- 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.

Requirements for Certificate	18 Units
BUS 310 Business Communications	3
BUSTEC 101 Computer Keyboarding: 10-Key	1
BUSTEC 110 Business Procedures for Professional Success.....	3
BUSTEC 126 Outlook: Basics (1)	1
or CISA 126 Outlook: Basics (1)	
BUSTEC 127 Outlook: Tools (1)	1
or CISA 127 Outlook: Tools (1)	
BUSTEC 305 Introduction to Office Technology	1
BUSTEC 332 Integrated Business Projects	3
And a minimum of 2 units from the following:	2
BUSTEC 300 Beginning Keyboarding/Applications (1 - 3)	
And a minimum of 3 units from the following:	3
BUSTEC 310 Introduction to Word/Information Processing (1 - 3)	
BUSTEC 313 Presentations for the Business Professional (2)	
CISC 300 Computer Familiarization (1)	
CISC 306 Introduction to Web Page Creation (1)	

Virtual Office Professional Certificate

This certificate program offers preparation as an independent entrepreneur providing administrative, creative, and technical services to clients in virtual environments. This emerging profession encourages working from home.

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 Opportunities

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.

Requirements for Certificate:	15-17 Units
BUS 100 English for the Professional (3).....	3
or BUS 310 Business Communications (3)	
BUSTEC 110 Business Procedures for Professional Success (3)	3 ¹
or BUSTEC 122 Workplace Behavior and Communication Technologies (3)	
BUSTEC 127 Outlook: Tools (1)	1
or CISA 127 Outlook: Tools (1)	
BUSTEC 300 Beginning Keyboarding/Applications	1 - 3
BUSTEC 350 Virtual Office Careers and Technologies.....	3
BUSTEC 332 Integrated Business Projects	3
CISA 320 Introduction to Database Management (1)	1
or CISC 306 Introduction to Web Page Creation (1)	

¹Individuals who hold a certificate as a Certified Professional Secretary (CPS) or Certified Administrative Professional (CAP) may receive credit for this option with evidence of completion of the CPS or CAP certification.

CERTIFICATES OF COMPLETION (offered by the department)

Office Assistant Certificate

This certificate provides training in clerical procedures for entry-level office positions.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- perform keyboarding tasks successfully and competently in the workplace.
- 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 Opportunities

Typical career opportunities are entry-level clerical positions.

Requirements for Certificate:	6 Units
BUSTEC 125 Office Specialist	6

Business Technology

BUSTEC 100 Keyboarding Skills 1-3 Units

Prerequisite: None

Advisory: BUSTEC 300; or ability to touch type.

Hours: 36 hours LEC; 54 hours LAB

This course is designed for individuals with keyboarding skills (ability to touch type) who want to improve their speed and accuracy. Individualized skill improvement plans are based on computerized assessment of keyboarding speed and accuracy. Enroll any time throughout the semester. Earn one unit of credit for each module successfully completed. Certification testing is available. Individuals interested in beginning keyboarding should enroll in BUSTEC 300. Credit/No Credit only.

BUSTEC 101 Computer Keyboarding: 10-Key 1 Unit

Prerequisite: None

Advisory: BUSTEC 300.

Hours: 12 hours LEC; 18 hours LAB

This course introduces the numeric keypad and develops the ability to key information into a computer with speed and accuracy. Simulated employment tests based on industry standards are included. Ten-key certification testing is completed at the end of the course.

BUSTEC 110 Business Procedures for Professional Success 3 Units

Prerequisite: BUSTEC 300 with a grade of "C" or better.

Corequisite: BUS 310.

Advisory: BUSTEC 310.

Hours: 54 hours LEC

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.

BUSTEC 122 Workplace Behavior and Communication Technologies 3 Units

Prerequisite: None

Advisory: BUSTEC 300, ENGRD 15, and ENGWR 51.

Hours: 54 hours LEC

This course introduces basic procedures that promote effective workplace practices. Specific topics include working with the office team, communicating effectively, problem solving, preparing and processing information using technology, and developing a portfolio. This course emphasizes activities and techniques that develop competencies needed in the global workplace.

BUSTEC 125 Office Specialist 6 Units

Corequisite: BUSTEC 101

Advisory: ENGWR 102 or ENGWR 103 and ENGRD 116 or ESLR 320 and ESLW 320

Hours: 96 hours LEC; 54 hours LAB

This course covers the skills needed for office specialist positions. The content includes computer keyboarding, word processing, and spreadsheet applications; alphabetic filing; office procedures and communications, including telephone, mail, email, and internet; human relations; and employment resources. A department certificate is granted upon successful completion of all course segments.

BUSTEC 126 Outlook: Basics 1 Unit

Same As: CISA 126

Advisory: BUSTEC 300

Hours: 18 hours LEC

This course introduces desktop communication management for users of Microsoft Outlook. Topics include understanding and navigating the Outlook environment, creating and sending e-mail, 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 taken CISA 126.

BUSTEC 127 Outlook: Tools 1 Unit

Same As: CISA 127

Prerequisite: BUSTEC 126 or CISA 126 with a grade of "C" or better

Advisory: BUSTEC 300

Hours: 18 hours LEC

This Outlook course presents the communication tools beyond basic e-mail. Topics include working with multiple e-mail accounts, using rules and folders, incorporating advanced calendar and contact features, setting up folder sharing and delegates, and customizing Outlook. In addition, the course covers the integration of Outlook with other applications within 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 taken CISA 127.

BUSTEC 300 Beginning Keyboarding/Applications 1-3 Units

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.

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course provides computer training for employment or personal use. Module one covers keyboarding and skill development techniques. Modules two and three introduce Microsoft Word (word processing software) and basic formats for business correspondence - memorandums, letters, e-mail, tables, and reports. Students may enroll at any time during the semester and earn one unit of credit for each module successfully completed.

BUSTEC 305 Introduction to Office Technology 1 Unit

Prerequisite: None

Advisory: BUSTEC 300.

Course Transferable to CSU

Hours: 18 hours LEC

This course focuses on the integration of office technology and business skills in the work environment. Topics include hardware and software; e-mail, voice, and fax communications; electronic calendars and scheduling; Internet resources; and the virtual office. This is an introductory course recommended for all business students.

**BUSTEC 310 Introduction to
Word/Information Processing 1-3 Units**

Prerequisite: BUSTEC 300 with a grade of "C" or better.

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course reviews basic word/information processing and introduces intermediate and advanced formatting for correspondence, tables, reports, newsletters, presentations, Internet documents, and other business-related documents. Related topics include integrated office applications, macros, managing multiple-user documents, and e-mail. This course is divided into three one-unit modules. Units earned in this course are based on modules successfully completed. This course may be taken four times on different modules or software packages/versions for a maximum of six units.

**BUSTEC 313 Presentations for the
Business Professional 2 Units**

Prerequisite: None

Advisory: BUS 310; CISA 340.

Course Transferable to CSU

Hours: 36 hours LEC

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. Strategies for interviews, meetings, training, and group presentations typically found in a business environment are explored.

BUSTEC 332 Integrated Business Projects 3 Units

Prerequisite: BUSTEC 110 with a grade of "C" or better.

Advisory: BUSTEC 310; CISA 310; CISA 320.

Course Transferable to CSU

Hours: 54 hours LEC

This course integrates office administration skills using the Microsoft Office suite. 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 are based on current office systems and incorporate problem-solving skills and real world business simulations.

**BUSTEC 350 Virtual Office Careers
and Technologies 3 Units**

Prerequisite: None

Course Transferable to CSU

Hours: 54 hours LEC

This course explores careers in the virtual office and identifies techniques and technologies needed by virtual office workers. Specific topics include types of virtual offices, technologies and skills needed in a virtual office, ways to establish and manage a virtual office, effective communication, and job opportunities. This course also examines issues for career preparation in a virtual environment.

Area: Science and Engineering
 Dean: Dr. Rina Roy
 Phone: (916) 484-8107
 Counseling: (916) 484-8572

Degree: A.S. - General Science

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).

Career Opportunities

The opportunities for those that have a core knowledge and understanding of the principles of chemistry are varied. Fields requiring a background in chemistry include: Chemistry, Medicine/Nursing, Engineering, Dentistry, Biochemistry, Forensics, Physical Therapy, Veterinary Medicine, Biotechnology, Respiratory Therapy, Dental Assistant/ Physician Assistant, Psychology, Biology, Environmental Science, Pharmacy, Pathology, Nutrition and Food Science, Physics, Optometry, Criminal Justice, Viticulture, Chiropractic Medicine, Geology, and Exercise Science.

General Science Degree

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.

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.
- describe the basic definitions and fundamental theories of an introductory 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.
- recognize ethical components of scientific decision making and apply personal and social values within the process of decision making in scientific endeavors.

Requirements for Degree 18 Units

A minimum of 18 units from the following: 18
 Transfer level science courses including one laboratory course in a physical science and one laboratory course in a biological science. Courses may be selected from anthropology (physical), astronomy, biology, biotechnology, chemistry, geography (physical), geology, natural resources, physical science, physics, and psychology (biological).

Associate Degree Requirements: 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.

Chemistry

CHEM 130 Chemistry for Funeral Service 4 Units

Corequisite: BUS 340, ENGWR 300, FSE 110, and FSE 160
Enrollment Limitation: Acceptance into the Funeral Service Education program.
Hours: 72 hours LEC

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. The development and use of personal, professional, and community sanitation practices are covered, as well as use and precautions related to potentially harmful chemicals that are currently used in the field of funeral service.

CHEM 290 PACE: The Scientific Method – A Hands-On Approach 1 Unit

Hours: 18 hours LEC

This course is designed for students in the Partnership to Assure College Entry (PACE) program. It offers a first experience in college science for high school students. It focuses on concepts from several different disciplines of science. The principles of science are developed and understood through a variety of interactive activities.

CHEM 305 Introduction to Chemistry 5 Units

Prerequisite: MATH 100 or 104 with a grade of "C" or better
Advisory: ENGWR 102 or 103, and ENGRD 116 with a grade "C" or better; OR ESLR 320 and ESLW 320 with a grade "C" or better; OR placement through assessment process.
General Education: AA/AS Area IV; CSU Area B1; CSU Area B3; IGETC Area 5A; IGETC Area 5C
Course Transferable to UC/CSU
Hours: 72 hours LEC; 54 hours LAB

This course covers general principles of chemistry, such as unit analysis, atomic structure, nomenclature, mole concept, stoichiometry, and gases. A brief introduction to organic chemistry and biochemistry is provided. It is primarily designed for allied health majors.

CHEM 306 Introduction to Chemistry 5 Units

Prerequisite: CHEM 305 with a grade of "C" or better
Advisory: ENGWR 102 or 103, and ENGRD 116 with a grade "C" or better; OR ESLR 320, ESLL 320 and ESLW 320 with a grade "C" or better; or placement through assessment process.
Course Transferable to UC/CSU
Hours: 72 hours LEC; 54 hours LAB

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.

CHEM 309 Integrated General, Organic, and Biological Chemistry 5 Units

Prerequisite: MATH 100, 104, or 129 with a grade of "C" or better; or placement through the assessment process.
Advisory: ENGRD 116, ENGWR 102, ESLR 320, ESLW 320, and MATH 120
General Education: AA/AS Area IV; CSU Area B1; CSU Area B3
Course Transferable to CSU
Hours: 72 hours LEC; 54 hours LAB

This course is an intensive survey of general, organic, and biological chemistry specifically designed for nursing majors and other health-related fields. Topics include general chemistry, organic chemistry, and biological chemistry as they apply to chemistry of the human body. This course satisfies the requirements of those health-career programs which require one semester of chemistry. Students who had chemistry in high school and retained some it are advised to take CHEM 309. Students who have not taken a chemistry course recently or have never taken a chemistry course are advised to take the CHEM 305 & 306 sequence. Students enrolled in CHEM 309 are strongly encouraged to co-enroll in CHEM 311.

CHEM 310 Chemical Calculations 4 Units

Prerequisite: MATH 100, 104, or 129 with a grade of "C" or better
Corequisite: MATH 120 or 124
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.
General Education: AA/AS Area IV
Course Transferable to CSU
Hours: 54 hours LEC; 54 hours LAB

This course introduces calculations, terminology, chemical and laboratory techniques. It provides intensive problem solving skills necessary for CHEM 400.

CHEM 311 Strategies for Problem Solving in Chemistry .75 Units

Corequisite: CHEM 305, 306, 309, 310, 400, 401, 420, 421, or 423
Course Transferable to CSU
Hours: 41 hours LAB

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 most chemistry courses at American River College. Strategies and content will be specific to the area of chemistry studied in the co-requisite. This course may be taken four times with a different co-requisite. Pass/No Pass only.

CHEM 325 Pollution, Poisons, and Planet Earth 4 Units

Advisory: MATH 32; ENGRD 116 or ESLR 320
General Education: AA/AS Area IV; CSU Area B1; CSU Area B3; IGETC Area 5A; IGETC Area 5C
Course Transferable to UC/CSU
Hours: 54 hours LEC; 54 hours LAB

This course describes the fundamental concepts of general, organic, and biological chemistry as they relate to human-made and natural pollution and poisons in the environment. The laboratory part of the course is designed to highlight current topics in environmental chemistry, investigate indicators of a healthy or polluted environment, and to investigate the effects of toxic chemicals on living systems. Field trips are required.

CHEM 334 Chemistry in the Kitchen 3 Units

General Education: AA/AS Area IV
Course Transferable to CSU
Hours: 54 hours LEC

This course qualitatively covers a variety of chemical principles in the context of cooking. These principles include basic atomic structure and geometry, phase changes, acids and bases, proteins and denaturing, fermentation, fats and carbohydrates. This course is designed for K-6 educators who want to increase their understanding of chemistry principles. Many of the topics are keyed to the new California State Science Standards.

CHEM 400 General Chemistry 5 Units

Prerequisite: MATH 120, 124 or 129 with a grade of "C" or better AND one of the following: 1) CHEM 310 with a grade of "C" or better 2) Or CHEM 305 with a grade of "C" or better and placement through the chemistry assessment process 3) Or High School chemistry with a grade of "C" or better and placement through the chemistry assessment process.
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.
General Education: AA/AS Area IV; CSU Area B1; CSU Area B3; IGETC Area 5A; IGETC Area 5C
Course Transferable to UC/CSU
Hours: 54 hours LEC; 108 hours LAB

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.

CHEM 401 General Chemistry 5 Units

Prerequisite: CHEM 400 with a grade of "C" or better
General Education: CSU Area B1; CSU Area B3; IGETC Area 5A; IGETC Area 5C
Course Transferable to UC/CSU
Hours: 54 hours LEC; 108 hours LAB

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.

CHEM 410 Quantitative Analysis**5 Units***Prerequisite: CHEM 401 with a grade of "C" or better.**Course Transferable to UC/CSU**Hours: 54 hours LEC; 108 hours LAB*

This quantitative analytical chemistry course emphasizes the theory and practice of gravimetric, volumetric, potentiometric, spectrophotometric and chromatographic methods of analysis.

The course focuses on calibration, standardization, method development and validation procedures, sampling, and data handling. This course is for chemistry, biochemistry, chemical engineering, pharmacy, biology, molecular biology, and microbiology majors. (CAN CHEM 12)

CHEM 420 Organic Chemistry**5 Units***Prerequisite: CHEM 401 with a grade of "C" or better.**Course Transferable to UC/CSU**Hours: 54 hours LEC; 108 hours LAB*

This course is designed primarily for chemistry, chemical engineering, premedical, pharmacy and other majors who require a more intensive course than CHEM 423. Emphasis is on the application of modern principles regarding structure, reactivity, methods of synthesis and physical properties of carbon compounds.

CHEM 421 Organic Chemistry**5 Units***Prerequisite: CHEM 420 with a grade of "C" or better.**Course Transferable to UC/CSU**Hours: 54 hours LEC; 108 hours LAB*

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, UV-VIS spectrometry, and carbon-13 NMR. Special attention is given to development of reaction mechanisms, methods of organic synthesis and instrumental analysis as it applies to organic chemistry.

CHEM 423 Organic Chemistry – Short Survey**5 Units***Prerequisite: CHEM 401 with a grade of "C" or better**General Education: CSU Area B1; CSU Area B3; IGETC Area 5A; IGETC Area 5C**Course Transferable to UC/CSU**Hours: 72 hours LEC; 54 hours LAB*

This course is an introductory survey of the compounds of carbon with emphasis on those of biological interest, 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, and chiropractics.

CHEM 430 Molecular Modeling**1 Unit***Prerequisite: CHEM 401 with a grade of "C" or better.**Advisory: CHEM 420 or 423.**Course Transferable to CSU**Hours: 12 hours LEC; 27 hours LAB*

This computer based course will cover a variety of topics involving molecular modeling and simulations. Some of the topics to be covered include reaction mechanisms, thermo chemistry, electrophilic and nucleophilic substitutions, complexes, and spectroscopy.

CHEM 480 Honors General Chemistry**1 Unit***Prerequisite: CHEM 400 with a grade of "C" or better;**ENGWR 300 with a grade of "C" or better or honors placement on the English assessment; GPA of 3.0 or better.**Corequisite: CHEM 401.**Course Transferable to UC/CSU**Hours: 18 hours LEC*

This honors course provides advanced studies for general chemistry students. It involves in-depth discussion and analysis of recent scientific articles in terms of general chemical principles.

CHEM 482 Biology/Chemistry Honors Seminar**1 Unit***Same As: BIOL 480**Prerequisite: Cumulative GPA of 3.0 or above; CHEM 400 and BIOL 400 with a grade of "C" or better; ENGWR 300 or 480 with a grade of "C" or better.**Course Transferable to CSU**Hours: 18 hours LEC*

This honors section will provide a seminar approach for advanced students of general chemistry and biology to discuss and analyze in-depth recent scientific articles in terms of the chemical and biological principles introduced in these curricula. Not open to students who have taken BIOL 480. May be taken two times for credit.

Area: Business & Computer Science
 Dean: Dr. Derrick Booth
 Phone: (916) 484-8361
 Counseling: (916) 484-8572

Degree: A.S. - Computer Science
 A.S. - CIS: Computer Networking Management
 A.S. - CIS: Computer Programming
 A.S. - CIS: Database Management
 A.A. - CIS: Microcomputer Applications
 A.S. - CIS: PC Support Management
 A.S. - Information Systems Security
 A.A.- Technical Communications

Certificates: CIS: Computer Networking Management
 CIS: Database Management
 CIS: Microcomputer Applications
 CIS: PC Support
 CIS: Computer Programming
 Computer Information Security Essentials
 Information Systems Security
 Network Administration Essentials-Windows
 Technical Communications
 Web Developer
 Web Publishing

DEGREES AND CERTIFICATES

Computer Science Degree

This program is 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 as is required by most university computer science programs.

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.

Requirements for Degree	30-32 Units
[CISP 300 Algorithm Design/Problem Solving (3) 5 - 7 and CISP 360 Introduction to Structured Programming (4)] or CISP 480 Honors Introduction to Structured Programming (5)	
CISP 310 Assembly Language Programming for Microcomputers.....4	
CISP 400 Object Oriented Programming with C++4	
CISP 430 Data Structures4	
CISP 440 Discrete Structures for Computer Science3	
MATH 400 Calculus I5	
MATH 401 Calculus II5	

Associate Degree Requirements: 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.

CIS: Computer Networking Management Degree

The 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:

- 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.

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.

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(CIS: Computer Networking Management Degree continued)

- 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 Opportunities

The Network Management 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.

Core Requirements for Degree 14-15 Units

BUS 310	Business Communications (3)	3 - 4
or ENGWR 300	College Composition (3)	
or ENGWR 480	Honors College Composition (3)	
or ESLW 340	Advanced Composition (4)	
CISA 315	Introduction to Electronic Spreadsheets	2
CISC 320	Operating Systems	1
CISC 323	Linux Operating System	1
CISC 350	Introduction to Data Communications	1
CISC 361	Microcomputer Support Essentials - Preparation for A+ Certification	3
CISS 310	Network Security Fundamentals	3

CISCO Concentration 33-35 Units

Core Requirements		14 - 15
CISC 324	Intermediate Linux Operating System	1
[CISC 110	Networking Technologies - Preparation for N+ Certification (2)	3 - 4
and CISC 111	Intermediate Networking Technologies - Preparation for N+ Certification (2)]	
or CISC 119	TCP/IP Protocols (3)	
CISC 140	CISCO Networking Academy (CCNA): Networking Fundamentals	3
CISC 141	CISCO Networking Academy (CCNA): Routing Protocols and Concepts	3
CISC 142	CISCO Networking Academy (CCNA): LAN Switching and Wireless	3
CISC 143	CISCO Networking Academy (CCNA): Accessing the Wide Area Network	3
CISS 325	Network Security and Firewalls	3

LINUX Concentration 32 - 33 Units

Core Requirements		14 - 15
CISC 324	Intermediate Linux Operating System	1
CISC 110	Networking Technologies - Preparation for N+ Certification	2
CISC 111	Intermediate Networking Technologies - Preparation for N+ Certification	2
CISC 119	TCP/IP Protocols	3
CISC 120	Beginning Network Administration with Linux	3
CISC 121	Network Administration with Linux: LAN Services	2
CISC 122	Network Administration with Linux: Internet Services	2
And a minimum of 3 units from the following:		3
CISP 400	Object Oriented Programming with C++ (4)	
CISS 342	Implementing Linux Operating System Security (3)	

WINDOWS Concentration 33 - 34 Units

Core Requirements		14 - 15
CISC 110	Networking Technologies - Preparation for N+ Certification	2
CISC 111	Intermediate Networking Technologies - Preparation for N+ Certification	2
CISC 300	Network Systems Administration	3
CISC 302	Intermediate Network Systems Administration	3
CISC 307	Windows Active Directory Services	3
CISC 308	Internetworking with TCP/IP (3)	3
or CISC 119	TCP/IP Protocols (3)	
And a minimum of 3 units from the following:		3
CISP 370	Beginning Visual Basic (4)	
CISS 341	Implementing Windows Operating System Security (3)	

Associate Degree Requirements: 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.

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.

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.

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(CIS: Computer Networking Management Certificate continued)

- 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.

Core Requirements for Certificate 8 Units

CISC 323	Linux Operating System	1
CISC 350	Introduction to Data Communications	1
CISC 361	Microcomputer Support Essentials - Preparation for A+ Certification.....	3
CISS 310	Network Security Fundamentals	3

CISCO Concentration 21 Units

Core Requirements	8	
CISC 324	Intermediate Linux Operating System	1
CISN 140	CISCO Networking Academy (CCNA): Networking Fundamentals	3
CISN 141	CISCO Networking Academy (CCNA): Routing Protocols and Concepts	3
CISN 142	CISCO Networking Academy (CCNA): LAN Switching and Wireless	3
CISN 143	CISCO Networking Academy (CCNA): Accessing the Wide Area Network	3

LINUX Concentration 23 Units

Core Requirements	8	
CISC 324	Intermediate Linux Operating System	1
CISN 110	Networking Technologies - Preparation for N+ Certification....	2
CISN 111	Intermediate Networking Technologies - Preparation for N+ Certification	2

CISN 119	TCP/IP Protocols	3
CISN 120	Beginning Network Administration with Linux	3
CISN 121	Network Administration with Linux: LAN Services	2
CISN 122	Network Administration with Linux: Internet Services	2

WINDOWS Concentration 24 Units

Core Requirements	8	
CISN 110	Networking Technologies - Preparation for N+ Certification ...	2
CISN 111	Intermediate Networking Technologies - Preparation for N+ Certification	2
CISN 300	Network Systems Administration	3
CISN 302	Intermediate Network Systems Administration	3
CISN 307	Windows Active Directory Services	3
CISN 308	Internetworking with TCP/IP (3)	3
or CISN 119	TCP/IP Protocols (3)	

CIS: Computer Programming Degree

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.

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 Opportunities

Upon completion of the computer programming degree, a student has the minimum qualifications as an entry-level programmer/developer.

Core Requirements for Degree 6 Units

CISC 310	Introduction to Computer Information Science	3
CISP 350	Database Programming	3

C++ Concentration 19-21 Units

Core Requirements	6	
[CISP 300	Algorithm Design/Problem Solving (3)	5 - 7
and CISP 360	Introduction to Structured Programming (4)]	
or CISP 480	Honors Introduction to Structured Programming (5)	
CISP 400	Object Oriented Programming with C++	4
CISP 430	Data Structures	4

Cobol Concentration 16 Units

Core Requirements	6	
CISA 322	Design and Development of Desktop Database Applications.....	3
CISP 300	Algorithm Design/Problem Solving	3
CISP 320	COBOL Programming	4

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(CIS: Computer Programming Degree continued)

Java Concentration 15-17 Units

Core Requirements	6
[CISP 300 Algorithm Design/Problem Solving (3)	5 - 7
and CISP 360 Introduction to Structured Programming (4)]	
or CISP 480 Honors Introduction to Structured Programming (5)	
CISP 401 Object Oriented Programming with Java	4

Visual Basic Concentration 20 Units

Core Requirements	6
CISA 322 Design and Development of Desktop Database Applications	3
CISP 300 Algorithm Design/Problem Solving	3
CISP 370 Beginning Visual Basic	4
CISP 371 Intermediate Visual Basic	4

Associate Degree Requirements: 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.

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.

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 Opportunities

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.

Core Requirements for Certificate 4 Units

CISC 310 Introduction to Computer Information Science	3
CISC 320 Operating Systems	1

C++ Concentration Requirements 17-19 Units

Core Requirements	4
[CISP 300 Algorithm Design/Problem Solving (3)	5 - 7
and CISP 360 Introduction to Structured Programming (4)]	
or CISP 480 Honors Introduction to Structured Programming (5)	
CISP 400 Object Oriented Programming with C++	4
CISP 430 Data Structures	4

Java Concentration Requirements 16-18 Units

Core Requirements	4
[CISP 300 Algorithm Design/Problem Solving (3)	5 - 7
and CISP 360 Introduction to Structured Programming (4)]	
or CISP 480 Honors Introduction to Structured Programming (5)	
CISP 350 Database Programming	3
CISP 401 Object Oriented Programming with Java	4

Visual Basic Concentration Requirements 21 Units

Core Requirements	4
CISA 322 Design and Development of Desktop Database Applications	3
CISP 300 Algorithm Design/Problem Solving	3
CISP 350 Database Programming	3
CISP 370 Beginning Visual Basic	4
CISP 371 Intermediate Visual Basic	4

CIS: Database Management Degree

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.

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.

Requirements for Degree 39-40 Units

ACCT 101 Fundamentals of College Accounting (3)	3 - 4
or ACCT 301 Financial Accounting (4)	
BUS 110 Business Economics (3)	3
or ECON 302 Principles of Macroeconomics (3)	
BUS 300 Introduction to Business	3
BUS 310 Business Communications (3)	3
or ENGWR 300 College Composition (3)	
CISA 315 Introduction to Electronic Spreadsheets	2
CISA 320 Introduction to Database Management	1
CISA 322 Design and Development of Desktop Database Applications	3

(continued on next page)

(CIS: Database Management Degree continued)

CISC 310	Introduction to Computer Information Science	3
CISC 320	Operating Systems	1
CISP 300	Algorithm Design/Problem Solving	3
CISP 350	Database Programming	3
CISP 370	Beginning Visual Basic	4
CISW 300	Web Publishing	3
CISW 410	Middleware Web Scripting	4

Associate Degree Requirements: 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.

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.

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.

Requirements for Certificate		24 Units
CISA 315	Introduction to Electronic Spreadsheets	2
CISA 320	Introduction to Database Management	1
CISA 322	Design and Development of Desktop Database Applications	3
CISC 320	Operating Systems	1
CISP 300	Algorithm Design/Problem Solving	3
CISP 350	Database Programming	3
CISP 370	Beginning Visual Basic	4
CISW 300	Web Publishing	3
CISW 410	Middleware Web Scripting	4

CIS: Microcomputer Applications Degree

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.

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.

Requirements for Degree		37 Units
CISA 126	Outlook: Basics (1)	1
or BUSTEC 126	Outlook: Basics (1)	
CISA 127	Outlook: Tools (1)	1
or BUSTEC 127	Outlook: Tools (1)	
CISA 305	Beginning Word Processing	2
CISA 306	Intermediate Word Processing	2
CISA 315	Introduction to Electronic Spreadsheets	2
CISA 316	Intermediate Electronic Spreadsheets	2
CISA 320	Introduction to Database Management	1
CISA 322	Design and Development of Desktop Database Applications	3
CISA 330	Desktop Publishing	2
CISA 340	Presentation Graphics	2
CISC 306	Introduction to Web Page Creation	1
CISC 310	Introduction to Computer Information Science	3
CISC 320	Operating Systems	1
CISC 323	Linux Operating System	1
CISP 370	Beginning Visual Basic	4
And a minimum of 1 unit from the following:		1
BUSTEC 300	Beginning Keyboarding/Applications (1 - 3)	
And a minimum of 5 units from the following:		5
ACCT 341	Computerized Accounting (2)	
BUSTEC 313	Presentations for the Business Professional (2)	
CISA 141	Capturing and Publishing Digital Media (2)	
CISA 160	Project Management Techniques and Software (3)	
CISA 171	Introduction to Adobe Acrobat (1)	
CISC 350	Introduction to Data Communications (1)	
CISC 351	Introduction to Local Area Networks (1)	
CISS 301	Ethical Hacking (2)	
CISW 300	Web Publishing (3)	
CISW 307	Introduction to Web Development and Design (3)	
And a minimum of 3 units from the following:		3
ACCT 343	Computer Spreadsheet Applications for Accounting (2)	
CISA 331	Intermediate Desktop Publishing (2)	
CISC 305	Introduction to the Internet (1)	
CISP 350	Database Programming (3)	
CISP 360	Introduction to Structured Programming (4)	
CISP 371	Intermediate Visual Basic (4)	
CISP 480	Honors Introduction to Structured Programming (5)	
CISS 300	Introduction to Information Systems Security (1)	
CISW 370	Designing Accessible Web Sites (1)	

Associate Degree Requirements: 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.

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.

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.

Requirements for Certificate 21 Units

CISA 305	Beginning Word Processing	2
CISA 315	Introduction to Electronic Spreadsheets	2
CISA 320	Introduction to Database Management	1
CISA 330	Desktop Publishing.....	2
CISA 340	Presentation Graphics.....	2
CISC 305	Introduction to the Internet.....	1
CISC 310	Introduction to Computer Information Science.....	3
CISC 320	Operating Systems.....	1 ¹
CISC 350	Introduction to Data Communications	1
A minimum of 6 units from the following:		6
CISA 306	Intermediate Word Processing (2)	
CISA 316	Intermediate Electronic Spreadsheets (2)	
CISA 322	Design and Development of Desktop Database Applications (3)	
CISC 306	Introduction to Web Page Creation (1)	
CISC 323	Linux Operating System (1)	

¹Taken on the Windows operating system.

CIS: PC Support Management Degree

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.

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.

Requirements for Degree 31 Units

BUS 300	Introduction to Business	3
BUS 310	Business Communications.....	3
CISA 160	Project Management Techniques and Software	3
CISC 310	Introduction to Computer Information Science.....	3
CISC 320	Operating Systems.....	1 ¹
CISC 350	Introduction to Data Communications	1
CISC 351	Introduction to Local Area Networks	1
CISC 361	Microcomputer Support Essentials - Preparation for A+ Certification.....	3
CISC 362	Microcomputer and Applications Support	2
CISC 363	Microcomputer Support Technical - Preparation for A+ Certification.....	3
CISS 301	Ethical Hacking	2

And a minimum of 6 units from the following:.....6

CISA 126	Outlook: Basics (1)	
or [BUSTEC 126 Outlook: Basics (1)		
and CISA 127 Outlook: Tools (1)]		
or BUSTEC 127 Outlook: Tools (1)		
CISA 305	Beginning Word Processing (2)	
CISA 315	Introduction to Electronic Spreadsheets (2)	
CISA 320	Introduction to Database Management (1)	
CISA 340	Presentation Graphics (2)	
CISC 306	Introduction to Web Page Creation (1)	
CISC 323	Linux Operating System (1)	

¹Taken on the Windows operating system.

Associate Degree Requirements: 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.

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.

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.

(continued on next page)

(CIS: PC Support Certificate continued)

- 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.

Requirements for Certificate		25 Units
BUS 310	Business Communications.....	3
CISC 310	Introduction to Computer Information Science.....	3
CISC 320	Operating Systems.....	1 ¹
CISC 350	Introduction to Data Communications.....	1
CISC 351	Introduction to Local Area Networks	1
CISC 361	Microcomputer Support Essentials - Preparation for A+ Certification.....	3
CISC 362	Microcomputer and Applications Support	2
CISC 363	Microcomputer Support Technical - Preparation for A+ Certification.....	3
CISS 301	Ethical Hacking	2
And a minimum of 6 units from the following:		6
CISA 126	Outlook: Basics (1)	
<i>or</i> [BUSTEC 126 Outlook: Basics (1)		
<i>and</i> CISA 127 Outlook: Tools (1)]		
<i>or</i> BUSTEC 127 Outlook: Tools (1)		
CISA 305	Beginning Word Processing (2)	
CISA 315	Introduction to Electronic Spreadsheets (2)	
CISA 320	Introduction to Database Management (1)	
CISA 340	Presentation Graphics (2)	
CISC 306	Introduction to Web Page Creation (1)	
CISC 323	Linux Operating System (1)	

¹Taken on the Windows operating system.

Computer Information Security Essentials Certificate

This program provides the basic information and skills necessary for network administrators to implement security from internal and external threats to a network. It also provides preparation for the Computing Technology Industry Association (CompTIA) Security+ exam.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- construct and apply secure group policy settings at the Organizational Unit (OU), Domain, Site or local machine level.
- explain and configure a network firewall to provide optimum security from external threats and exploits.
- construct Windows NTFS file system permissions and shares to allow only the minimum levels of access needed by users to access network resources.
- compare and contrast the benefits of firewalls vs. intrusion detection devices and software.

Requirements for Certificate		12 Units
CISS 310	Network Security Fundamentals.....	3
CISS 325	Network Security and Firewalls	3
CISS 341	Implementing Windows Operating System Security (3)....	3
<i>or</i> CISS 342 Implementing Linux Operating System Security (3)		
CISS 360	Computer Forensics and Investigation	3

Information Systems Security Degree

This program provides the information and skills necessary for network administration professionals to implement security from internal and external threats for an enterprise network. It covers client and server security on different operating systems, disaster recovery planning, and forensics. This program also provides preparation for several computer information security certification exams, including the Computer Technology Industry Association (CompTIA) Security+ exam, Microsoft Certified Systems Engineer (MCSE) exams and several of the Certified Information Systems Security Professional (CISSP) certification exams.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- define best practices for configuring network operating system services to provide optimum security.
- compare and contrast the benefits of firewalls vs. intrusion detection devices and software.
- explain and configure a network firewall to provide optimum security from external threats and exploits.
- analyze organizational needs and implement internal security policies for the enterprise.
- evaluate and implement the required security programs and policies to protect the enterprise against viruses, Trojans, worms, rootkits, and spyware.
- assess and configure secure data transfer protocols for internal and external needs, including Windows IP Security (IPSec) and the Virtual Private Network (VPN) tunneling protocols.
- apply Windows group policy to secure the internal network and shared resources.
- construct NTFS file system permissions and shares to allow only the minimum levels of access needed by users to use network resources.
- prioritize and establish a disaster recovery plan for the enterprise.
- construct and apply group policies and NTFS file system permissions to secure files and network resources.

Requirements for Degree		33 Units
BUS 310	Business Communications	3
CISC 323	Linux Operating System	1
CISC 324	Intermediate Linux Operating System	1
CISN 110	Networking Technologies - Preparation for N+ Certification	2
CISN 111	Intermediate Networking Technologies - Preparation for N+ Certification	2
CISN 300	Network Systems Administration	3
CISN 302	Intermediate Network Systems Administration	3
CISN 307	Windows Active Directory Services	3
CISS 310	Network Security Fundamentals	3
CISS 325	Network Security and Firewalls	3
CISS 341	Implementing Windows Operating System Security (3) ...	3
<i>or</i> CISS 342 Implementing Linux Operating System Security (3)		
CISS 350	Disaster Recovery	3
CISS 360	Computer Forensics and Investigation	3

Associate Degree Requirements: The Information Systems Security 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.

Information Systems Security Certificate

This program provides the information and skills necessary for network administrators to implement security to protect against internal and external threats to an enterprise network, and covers client and server security on different operating systems. This program provides preparation for several certification exams, including the Computer Technology Industry Association (CompTIA) Security+ exam, Microsoft Certified Systems Engineer (MCSE) exams and some of the Certified Information Systems Security Professional (CISSP) certification exams.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- define best practices for configuring network operating system services to provide optimum security.
- construct and apply secure group policy settings at the Organizational Unit (OU), domain, site or local machine level.
- explain and configure a network firewall to provide optimum security from external threats and exploits.
- analyze organizational needs and implement internal security policies for the enterprise.
- evaluate and implement the required security programs and policies to protect the enterprise against viruses, Trojans, worms, rootkits, and spyware.
- assess and configure secure Internet Protocol (IP) data transfer protocols for internal and external needs, including Internet Protocol Security (IPSec) and the Virtual Private Networking (VPN) tunneling protocols.
- prioritize and establish a disaster recovery plan for the enterprise.
- compare and contrast the benefits of firewalls vs. intrusion detection devices and software.

Requirements for Certificate 23 Units

CISC 323	Linux Operating System	1
CISC 324	Intermediate Linux Operating System	1
CISN 300	Network Systems Administration	3
CISN 302	Intermediate Network Systems Administration	3
CISN 307	Windows Active Directory Services	3
CISS 310	Network Security Fundamentals	3
CISS 325	Network Security and Firewalls	3
CISS 341	Implementing Windows Operating System Security (3)	3
or CISS 342	Implementing Linux Operating System Security (3)	3
And a minimum of 3 units from the following:		
CISN 110	Networking Technologies - Preparation for N+ Certification (2)	
CISN 111	Intermediate Networking Technologies - Preparation for N+ Certification (2)	
CISN 140	CISCO Networking Academy (CCNA)tm: Networking Fundamentals (3)	
CISS 301	Ethical Hacking (2)	

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.

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.

Requirements for Certificate 12 Units

CISN 300	Network Systems Administration	3
CISN 302	Intermediate Network Systems Administration	3
CISN 307	Windows Active Directory Services	3
CISN 308	Internetworking with TCP/IP	3

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.

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 Microsoft 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.

Requirements for Certificate 24 - 27 Units

CISC 320	Operating Systems	1
CISC 323	Linux Operating System	1
CISC 324	Intermediate Linux Operating System	1
CISP 300	Algorithm Design/Problem Solving (3)	3 - 5
or CISP 360	Introduction to Structured Programming (4)	
or CISP 370	Beginning Visual Basic (4)	
or CISP 401	Object Oriented Programming with Java (4)	
or CISP 480	Honors Introduction to Structured Programming (5)	
CISP 350	Database Programming	3
CISW 300	Web Publishing	3
CISW 310	Advanced Web Publishing (4)	3 - 4
or CISW 360	Beginning Flash (3)	
or CISW 400	Client-side Web Scripting (4)	
CISW 370	Designing Accessible Web Sites	1

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(Web Developer Certificate continued)

CISW 410	Middleware Web Scripting (4)4
or CISW 420	Server-side Web Scripting (4)	
A minimum of 4 units from the following:	4
CISW 304	Cascading Style Sheets (2)	
CISW 350	Imaging for the Web (1)	
CISW 355	Web Imaging Projects (2)	
CISW 405	ActionScript for Flash (3)	
CISW 410	Middleware Web Scripting (4)	
CISW 411	Middleware Scripting Database Web Applications (2)	
CISW 442	Web Publishing with XML (3)	

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.

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.

Requirements for Certificate 19 Units

CISC 310	Introduction to Computer Information Science.....	3
CISC 320	Operating Systems.....	1
CISC 323	Linux Operating System	1
CISW 300	Web Publishing	3
CISW 304	Cascading Style Sheets	2
CISW 350	Imaging for the Web.....	1
CISW 370	Designing Accessible Web Sites.....	1
A minimum of 4 units from the following:		4
CISW 310	Advanced Web Publishing (4)	
CISW 400	Client-side Web Scripting (4)	
CISW 410	Middleware Web Scripting (4)	
CISW 420	Server-side Web Scripting (4)	
A minimum of 3 units from the following:		3
ARTNM 402	Intermediate Web Design (3)	
CISW 321	Web Site Development using Dreamweaver (3)	
CISW 355	Web Imaging Projects (2)	
CISW 360	Beginning Flash (3)	
CISW 442	Web Publishing with XML (3)	

Technical Communications Degree

The Technical Communications degree program 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.

Career Opportunities

Technical communicators may be employed in a variety of occupations in government, scientific firms, nonprofits, natural resources, finance, education, and high tech.

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.

Requirements for Degree 32 Units

CISA 305	Beginning Word Processing	2
CISW 300	Web Publishing	3
ENGWR 342	Introduction to Technical/Professional Communication.....	3
ENGWR 344	Technical/Professional Communication: Writing Reports ...	1.5
ENGWR 348	Technical/Professional Communication: Plain English...	1.5
ENGWR 350	Technical/Professional Communication: Proposal Writing.....	1.5
ENGWR 352	Technical/Professional Communication: Writing Technical Manuals	3
ENGWR 353	Technical/Professional Communication: Developing Help Systems.....	1.5
JOUR 300	Newswriting and Reporting.....	3
And a minimum of 12 units from the following:		12
ARTNM 328	Digital Photo Imagery - PhotoShop Basics (3)	
ARTNM 330	Intermediate Digital Photo Imagery (3)	
ARTNM 352	Design for Publication (3)	
or [CISA 330	Desktop Publishing (2)	
and CISA 331	Intermediate Desktop Publishing (2)]	
ARTNM 401	Introduction to Web Development and Design (3)	
or CISW 307	Introduction to Web Development and Design (3)	
ARTNM 402	Intermediate Web Design (3)	
ARTNM 404	Interactive Multimedia Basics (3)	
CISW 310	Advanced Web Publishing (4)	

Associate Degree Requirements: 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.

Technical Communications Certificate

The Technical Communications certificate offers an interdisciplinary program of courses in writing, 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.

Career Opportunities

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.

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 printed pages and online screens that communicate organizations' values, enhance readability, and are easy to use.
- demonstrate basic skills in the use of key word processing, page design, help development, and web design applications.
- evaluate organizations' communication goals with technical writing ethics in mind.

Requirements for Certificate 21.5-22.5 Units

ARTNM 352	Design for Publication (3)	3- 4
or [CISA 330	Desktop Publishing (2)	
and CISA 331	Intermediate Desktop Publishing (2)]	
CISA 305	Beginning Word Processing.....	2
CISW 300	Web Publishing	3
ENGWR 342	Introduction to Technical/Professional Communication.....	3
ENGWR 352	Technical/Professional Communication: Writing Technical Manuals	3
ENGWR 353	Technical/Professional Communication: Developing Help Systems.....	1.5
And a minimum of 6 units from the following:		6
ARTNM 328	Digital Photo Imagery - PhotoShop Basics (3)	
ARTNM 330	Intermediate Digital Photo Imagery (3)	
ARTNM 401	Introduction to Web Development and Design (3)	
ARTNM 402	Intermediate Web Design (3)	
ARTNM 404	Interactive Multimedia Basics (3)	
CISW 307	Introduction to Web Development and Design (3)	
CISW 310	Advanced Web Publishing (4)	

Computer Information Science - Apps

CISA 126 Outlook: Basics 1 Unit

Same As: BUSTEC 126

Advisory: BUSTEC 300

Hours: 18 hours LEC

This course introduces desktop communication management for users of Microsoft Outlook. Topics include understanding and navigating the Outlook environment, creating and sending e-mail, 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 taken BUSTEC 126.

CISA 127 Outlook: Tools 1 Unit

Same As: BUSTEC 127

Prerequisite: BUSTEC 126 or CISA 126 with a grade of "C" or better

Advisory: BUSTEC 300

Hours: 18 hours LEC

This Outlook course presents the communication tools beyond basic e-mail. Topics include working with multiple e-mail accounts, using rules and folders, incorporating advanced calendar and contact features, setting up folder sharing and delegates, and customizing Outlook. In addition, the course covers the integration of Outlook with other applications within 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 taken BUSTEC 127.

CISA 141 Capturing and Publishing Digital Media 2 Units

Hours: 27 hours LEC; 27 hours LAB

This course is an overview of multimedia publishing software and peripherals used to produce digital media. Topics include the function and features of technology devices such as video camcorders, digital cameras, digital music devices, graphic pads and pens, DVD/CD burners, USB drives, and photo/CD/DVD printers. Multimedia publishing software and devices are examined and discussed for advantages and disadvantages. File and equipment management techniques are presented.

CISA 160 Project Management Techniques and Software 3 Units

Same As: MGMT 142

Advisory: ENGWR 102 or 103, and ENGRD 116; OR ESLR 320 and ESLW 320; CISC 300

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 MGMT 142.

CISA 171 Introduction to Adobe Acrobat 1 Unit

Prerequisite: None

Hours: 9 hours LEC; 27 hours LAB

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, manipulating graphics, and managing eBooks.

CISA 294 Topics in Computer Information Science - Applications .5-5 Units

Prerequisite: To be determined with each topic.

Hours: 72 hours LEC; 54 hours LAB

This is an individualized course developed in cooperation with industry and/or government to meet specialized training needs. The course may be taken twice for credit.

CISA 305 Beginning Word Processing 2 Units*Advisory: CISC 300**General Education: AA/AS Area II(b)**Course Transferable to CSU**Hours: 27 hours LEC; 27 hours LAB*

This course introduces word processing operations, such as creating, editing, file management techniques, and printing text. Emphasis is on formatting and document production techniques to produce professional business documents used in today's workplace.

The course culminates with the study of intermediate level features such as merge, sort, graphics, macros, style, and templates.

This course may be taken four times on a different software package or version.

CISA 306 Intermediate Word Processing 2 Units*Prerequisite: CISA 305 with a grade of "C" or better**Course Transferable to CSU**Hours: 27 hours LEC; 27 hours LAB*

This course is a continuation of CISA 305 with an emphasis on applications for business documents and reports. In addition, this course includes desktop publishing techniques using word processing software, newsletter production, macro editing, complex document styles and commands, importing, linking and merging data from other applications into a word processing document. This course may be taken four times for credit on a different software or version.

CISA 308 Exploring Word Processing and Presentation Software 1 Unit*Course Transferable to CSU**Hours: 18 hours LEC*

The 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.

CISA 315 Introduction to Electronic Spreadsheets 2 Units*Advisory: CISC 100 or 300 ; CISC 100 and the ability to touch type.**General Education: AA/AS Area II(b)**Course Transferable to CSU**Hours: 27 hours LEC; 27 hours LAB*

This course introduces the use of electronic spreadsheet programs. It includes designing spreadsheets, developing formulas and functions for automatic calculations, developing "what if" models, and producing printed reports and charts. In addition, the course introduces 3-D cell referencing, various advanced look up and financial functions, and data filtering, and querying techniques. The course may be taken four times for credit on a different software package or version.

CISA 316 Intermediate Electronic Spreadsheets 2 Units*Prerequisite: CISA 315 with a grade of "C" or better**Course Transferable to CSU**Hours: 27 hours LEC; 27 hours LAB*

This course is a continuation of electronic worksheets 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. The course may be taken four times for credit on a different software package or version.

CISA 318 Exploring Spreadsheet Software 1 Unit*Course Transferable to CSU**Hours: 18 hours LEC*

The 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.

CISA 320 Introduction to Database Management 1 Unit*Advisory: BUSTEC 300 and CISC 300**General Education: AA/AS Area II(b)**Course Transferable to CSU**Hours: 9 hours LEC; 27 hours LAB*

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. It may be taken four times for credit on a different software package or version.

CISA 322 Design and Development of Desktop Database Applications 3 Units*Prerequisite: CISA 320 with a grade of "C" or better**Course Transferable to CSU**Hours: 36 hours LEC; 54 hours LAB*

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. It may be taken three times for credit with a different version of the software.

CISA 330 Desktop Publishing 2 Units*Advisory: BUS 100, BUSTEC 100, and CISC 300**Course Transferable to CSU**Hours: 27 hours LEC; 27 hours LAB*

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 marketing material on the computer. Additionally it covers importing graphics and text, using palette menus, layers, master pages, and working with graphic and text frames. This course may be taken four times for credit on different software packages or versions.

CISA 331 Intermediate Desktop Publishing 2 Units*Prerequisite: CISA 330 with a grade of "C" or better**Advisory: BUS 100**Course Transferable to CSU**Hours: 27 hours LEC; 27 hours LAB*

This course builds upon previous desktop publishing software concepts and study. Topics include working with color, 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. This course may be taken four times for credit on a different software package or version.

CISA 340 Presentation Graphics 2 Units*Advisory: CISC 300**Course Transferable to CSU**Hours: 27 hours LEC; 27 hours LAB*

This course covers 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 hardware. This course may be taken four times on a different software package or version.

Computer Information Science - Core

CISC 100 Computer Fundamentals with Hands-on Lab **2 Units**

Prerequisite: None

Hours: 27 hours LEC; 27 hours LAB

This introductory course provides general non-technical knowledge combined with a hands-on lab on how computers work including basic computer terminology and concepts. The focus is slower paced instruction with extensive hands-on reinforcement of instructional concepts. Course topics include an introduction to the operating system software and application software focusing on word processing, spreadsheets, the Internet and email.

CISC 294 Topics in Computer Information Science - Core **.5-5 Units**

Hours: 72 hours LEC; 54 hours LAB

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. This course may be taken four times for credit on different topics.

CISC 300 Computer Familiarization **1 Unit**

Advisory: ENGRD 116 or ESLR 320, and the ability to touch type.

General Education: AA/AS Area II(b); AA/AS Area III(b)

Course Transferable to CSU

Hours: 18 hours LEC

This course provides a general non-technical introduction to how computers work in addition to basic computer terminology and concepts. The focus is hands-on instruction using an operating system, word processing, spreadsheet, and Internet software. The course may be taken twice for credit on different hardware platforms.

CISC 305 Introduction to the Internet **1 Unit**

Advisory: CISC 300 and 320

Course Transferable to CSU

Hours: 18 hours LEC; 18 hours LAB

This course is an introduction to how the Internet works and how to effectively use basic Internet services. Topics include E-mail, E-mail lists, the World Wide Web, search engines, newsgroups, Telnet, File Transfer Protocol (FTP), various forms of asynchronous communications such as Really Simple Syndication (RSS), and Internet security considerations.

CISC 306 Introduction to Web Page Creation **1 Unit**

Advisory: CISC 305

Course Transferable to CSU

Hours: 18 hours LEC; 18 hours LAB

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. This course may be taken four times for credit on a different software package or version.

CISC 308 Exploring Computer Environments and the Internet **1 Unit**

Course Transferable to CSU

Hours: 18 hours LEC

The 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.

CISC 309 Applied Applications Lab **.5 Unit**

Corequisite: CISA 305, CISA 306, CISA 315, CISA 316, CISA 320, or CISC 300

Advisory: ENGRD 116 or ESLR 320, and the ability to touch type.

Course Transferable to CSU

Hours: 27 hours LAB

This course complements CISC 300, CISA 305, CISA 306, CISA 315, CISA 316, and CISA 320 by providing supplemental lab instruction. The material reinforces the concepts and techniques presented in these courses. This course may be taken four times for credit. Pass/No Pass only.

CISC 310 Introduction to Computer Information Science **3 Units**

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course is a survey of the computer field covering the function and purpose of computer hardware and software, computer programming concepts, productivity software, employment opportunities, and the social impact of the computer.

CISC 320 Operating Systems **1 Unit**

Course Transferable to CSU

Hours: 18 hours LEC; 18 hours LAB

This course introduces operating systems for the PC. Topics include file systems, operating system services, program management, file and directory organization, and hard drive maintenance. It also includes information on protecting your PC from viruses, Trojans, worms, adware, spyware, and other malicious network exploits. Additional topics are DOS commands and batch files. The course may be taken four times on a different Windows operating system version.

CISC 323 Linux Operating System **1 Unit**

Advisory: CISC 300 and ability to touch type.

Course Transferable to CSU

Hours: 18 hours LEC; 18 hours LAB

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.

CISC 324 Intermediate Linux Operating System **1 Unit**

Prerequisite: CISC 323 with a grade of "C" or better

Course Transferable to CSU

Hours: 18 hours LEC; 18 hours LAB

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.

CISC 350 Introduction to Data Communications **1 Unit**

Advisory: CISC 300 and ability to touch type.

Course Transferable to CSU

Hours: 18 hours LEC

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.

CISC 351 Introduction to Local Area Networks 1 Unit

Advisory: CISC 320 and 350
Course Transferable to CSU
Hours: 18 hours LEC; 18 hours LAB

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. The course may be taken for credit four times on a different Windows operating system.

CISC 361 Microcomputer Support Essentials - Preparation for A+ Certification 3 Units

Advisory: CISC 310, 320, and 350
Course Transferable to CSU
Hours: 42 hours LEC; 36 hours LAB

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.

CISC 362 Microcomputer and Applications Support 2 Units

Corequisite: CISC 361
Advisory: CISA 305, 315, and 320
Course Transferable to CSU
Hours: 24 hours LEC; 36 hours LAB

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. Customer service and problem solving skills needed for success in a small or large business environment are introduced. Students serve as assistants in computer support in one of the American River College (ARC) computer classrooms/labs.

CISC 363 Microcomputer Support Technical - Preparation for A+ Certification 3 Units

Prerequisite: CISC 361 with a grade of "C" or better
Course Transferable to CSU
Hours: 42 hours LEC; 36 hours LAB

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.

CISC 498 Work Experience in Computer Information Science - Core 1-4 Units

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.
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position, or job related to computer information science.
Students are advised to consult with the Computer Information Science Department faculty to review specific certificate and degree work experience requirements.
General Education: AA/AS Area III(b)
Course Transferable to CSU
Hours: 300 hours LAB

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 required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to attend a weekly orientation and 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. The weekly orientation is required for first time participants; returning participants are not required to attend the orientation weekly but are required to meet with the instructor as needed to complete all program forms and assignments. Work Experience may be taken for a total of 16 units when there are new or expanded learning objectives.

Computer Information Science - Network**CISN 110 Networking Technologies - Preparation for N+ Certification 2 Units**

Hours: 36 hours LEC

This is an introductory course in networking software and hardware. Topics include modems, communication protocols, local and wide area networks, intra- and inter-networks, network architectures, topologies, and the Open Systems Interconnect (OSI) model. This course, along with CISN 111, provides preparation for the Computer Technology Industry Association N+ certification test.

CISN 111 Intermediate Networking Technologies - Preparation for N+ Certification 2 Units

Prerequisite: CISN 110 with a grade of "C" or better
Hours: 36 hours LEC

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.

CISN 118 Internet Protocol Subnetting 1 Unit

Advisory: CISN 110 and MATH 25
Hours: 18 hours LEC

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.

CISN 119 TCP/IP Protocols**3 Units**

Advisory: CISC 350
Hours: 54 hours LEC

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.

CISN 120 Beginning Network Administration with Linux**3 Units**

Prerequisite: CISC 323 with a grade of "C" or better
Advisory: CISC 324
Hours: 45 hours LEC; 27 hours LAB

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.

CISN 121 Network Administration with Linux: LAN Services**2 Units**

Prerequisite: CISN 120 with a grade of "C" or better
Advisory: CISN 119
Hours: 27 hours LEC; 27 hours LAB

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.

CISN 122 Network Administration with Linux: Internet Services**2 Units**

Prerequisite: CISN 120 with a grade of "C" or better
Advisory: CISN 119
Hours: 27 hours LEC; 27 hours LAB

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.

CISN 140 CISCO Networking Academy (CCNA)tm: Networking Fundamentals**3 Units**

Advisory: CISC 310, 320, or 350
Hours: 54 hours LEC; 18 hours LAB

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). This course may be taken two times for credit for recertification due to updates to industry standards.

CISN 141 CISCO Networking Academy (CCNA)tm: Routing Protocols and Concepts**3 Units**

Prerequisite: CISN 140 with a grade of "C" or better
Hours: 54 hours LEC; 18 hours LAB

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). This course may be taken two times for credit for recertification due to updates to industry standards.

CISN 142 CISCO Networking Academy (CCNA)tm: LAN Switching and Wireless**3 Units**

Prerequisite: CISN 140 with a grade of "C" or better
Hours: 54 hours LEC; 18 hours LAB

This course focuses on Layer 2 switching protocols, concepts and technologies. Topic 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). This course may be taken two times for credit for recertification due to updates to industry standards.

**CISN 143 CISCO Networking Academy (CCNA)™:
Accessing the Wide Area Network 3 Units**

Prerequisite: CISN 141 and 142 with grades of "C" or better
Hours: 54 hours LEC; 18 hours LAB

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). This course may be taken two times for credit for recertification due to updates to industry standards.

CISN 300 Network Systems Administration 3 Units

Advisory: CISC 320, 350, and 351

Course Transferable to CSU
Hours: 45 hours LEC; 27 hours LAB

This course covers the administration of a server in a client/server network. Topics include designing a basic network, installing and configuring a network operating system, and managing network security with user and group accounts. Additional topics are creating network shares, setting up and managing network printers, backing up servers, monitoring and setting access permissions on network resources, and establishing policies and procedures for network operations. This course may be taken four times on a different Windows version.

**CISN 302 Intermediate Network Systems
Administration 3 Units**

Prerequisite: CISN 300 with a grade of "C" or better

Course Transferable to CSU
Hours: 45 hours LEC; 27 hours LAB

This course covers advanced system administration in a client/server network. Topics include configuring the server environment, implementing system policies, implementing and managing fault-tolerant disk volumes, and managing applications. Additional topics covered are managing connectivity for different network and client operating systems, as well as managing and implementing remote servers. This course covers material required for one of the Microsoft MCSE Networking certification examinations. This course may be taken four times on a different Windows software version.

CISN 307 Windows Active Directory Services 3 Units

Prerequisite: CISN 302 with a grade of "C" or better

Course Transferable to CSU
Hours: 45 hours LEC; 27 hours LAB

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. This course may be taken four times for credit on different Windows operating system versions.

CISN 308 Internetworking with TCP/IP 3 Units

Prerequisite: CISN 302 with a grade of "C" or better
Course Transferable to CSU

Hours: 45 hours LEC; 27 hours LAB

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). This course may be taken four times for credit on different Windows operating system versions.

Computer Information Science - Programming**CISP 300 Algorithm Design/Problem Solving 3 Units**

Advisory: CISC 310

General Education: AA/AS Area II(b)

Course Transferable to CSU
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.

**CISP 310 Assembly Language Programming
for Microcomputers 4 Units**

Prerequisite: CISP 360 with a grade of "C" or better.

Course Transferable to UC/CSU
Hours: 54 hours LEC; 54 hours LAB

This course is an introduction to the architecture of microcomputers that use the Intel microprocessor. Topics include machine and assembly language, keyboard and screen manipulation, binary and binary coded decimal (BCD) arithmetic, American Standard Code for Information Interchange (ASCII) and binary conversion, table processing, macros, and subroutines. Machine language programs are traced as an aid to debugging.

**CISP 315 Introduction to Computer
Architecture and Design 4 Units**

Prerequisite: CISP 310 with a grade of "C" or better

General Education: AA/AS Area II(b)

Course Transferable to UC/CSU
Hours: 54 hours LEC; 54 hours LAB

This course is an introduction to the fundamental theories of, and their applications in, digital computer design. Topics include machine code decoding, memory bus cycles, memory, arithmetic and logic unit, registers, latches, Boolean algebra, logic gates, state machines, binary representation, pipelining and Boolean equation optimization. Synthesis of the design of a computer in a hardware description language (HDL) is stressed. All topics are related to programming and overall computer system operations.

CISP 320 COBOL Programming 4 Units

Prerequisite: CISP 300 or 370 with a grade of "C" or better
General Education: AA/AS Area II(b)
Course Transferable to CSU
Hours: 54 hours LEC; 54 hours LAB

This course is an introduction to the COBOL programming language. Course elements include top-down design, modular programming methods, and structured programming methods to analyze and solve problems found in business and government. Laboratory assignments cover a variety of input/output techniques including data validation, report formatting, arithmetic operations, output editing, single and double array processing, control-break concepts, and the creation and update of sequential files.

CISP 350 Database Programming 3 Units

Advisory: CISA 320 and CISC 310
General Education: AA/AS Area II(b)
Course Transferable to CSU
Hours: 36 hours LEC; 54 hours LAB

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.

CISP 360 Introduction to Structured Programming 4 Units

Prerequisite: CISP 300, 320, or 370 with a grade of "C" or better
General Education: AA/AS Area II(b)
Course Transferable to UC/CSU
Hours: 54 hours LEC; 54 hours LAB

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, interactive and file input/output, standard libraries, arrays, pointers, methods (functions), classes and objects.

CISP 370 Beginning Visual Basic 4 Units

Advisory: CISC 310 and CISP 300
Course Transferable to CSU
Hours: 54 hours LEC; 54 hours LAB

This is an introductory programming course covering the development of Windows-based desktop applications using Visual Basic .NET (VB .Net). Topics include best practices for Graphical User Interface (GUI) design, use of the Visual Studio .NET development software, organizing code into procedures and modules, calculation techniques, input data validation, file input and output, variable scope, arrays, and multiple-window applications. This course is designed for those who want a strong foundation in building GUI applications. It may be taken four times for credit with different versions of the VB .Net language.

CISP 371 Intermediate Visual Basic 4 Units

Prerequisite: CISP 370 with a grade of "C" or better
Course Transferable to CSU
Hours: 54 hours LEC; 54 hours LAB

This intermediate course in Visual Basic programming further examines data and its relationship to the functions that operate on data. Topics include multiple forms, components, properties, classes, objects, static and dynamic relationships, databases, data sets, queries, hierarchies, inheritance, associations, testing, and debugging. This course may be taken four times for credit using a different version of the Visual Basic language.

CISP 372 Beginning Visual Basic for Applications Programming 1 Unit

Prerequisite: None
Course Transferable to CSU
Hours: 15 hours LEC; 9 hours LAB

This course introduces Visual Basic for Applications (VBA) programming for the purposes of application automation and customization. It includes basic programming concepts such as variables, control structures and subroutines. The use of elementary user interface controls are also included in this course.

CISP 400 Object Oriented Programming with C++ 4 Units

Prerequisite: CISP 360 with a grade of "C" or better
Advisory: CISC 323
General Education: AA/AS Area II(b)
Course Transferable to UC/CSU
Hours: 54 hours LEC; 54 hours LAB

This course is an introduction to the C++ programming language and object-oriented programming in the Linux/UNIX environment. Topics include 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.

CISP 401 Object Oriented Programming with Java 4 Units

Prerequisite: CISP 360 with a grade of "C" or better
Course Transferable to UC/CSU
Hours: 54 hours LEC; 54 hours LAB

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.

CISP 430 Data Structures 4 Units

Prerequisite: CISP 400 or 401 with a grade of "C" or better
Course Transferable to UC/CSU
Hours: 54 hours LEC; 54 hours LAB

This course applies object-oriented techniques for systematic problem analysis and the managing of program complexity using abstraction. Specifications, 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.

CISP 440 Discrete Structures for Computer Science 3 Units

Prerequisite: MATH 370 with a grade of "C" or better
Corequisite: CISP 430
General Education: AA/AS Area II(b); CSU Area B4
Course Transferable to UC/CSU
Hours: 54 hours LEC

This course is an introduction to the essential discrete structures used in Computer Science, with emphasis on their applications. Topics covered include elementary formal logic and set theory, elementary combinatorics, recursive programming and algorithm analysis, finite state machines and formal languages, digital logic and switching, combinatorial circuits, and computer arithmetic.

CISP 480 Honors Introduction to Structured Programming 5 Units

Prerequisite: Placement into ENGWR 480 through the assessment process.

Advisory: CISC 310

Course Transferable to CSU

Hours: 72 hours LEC; 54 hours LAB

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 through algorithm design, continuing with implementation through structured programming and objects, as well as documentation, testing, and debugging. Topics include assessing and analyzing computer problems and requirements documents, and developing programming plans from which source code versions of programs are created. Additionally, data representation, data types, variables, constants, operators, and expression evaluation are covered, along with control structures, interactive and file input/output, standard libraries, arrays, pointers, methods (functions), classes, and objects. Pseudocode and an object-oriented language are used to create program solutions.

Computer Information Science - Security**CISS 300 Introduction to Information Systems Security 1 Unit**

Prerequisite: None

Advisory: CISC 320, 350, or 351

Course Transferable to CSU

Hours: 18 hours LEC; 18 hours LAB

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 E-mail and public and private key exchange.

CISS 301 Ethical Hacking 2 Units

Advisory: CISC 320, 323, 350, and 351

Course Transferable to CSU

Hours: 27 hours LEC; 27 hours LAB

This course explores ways in which security for a stand-alone PC and a network-connected PC can be compromised. It introduces basic security concepts, principles and "best practices." It also explores ways in which the security of a PC can be checked and evaluated. Principles of ethical hacking are discussed. Internal and external security threats are discussed, including viruses, worms, Trojans, scripts, and other malicious e-mail content. Network vulnerabilities, common exploits, and basic countermeasures are also covered.

CISS 310 Network Security Fundamentals 3 Units

Advisory: CISN 119, 140, and 302

Course Transferable to CSU

Hours: 45 hours LEC; 27 hours LAB

This course provides the information and skills required to analyze security risks from potential network intrusions to organizations' network information systems. Topics cover the required content of the Computing Technology Industry Association (CompTIA) Security+ certification exam.

CISS 325 Network Security and Firewalls 3 Units

Prerequisite: CISS 310 with a grade of "C" or better

Course Transferable to CSU

Hours: 45 hours LEC; 27 hours LAB

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 provides preparation for the Check Point Security's "Check Point Certified Security Administrator" (CCSA) certification exam. This course is not open to students who have completed CISS 320 and CISS 330 at any other campus within the Los Rios District.

CISS 341 Implementing Windows Operating System Security 3 Units

Advisory: CISC 320, CISC 351, and CISS 310

Course Transferable to CSU

Hours: 45 hours LEC; 27 hours LAB

This course provides in-depth information on the Microsoft Windows desktop operating system security features, as well as step-by-step configuration for most 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. This course may be taken 4 times for credit on different versions of the Windows operating system.

CISS 342 Implementing Linux Operating System Security 3 Units

Advisory: CISC 323 and CISS 310

Course Transferable to CSU

Hours: 45 hours LEC; 27 hours LAB

This course provides in-depth information on Linux/UNIX operating system security features, as well as step-by-step configuration for most 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. This course may be taken 4 times for credit on different versions of the Linux or UNIX operating systems.

CISS 350 Disaster Recovery 3 Units

Advisory: CISS 310

Course Transferable to CSU

Hours: 54 hours LEC

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, and development and implementation of disaster recovery policies and procedures.

CISS 360 Computer Forensics and Investigation 3 Units

Advisory: CISC 324, CISS 310, and CISS 350

Course Transferable to CSU

Hours: 45 hours LEC; 27 hours LAB

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.

Computer Information Science - Web**CISW 300 Web Publishing 3 Units***Advisory: CISC 300 and 305**Course Transferable to CSU**Hours: 36 hours LEC; 54 hours LAB*

This course is an introduction to publishing on the World Wide Web. Topics include creating web pages with the Hyper Text Markup Languages (HTML), organizing a series of pages into a web site, and uploading web pages to a server. The 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.

CISW 304 Cascading Style Sheets 2 Units*Prerequisite: CISW 300 with a grade of "C" or better**Course Transferable to CSU**Hours: 27 hours LEC; 27 hours LAB*

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 Extensible Hypertext Markup Language (XHTML).

CISW 307 Introduction to Web Development and Design 3 Units*Same As: ARTNM 401**Course Transferable to CSU**Hours: 36 hours LEC; 54 hours LAB*

This course covers strategies for the development and design of Web sites. Using an industry-standard Web authoring tool, the course integrates both artistic and technical concepts. Topics include assembling, designing, and publishing Web pages using strategies, principles, and processes universally practiced by professionals in this field. CISW 307 and/or ARTNM 401 may be taken a total of 4 times on different platforms or software versions.

CISW 310 Advanced Web Publishing 4 Units*Prerequisite: CISW 300 with a grade of "C" or better**Course Transferable to CSU**Hours: 54 hours LEC; 54 hours LAB*

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.

CISW 321 Web Site Development using Dreamweaver 3 Units*Advisory: CISC 305 and CISW 300**Course Transferable to CSU**Hours: 36 hours LEC; 54 hours LAB*

This course covers the use of Dreamweaver, a visual Web-authoring tool, to develop and implement Web sites. The topics covered 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 Web site structures, using Web site management tools, Web site documentation, making global updates to a Web site, and using advanced Dreamweaver features. This course can be taken for credit a total of 4 times on different platforms or software versions.

CISW 350 Imaging for the Web 1 Unit*Advisory: CISC 306 or CISW 300**Course Transferable to CSU**Hours: 18 hours LEC; 18 hours LAB*

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. It also covers creating buttons and intuitive navigational elements, making background textures and images, and simple animation/video. It may be taken two times for credit on different platforms or software versions.

CISW 355 Web Imaging Projects 2 Units*Prerequisite: ARTNM 402 or CISW 350 with a grade of "C" or better**Course Transferable to CSU**Hours: 27 hours LEC; 27 hours LAB*

This course is a continuation of CISW 350. Projects and simulations developing graphics for the Web are created for the purpose of marketing and advertising on the Web. The steps, procedures, and common problems encountered when producing quality graphics for professional websites are discussed and practiced. Real and simulated projects include the following: compressing and uploading times, cropping and resizing, digital camera imaging, retouching and fixing photographs, photographic special effects and filters, rasterizing text, implementing backgrounds, buttons, themes, image maps, slicing, and simple animations.

CISW 360 Beginning Flash 3 Units*Advisory: ARTNM 324, CISW 300, and CISW 350**Course Transferable to CSU**Hours: 36 hours LEC; 54 hours LAB*

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. This course can be taken for credit a total of 4 times on different platforms or software versions.

CISW 365 Interactive Multimedia Basics 3 Units*Same As: ARTNM 404**Advisory: ARTNM 324, ARTNM 402, CISW 300, or CISW 310**Course Transferable to CSU**Hours: 36 hours LEC; 54 hours LAB*

This course introduces the design and the development of Flash-based interactive web sites, and its unique design workflow. Topics include the creation of simple vector-based graphics, buttons, animation and movies, and the integration of sound, raster graphics, and video. Visual design principles and interface design concepts are integrated into making portfolio-quality rich media projects. CISW 365 and/or ARTNM 404 may be taken a total of 4 times on different platforms or software versions.

CISW 370 Designing Accessible Web Sites 1 Unit*Prerequisite: CISW 300 with a grade of "C" or better**Course Transferable to CSU**Hours: 18 hours LEC*

This course provides an overview of the methods that are used to design web sites for people with disabilities. Current legal requirements for accessible web sites, especially the Americans with Disabilities Act (ADA), are emphasized.

CISW 400 Client-side Web Scripting 4 Units

Prerequisite: CISW 300 with a grade of "C" or better

Advisory: CISP 300 and CISW 310

Course Transferable to CSU

Hours: 54 hours LEC; 54 hours LAB

This course emphasizes the creation of dynamic and interactive web sites using a client-side scripting language such as JavaScript. 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. This course may be taken twice using a different client-side scripting language.

CISW 405 ActionScript for Flash 3 Units

Prerequisite: ARTNM 404 or CISW 365 with a grade of "C" or better

Advisory: CISP 300 or CISW 400

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course introduces Adobe Flash users to programming with ActionScript to animate, process data, and create dynamic content. It emphasizes the object-oriented capabilities of Adobe Flash, and instructs how to use ActionScript objects, methods, events, properties, and functions, with an eye toward ActionScript best practices.

CISW 410 Middleware Web Scripting 4 Units

Prerequisite: CISW 300 with a grade of "C" or better

Advisory: CISP 300 and CISW 310

Course Transferable to CSU

Hours: 54 hours LEC; 54 hours LAB

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. This course may be taken twice using different middleware web scripting environment.

CISW 411 Middleware Scripting Database Web Applications 2 Units

Prerequisite: CISW 410 with a grade of "C" or better

Advisory: CISW 310

Course Transferable to CSU

Hours: 27 hours LEC; 27 hours LAB

This course covers interactive database applications for the Web using a database and middleware scripting language. Topics include organizing data, developing tables for databases, and creating middleware scripts that add, delete, sort, edit, and merge the data in the database. Maintaining database integrity and using DHTML (Dynamic Hypertext Mark-up Language) to streamline certain client side functions, such as form validation, are also covered.

CISW 420 Server-side Web Scripting 4 Units

Prerequisite: CISW 300 with a grade of "C" or better

Advisory: CISP 300 and CISW 310

Course Transferable to CSU

Hours: 54 hours LEC; 54 hours LAB

This course emphasizes the creation of interactive web sites using a server-side scripting language such as a Perl or Java. Topics include core features of the server-side web scripting language, control structures, functions, arrays, form validation, regular expressions, cookies, environmental variables, email applications, and database-driven web applications. This course may be taken twice using a different server-side web scripting language.

CISW 442 Web Publishing with XML 3 Units

Prerequisite: CISW 300 with a grade of "C" or better

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course describes how to create well-formed and valid Extensible Markup Language (XML) documents, which are later used in conjunction with Extensible Style Sheet Language (XSL) to produce Web pages and other result documents. Topics include formatting XML documents with Cascading Style Sheets (CSS), Document Type Definitions (DTD), XML Namespaces and Schemas, XPATH, and Extensible Style Sheet Language Transforms (XSLT).

Area: Technical Education
 Dean: Gabriel Meehan
 Phone: (916) 484-8354
 Counseling: (916) 484-8572

<http://arc.losrios.edu/~dt/index.php>

Degree: A.A. - Design Technology
 A.S. - Engineering Technology
 A.S. - Engineering: Transfer
 Option: Construction Management
 Option: Mechanical Engineering
 Technology
 Certificate: Design Technology
 Engineering Technology

DEGREES AND CERTIFICATES

Design Technology Degree and Certificate

This degree and certificate emphasizes the knowledge and skills required for entry level success in the architectural, civil, and mechanical engineering professions. These include graphic standards and practices, technical analysis and communication, material sciences, and the design and critique processes. In addition, projects include environmental (sustainable) design, product economics, and legal considerations. Current computer technologies and various design software for three dimensional modeling and two dimensional drafting are used throughout the program. Graphic documentation and a portfolio of work are created for each course.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- solve architectural and engineering technical problems by applying design and engineering process methodologies. Critique and analyze the success or failure of the process and the solutions.
- apply the appropriate use of representational media, including study and presentation models (electronic and physical), freehand and conceptual drawing, technical documentation, and diagramming, to convey envisioned ideas at each stage of the design process.
- organize a set of documents for land planning and site development, commercial and residential buildings, and product assemblies that include material selections, cross-referencing, code review, checklists, and coordination.
- create design solutions that demonstrate knowledge and understanding of historical, cultural, human, aesthetic, environmental (sustainable) and social issues.
- communicate architectural and engineering design solutions effectively through individual and cooperative group efforts including speaking, writing, presentation, and the use of various design graphics and technical software.

Career Opportunities

A student who has earned a degree or certificate in design technology is well prepared to enter the architecture or engineering field as a design technician. Design technicians are involved in all phases of the design process and duties may include the preparation of technical and presentation drawings, specifications, reports and cost estimates. Design technicians primarily work with architects, mechanical engineers, structural engineers and civil engineers.

Requirements for Degree or Certificate 37 - 38 Units

DESGN 300	Introduction to Design Resources	3
DESGN 302	Technical Documentation with CADD	3
DESGN 310	Graphic Analysis and Documentation	3
DESGN 320	Three Dimensional Graphics and Design	3
DESGN 325	Architectural Modeling and Design.....	3
DESGN 328	Engineering Modeling and Design.....	3
DESGN 330	Engineering Systems and Design	5
DESGN 340	Architecture and Construction.....	5
DESGN 350	Surveying and Land Planning (5)	4 - 5
or ENGR 310	Engineering Survey Measurements (4)	
DESGN 360	Commercial Engineering Design and Drafting	5

Associate Degree Requirements: The Design 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.

Engineering Technology Degree and Certificate

This degree and certificate emphasizes the knowledge and skills required for entry level success in the engineering professions. These include a basic preparation within the scientific fields including physics, mathematics, chemistry, and material sciences. These sciences are applied to technical analysis and graphic communication standards and practices. In addition, projects include environmental and sustainable design issues, product economics, and legal considerations. Current computer technologies and various analytical design and documentation software are emphasized throughout the program.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- solve technical engineering problems by applying design and engineering process methodologies. Critique and analyze the success or failure of the process and the solutions.
- apply the appropriate use of representational media, including study and presentation models (electronic and physical), freehand and conceptual drawing, technical documentation, and diagramming.
- organize a set of engineering product development documents and technical reports per industry standards.
- research and design for engineering products that demonstrate knowledge and understanding of historical, cultural, human, aesthetic, environmental (sustainable) and social issues.
- communicate engineering design solutions effectively through individual and cooperative group efforts including speaking, writing, presentation, and the use of various design graphics and technical software.

(continued on next page)

(Engineering Technology Degree and Certificate continued)

Career Opportunities

Upon completion of the degree or certificate program the engineering technician will be prepared to go directly into the employment market as a technical assistant to engineers, or other technical employment. For every engineer, several support technicians are required. Engineering technicians are needed in the fields of manufacturing, architecture, construction, materials testing, public utilities, and many other fields.

Requirements for Degree or Certificate 38 - 43 Units

CHEM 305	Introduction to Chemistry (5)	4 - 5
or CHEM 310	Chemical Calculations (4)	
CISA 315	Introduction to Electronic Spreadsheets	2
CISA 316	Intermediate Electronic Spreadsheets	2
DESGN 300	Introduction to Design Resources (3)	3
or ENGR 307	Industrial Materials Testing (3)	
DESGN 302	Technical Documentation with CADD	3
DESGN 310	Graphic Analysis and Documentation (3)	3
or ENGR 312	Engineering Graphics (3)	
DESGN 328	Engineering Modeling and Design	3
DESGN 330	Engineering Systems and Design (5)	3 - 5
or ENGR 320	Manufacturing Processes (3)	
DESGN 340	Architecture and Construction (5)	5
or DESGN 360	Commercial Engineering Design and Drafting (5)	
DESGN 350	Surveying and Land Planning (5)	4 - 5
or ENGR 310	Engineering Survey Measurements (4)	
MATH 330	Trigonometry	3
PHYS 310	Conceptual Physics (3)	3 - 4
or PHYS 350	General Physics (4)	

Associate Degree Requirements: The Engineering 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.

Engineering: Transfer Option

The purpose of the program is to provide academic preparation for transfer to California State University, Sacramento for the Engineering Construction Management Program or the Mechanical Engineering Technology Program. At the completion of the courses in the option, a student will obtain an A.S. Degree and have many of the courses required for transfer. Please check the current Articulation Agreement by Major at www.assist.org

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- apply the principles of engineering to mechanical and construction technologies.
- identify, analyze, and solve technical problems.
- plan, conduct, analyze, and interpret experiments.
- communicate about engineering solutions effectively through speaking, writing, and graphics.

Core Requirements for Degree 29-30 Units

DESGN 100	Introduction to Computer Aided Drafting and Design (CADD)	3
DESGN 302	Technical Documentation with CADD	3
DESGN 340	Architecture and Construction (5)	5
or DESGN 360	Commercial Engineering Design and Drafting (5)	

DESGN 350	Surveying and Land Planning (5)	4 - 5
or ENGR 310	Engineering Survey Measurements (4)	
MATH 350	Calculus for the Life and Social Sciences I	3
MATH 351	Calculus for the Life and Social Sciences II	3
PHYS 350	General Physics	4
PHYS 360	General Physics	4

Construction Management Option 67-69.5 Units

Core Requirements		29-30
ACCT 301	Financial Accounting	4
ACCT 311	Managerial Accounting	4
BIOL 303	Survey of Biology	4
BUS 340	Business Law	3
CISA 305	Beginning Word Processing	2
CISA 315	Introduction to Electronic Spreadsheets	2
CISC 320	Operating Systems	1
DESGN 310	Graphic Analysis and Documentation	3
ENGR 307	Industrial Materials Testing (3)	3 - 4.5
or ENGR 413	Properties of Materials (4.5)	
ENGR 420	Statics	3
ENGWR 300	College Composition	3
SPEECH 311	Argumentation and Debate	3

And a minimum of 3 units from the following:

CSU course: Construction Management 22. May be taken prior to transferring. Consult with a counselor.

Mechanical Engineering Technology Option 68-73 Units

Core Requirements		29-30
CHEM 305	Introduction to Chemistry (5)	5
or CHEM 400	General Chemistry (5)	
CISA 315	Introduction to Electronic Spreadsheets	2
CISA 316	Intermediate Electronic Spreadsheets	2
DESGN 300	Introduction to Design Resources (3)	3
or ENGR 307	Industrial Materials Testing (3)	
DESGN 328	Engineering Modeling and Design	3
DESGN 310	Graphic Analysis and Documentation (3)	3
or ENGR 312	Engineering Graphics (3)	
DESGN 330	Engineering Systems and Design	5
ENGR 320	Manufacturing Processes	3

And a minimum of 3 units from the following:

One or more transfer level Humanities course (numbered 300-499)

And a minimum of 3 units from the following:

One or more transfer level Language and Rationality course (numbered 300-499)

And a minimum of 6 units from the following:

Transfer level Social Science courses (numbered 300-499)

And a minimum of 5 units from the following:

Transfer level courses (numbered 300-499).

Associate Degree Requirements: The Engineering: Transfer 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.

Design Technology

DESGN 100 Introduction to Computer Aided Drafting and Design (CADD) 3 Units

Hours: 36 hours LEC; 72 hours LAB

This course is an introduction to computer-assisted drafting and design (CADD) and basic technical drawing. It covers orthographic and isometric projection concepts, utilizing CADD to produce basic technical drawings. It introduces basic drawings from architecture, mechanical design, electronics and space planning. This course may be taken two times for credit using different software versions.

DESGN 298 Work Experience in Design Technology 1-4 Units

Advisory: ENGWR 102 or 103, and ENGRD 116 with grade of "C" or better; OR ESLR 320 and ESLW 320 with grade of "C" or better;

OR placement through assessment process

General Education: AA/JAS Area III(b)

Hours: 300 hours LAB

This course provides students with opportunities to develop marketable skills in preparation for employment in the architectural and engineering field. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to fulfill a weekly orientation and 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. The weekly orientation is required for first time participants, returning participants are not required to attend the weekly orientation but are required to meet with the instructor as needed to complete all program forms and assignments. Work Experience may be taken for a total of 16 units when there are new or expanded learning objectives.

DESGN 300 Introduction to Design Resources 3 Units

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.

Course Transferable to CSU

Hours: 54 hours LEC

This course is a survey of the resources that are used in the architectural and engineering professions. It introduces construction materials and their properties and characteristics that affect construction processes. Environmental and sustainable materials, sustainable building certification, and rating systems are also covered.

DESGN 302 Technical Documentation with CADD 3 Units

Prerequisite: DESGN 100 with a grade 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.

Hours: 36 hours LEC; 72 hours LAB

This course emphasizes using various electronic graphical media software to create standardized technical documentation for architectural, civil, and mechanical applications. A wide range of methods are used to create, print and save 2D, 3D, orthographic, and isometric presentations in a wide variety of output formats using AutoCAD as the primary tool. Section views for mechanical and architectural applications are covered, as well as a variety of drawing and file management topics. This course may be taken two times for credit using different software versions. This course was formerly DESGN 102.

DESGN 310 Graphic Analysis and Documentation 3 Units

Prerequisite: DESGN 100 with a grade of "C" or better

Advisory: DESGN 302 (Technical Documentation with CADD), AND 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.

Course Transferable to CSU

Hours: 36 hours LEC; 72 hours LAB

This course covers the application of orthographic projection and geometric construction principles as they are used to solve technical problems. Additionally, graphical analysis is used to determine strength, deflection, cost, volume, and green technology ratings. These analyses may utilize design characteristics such as forces, moments, ratios, and areas as well as distance, bearing, and grade. These characteristics are then used in the solution of engineering and architectural problems.

DESGN 320 Three Dimensional Graphics and Design 3 Units

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.

Course Transferable to UC/CSU

Hours: 36 hours LEC; 72 hours LAB

This course is an introduction to the fundamentals of the design process for architecture and engineering. It includes the application of programming, environmental analysis, sustainable (green) considerations, code guidelines and restrictions, market analysis, and economic considerations on design projects. Technical design solutions with freehand perspective graphics, physical mass modeling prototyping, and virtual concept computer modeling are also covered. The course also includes individual and team studio situations, oral presentations, and formal critiques.

DESGN 325 Architectural Modeling and Design 3 Units

Prerequisite: DESGN 100 (Introduction to Computer Aided Drafting and Design (CADD)) and DESGN 320 (Three Dimensional Graphics and Design) with a grade of "C" or better; AND DESGN 300 (Introduction to Design Resources) or ENGR 307 (Industrial Materials Testing) with a grade 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.

Course Transferable to CSU

Hours: 36 hours LEC; 72 hours LAB

This course covers the concepts and applications of three dimensional graphic design using various visualization, modeling, and Building Information Modeling (BIM) programs, such as AutoCAD, SketchUp and Revit Architectural. Topics include the procedures and techniques for producing architectural models and associated technical documentation and presentation. Course projects emphasize sustainable design concepts and include all phases of design. This course may be taken two times for credit on different software versions.

DESGN 328 Engineering Modeling and Design 3 Units

Prerequisite: DESGN 100 with a grade of "C" or better
Advisory: DESGN 320; 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.

Course Transferable to UC/CSU
Hours: 36 hours LEC; 72 hours LAB

This course covers the concepts and applications of three dimensional graphic design using various visualization, modeling, and Building Information Modeling (BIM) programs, such as AutoCAD, SketchUp, and Revit MEP. Topics include the procedures and techniques for producing surface models, solid models, and their associated technical documentation/presentation components as well as their application to civil engineering, mechanical engineering and green technology. This course may be taken two times for credit using different software versions. This course was formerly DESGN 308.

DESGN 330 Engineering Systems and Design 5 Units

Prerequisite: DESGN 302 (Technical Documentation with CADD), and DESGN 320 (Three Dimensional Graphics and Design) and, DESGN 328 (Engineering Modeling and Design) with grades of "C" or better AND DESGN 310 (Graphic Analysis and Documentation) or ENGR 312 (Engineering Graphics) with a grade 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.

Course Transferable to CSU
Hours: 54 hours LEC; 108 hours LAB

This course covers machine and mechanical system design and analysis through the study of Mechanical Electrical Plumbing (MEP) system applications. Basic Building Information Modeling (BIM) techniques and technical documentation are applied to a variety of industrial and commercial products utilizing orthographics, sections, auxiliaries, tolerance reviews, Geometric Dimension and Tolerancing (GD&T), as well as the creation of facility and production plans. Emphasis is placed on the current American National Standards Institute (ANSI) standard for geometric dimension and tolerancing and its application to working drawings. Applications emphasize green technology concerns, such as water and energy conservation in industrial, commercial, or municipal settings.

DESGN 340 Architecture and Construction 5 Units

Prerequisite: DESGN 302 (Technical Documentation with CADD), AND DESGN 325 (Architectural Modeling and Design) or DESGN 328 (Engineering Modeling and Design) and DESGN 320 (Three Dimensional Graphics and Design), AND DESGN 310 (Graphic Analysis), or ENGR 312 (Engineering Graphics) with grades of "C" or better

Course Transferable to CSU
Hours: 54 hours LEC; 108 hours LAB

This course is an introduction to the residential architectural design process. It covers the fundamentals of construction materials and methodology, basic code requirements, and the introduction of applied engineering concepts for light construction. It also includes the application of a predefined program, environmental analysis, sustainable design, building mass prototyping, and graphical technical documentation.

DESGN 350 Surveying and Land Planning 5 Units

Prerequisite: DESGN 302 (Technical Documentation with CADD), DESGN 328 (Engineering Modeling and Design) AND DESGN 310 (Graphic Analysis and Documentation) or ENGR 312 (Engineering Graphics) with a grade of "C" or better
Advisory: DESGN 320, MATH 120, MATH 124, and MATH 129

Course Transferable to CSU
Hours: 54 hours LEC; 108 hours LAB

This course examines elementary surveying principles and basic civil design and drafting techniques. It covers the instruments, methods, and theories necessary for the measurement of distance, direction, angles, and elevations. Surveyed data is applied to create site layouts, site models, profiles, cut and fill volumes, and traverse computations. Additionally, environmental and sustainable design practices are applied to a variety of projects.

DESGN 360 Commercial Engineering Design and Drafting 5 Units

Prerequisite: DESGN 302 (Technical Documentation with CADD), AND DESGN 325 (Architectural Modeling and Design) or DESGN 328 (Engineering Modeling and Design) AND DESGN 310 (Graphic Analysis), or ENGR 312 (Engineering Graphics) with grades of "C" or better

Course Transferable to CSU
Hours: 54 hours LEC; 108 hours LAB

This course employs individual and group exercises simulating typical design and engineering problems in commercial structures, commercial building systems, and environmental systems in buildings. The fundamentals of construction materials and methodology, basic code requirements, and the introduction of applied engineering concepts for heavy construction are introduced. Topics include defined programs, environmental analysis, sustainable design applications, and the development of various mass prototyping based on the given theme. Design solutions are presented by various freehand concept drawings, physical modeling and electronic media applications. A formal graphic portfolio including all course work is required.

Area: Technical Education
 Dean: Gabriel Meehan
 Phone: (916) 484-8354
 Counseling: (916) 484-8572
<http://wserver.arc.losrios.edu/~tech/>

Degree: A.S. - Diesel Technology
 Certificates: Diesel Technology
 Clean Diesel Technology

Certificates of Completion offered by the department:
 Preventive Maintenance

DEGREES AND CERTIFICATES

Diesel Technology Degree

The Diesel Technology 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.

Career Opportunities

This degree prepares the students as diesel technicians in the following areas of specialty: brakes, engine repair, hydraulics, and electrical.

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.

Requirements for Degree		28 Units
DCDT 101	Diesel Preventive Maintenance	4
DCDT 110	Diesel Engine Repair.....	4
DCDT 120	Basic Hydraulic Principles of Diesel Technology	4
DCDT 130	Diesel Brake Systems	4
DCDT 140	Diesel Electrical Systems	4
DCDT 150	Diesel Power Trains	4
DCDT 162	Clean Diesel Software Support.....	4

Associate Degree Requirements: The Diesel Mechanics 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.

Diesel Technology Certificate

The Diesel Technology certificate provides training in diesel technology. Topics include diesel brakes, hydraulics, electrical systems, and power trains.

Career Opportunities

This certificate prepares the students for various entry level positions exist in the diesel repair industry, such as entry level technician.

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.

Requirements for Certificate		24 Units
DCDT 101	Diesel Preventive Maintenance	4
DCDT 110	Diesel Engine Repair.....	4
DCDT 120	Basic Hydraulic Principles of Diesel Technology	4
DCDT 130	Diesel Brake Systems	4
DCDT 140	Diesel Electrical Systems	4
DCDT 150	Diesel Power Trains	4

Clean Diesel Technology Certificate

The Clean Diesel Technology certificate covers the diesel engine systems. Topics include biodiesel fuel and fuel systems, clean diesel technology, and clean diesel software support.

Career Opportunities

This certificate prepares the students for various entry level positions in the diesel repair industry, such as entry level technician, hydraulic technician, and heavy equipment service advisor.

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.

Requirements for Certificate		24 Units
DCDT 102	Biodiesel Fuel and Fuel Systems	4
DCDT 103	Clean Diesel Systems	4
DCDT 104	Clean Diesel Rebuild, Retrofit, Repower, Retire	4
DCDT 110	Diesel Engine Repair.....	4
DCDT 112	Clean Diesel Retrofit	4
DCDT 162	Clean Diesel Software Support.....	4

CERTIFICATE OF COMPLETION (offered by the department)

Preventive Maintenance Certificate

The Preventive Maintenance 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.

Career Opportunities

This certificate prepares the students for various entry level positions in the diesel repair industry.

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

Requirements for Degree		12 Units
DCDT 100	Diesel Technology Basics.....	4
DCDT 101	Diesel Preventive Maintenance.....	4
DCDT 110	Diesel Engine Repair.....	4

Diesel/Clean Diesel Technology

DCDT 100 Diesel Technology Basics 4 Units

Hours: 72 hours LEC

This course introduces diesel technology. Topics include shop safety, hazardous waste handling and disposal, and engine components and their function.

DCDT 101 Diesel Preventive Maintenance 4 Units

Hours: 54 hours LEC; 54 hours LAB

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. This course may be taken two times for credit using different equipment.

DCDT 102 Biodiesel Fuel and Fuel Systems 4 Units

Hours: 54 hours LEC; 54 hours LAB

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.

DCDT 103 Clean Diesel Systems 4 Units

Hours: 54 hours LEC; 54 hours LAB

This course provides a complete overview of the clean diesel engine system. Topics include fuel injection systems, emission regulations, and diesel emission control systems. This course can be taken two times for credit using different equipment.

DCDT 104 Clean Diesel Rebuild, Retrofit, Repower, Retire 4 Units

Hours: 54 hours LEC; 54 hours LAB

This course covers clean diesel rebuilding, repowering, retrofitting, or retiring of equipment decisions. Topics include rebuilding, replacement, and retirement of diesel systems and components. This course may be taken two times for credit using different equipment.

DCDT 110 Diesel Engine Repair 4 Units

Hours: 54 hours LEC; 54 hours LAB

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. This course may be taken two times for credit using different equipment.

DCDT 111 Clean Natural Gas Engine Repair 4 Units

Hours: 54 hours LEC; 54 hours LAB

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.

DCDT 112 Clean Diesel Retrofit 4 Units

Hours: 54 hours LEC; 54 hours LAB

This course covers diesel engine retrofit needs for older diesel engines. Topics include troubleshooting, fault codes, and diesel particulate filter systems. This course may be taken two times for credit using different equipment.

DCDT 120 Basic Hydraulic Principles of Diesel Technology 4 Units

Hours: 54 hours LEC; 54 hours LAB

This course provides an introduction to the basic hydraulic principles and functions of the diesel engine. Topics include hydraulic fundamentals and principles, functions of hydraulic fluids, directional and flow control valves, and machine hydraulic overview. This course may be taken two times for credit using different equipment.

DCDT 130 Diesel Brake Systems 4 Units

Hours: 54 hours LEC; 54 hours LAB

This course covers the operation of diesel brake systems and components. Topics include band, shoe, caliper, and full disc brakes. This course may be taken two times for credit using different equipment.

DCDT 140 Diesel Electrical Systems 4 Units

Hours: 54 hours LEC; 54 hours LAB

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. This course may be taken two times for credit using different equipment.

DCDT 142 Diesel Emission Control Systems 4 Units

Hours: 54 hours LEC; 54 hours LAB

This course covers the emission control system of the diesel engine. Topics include performance maintenance and emissions control within emission limits. This course may be taken two times for credit using different equipment.

DCDT 150 Diesel Power Trains 4 Units*Hours: 54 hours LEC; 54 hours LAB*

This course covers the diesel power train. Topics include inspection and adjustment of clutch linkage, flywheel, and replacement of clutch brakes. This course can be taken two times for credit using different equipment.

DCDT 162 Clean Diesel Software Support 4 Units*Hours: 72 hours LEC*

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. This course may be taken two times for credit using different software.

DCDT 190 Applied Projects in Clean Diesel Technology 2 Units*Prerequisite: DCDT 101, 110, 120, 130, 140, or 150 with a grade of "C" or better**Hours: 108 hours LAB*

This course provides opportunities to pursue laboratory projects in clean diesel technology. Projects are selected by the diesel technology department. This course may be taken four times for credit on different projects.

DCDT 298 Work Experience in Clean Diesel Technology 1-4 Units*General Education: AA/AS Area III(b)**Hours: 300 hours LAB*

This course provides students with opportunities to develop marketable skills in preparation for employment in the clean diesel technology field. It is designed for students interested in work experience and/or internships in the clean diesel industry. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Rigor is ensured through the development of appropriate level learning objectives set between the student and the employer. During the course of the semester, the student is required to fulfill a weekly orientation and 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. The weekly orientation is required for first time participants; returning participants are not required to attend the weekly orientation but are required to meet with the instructor as needed to complete all program forms and assignments. This course may be taken for a total of 16 units when there are new or expanded learning objectives. Students can earn a total of 16 Work Experience Units.

Area: Health & Education
 Dean: Dr. Steven Boyd
 Phone: (916) 484-8432
 Counseling: (916) 484-8572

http://www.arc.losrios.edu/Programs_of_Study/Health_and_Education/Early_Childhood.htm

Degree: A.A. - Early Childhood Education
 A.S. for Transfer - Early Childhood Education

Certificates: Associate Teacher
 Culture and Diversity Specialist
 Infant Specialist
 Management Specialist
 Master Teacher
 School Age
 Site Supervisor
 Teacher

Certificates of Completion offered by the department:
 Assistant Teacher
 Family Child Care

The ARC Early Childhood Education Program

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.

DEGREES AND CERTIFICATES

Early Childhood Education Degree

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.

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 group care early childhood settings.

- apply ethical standards of behavior accepted by the profession of early childhood education.

Career Opportunities

Upon completion of the A.A. degree, a student possesses the course work 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.

Requirements for Degree	44 Units
ECE 300	Introduction to Principles and Practices in Early Childhood Education.....3
ECE 312 or PSYC 372	Child Development (3).....3
ECE 314	The Child, the Family and the Community.....3
ECE 320	Curriculum and Interactions in Early Childhood Education.....4
ECE 321	Advanced Practicum in Early Childhood Education4
ECE 325	Guidance and Discipline for Young Children.....3
ECE 326	Making Learning Visible Through Observation and Documentation3
ECE 331	Education and Care of Infants in Group Settings.....3
ECE 342	Constructive Math and Science in Early Childhood Education.....3
ECE 343	Language and Literacy Development in Early Childhood.....3
ECE 361 or ECE 363	Introducing Young Children to Visual Arts (3).....3
ECE 415	Music and Movement with Young Children (3).....3
ECE 415	Children's Health, Safety and Nutrition.....3
ECE 430	Culture and Diversity in Early Childhood Education3
A minimum of 3 units from the following:.....3	
ECE 305	Introduction to Family Child Care (1)
ECE 316	Mass Media and Young Children (1)
ECE 330	Infant Development (3)
ECE 356	Programs for the School-Age Child (3)
ECE 358	Activities for the School-Age Child (Six to Fourteen Years) (3)
ECE 404	Children with Special Needs (3)
ECE 405	Practicum in Inclusive Settings (3)
ECE 424	Adult Supervision: Mentoring in a Collaborative Learning Setting (2)
ECE 432	Leadership in Diversity (3)

Associate Degree Requirements: 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.

Early Childhood Education A.S. for Transfer Degree

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 was 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 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). The ECE courses required in this program are part of the CA Curriculum Alignment Project, Lower Division 8 coursework.

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.

Requirements for Degree		26 Units
ECE 300	Introduction to Principles and Practices in Early Childhood Education.....	3
ECE 312	Child Development (3).....	3
or PSYC 372	Child Development (3)	
ECE 314	The Child, the Family and the Community.....	3
ECE 320	Curriculum and Interactions in Early Childhood Education.....	4
ECE 321	Advanced Practicum in Early Childhood Education.....	4
ECE 326	Making Learning Visible Through Observation and Documentation.....	3
ECE 415	Children's Health, Safety and Nutrition (3).....	3
or NUTRI 320	Children's Health, Safety and Nutrition (3)	
ECE 430	Culture and Diversity in Early Childhood Education.....	3

Associate in Science for Transfer Degree Requirements: 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.

Certificates Leading to Child Development Permits

ARC also offers a sequence of certificates that guide students in working their way up the California Development Permit matrix. Students who complete the following certificates will, upon verification of required experience, be recommended to the Commission on Teacher Credentialing for issuance of Child Development Permits.

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.

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.

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(Associate Teacher Certificate continued)

Career Opportunities

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.

Requirements for Certificate		13 Units
ECE 300	Introduction to Principles and Practices in Early Childhood Education.....	3
ECE 312 or PSYC 372	Child Development (3).....	3
ECE 314	The Child, the Family and the Community.....	3
ECE 320	Curriculum and Interactions in Early Childhood Education.....	4

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.

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.

Career Opportunities

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.

Requirements for Certificate		45 Units
ECE 300	Introduction to Principles and Practices in Early Childhood Education.....	3
ECE 312 or PSYC 372	Child Development (3).....	3
ECE 314	The Child, the Family and the Community.....	3
ECE 320	Curriculum and Interactions in Early Childhood Education.....	4
ECE 321	Advanced Practicum in Early Childhood Education.....	4
ECE 326	Making Learning Visible Through Observation and Documentation.....	3
ECE 331	Education and Care of Infants in Group Settings.....	3
ECE 415 or NUTRI 320	Children's Health, Safety and Nutrition (3).....	3
ECE 430	Culture and Diversity in Early Childhood Education.....	3
And a minimum of 16 units from the following:		16

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 & Behavioral Sciences.

Master Teacher Certificate

This certificate meets the requirements for teaching in a publicly funded early care and education program. It requires an additional 6 units of specialized study beyond the teacher level certificate, allowing the student to select a particular focus of study (i.e., infant/toddler; culture and diversity; health and nutrition; children's literature; and art or music for young children). Applicants must verify required experience teaching children and supervising staff to be recommended to the California Commission on Teacher Credentialing for issuance of the Master Teacher Child Development Permit.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- appraise child development principles to lead a teaching team in the design and evaluation of environments that are 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.
- choose 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.

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(Master Teacher Certificate continued)**Career Opportunities**

This certificate qualifies students to be a master teacher or a supervising teacher in early care and education programs. Upon completion of this certificate and with documented related experience, the individual is eligible to be a lead teacher and/or mentor teacher in both publicly and privately funded programs serving young children and their families.

Core Requirements for Certificate 47 Units

ECE 300	Introduction to Principles and Practices in Early Childhood Education.....	3
ECE 312	Child Development (3)	3
or PSYC 372	Child Development (3)	
ECE 314	The Child, the Family and the Community.....	3
ECE 320	Curriculum and Interactions in Early Childhood Education....	4
ECE 321	Advanced Practicum in Early Childhood Education	4
ECE 326	Making Learning Visible Through Observation and Documentation.....	3
ECE 331	Education and Care of Infants in Group Settings.....	3
ECE 415	Children's Health, Safety and Nutrition (3).....	3
or NUTRI 320	Children's Health, Safety and Nutrition (3)	
ECE 424	Adult Supervision: Mentoring in a Collaborative Learning Setting.....	2
ECE 430	Culture and Diversity in Early Childhood Education	3

And a minimum of 16 units from the following: 16

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.

Master Teacher Specialization Concentrations:**Art with Children 53 Units**

Core Requirements	47	
ECE 361	Introducing Young Children to Visual Arts	3
And a minimum of 3 units from the following:		3
ART 320	Design: Fundamentals (3)	
ART 432	Art for Children Practicum (2 - 4)	
ARTH 300	Introduction to Art (3)	

Children's Health, Safety and Nutrition 53 Units

Core Requirements	47	
ECE 415	Children's Health, Safety and Nutrition (3)	3 ¹
or NUTRI 320	Children's Health, Safety and Nutrition (3)	
NUTRI 300	Nutrition	3

¹If 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.

Children's Literature 53 Units

Core Requirements	47	
ENGLT 370	Children and Literature	3
ENGLT 372	Children and Literature: Storytelling	1
ENGLT 374	Children and Literature: Folklore and Fairy Tales	1
ENGLT 376	Children and Literature: Reader's Theater	1

Culture and Diversity 53 Units

Core Requirements	47	
ECE 430	Culture and Diversity in Early Childhood Education	3 ²
ECE 432	Leadership in Diversity	3

²ECE 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.

Drama with Children 53 Units

Core Requirements	47	
TA 400	Creative Drama for Children	3
TA 404	Techniques of Puppetry (3)	3
or TA 406	Children's Theatre (3)	

Infant Care 53 Units

Core Requirements	47
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A minimum of 6 units from the following:..... 6³

ECE 334 Laboratory with Infants and Toddlers (1)
or ECE 331 Education and Care of Infants in Group Settings (3)
or ECE 330 Infant Development (3)

³ECE 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. ECE 334 may be repeated three times for a total of 3 units.

Music with Children 53 Units

Core Requirements	47
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ECE 363 Music and Movement with Young Children..... 3

And a minimum of 3 units from the following:

MUFHL 330	World Music (3)	
MUIVI 340	Beginning Piano (2)	
MUIVI 341	Beginning Piano (2)	
MUIVI 370	Beginning Guitar (2)	
MUIVI 371	Intermediate Guitar (2)	
MUSM 370	Music for Children (3)	

School-Age Care 53 Units

Core Requirements	47
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ECE 356 Programs for the School-Age Child..... 3

ECE 358 Activities for the School-Age Child (Six to Fourteen Years)

Special Needs 53 Units

Core Requirements	42
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ECE 404 Children with Special Needs..... 3

ECE 405 Practicum in Inclusive Settings

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.

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).

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(Site Supervisor Certificate continued)

- 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 Opportunities

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.

Requirements for Certificate	60 Units
ECE 300	Introduction to Principles and Practices in Early Childhood Education.....3
ECE 312 or PSYC 372	Child Development (3).....3
ECE 314	The Child, the Family and the Community.....3
ECE 320	Curriculum and Interactions in Early Childhood Education.....4
ECE 321	Advanced Practicum in Early Childhood Education.....4
ECE 326	Making Learning Visible Through Observation and Documentation.....3
ECE 331	Education and Care of Infants in Group Settings.....3
ECE 415 or NUTRI 320	Children's Health, Safety and Nutrition (3).....3
ECE 420	Administration of Child Development Centers.....3
ECE 422	Advanced Coordination and Supervision of Child Development Programs3
ECE 424	Adult Supervision: Mentoring in a Collaborative Learning Setting.....2
ECE 430	Culture and Diversity in Early Childhood Education.....3

And a minimum of 23 units from the following: 23

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.

The Early Childhood Education Department is also authorized to recommend students to the Commission on Teacher Credentialing for the Child Development Assistant Permit and for the Program Director Permit. Students who wish to be recommended for the Child Development Assistant Permit must have completed ECE 312/PSYCH 372, and ECE 300 for a total of six units. Students who wish to be recommended for the Child Development Program Director Permit must verify completion of a BA degree, possess the Child Development Teacher Certificate, and complete ECE 420, 422 and 424. This permit is required for those supervising multiple publicly-funded early childhood education sites.

Specialist Certificates

The following certificates are designed for students who seek courses which will prepare them to work with a specific age group or program type. The following certificates meet the minimum requirements for teaching in or administering privately-funded early care and education.

Culture & 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, age-appropriate curriculum and a supervised field/lab experience. Additionally, it offers a specialization in culture and diversity issues dealing with young children and their families.

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 classroom setting.
- plan and implement developmentally appropriate and culturally relevant classroom environment that support 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 and culturally relevant 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.
- analyze how one's own cultural background, societal beliefs, and values impact their work with young children and families.
- advocate for and promote culturally relevant and anti-biased education in the early care and education community.
- demonstrate practices in maintaining health/safety standards and managing infectious disease in group-care settings.

Career Opportunities

Upon completion of this specialization certificate, the individual is eligible to be a teacher in a privately funded (Title 22) early care and education program and/or an associate teacher in a publicly funded (Title 5) program serving young children and their families.

Requirements for Certificate	22 Units
ECE 300	Introduction to Principles and Practices in Early Childhood Education.....3
ECE 312 or PSYC 372	Child Development (3).....3
ECE 314	The Child, the Family and the Community.....3
ECE 320	Curriculum and Interactions in Early Childhood Education4
ECE 415 or NUTRI 320	Children's Health, Safety and Nutrition (3).....3
ECE 430	Culture and Diversity in Early Childhood Education3
ECE 432	Leadership in Diversity.....3

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, age-appropriate curriculum, and a supervised field/lab experience. Additionally, it focuses on infant development and the care of education of infants/toddlers in group settings.

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 care 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-care 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 Opportunities

Upon completion of this certificate, the student exceeds 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, the student qualifies as an associate teacher of infants and toddlers in publicly funded early childhood education programs (as required by Title 5 California Education Code of Regulations).

Requirements for Certificate		23 Units
ECE 300	Introduction to Principles and Practices in Early Childhood Education.....	3
ECE 312 or PSYC 372	Child Development (3).....	3
ECE 314	The Child, the Family and the Community.....	3
ECE 320	Curriculum and Interactions in Early Childhood Education	4
ECE 330	Infant Development	3
ECE 331	Education and Care of Infants in Group Settings.....	3
ECE 334	Laboratory with Infants and Toddlers.....	1
ECE 415 or NUTRI 320	Children's Health, Safety and Nutrition (3).....	3

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.

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 Opportunities

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.

Requirements for Certificate		24 Units
ECE 300	Introduction to Principles and Practices in Early Childhood Education.....	3
ECE 312 or PSYC 372	Child Development (3).....	3
ECE 314	The Child, the Family and the Community.....	3
ECE 320	Curriculum and Interactions in Early Childhood Education	4
ECE 415 or NUTRI 320	Children's Health, Safety and Nutrition (3).....	3
ECE 420	Administration of Child Development Centers.....	3
ECE 422	Advanced Coordination and Supervision of Child Development Programs	3
ECE 424	Adult Supervision: Mentoring in a Collaborative Learning Setting.....	2

School Age 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 specific school-age program requirements and activities.

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 Opportunities

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.

Requirements for Certificate	22 Units
ECE 300	Introduction to Principles and Practices in Early Childhood Education.....3
ECE 312 or PSYC 372	Child Development (3).....3
ECE 314	The Child, the Family and the Community.....3
ECE 320	Curriculum and Interactions in Early Childhood Education 4
ECE 356	Programs for the School-Age Child.....3
ECE 358	Activities for the School-Age Child (Six to Fourteen Years)3
ECE 415 or NUTRI 320	Children's Health, Safety and Nutrition (3).....3

CERTIFICATES OF COMPLETION (offered by the department)

Assistant Teacher Certificate

This certificate provides entry-level coursework in preparation to be an assistant teacher in an early care and education program. Topics include an introduction to the field and child development theories and principles. Upon completion of this certificate, the student is eligible to apply for the Assistant Teacher Child Development Permit with the Commission on Teacher Credentialing.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- describe and apply principles of physical, intellectual, social and emotional development that occur between birth and the end of adolescence.
- support the teaching team in the planning and implementation of developmentally appropriate indoor and outdoor environments for young children.
- compare and contrast common curricular approaches and program types.
- identify components of quality in early childhood education programs.
- record objective and detailed observations of children's behavior.

Career Opportunities

With an Assistant Teacher Certificate, students are eligible to work in private and public early care and education programs as assistant teachers. These programs include infant/toddler centers, preschools, and before-and-after school programs serving school-age children. Additionally, assistant teachers can operate their own family child care home.

Requirements for Certificate	6 Units
ECE 300	Introduction to Principles and Practices in Early Childhood Education.....3
ECE 312 or PSYC 372	Child Development (3).....3

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.

Student Learning Outcomes

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 Opportunities

Upon completion of this certificate, the student is prepared to offer quality in-home child care to families in the community.

Requirements for Certificate	10 Units
ECE 305	Introduction to Family Child Care1
ECE 312 or PSYC 372	Child Development (3).....3
ECE 314	The Child, the Family and the Community.....3
ECE 415 or NUTRI 320	Children's Health, Safety and Nutrition (3).....3

Early Childhood Education

ECE 107 Nutrition Basics for the Childcare Provider – Basic Nutritional Needs of Children 0-5 **1 Unit**

Same As: NUTRI 107

Advisory: ENGWR 102, ENGWR 103, or ESLW 320; or placement through the assessment process.

Hours: 18 hours LEC

This course examines scientific information on the basic nutritional needs of children 0-5 years of age. Topics include macronutrient and micronutrient functions, dietary requirements, and growth and activity patterns in infants, toddlers, and preschool age children. It is designed to satisfy continuing education requirements for childcare providers advancing toward a Master Teacher Certificate. This course is not open to students who have taken NUTRI 107.

ECE 108 Nutrition Basics for the Childcare Provider – Diet, Health, & Physical Activity 0-5 years **1 Unit**

Prerequisite: ECE 107 or NUTRI 107 with a grade of "C" or better

Hours: 18 hours LEC

This course provides scientific information on the relationship between diet, physical activity, and health of children 0-5 years of age. Topics include health implications of dietary deficiencies and excesses, childhood obesity, and physical activity. It is designed to satisfy continuing education requirements for childcare providers advancing toward the Master Teacher Certificate. This course is not open to students who have taken NUTRI 108.

ECE 109 Nutrition Basics for the Childcare Provider – Healthy Foods and Meal Planning **1 Unit**

Same As: NUTRI 109

Prerequisite: ECE 108 or NUTRI 108 with a grade of "C" or better

Hours: 18 hours LEC

This course provides practical information for planning healthy meals and diets for children 0-5 years of age. Its focus is on: creative ways to incorporate fruits and vegetables; how to address neophobia; teaching opportunities at meal and snack time; the importance of a balanced diet; meal and snack planning. It is designed to satisfy continuing education requirements for childcare providers advancing toward the Master Teacher Certificate. This course is not open to students who have taken NUTRI 109.

ECE 120 Effective Discipline for Foster Parents **1 Unit**

Prerequisite: None

Hours: 18 hours LEC

This course provides foster parents discipline techniques which are effective in the production of positive behaviors in the children and youth placed in their care. The parenting theories of Fay, Cline and Fay's "Love and Logic" are emphasized. This course meets requirements for continuing education for Sacramento County licensed foster parents or kinship care providers.

ECE 122 Competence in Diversity **1 Unit**

Prerequisite: None

Hours: 18 hours LEC

This course identifies the importance of promoting the self-esteem of foster children through personal history and culture. Techniques for promoting a positive sense of identity are emphasized. This course includes critical issues that face foster parents and the children they care for in a poly-ethnic and otherwise diverse community. This course meets state requirements for continuing education for Sacramento County licensed foster parents and kinship care providers.

ECE 294 Topics in Early Childhood Education **.5-4 Units**

Prerequisite: None

Hours: 72 hours LEC

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. The course may be taken four times up to a maximum of 6 units providing there is no duplication of topics.

ECE 300 Introduction to Principles and Practices in Early Childhood Education **3 Units**

Course Transferable to CSU

Hours: 54 hours LEC

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.

ECE 305 Introduction to Family Child Care **1 Unit**

Course Transferable to CSU

Hours: 18 hours LEC

This course is an orientation to family child care. It includes state and local regulations, issues of health and safety, curriculum, behavior guidance, and business management of child care programs operating in the provider's home.

ECE 312 Child Development **3 Units**

Same As: PSYC 372

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.

General Education: AA/AS Area V(b); CSU Area D9; CSU Area E1; IGETC Area 4I

Course Transferable to UC/CSU

Hours: 54 hours LEC

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. Included are the influences of culture, family, and the environment. This material is designed as a foundation for early care and education, teaching, and parenting. This course is not open to students who have completed PSYC 372.

ECE 314 The Child, the Family and the Community **3 Units**

Advisory: ENGWR 102 or ENGWR 103, and ENGRD 116; or ESLR 320 and ESLW 320; with a grade of "C" or better.

General Education: AA/AS Area V(b); CSU Area D7

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course covers the child's development within the family and within the community. The focus is on the impact of parenting style, marriage and transitions within the family, culture, school, 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.

ECE 316 Mass Media and Young Children 1 Unit*Prerequisite: None**Course Transferable to CSU**Hours: 18 hours LEC*

This course covers the role of mass media in socializing young children. Emphasis is on the influence of mass media on development, including the impact of television, movies, commercial advertising, books, and popular music, with discussion of strategies for minimizing the negative influences of mass media on children.

ECE 320 Curriculum and Interactions in Early Childhood Education 4 Units*Prerequisite: ECE 300 and either ECE 312 or PSYC 372 with a grade of "C" or better.**Enrollment Limitation: Current tuberculosis clearance.**Course Transferable to CSU**Hours: 36 hours LEC; 108 hours LAB*

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.

ECE 321 Advanced Practicum in Early Childhood Education 4 Units*Prerequisite: ECE 320 with a grade of "C" or better**Enrollment Limitation: Current Tuberculosis clearance.**Course Transferable to CSU**Hours: 36 hours LEC; 108 hours LAB*

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.

ECE 325 Guidance and Discipline for Young Children 3 Units*Prerequisite: None**Course Transferable to CSU**Hours: 54 hours LEC*

This course focuses on early childhood guidance and discipline through examination of theories, research and practical application for teachers in early childhood classrooms and parents at home. Developmental stages of children's behavior, positive discipline techniques and teaching social emotional skills are included.

ECE 326 Making Learning Visible Through Observation and Documentation 3 Units*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.**Course Transferable to CSU**Hours: 54 hours LEC*

This course applies 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.

ECE 330 Infant Development 3 Units*General Education: AA/AS Area III(b)**Course Transferable to CSU**Hours: 54 hours LEC*

This course is an examination of infant development, from conception to 36 months of age. It provides a review of research findings related to infancy and implications for infant care.

ECE 331 Education and Care of Infants in Group Settings 3 Units*Course Transferable to CSU**Hours: 54 hours LEC*

This course applies current research in infant development to the teaching and care of infants in group settings. Emphasis is on early childhood education principles and practices when applied to the care and education of infants from birth to 36 months of age. It includes strategies for designing, implementing, and evaluating group care programs for infants.

ECE 334 Laboratory with Infants and Toddlers 1 Unit*Corequisite: ECE 330 or 331**Enrollment Limitation: Current Tuberculosis Clearance.**Course Transferable to CSU**Hours: 54 hours LAB*

This class provides experience working with infants and toddlers in a group care program. It is designed as a laboratory for those who have completed or are enrolled in ECE 330 or 331. The course requires participation for a designated three hours per week with infants and/or toddlers in a supervised infant/toddler setting. This course may be taken three times for credit, each time in a setting with a different age group or program type.

ECE 342 Constructive Math and Science in Early Childhood Education 3 Units*Advisory: ENGRD 116 and ENGWR 102**Course Transferable to CSU**Hours: 54 hours LEC*

The course is an introduction to the constructivist approach to teaching pre-math and science 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.

ECE 343 Language and Literacy Development in Early Childhood 3 Units*Advisory: ENGRD 116 and ENGWR 102**Course Transferable to CSU**Hours: 54 hours LEC*

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.

ECE 350 Introduction to Elementary Teaching with Field Experience 3 Units

Same As: ENGED 324

Advisory: ECE 312 or PSYC 372

Enrollment Limitation: Students are required to show proof of TB clearance and complete a fingerprint clearance through the cooperating school district before they can attend the school site for field work.

General Education: AA/AS Area III(b)

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course is a career exploration course with early field experience for students considering the field of kindergarten through eighth grade teaching. It includes a supervised field placement in a local elementary school in addition to on-site class meetings. It fulfills one of the early field experiences for the CSUS liberal studies major. Course content includes the profession and culture of teaching, observation skills, communication skills, diversity, and social issues. Students' field experience integrates and applies the course content. Students complete a service learning project at participating school sites. Before field placement, students must show proof of TB clearance and be fingerprinted through the cooperating school district. Not open to students who have completed ENGED 324.

ECE 356 Programs for the School-Age Child 3 Units

Prerequisite: None

Course Transferable to CSU

Hours: 54 hours LEC

This course covers the fundamentals of planning, implementing and evaluating programs for before- and after- school care of school-age children (K-8). Emphasis is on developmental levels, age-appropriate activities and day-to-day program operations.

ECE 358 Activities for the School-Age Child (Six to Fourteen Years) 3 Units

Prerequisite: None

Course Transferable to CSU

Hours: 54 hours LEC

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.

ECE 361 Introducing Young Children to Visual Arts 3 Units

General Education: AA/AS Area I

Course Transferable to CSU

Hours: 54 hours LEC

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.

ECE 363 Music and Movement with Young Children 3 Units

General Education: AA/AS Area I

Course Transferable to CSU

Hours: 54 hours LEC

This course focuses on the use of music and movement with children from infancy to age eight in group settings. Theoretical perspectives are reviewed and blended with practical applications that the teacher of young children can use to form a classroom community of learners, manage classroom behavior, and facilitate transitions. Topics include developing music and movement experience plans and creating musical instruments from inexpensive, readily available materials. It also explores music and movement as ways to involve children with cultural diversity and traditions.

ECE 404 Children with Special Needs 3 Units

Prerequisite: ECE 312 or PSYC 372 with a grade of "C" or better

Course Transferable to CSU

Hours: 54 hours LEC

This course provides a broad overview of the characteristics, assessment techniques, methods of intervention, community and family resources, and current issues of young children (from birth to age eight) with special needs. The focus is to increase the awareness and understanding of children's individual needs in an early childhood setting and to provide practical information to those currently involved with children with special needs. Observations in public or private children's centers, schools, and agencies may be required.

ECE 405 Practicum in Inclusive Settings 3 Units

Prerequisite: ECE 404 with a grade of "C" or better

Enrollment Limitation: Current tuberculosis and fingerprint clearance.

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course provides supervised experience working with children with special needs in an inclusive school setting. Topics include integration strategies, classroom environments, and individualized instructional strategies for children. Emphasis is placed on providing skills in individualizing programs for communication, modifications, adaptations and behavior.

ECE 414 CPR and Pediatric First Aid 1.5 Units

Same As: HEED 311

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.

Course Transferable to UC/CSU

Hours: 27 hours LEC

This course covers emergency life saving and first aid techniques involving infants and children. Respiratory distress, non-breathing, unconsciousness, choking, and other pediatric emergencies are addressed. CPR for adults is another major component of the course. The California Child Care first aid certificate examination, the Adult CPR, and the Infant and Child CPR examination are included. ECE 410 and this course fulfill Title 22 (California Department of Social Services) Health and Safety requirements for staff. ECE 414/HEED 311 may be taken four times.

ECE 415 Children's Health, Safety and Nutrition 3 Units

Same As: NUTRI 320

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.

Course Transferable to CSU

Hours: 54 hours LEC

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. Course emphasis is placed on 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.

ECE 420 Administration of Child Development Centers 3 Units

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

Course Transferable to CSU

Hours: 54 hours LEC

This introductory course focuses on the elements of program planning, budgeting, supervision and personnel administration for schools and private child development centers serving children and families. This course satisfies the administration requirement of the California Title 22 Health and Safety Code, and satisfies three of the six units of the administration requirement of the Title 5 Education Code and the California Commission for Teacher Credentialing.

ECE 422 Advanced Coordination and Supervision of Child Development Programs 3 Units

Prerequisite: ECE 420 with a grade of "C" or better

Course Transferable to CSU

Hours: 54 hours LEC

This advanced course covers administration and coordination of multi-faceted child development programs. The course emphasizes publicly funded programs and personnel management. It meets the requirements of the Education Code under Title 5 and the Commission for Teacher Credentialing.

ECE 424 Adult Supervision: Mentoring in a Collaborative Learning Setting 2 Units

Prerequisite: ECE 314 and 320 with grades of "C" or better

Course Transferable to CSU

Hours: 36 hours LEC

This course covers principles and strategies for teachers who supervise the work of other teachers in early childhood education. Emphasis is on the role of the mentor teacher working collaboratively to guide a teaching team or individual within a classroom setting. This course satisfies the adult supervision requirement for the Child Development Master Teacher Permit and Site Supervisor permits issued by the California Commission on Teacher Credentialing.

ECE 430 Culture and Diversity in Early Childhood Education 3 Units

General Education: AA/AS Area V(b); AA/AS Area VI

Course Transferable to CSU

Hours: 54 hours LEC

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.

ECE 432 Leadership in Diversity 3 Units

Prerequisite: ECE 430 with a grade of "C" or better

Course Transferable to CSU

Hours: 54 hours LEC

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.

ECE 455 Environment Rating Scales in Early Childhood Programs 1 Unit

Prerequisite: None

Course Transferable to CSU

Hours: 18 hours LEC

This course examines Environment Rating Scales (Infant/Toddler, Early Childhood, School Age Programs and Family Child Care) as a tool for quality improvement in a variety of child development programs. Emphasis is given to theory and best practices in order to evaluate classrooms, materials, and interactions between adults and children.

Area: Behavioral & Social Sciences
 Dean: Carol Pottorff
 Phone: (916) 484-8283
 Counseling: (916) 484-8572

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.

Economics

ECON 302 Principles of Macroeconomics 3 Units

Prerequisite: MATH 120, 124, 125, or 129 with a grade of "C" or better; or placement through the assessment process.

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.

General Education: AA/AS Area V(b); CSU Area D2; IGETC Area 4B

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course, an introduction to macroeconomics, is concerned with the economic well-being of the national economy. Topics covered include supply, demand, aggregate supply, aggregate demand, equilibrium, money, banking, taxation, inflation, employment, and economic growth.

ECON 304 Principles of Microeconomics 3 Units

Prerequisite: MATH 120, 124, 125, or 129 with a grade of "C" or better; or placement through the assessment process.

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.

General Education: AA/AS Area V(b); CSU Area D2; IGETC Area 4B

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course is concerned with individuals and business firms and how they interact 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. Additionally, it covers resource allocation under conditions of competition, monopoly, oligopoly, and monopolistic competition.

ECON 320 Concepts in Personal Finance 3 Units

Same As: BUS 320

Advisory: ENGWR 102 or 103, and ENGRD 116; OR ESLR 320 and ESLW 320.

General Education: AA/AS Area V(b); AA/AS Area III(b); CSU Area D2

Course Transferable to CSU

Hours: 54 hours LEC

This course covers how to analyze financial affairs for lifelong decision making. It examines the basics of financial planning and the analysis and decision making in areas of budgeting, taxes, borrowing, money management, insurance, investments, and retirement. This course is not open to students who have completed BUS 320.

Area: Technical Education
 Dean: Gabriel Meehan
 Phone: (916) 484-8354
 Counseling: (916) 484-8572

NARTE and FCC approved test site



<http://www.arc.losrios.edu/~electron>

Degree: A.S. - Electronic Systems Technology
 A.S. - Mechtronics
 Certificates: Advanced Electronics and Telecommunications
 Biomedical Equipment Technology
 Digital Home Technology Integration
 Digital Repair & Upgrade Technician
 Electronic Systems Technology
 Fiber Optics
 Mechtronics
 Robotics
 Telecommunication Specialist
 Certificate of Completion offered by the department:
 Basic Electronics and Telecommunications

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.

DEGREES AND CERTIFICATES

Electronic Systems Technology Degree and Certificate

The Electronics Systems Technology Degree or Certificate combines broad-based electronic and telecommunications training with specialty areas such as robotics, fiber optics, programmable interface controllers (PICs), and stamp micro-controllers.

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 Opportunities

This degree or 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. Obtaining the degree or certificate improves the opportunities for quality employment and career advancement.

Requirements for Degree or Certificate	36 Units
1st Semester - Basic Certificate	
ET 115 Fiber Optics and Telecommunication Cabling.....	4
ET 302 Principles of Electricity and Electronics.....	4
ET 308 Technical Soldering Practices and Techniques.....	2
Second Semester - Advanced Certificate:	
ET 312 Mathematics for Circuit Analysis	3
ET 322 Semiconductors and Nanotechnology	4
Following Semesters:	
ET 112 Communications Units.....	3
ET 253 Industrial Communication Systems Support	4
ET 335 Integrated Circuits with Computer Applications	4
ET 380 Introduction to Electronic Communications.....	4
ET 420 Microcontrollers and Digital Signal Processors	4

Associate Degree Requirements: 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.

Mechtronics Degree and Certificate

This degree or certificate provides training in a multi-disciplinary field of which the primary focus is industrial automation. Topics such as electricity, electronics, industrial motor controls, programmable logic controllers, robotics, AC/DC drives, mechanical design, and manufacturing technologies are covered in this program.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- integrate the principles of mechtronics to the design of mechtronic systems.
- evaluate mechanical and electrical solutions to solve technological problems.
- apply industry-appropriate design graphic techniques to develop technical design documents from a conceptual design.
- apply mechtronic principles to the field of robotics and machine automation.
- design robotic and machine automation systems using mechtronic principles.
- evaluate welding projects in accordance with welding procedures and specifications.
- apply the essential elements of clear and purposeful oral and written communications for organizational effectiveness.
- analyze conceptual problems that require the application of basic physics concepts.

Career Opportunities

This degree or certificate prepares the student 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, mechanical electrical machine systems installer. Obtaining the Associate of Science degree and the certificate improves the opportunities for quality employment and career advancement.

Requirements for Degree or Certificate 35-38 Units

1st Semester:

ET 302	Principles of Electricity and Electronics	4
DESGN 100	Introduction to Computer Aided Drafting and Design (CADD)	3
WELD 300	Introduction to Welding	3

Following Semesters:

DESGN 302	Technical Documentation with CADD	3
ET 192	Introduction to Robotics	2
ET 194	Intermediate Robotics	2
ET 195	Electrical and Mechanical Power and Control Systems....	3
ET 253	Industrial Communication Systems Support	4
MGMT 360	Management Communication	3
PHYS 310	Conceptual Physics	3
[[ENGR 307	Industrial Materials Testing (3)	5 - 8
and MATH 100	Elementary Algebra (5)]	
or [DESGN 310	Graphic Analysis and Documentation (3)	
and DESGN 330	Engineering Systems and Design (5)]	
or [WELD 342	Symbol Reading, Layout and Fabrication (3)	
and ET 196	Sensors, Measurement, and Control (2)]]	

Associate Degree Requirements: The Mechtronics 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.

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.

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 Kirchoff'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 Opportunities

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.

Requirements for Certificate 17 Units

1st Semester - Basic Certificate

ET 115	Fiber Optics and Telecommunications Cabling.....	4
ET 302	Principles of Electricity and Electronics.....	4
ET 308	Technical Soldering Practices and Techniques.....	2

Second Semester - Advanced Certificate:

ET 312	Mathematics for Circuit Analysis	3
ET 322	Semiconductors and Nanotechnology	4

Biomedical Equipment Technology Certificate

This certificate covers the operation, maintenance, troubleshooting, and certification of biomedical equipment used in the medical device industry. It includes an in-depth study of frequently used medical equipment. It prepares electronics technology students for a biomedical technician internship or trainee position.

(continued on next page)

(Biomedical Equipment Technology Certificate continued)**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 Opportunities

This program covers the theory and training on biomedical equipment for electronics technicians interested in working in the medical device service industry for hospitals, medical device manufacturers, or other service organizations.

Requirements for Certificate **17 Units**

ET 302	Principles of Electricity and Electronics.....	4
ET 322	Semiconductors and Nanotechnology (4).....	4
or ET 335	Integrated Circuits with Computer Applications (4)	
or ET 380	Introduction to Electronic Communications (4)	
ET 425	Introduction to Biomedical Equipment Technology	4
ET 426	Advanced Biomedical Equipment Technology	4
A minimum of 1 unit from the following:		1
ET 260	Introduction to Medical Ultrasound Equipment (0.5)	
ET 261	Introduction to Biomedical Equipment Networking (0.5)	
ET 262	Introduction to Respiratory Therapy Ventilators (0.5)	
ET 263	Introduction to Medical X-ray Imaging Equipment (1)	

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.

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 homes 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 Opportunities

The Digital Home Technology Integrator certificate prepares individuals to design, install, and support residential networks and home integration for employment in the home technology industry. This program develops the technicians's ability to configure, integrate, maintain and troubleshoot home theater, music, security, and home networks.

Requirements for Certificate **15 Units**

ET 115	Fiber Optics and Telecommunication Cabling	4
ET 302	Principles of Electricity and Electronics.....	4
ET 385	Digital Home Technology Integration	4
ET 386	Fiber Optic Splicing, Connectivity and Testing	3

Digital Repair and Upgrade Technician Certificate

The Digital Repair and Upgrade Technician 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.

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 Opportunities

The Digital Repair and Upgrade Technician 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.

Requirements for Certificate **14-17 Units**

CISC 320	Operating Systems	1
CISC 361	Microcomputer Support Essentials - Preparation for A+ Certification	3
CISC 363	Microcomputer Support Technical - Preparation for A+ Certification	3
ET 253	Industrial Communication Systems Support	4
ET 298	Work Experience in Electronics Technology	1 - 4
ET 308	Technical Soldering Practices and Techniques	2

Fiber Optics Certificate

The Fiber Optics certificate is an introduction into 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.

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 Opportunities

The Fiber Optic certificate prepares the student to obtain 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.

Requirements for Certificate		17 Units
ET 115	Fiber Optics and Telecommunication Cabling	4
ET 302	Principles of Electricity and Electronics.....	4
ET 380	Introduction to Electronic Communications	4
ET 386	Fiber Optic Splicing, Connectivity and Testing	3
ET 387	Advanced Fiber Optics	2

Robotics Certificate

The Robotics certificate provides an overview of electronics and robotic theory and application, programming, design, and modification. Electronics theory and application are stressed along with sensors and controllers, an important part of the next generation of robotics. Various robotic platforms are used to give a wide understanding of all types of current and future systems.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- identify and describe the terminology used when working with Parallax stamp micro-controllers.
- program and troubleshoot the Parallax stamp micro-controller using P-Basic language.
- evaluate operational characteristics of electronics components and devices operating under normal and abnormal conditions.
- synthesize and analyze electronic circuitry using computer electronic simulation software.
- compare and evaluate solder connections in accordance with industry standards.

- calculate speed and acceleration of robotic motion.
- compare DC motor and servo motor characteristics.
- analyze a fluid power schematic diagram and design a simple hydraulic circuit.

Requirements for Certificate		15 Units
ET 192	Introduction to Robotics	2
ET 194	Intermediate Robotics.....	2
ET 195	Electrical and Mechanical Power and Control Systems....	3
ET 196	Sensors, Measurement, and Control	2
ET 302	Principles of Electricity and Electronics.....	4
ET 308	Technical Soldering Practices and Techniques	2

Telecommunication Specialist Certificate

The Telecommunication Specialist 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.

Student Learning Outcomes

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 Opportunities

The Telecommunication Specialist certificate provides training for design, installation, and maintenance of any type of wired or wireless communication systems, such as, remote monitoring, radio frequency (RF) control, radio and television transmitters, public safety and government communication equipment, and fiber optic systems.

(continued on next page)

(Telecommunication Specialist Certificate continued)**Requirements for Certificate** **22 Units****1st Semester**

ET 112	Communications Units.....	3
ET 115	Fiber Optics and Telecommunication Cabling	4
ET 302	Principles of Electricity and Electronics	4

Following Semesters

ET 308	Technical Soldering Practices and Techniques	2
ET 380	Introduction to Electronic Communications	4
ET 386	Fiber Optic Splicing, Connectivity and Testing	3
ET 387	Advanced Fiber Optics	2

**CERTIFICATE OF COMPLETION
(offered by the department)****Basic Electronics and Telecommunications
Certificate**

The Basic Electronics and Telecommunication 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. The courses required for this certificate can be completed in one semester, making it an ideal stepping stone to the Advanced Electronics and Telecommunications certificate.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- evaluate potential problems associated with electrostatic discharge (ESD).
- evaluate solder connections in accordance with industry standards.
- analyze the differences between surface mount techniques and through-hole techniques.
- inspect SMDs using a high-magnification observation station.
- diagram schematic symbols used in electronic and electrical industrial applications.
- analyze and troubleshoot basic electronic circuits.
- compare and contrast series and parallel resistive, capacitive, and inductive devices.
- analyze and describe the components in a complete telecommunication system.
- construct connectors and plugs used in telecommunication systems.
- analyze test equipment data to determine the location of a communication system.
- evaluate communication system components and select the best for a given application.
- assess safety hazards when working with telecommunication systems.

Career Opportunities

The Basic Electronics and Telecommunications certificate is designed for anyone wanting to enter the electronics or telecommunications industry. This certificate satisfies the requirements of a variety of entry-level positions, such as, printed circuit board (PCB) assembler, telecommunication field technician, or rework technician.

Requirements for Certificate **10 Units**

ET 115	Fiber Optics and Telecommunication Cabling	4
ET 302	Principles of Electricity and Electronics	4
ET 308	Technical Soldering Practices and Techniques	2

Electronics Technology**ET 101 Introduction to Amateur Radio .5 Units**

Hours: 9 hours LEC

This course introduces the fundamentals of amateur radio for public and emergency communication. It covers the equipment, procedures, and uses for amateur (Ham) radio.

**ET 103 Ham Radio Technician
License Preparation 2 Units**

Hours: 36 hours LEC

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.

ET 110 Communications Systems 5 Units

*Prerequisite: ET 335 and ET 380 with a grade of "C" or better.
Hours: 54 hours LEC; 108 hours LAB*

This course is a comprehensive study of high frequency communication concepts including antennas, transmission lines, transmitters and receivers. Commercial telecommunication equipment and schematics are used to simulate equipment that is utilized in industry. System design, component and equipment analysis and troubleshooting are stressed. Extensive use of laboratory experiments enhances theory. A field trip is required.

ET 112 Communications Units 3 Units

*Advisory: ET 380
Hours: 54 hours LEC*

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.

**ET 113 Introduction to Residential
Telecommunication Wiring .5 Units**

Hours: 9 hours LEC

This course covers the proper procedures to design, install, and test telecommunications wiring for the home. Safety is stressed throughout the course. Hands-on experience installing Cat3 and Cat5 telephone and data cables is covered. Proper termination and installation is also discussed. This course may be taken four times covering different technologies found in the home telecommunications network.

ET 115 Fiber Optics and Telecommunication Cabling 4 Units*Prerequisite: None**Hours: 54 hours LEC; 54 hours LAB*

This course is an introduction to the concepts of telecommunication cable installation and connection practices and standards. It includes the study of commonly used fiber and copper cable types and connectors, installation tools, and test equipment. Emphasis is on installation techniques in practical situations. Laboratory activities provide practical experience in the operation and use of tools and test equipment specific to the telecommunication industry. Field trips are required.

ET 154 Wireless Communication Systems 1.5 Units*Prerequisite: None**Hours: 18 hours LEC; 27 hours LAB*

This is an introduction to wireless communication designed for electronic technicians. The course includes wireless communication terminology and instruction in the proper use of hardware and test equipment used in installation, maintenance and operation. Topics include the study of individual system component theory and operation as well as the entire wireless communication system.

ET 190 Introduction to Programmable Logic Controllers (PLCs) 2 Units*Hours: 36 hours LEC*

This course introduces the fundamentals of the operation and use of the Programmable Logic Controllers (PLC). The PLC uses programmable memory to store instructions and executes specific functions that include on/off control, timing, counting, and sequencing arithmetic used in machine control. Ladder logic is used in programming and troubleshooting the PLC. Field trips may be required.

ET 192 Introduction to Robotics 2 Units*Prerequisite: None**Hours: 36 hours LEC*

This course is an introduction to robotics utilizing the Parallax stamp microcontroller and Boe-Bot robotic vehicle. It explores how robots and microcontrollers interface with common electronic applications. It also investigates unusual and innovative applications for robots and microcontrollers. Field trips are required.

ET 194 Intermediate Robotics 2 Units*Prerequisite: None**Hours: 36 hours LEC*

This course covers advanced robotics utilizing the Parallax stamp microcontroller and Boe-Bot robotic vehicle. Topics include the operation and design of robots using the Robix robotic platform. This course includes how robotics and automation are utilized in industry. Hardware component selection, assembly, and software programming of various types of robotic assemblies are emphasized. The principles of electronics, physics, and engineering as they apply to robotic design are presented. Field trips are required.

ET 195 Electrical and Mechanical Power and Control Systems 3 Units*Prerequisite: None**Hours: 54 hours LEC*

This course is a study of electrical and mechanical power components and systems used in the control and transmission of mechanical and electrical power. Topics include the analysis of electric circuits and controls; programmable logic controllers (PLC's), electromagnetic devices and their use in systems; discrete semiconductor switching devices; hydraulic and pneumatic power devices; types and uses of electric motors and generators as well as power distribution systems. Troubleshooting and repair of hydraulic, pneumatic control equipment and electrical / electronic systems are studied through a number of industry-based projects.

ET 196 Sensors, Measurement, and Control 2 Units*Hours: 36 hours LEC*

This course is a detailed study of the physical world and the sensors which measure its properties. Signals from these sensors are converted for display and used to control physical properties such as temperature or pressure. Lecture and demonstrations reinforce theory and provide experience in sensor identification and troubleshooting. Microcontrollers are used to simulate industrial situations.

ET 235 PACE: Beginning Robotics 1 Unit*Hours: 18 hours LEC*

This electronics course is designed for students enrolled in the Partnership to Assure College Entry (PACE) program. It is an introduction to robotics. Topics include electronic and mechanical components, test equipment, basic circuit functions, and job opportunities.

ET 250 Employability Skills for Technical Careers 2 Units*Same As: AT 107 and WELD 150*

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)**Hours: 36 hours LEC*

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.

ET 251 Automotive Electronic Accessories and Installation 3 Units*Same As: AT 251**Corequisite: AT 312 or ET 302**Hours: 36 hours LEC; 54 hours LAB*

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. Topics related to this course cover the areas for the certification testing required to become a qualified Mobile Electronics Certified Professional (MECP) installer. A field trip is required. This course is not open to students who have taken AT 251.

**ET 252 Voice, Data, and Video for
Electrical Contractors 2 Units**

Hours: 36 hours LEC

This course prepares the electrical installer/technician to take the California State Voice/Data/Video (VDV) exam. Topics include various components of the National Electrical Code as applied to low voltage. It covers key facets of the VDV industry including safety, Ohm's Law, Voice/Data/Video, fiber optics, security, access control, closed-circuit television (CCTV), and audio systems.

**ET 253 Industrial Communication Systems
Support 4 Units**

Hours: 54 hours LEC; 54 hours LAB

This course covers the operation, repair, and assembly of computers, 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 IP (VoIP), analog/digital communications, and synchronous optical networks (SONET) are covered as they relate to electronics, communications, biomedical, solar, industrial, and transportation applications. Field trips may be required.

**ET 260 Introduction to Medical
Ultrasound Equipment .5 Units**

Corequisite: ET 425

Hours: 9 hours LEC

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.

**ET 261 Introduction to Biomedical
Equipment Networking .5 Units**

Advisory: ET 302;

Hours: 9 hours LEC

This course provides an overview of the Digital Information Communication of Medicine (DICOM) system. DICOM is a patient data system for medical devices to communication to the hospital data base. Topics include interface standards, test equipment, troubleshooting, and applications.

**ET 262 Introduction to Respiratory
Therapy Ventilators .5 Units**

Corequisite: ET 425

Hours: 9 hours LEC

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.

**ET 263 Introduction to Medical X-ray
Imaging Equipment 1 Unit**

Prerequisite: ET 425 with a grade of "C" or better

Hours: 18 hours LEC

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.

ET 294 Topics in Electronics Technology .5-5 Units

Prerequisite: To be determined for each topic.

Hours: 90 hours LEC; 270 hours LAB

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.

**ET 298 Work Experience in
Electronics Technology 1-4 Units**

Enrollment Limitation: Be in a paid or non-paid internship, volunteer opportunity or job related to the electronics industry.

Hours: 300 hours LAB

This course provides students with opportunities to develop marketable skills in preparation for employment in the electronics field or advancement within their career. It is designed for students interested in work experience and/or internships in associate degree level occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Rigor is ensured through the development of appropriate level learning objectives set between the student and the employer. During the course of the semester, the student is required to fulfill a weekly orientation and 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. The weekly orientation is required for first time participants, returning participants are not required to attend the weekly orientation but are required to meet with the instructor as needed to complete all program forms and assignments. ET 298 may be taken for a total of 16 units when there are new or expanded learning objectives. Students can earn a total of 16 Work Experience units.

**ET 302 Principles of Electricity
and Electronics 4 Units**

Course Transferable to CSU

Hours: 54 hours LEC; 54 hours LAB

This introductory course explores the field of electronics and electricity. Topics include the theory of AC, DC, Ohm's law, inductance, and capacitance. The use of electronic simulation software and hands on lab experiments using industry instruments reinforces theory. Field trips to local electronics industries may be required.

ET 303 Energy and Sustainability 3 Units

Same As: ENERGY 303 and NATR 303

General Education: AA/AS Area IV

Course Transferable to CSU

Hours: 54 hours LEC

Fundamentals of energy and its impact on society and the environment are covered in this course. The mechanics, advantages and disadvantages of current and future renewable, green and nonrenewable energy sources are investigated. Residential energy audits are covered. Field trips are required. This course is not open to students who have completed ENERGY 303 or NATR 303.

ET 308 Technical Soldering Practices and Techniques 2 Units*Advisory: ET 115 and 302**Course Transferable to CSU**Hours: 18 hours LEC; 54 hours LAB*

This course provides training in the standards, processes, and techniques related to the field of lead and lead-free soldering. Emphasis is placed on 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 de-soldering techniques in Plated Through Hole (PTH), Surface Mount Device/Technology (SMD/SMT), and fine to ultra fine-pitch soldering. Field trips may be required.

ET 312 Mathematics for Circuit Analysis 3 Units*Course Transferable to CSU**Hours: 54 hours LEC*

The foundations for the analysis of electrical and electronic circuits are covered in this course. Topics include the analysis of direct current (DC), alternating current (AC), transformer, capacitor, inductor, and energy conversion circuits.

ET 322 Semiconductors and Nanotechnology 4 Units*Prerequisite: ET 302 with a grade of "C" or better**Course Transferable to CSU**Hours: 54 hours LEC; 54 hours LAB*

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.

ET 335 Integrated Circuits with Computer Applications 4 Units*Prerequisite: ET 302 with a grade of "C" or better**Course Transferable to CSU**Hours: 54 hours LEC; 54 hours LAB*

This course covers integrated circuits (IC's) 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.

ET 361 Printed Circuit Board Design 1 Unit*Prerequisite: ET 302 with a grade of "C" or better; or placement through the assessment process.**Course Transferable to CSU**Hours: 9 hours LEC; 27 hours LAB*

This course is an introduction to the concepts of printed circuit board (PCB) design and manufacturing. Topics include the development of electronic circuit schematics, component selection and layout, and the interconnection of devices. PCB design software is used to create schematics, board layouts, silkscreens, and manufacturing code. A field trip may be required.

ET 369 The Design and Fabrication of Electronics Projects 2 Units*Prerequisite: ET 322 with a grade of "C" or better.**Course Transferable to CSU**Hours: 18 hours LEC; 54 hours LAB*

This course provides an opportunity for students to design and build advanced projects. It enables students to work on approved electronics projects outside the scope of typical classroom applications. Students learn the process of planning, design, prototyping, and fabrication while building an actual working project. Completed projects are entered in county and statewide technology such as the California State Fair Industrial Technology competition. A completed project is a course requirement. Projects can be completed individually or in teams. Field trips are required. This course may be taken three times on different projects.

ET 380 Introduction to Electronic Communications 4 Units*Prerequisite: ET 302 with a grade of "C" or better.**Course Transferable to CSU**Hours: 54 hours LEC; 54 hours LAB*

This course covers 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 are required.

ET 385 Digital Home Technology Integration 4 Units*Prerequisite: ET 115 with a grade of "C" or better**Course Transferable to CSU**Hours: 54 hours LEC; 54 hours LAB*

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 are required. This course may be taken two times on different certification requirements.

ET 386 Fiber Optic Splicing, Connectivity and Testing 3 Units*Prerequisite: None**Course Transferable to CSU**Hours: 54 hours LEC*

This is an introductory course in fiber optic theory and operation including the complete fiber optic communication system. It includes fiber optic terminology and instruction in the proper 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 Reflectometer (OTDR). A field trip is required. This course may be taken twice for credit using different equipment.

ET 387 Advanced Fiber Optics 2 Units*Prerequisite: ET 386 with a grade of "C" or better.**Course Transferable to CSU**Hours: 36 hours LEC*

This course covers advanced fiber optic theory and operation. Fiber optic systems are vital communication links that enable high speed transfer of video, telephone, and data to occur. Testing of fiber optic systems using sophisticated electro-optical test equipment such as the Optical Time Domain Reflectometer (OTDR) is included. This course also introduces the use of computer based software to simplify fiber optic system design. May be taken twice for credit.

Area: Technical Education
 Dean: Gabriel Meehan
 Phone: (916) 484-8354
 Counseling: (916) 484-8572

Certificates: Solar Energy Systems Design, Estimation,
 and Sales
 Solar Energy Technology

<http://www.arc.losrios.edu/~electron>



CERTIFICATES

Solar Energy Systems Design, Estimation, and Sales Certificate

The Solar Energy Systems Design, Estimation, and Sales 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.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- describe the components in a complete grid tie photovoltaic system.
- construct solar photovoltaic battery charging systems.
- analyze test equipment data to determine the location of the “sweet spot” on a solar photovoltaic panel’s Current – Voltage (IV) curves.
- identify tools and test equipment necessary for solar photovoltaic panel installations.
- identify different sizes of wire according to American Wire Gauge (AWG) tables.
- describe the advantages of obtaining the NABCEP Entry Level 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 Solmetrics SunEye predictor and software.
- inspect and repair malfunctioning components in a functioning grid tie solar photovoltaic system.
- estimate the yearly power output (Wh/year) 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. Describe the financing process and how to access capital.
- 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.

Career Opportunities

This certificate prepares students for entry level employment in a wide variety of positions in the photovoltaic industry. It is also valuable for people working in the PV industry to upgrade their skills to include the newest advancements in solar technology. Students also meet the requirements to take the North American Board of Certified Energy Practitioners (NABCEP) PV Entry Level Certificate of Knowledge Exam. 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.

Requirements for Certificate	24 Units
ET 302	Principles of Electricity and Electronics.....4
ENERGY 140	Electrical Applications for Solar Installers.....4
ENERGY 141	Electrical & Mechanical Applications for Solar Installers.....4
ENERGY 142	NABCEP (North American Board of Certified Energy Practitioners) Entry Level Test Review.....2
ENERGY 143	Solar Photovoltaic Systems Design, Installation, and Troubleshooting.....4
BUS 350	Small Business Management/Entrepreneurship.....3
SPEECH 301	Public Speaking.....3

Solar Energy Technology Certificate

The Solar Energy Technology 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 Entry Level Certificate of Knowledge Exam.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- describe the components in a complete grid tie photovoltaic system.
- construct solar photovoltaic battery charging systems.
- analyze test equipment data to determine the location of the “sweet spot” on a solar photovoltaic panel’s Current – Voltage (IV) curves.
- identify tools and test equipment necessary for solar photovoltaic panel installations.
- identify different sizes of wire according to American Wire Gauge (AWG) tables.

(continued on next page)

(Solar Energy Technology Certificate continued)

- analyze and describe the advantages of obtaining the NABCEP Entry Level 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 Solmetrics SunEye predictor and software.
- inspect and repair malfunctioning components in a functioning grid tie solar photovoltaic system.
- assess safety hazards in respect to fire, shock, and falls when installing or repairing photovoltaic systems.
- estimate the yearly power output (Wh/year) 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
- calculate the correct gauge wire and number of wires in a metal raceway according to National Electrical Code standards
- calculate the battery Amperage required for a stand alone PV system

Career Opportunities

This certificate prepares the student for entry level employment in a wide variety of positions in the Photovoltaic industry. It is also valuable for people working in the PV industry to upgrade their skills to include the newest advancements in solar technology. Students also meet the requirements to take the North American Board of Certified Energy Practitioners (NABCEP) PV Entry Level Certificate of Knowledge Exam. Career opportunities include PV installers, PV service technicians, and other emerging careers in this field.

Requirements for Certificate		18 Units
ET 302	Principles of Electricity and Electronics.....	4
ENERGY 140	Electrical Applications for Solar Installers	4
ENERGY 141	Electrical & Mechanical Applications for Solar Installers	4
ENERGY 142	NABCEP (North American Board of Certified Energy Practitioners) Entry Level Test Review	2
ENERGY 143	Solar Photovoltaic Systems Design, Installation, and Troubleshooting.....	4

Energy**ENERGY 140 Electrical Applications for Solar Installers****4 Units**

Prerequisite: ET 302 with a grade of "C" or better
Hours: 54 hours LEC; 54 hours LAB

This is an introductory course in Solar Photovoltaic (PV) energy. It covers how solar photovoltaic 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. This is the first course in a series leading to the solar photovoltaic energy installers certification. Field trips are required.

ENERGY 141 Electrical & Mechanical Applications for Solar Installers **4 Units**

Prerequisite: ENERGY 140 or 299 with a grade of "C" or better
Hours: 54 hours LEC; 54 hours LAB

This is an advanced course in Solar Photovoltaic (PV) energy. Topics include using hardware and software tools for shading and correctly orientating 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 load analysis on a specific residence. Additionally, it covers 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 NABCEP (North American Certified Energy Practitioner) certified solar photovoltaic installers and service technicians entry level certificate of knowledge of PV systems test. Field trips are required. This course may be taken two times for credit using different test equipment.

ENERGY 142 NABCEP (North American Board of Certified Energy Practitioners) Entry Level Test Review **2 Units**

Prerequisite: ENERGY 141 with a grade of "C" or better
Hours: 36 hours LEC

This advanced course in solar photovoltaic (PV) energy includes preparation for the North American Board of Certified Energy Practitioners (NABCEP) PV Entry Level 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 solar photovoltaic installers and service technicians entry level certificate of knowledge of PV systems test. Field trips may be required. This course may be taken two times for credit using different software.

ENERGY 143 Solar Photovoltaic Systems Design, Installation, and Troubleshooting 4 Units

Prerequisite: ENERGY 141 and 142 with grades of "C" or better
Hours: 54 hours LEC; 54 hours LAB

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. Field trips are required. This course may be taken two times for credit using different hardware.

ENERGY 148 NABCEP (North American Board of Certified Energy Practitioners) Review for Electricians 3 Units

Enrollment Limitation: NABCEP requires students to be a State of California licensed electrician
Hours: 54 hours LEC

This course in solar photovoltaic (PV) energy offers preparation for the North American Board of Certified Energy Practitioners (NABCEP) PV Entry Level Certificate of Knowledge Exam for state of California certified electricians. Topics include hardware and software tools, shade and orienting solar panels, the effect of PV panel orientation on system power and efficiency, and 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 qualifies students to take the NABCEP Certified Solar Photovoltaic Installers and Service Technicians Entry Level Certificate Of Knowledge Of PV Systems Exam. Field trips are required. This course may be taken two times for credit using different software.

ENERGY 303 Energy and Sustainability 3 Units

Same As: ET 303 and NATR 303
General Education: AA/AS Area IV
Course Transferable to CSU
Hours: 54 hours LEC

Fundamentals of energy and its impact on society and the environment are covered in this course. The mechanics, advantages and disadvantages of current and future renewable, green and nonrenewable energy sources are investigated. Residential energy audits are covered. Field trips are required. This course is not open to students who have completed ET 303 or NATR 303.

Area: Science and Engineering
 Dean: Dr. Rina Roy
 Phone: (916) 484-8107
 Counseling: (916) 484-8572

ARC's program provides the foundation in mathematics, physics, and engineering necessary to transfer to a four-year institution and complete a bachelor's degree in 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.

Engineering

ENGR 300 Introduction to Engineering 1 Unit

Advisory: ENGWR 102 and ENGRD 116 with a grade of "C" or better, OR ESLL 320 and ESLR 320 and ESLW 320 with a grade of "C" or better.
Course Transferable to UC/CSU
Hours: 18 hours LEC

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.

ENGR 305 Basic Technical Drawing 3 Units

Advisory: ENGWR 102 and ENGRD 116 with a grade of "C" or better; OR ESLL 320 and ESLR 320 and ESLW 320 with a grade of "C" or better.
Course Transferable to CSU
Hours: 36 hours LEC; 72 hours LAB

This course introduces the graphical tools and instruments used to generate, analyze and interpret engineering drawings. Topics include lettering, geometric construction, or orthographic projection, auxiliary drawings, sectioning, and dimensioning.

ENGR 307 Industrial Materials Testing 3 Units

Prerequisite: MATH 100 or 104 with a grade of "C" or better; or placement through the assessment process.
Advisory: MATH 120, 124, or 129
Course Transferable to CSU
Hours: 54 hours LEC; 36 hours LAB

This course covers the basic properties of materials used in industry. The course emphasizes the practical use of the materials, but uses sufficient theory to understand these applications well. The course covers metals, concretes, plastics, ceramics, glasses, wood, and other composites. This course is primarily intended for design technology, engineering technicians and other technical students.

ENGR 310 Engineering Survey Measurements 4 Units

Prerequisite: MATH 330 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
Course Transferable to UC/CSU
Hours: 54 hours LEC; 54 hours LAB

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, and earthquake quantity calculations. This course is intended for civil engineers, but may also be required for other programs.

ENGR 312 Engineering Graphics 3 Units

Prerequisite: ENGR 305 with a grade of "C" or better
Course Transferable to UC/CSU
Hours: 36 hours LEC; 72 hours LAB

This course applies the graphical tools needed to analyze, interpret, and solve engineering problems. The engineering design process is taught using manual and introductory interactive computer-aided design and drafting (CADD) tools to solve typical three-dimensional engineering problems. Topics include descriptive geometry, vector graphics, orthogonal projection, and primary and secondary auxiliary views. This course is intended for mechanical and civil engineering majors, but may also be required for other programs.

ENGR 320 Manufacturing Processes 3 Units

Course Transferable to UC/CSU
Hours: 36 hours LEC; 54 hours LAB

This course covers the principles of manufacturing processes in the areas of material removal, forming, joining and casting, and the fundamentals of numerical control. Topics include the application of equipment such as lathes, milling machines, drill press machines, saws, grinders, welders, molding equipment, and core makers. It includes hands-on experience in welding and machinery operation.

ENGR 401 Introduction to Electrical Circuits and Devices 3.5 Units

Prerequisite: PHYS 421 with a grade of "C" or better
Corequisite: MATH 420
Course Transferable to UC/CSU
Hours: 54 hours LEC; 36 hours LAB

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.

ENGR 413 Properties of Materials 4.5 Units

*Prerequisite: CHEM 400 and PHYS 410 with grades of "C" or better
Advisory: ENGWR 102 and ENGRD 116 with a grade of "C" or better, OR ESLL 320 and ESLR 320 and ESLW 320 with a grade of "C" or better.*

Course Transferable to UC/CSU

Hours: 72 hours LEC; 27 hours LAB

This is an introductory course in the properties of materials used in engineering. This course places emphasis upon the theory underlying the behavior of engineering materials. It includes a laboratory component, which covers the testing of metals, polymers, composites, wood, and other materials.

ENGR 420 Statics 3 Units

Prerequisite: MATH 401 and PHYS 410 with grades of "C" or better

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course covers the study of bodies in equilibrium with emphasis on force systems, structures, distributed loads, friction and virtual work. In this course, analytical rather than graphical methods of problem solving are emphasized.

ENGR 430 Dynamics 3 Units

Prerequisite: ENGR 420 and MATH 402 with grades of "C" or better

Advisory: MATH 420

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course covers the basic fundamentals of dynamics for engineers. Topics include kinematics and kinetics of particles; systems of particles and rigid bodies; systems with fixed and rotating axes; and the equations of motion, energy, and momentum.

Area: English
 Dean: Dr. Tammy Montgomery
 Phone: (916) 484-8101
 Counseling: (916) 484-8572

Degree: A.A. - English

The Technical Communications Degree and Certificate in English have been moved to the Business and Computer Science Area. Students who have completed courses in the English Department for this degree or certificate will be able to apply these to the Technical Communications Degree and Certificate in Business and Computer Science.

DEGREES AND CERTIFICATES

English Degree

The English A.A. degree gives students a broad based background in writing, literature, and language analysis. It prepares students for the further study of English or a related field at a four-year school; it also supports a wide range of career options, emphasizing as it does the communication and analytic skills that provide a necessary foundation for many different endeavors.

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 major literary authors, forms, and movements in both American and British literature
- 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

NOTE: Students who plan to major in English at a four-year college or university would be well advised to check with an ARC counselor because four-year schools differ widely in the ways in which they construct their English majors.

Requirements for Degree 24 Units

ENGWR 300	College Composition (3)3
or ENGWR 480	Honors College Composition (3)	
ENGWR 301	College Composition and Literature (3)3
or ENGWR 481	Honors College Composition and Literature (3)	
or ENGWR 302	Advanced Composition and Critical Thinking (3)	
or ENGWR 482	Honors Advanced Composition and Critical Thinking (3)	
ENGL 310	English Literature3
ENGL 311	English Literature3
ENGL 320	American Literature3
ENGL 321	American Literature3
And a minimum of 6 units from the following:	6
ENGW 400	Creative Writing (3)	
ENGW 410	Fiction Writing Workshop (3)	
ENGW 420	Poetry Writing Workshop (3)	
ENGW 421	A Short Course in Poetry Writing (1)	
ENGW 430	Creative Non-Fiction Writing Workshop (3)	
ENGW 441	Feature Film Screenwriting Workshop I (3)	
ENGW 450	College Literary Magazine (3)	
ENGED 305	Structure of English (3)	
ENGED 320	Service Learning: Tutoring Elementary Students in Reading (3)	
ENGL 300	Introduction to Fiction (3)	
ENGL 304	Introduction to Poetry (3)	

ENGL 327	Literature of California (3)
ENGL 338	Native American Literature (3)
ENGL 340	World Literature (3)
ENGL 341	World Literature (3)
ENGL 345	Mythologies of the World (3)
ENGL 360	Women in Literature (3)
ENGL 370	Children and Literature (3)
ENGL 372	Children and Literature: Storytelling (1)
ENGL 374	Children and Literature: Folklore and Fairy Tales (1)
ENGL 376	Children and Literature: Reader's Theater (1)
ENGL 378	Young Adult Literature (3)
ENGL 380	Introduction to Shakespeare (3)
ENGL 382	Introduction to Dramatic Literature (3)
ENGL 392	Science Fiction and Fantasy (3)
ENGL 494	Topics in Literature (3)
ENGRD 310	Critical Reading as Critical Thinking (3)
ENGRD 312	Academic Textbook Reading (3)

Associate Degree Requirements: The English 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.

English - Creative Writing

ENGW 400 Creative Writing 3 Units

Prerequisite: ENGWR 102 with a grade of "C" or better; or placement through the assessment process.

General Education: AA/AS Area II(b)

Course Transferable to UC/CSU

Hours: 54 hours LEC

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. The course includes analysis of literary models, faculty and class critiques of work, and discussion of literary techniques in each covered genre, techniques such as metaphor, imagery, dialogue, and narrative. A portfolio of creative writing is submitted at the end of the semester.

ENGW 410 Fiction Writing Workshop 3 Units

Prerequisite: ENGWR 102 with a grade of "C" or better; or placement through the assessment process.

Advisory: ENGW 400 and ENGWR 300

Course Transferable to UC/CSU

Hours: 54 hours LEC

This creative writing course concentrates on fiction writing, including the analysis of fiction written during the semester. It examines literary styles in traditional and contemporary fiction and demonstrates revising and editing processes through lecture, discussion, assigned reading, and in-class writing exercises. The course may require a portfolio of original work and a conference with the instructor.

ENGCW 420 Poetry Writing Workshop 3 Units

Prerequisite: ENGWR 102 with a grade of "C" or better; or placement through the assessment process.

Course Transferable to UC/CSU

Hours: 54 hours LEC

This creative writing course concentrates on poetry writing, 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 in creative works. Course topics are covered through lecture, discussion, assigned reading, collaborative writing projects, and in-class writing exercises. A portfolio of original work and individual conferences with the instructor are required.

ENGCW 421 A Short Course in Poetry Writing 1 Unit

Advisory: ENGCW 400

Course Transferable to CSU

Hours: 18 hours LEC

This creative writing course is an abbreviated version of the three-unit Poetry Writing Workshop, ENGCW 420, focusing on the writing of several poems. The course examines literary styles in traditional and contemporary poetry and demonstrates revising and editing processes through lecture, discussion, assigned reading, and in-class writing exercises.

ENGCW 430 Creative Non-Fiction Writing Workshop 3 Units

Prerequisite: ENGWR 102 with a grade of "C" or better; or placement through the assessment process.

General Education: AA/AS Area II(b)

Course Transferable to UC/CSU

Hours: 54 hours LEC

This creative writing course concentrates on the literary essay. The course covers the writing of various kinds of essay, 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. Topics also include analysis of classical and modern essays for elements such as voice, point of view, and structure. Field trips may be required.

ENGCW 441 Feature Film Screenwriting Workshop I 3 Units

Advisory: ENGCW 400 or ENGWR 300

Course Transferable to CSU

Hours: 54 hours LEC

This course introduces the writing of a feature-length film script. It includes 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 scripts are analyzed for their writing strengths.

ENGCW 450 College Literary Magazine 3 Units

Prerequisite: ENGWR 102 with a grade of "C" or better; or placement through the assessment process.

Advisory: ENGCW 400, ENGCW 410, ENGCW 420, ENGCW 430, or ENGWR 300

Course Transferable to CSU

Hours: 54 hours LEC; 18 hours LAB

This course provides instruction and experience in the selection, editing, and preparation of literary content for ARC's college magazine, the American River Review. It provides experience in publicity, marketing, fund-raising, distribution, and staging of literary readings. It may be taken four times for credit when working on different issues of the American River Review. Design and art courses for the magazine are offered through the Art New Media Department.

English - Education**ENGED 305 Structure of English 3 Units**

Prerequisite: ENGWR 300 with a grade of "C" or better

General Education: AA/AS Area II(b)

Course Transferable to UC/CSU

Hours: 54 hours LEC

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 and selected issues of language acquisition among the culturally diverse population in California schools. It is designed for those who plan to teach or who are especially interested in grammar as it relates to writing.

ENGED 320 Service Learning: Tutoring Elementary Students in Reading 3 Units

Prerequisite: ENGRD 116 with a grade of "C" or better; or placement through the assessment process.

Enrollment Limitation: Students are required to show proof of TB clearance and complete a fingerprint clearance through the cooperating school district before they can attend the school site for field work.

General Education: AA/AS Area III(b)

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course covers basic methods of tutoring elementary school children who read 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.

ENGED 322 Service Learning: Tutoring Secondary Students in Reading 3 Units

Prerequisite: ENGRD 116 with a grade of "C" or better; or placement through the assessment process.

Enrollment Limitation: Students are required to show proof of TB clearance and complete a fingerprint clearance through the cooperating school district before they can attend the school site for tutoring.

General Education: AA/AS Area III(b) (effective Summer 2012)

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course covers methods of tutoring high school seniors assessed below entry-level college reading. This class meets on campus for the first part of the semester for tutor training. This course provides in-depth practice tutoring high school seniors in reading at a nearby high school, and offers field experience for teacher preparation.

ENGED 324 Introduction to Elementary Teaching with Field Experience 3 Units

Same As: ECE 350

Advisory: ECE 312 or PSYC 372

Enrollment Limitation: Students are required to show proof of TB clearance and complete a fingerprint clearance through the cooperating school district before they can attend the school site for field work.

General Education: AAI/AS Area III(b)

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course is a career exploration course with early field experience for students considering the field of kindergarten through eighth grade teaching. It includes a supervised field placement in a local elementary school in addition to on-site class meetings. It fulfills one of the early field experiences for the CSUS liberal studies major. Course content includes the profession and culture of teaching, observation skills, communication skills, diversity, and social issues. Students' field experience integrates and applies the course content. Students complete a service learning project at participating school sites. Before field placement, students must show proof of TB clearance and be fingerprinted through the cooperating school district. Not open to students who have completed Early Childhood Education (ECE) 350.

English - Literature**ENGLT 300 Introduction to Fiction 3 Units**

Prerequisite: ENGWR 300 with a grade of "C" or better

Advisory: ENGWR 301

General Education: AAI/AS Area I; CSU Area C2; IGETC Area 3B

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course covers the study of fiction as a type of literature. The course typically examines at least twenty short stories and at least three novels, critically analyzing plot, setting, character, theme, and style. The course includes fiction written in English, as well as fiction in translation.

ENGLT 304 Introduction to Poetry 3 Units

Prerequisite: ENGWR 300 with a grade of "C" or better

Advisory: ENGWR 301

General Education: AAI/AS Area I; CSU Area C2; IGETC Area 3B

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course introduces the art of poetry. It includes the interpretation 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.

ENGLT 308 The Graphic Novel and Manga 3 Units

Prerequisite: ENGWR 300 with a grade of "C" or better

General Education: AAI/AS Area I (effective Summer 2012);

AAI/AS Area VI (effective Summer 2012)

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course critically examines graphic novels and manga. The course 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. The course typically includes at least five full-length works as well as numerous background readings.

ENGLT 310 English Literature 3 Units

Prerequisite: ENGWR 300 with a grade of "C" or better

Advisory: ENGWR 301

General Education: AAI/AS Area I; CSU Area C2; IGETC Area 3B

Course Transferable to UC/CSU

Hours: 54 hours LEC

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 context of particular works and authors are also covered. Whenever possible, works are read in their entirety.

ENGLT 311 English Literature 3 Units

Prerequisite: ENGWR 300 with a grade of "C" or better

Advisory: ENGWR 301

General Education: AAI/AS Area I; CSU Area C2; IGETC Area 3B

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course is a survey of representative works in English literature from the nineteenth and twentieth centuries, covering the Romantic, Victorian, modernist, and postmodern periods. Prose, poetry, and drama are represented, and whenever possible, works are read in their entirety.

ENGLT 320 American Literature 3 Units

Prerequisite: ENGWR 300 with a grade of "C" or better

Advisory: ENGWR 301

General Education: AAI/AS Area I; CSU Area C2; IGETC Area 3B

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course surveys representative texts in American literature from the precolonial period to the Civil War. Texts include Native American myths, writing of the colonial period and the American Revolution, slave narratives, Romantic fiction, and poetry from the seventeenth to the mid-nineteenth century. Whenever possible, texts are read in their entirety.

ENGLT 321 American Literature 3 Units

Prerequisite: ENGWR 300 with a grade of "C" or better

Advisory: ENGWR 301

General Education: AAI/AS Area I; CSU Area C2; IGETC Area 3B

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course surveys representative literature from the post-Civil War period until the present. It begins with the end of the Romantic period and follows the rise of Realism. Prose includes local color and social criticism, fiction of the "Lost Generation," and contemporary fiction. Poetry includes the many movements from turn-of-the-century to contemporary. Whenever possible, texts are read in their entirety.

ENGLT 327 Literature of California 3 Units

Prerequisite: ENGWR 300 with a grade of "C" or better

General Education: AAI/AS Area I; AAI/AS Area VI; CSU Area C2;

IGETC Area 3B

Course Transferable to UC/CSU

Hours: 54 hours LEC

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, and essays), such as Native American legends, early California exploration accounts, prose and poetry from the California heartland, Hollywood crime fiction, with emphasis on what makes the California experience unique.

ENGLT 338 Native American Literature 3 Units

Prerequisite: ENGWR 300 with a grade of "C" or better
General Education: AA/AS Area I; AA/AS Area VI; CSU Area C2; IGETC Area 3B
Course Transferable to UC/CSU
Hours: 54 hours LEC

This course examines the living Native American experience as expressed through Native works of autobiography, fiction, poetry, and drama. Emphasis is placed on indigenous world views and perspectives. Highlighted through the literature are the adaptations of living indigenous cultures to colonial influences. The course examines how Native literature is a reflection of the historical and cultural movements that have shaped, been shaped by, and interacted with the native community. Included are samples of Native literary voices from tribes from all areas of the Americas, North, South, and Central. Field trips may be required.

ENGLT 340 World Literature 3 Units

Prerequisite: ENGWR 300 with a grade of "C" or better
Advisory: ENGWR 301
General Education: AA/AS Area I; CSU Area C2; IGETC Area 3B
Course Transferable to UC/CSU
Hours: 54 hours LEC

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 nonwestern 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.

ENGLT 341 World Literature 3 Units

Prerequisite: ENGWR 300 with a grade of "C" or better
Advisory: ENGWR 301
General Education: AA/AS Area I; CSU Area C2; IGETC Area 3B
Course Transferable to UC/CSU
Hours: 54 hours LEC

This course surveys world literature in translation from the mid-seventeenth century to the present. In addition to significant works in the western tradition, masterpieces of nonwestern literature are studied. The entire range of genres is represented, and, whenever possible, works are read in their entirety.

ENGLT 345 Mythologies of the World 3 Units

Prerequisite: ENGWR 300 with a grade of "C" or better
General Education: AA/AS Area I; CSU Area C2; IGETC Area 3B
Course Transferable to UC/CSU
Hours: 54 hours LEC

This literature course provides an introduction to characters and themes in myths from world literature: sagas of heroes, creation stories, and journeys to death and rebirth. It explores the metaphors of the stories, metaphors which continue to captivate readers many years later and influence characters and stories in modern literature and culture.

ENGLT 360 Women in Literature 3 Units

Prerequisite: ENGWR 300 with a grade of "C" or better
General Education: AA/AS Area I; CSU Area C2; IGETC Area 3B
Course Transferable to UC/CSU
Hours: 54 hours LEC

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.

ENGLT 370 Children and Literature 3 Units

Advisory: ENGWR 102 or 103; or placement through the assessment process.
General Education: AA/AS Area I; CSU Area C2
Course Transferable to CSU
Hours: 54 hours LEC

This course is a survey of the best 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 of current issues such as censorship, literacy, and multicultural diversity. The course is intended for prospective teachers, preschool teachers, early childhood education (ECE) majors, parents, and anyone who is or will be in frequent contact with children. It includes reading to children in a formal group setting, which may include an off-campus location.

ENGLT 372 Children and Literature: Storytelling 1 Unit

Advisory: ENGLT 370, ENGWR 102, or ENGWR 103; or placement through the assessment process.
General Education: AA/AS Area I; AA/AS Area VI; CSU Area C2
Course Transferable to CSU
Hours: 18 hours LEC

This course offers further studies in children's literature, emphasizing the principal types and sources of oral literature for children. Theories of how storytelling develops cognitive and language skills, social growth, self-esteem, and aesthetic appreciation in children are covered. It includes multiculturally diverse story sources of oral literature, such as legends, dramatic poetry, and family and community histories. Practice in storytelling is included.

ENGLT 374 Children and Literature: Folklore and Fairy Tales 1 Unit

Advisory: ENGWR 102 or 103
General Education: AA/AS Area I; AA/AS Area VI; CSU Area C2
Course Transferable to CSU
Hours: 18 hours LEC

This course surveys folklore and fairy tales in the United States and other countries and cultures. Readings include literature written by and about Native Americans, African Americans, Hispanic Americans, and Asian Americans, in addition to other world cultures. The course emphasizes literary analysis and the values of multicultural literature in the development of children's cultural and aesthetic sensitivity.

ENGLT 376 Children and Literature: Reader's Theater 1 Unit

Advisory: ENGWR 102 or 103
General Education: AA/AS Area I; AA/AS Area VI; CSU Area C2
Course Transferable to CSU
Hours: 18 hours LEC

This course offers further studies in children's literature with emphasis on selecting and adapting children's literature to group writing and reading aloud dramatically in group situations. Criteria for selection and adaptation are applied to folk literature, plays, short novels, and storybooks. Using Reader's Theater to develop the child's understanding and appreciation of literary aesthetics, language skills, and cultural diversity is emphasized.

ENGLT 378 Young Adult Literature 3 Units

Prerequisite: ENGWR 300 with a grade of "C" or better
General Education: AA/AS Area I; CSU Area C2; IGETC Area 3B
Course Transferable to UC/CSU
Hours: 54 hours LEC

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 the 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. Censorship concerns and culturally diverse selections also form a core part of the course. Authors may include S. E. Hinton, Will Hobbs, Karen Hesse, Richard Peck, Paul Zindel, J. K. Rowling, Sandra Cisneros, Lois Lowry, John Knowles, and J. D. Salinger. This course includes an analysis of literary elements, an examination of authors' style and content, and reflection on what makes a piece of literature a classic.

ENGLT 380 Introduction to Shakespeare 3 Units

Prerequisite: ENGWR 300 or 480 with a grade of "C" or better
General Education: AA/AS Area I; CSU Area C2; IGETC Area 3B
Course Transferable to UC/CSU
Hours: 54 hours LEC

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 and contemporary approaches to interpreting the plays. Field trips to live Shakespearean performances may be required.

ENGLT 382 Introduction to Dramatic Literature 3 Units

Prerequisite: ENGWR 300 with a grade of "C" or better
Advisory: ENGWR 301
General Education: AA/AS Area I; CSU Area C2; IGETC Area 3B
Course Transferable to UC/CSU
Hours: 54 hours LEC

This course introduces drama as a type of literature. Plays from varying historical periods and cultures are covered, with an emphasis on the analysis of plot, characterization, setting, theme, and other literary elements of drama. Field trips to live theater productions are required.

ENGLT 392 Science Fiction and Fantasy 3 Units

Prerequisite: ENGWR 300 with a grade of "C" or better
General Education: AA/AS Area I; CSU Area C2; IGETC Area 3B
Course Transferable to UC/CSU
Hours: 54 hours LEC

This course explores the literature of science fiction and fantasy. It includes the roots of these genres and surveys development into their contemporary forms. Topics may include selections from television, film, anime, short stories, and novels.

ENGLT 403 Film Adaptations 3 Units

Prerequisite: ENGWR 300 with a grade of "C" or better
General Education: AA/AS Area I; CSU Area C2; IGETC Area 3B
Course Transferable to UC/CSU
Hours: 54 hours LEC

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. The course analyzes intention, creative distinctions, and the limits and strengths of each medium.

ENGLT 494 Topics in Literature 3 Units

Prerequisite: ENGWR 300 with a grade of "C" or better
General Education: AA/AS Area I; CSU Area C2
Course Transferable to CSU
Hours: 54 hours LEC

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. This course may be taken twice for credit with different course topics.

English - Reading**ENGRD 12 Reading Center: Basic Reading Skills .25-2 Units**

Prerequisite: ESLR 50 with a grade of "C" or better; or placement through the assessment process.
Hours: 108 hours LAB

The Reading Center offers individual instructional modules designed to acquire or improve reading skills in specific areas. Course offerings vary, depending upon needs and abilities. A partial list includes the following: comprehension, vocabulary development, critical reading, study skills, and spelling improvement. Enrollment is open through the eleventh week of the semester. Pass/no pass only. This course may be taken up to four times for credit with different course topics for a maximum of four units.

ENGRD 14 Reading Skills 3 Units

Prerequisite: Placement through the assessment process.
Hours: 54 hours LEC

This course covers the foundations of reading skills, such as word attack through syllabication and phonics, vocabulary development, and basic reading comprehension. Concurrent enrollment in ENGRD 54, Reading Center: Individualized Reading Skills, may be required for individual work in a support module.

ENGRD 15 Basic Reading Skills 3 Units

Prerequisite: ENGRD 14 with a grade of "C" or better; or placement through the assessment process.
Advisory: Concurrent or previous enrollment in ENGWR 51.
Hours: 54 hours LEC

This course provides instruction in techniques for improving basic skills in reading. It involves intensive work with word attack, literal comprehension, vocabulary and study skills, including practice with multicultural reading materials and strategies. Individual work in the Learning Resource Center may be required by instructor. This course is not open to students who have completed ENGRD 56 or ENGWR 56 with a grade of "C" or better.

ENGRD 17 Vocabulary and Spelling with Study Strategies 2 Units

Hours: 36 hours LEC

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.

ENGRD 54 Reading Center - Individualized Reading Skills .5-3 Units

Prerequisite: Placement through the assessment process for native speakers, or ESLR 50 (Intermediate-Mid Reading) with a "C" or better for non-native speakers.

Hours: 54 hours LEC

The course offers individualized instruction in basic reading skills in specific areas. Course offerings are based on needs and abilities. A partial list includes work in reading comprehension and vocabulary acquisition, essay and textbook reading, and study skills. The course may be taken four times with different modules for a maximum of four units. This course is not a substitute for ENGRD 14, 15, 56, or 116. Students may register up until the end of the second week of class. This course is offered Pass/No Pass only.

ENGRD 56 Integrated Reading, Writing and Study Skills 6 Units

Same As: ENGWR 56

Prerequisite: ENGRD 14 with a grade of "C" or better or placement through the assessment process; AND ENGWR 43 with a grade of "Pass," or one or more units of ENGWR 53, or placement through the assessment process.

Hours: 108 hours LEC

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. The course includes reading and writing in response to a variety of fictional and non-fictional materials and reviews basic rules of grammar and usage to develop skills in sentence, paragraph, and essay writing. Additional topics include a review of campus services and programs and effective study strategies. This course requires a total of 3,500 words written throughout the semester in a variety of assignments. Completing this course is equivalent to completing both ENGWR 51 and ENGRD 15. This course is not open to students who have completed ENGRD 15, ENGWR 51, or ENGWR 56 with a grade of "C" or better.

ENGRD 111 Reading Across the Disciplines (R.A.D.) .5 Units

Corequisite: Enrollment in a below transfer level content area course.

Hours: 9 hours LEC

This course offers reading skills development as applied to various content-area courses. Topics include the following: strategies for textbook comprehension, note-taking, annotating, mastering discipline-base vocabulary, paraphrasing, reading graphics, and test-taking strategies. Students must come to the R.A.D. Center and meet with a R.A.D. staff member before enrolling. This course may be taken 4 times for credit when used in conjunction with different content area classes. Pass/No Pass only.

ENGRD 114 College Vocabulary and Spelling 2 Units

Hours: 36 hours LEC

This course provides college vocabulary and spelling skills. Topics include Greek and Latin word parts, phonetic analysis, thematic readings, proofreading, determining meaning of technical terms in academic disciplines, and effective use of learning style strategies. Topics in this course promote college success.

ENGRD 116 Proficient Reading 3 Units

Prerequisite: ENGRD 15, ENGRD 56, or ENGWR 56 with a grade of "C" or better; or placement through the assessment process.

Advisory: Concurrent enrollment in ENGWR 102 or 103.

Hours: 54 hours LEC

This course analyzes expository and argumentative essays, textbooks, and literature in preparation for ENGRD 310 or ENGRD 312. 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 introduction, body, and conclusion. This course also focuses on applying study strategies for comprehending and retaining information from textbooks in preparation for tests. Individual work in the Writing Across the Curriculum Program, the Reading Across the Disciplines Program, or the Reading Center may be required.

ENGRD 117 Reading Center: Intermediate Reading Skills .25-2 Units

Prerequisite: ESLR 310 with a grade of "C" or better; or placement through the assessment process.

Hours: 108 hours LAB

The Reading Center offers individualized instructional modules designed to strengthen reading skills in specific areas. Course offerings vary, depending upon needs and abilities. A partial list includes the following: comprehension, vocabulary development, critical reading, textbook reading, reading for the proficiency exam, and study skills. Scheduling is flexible. Enrollment is open through the eleventh week of the semester. Pass/no pass only. This course may be taken up to four times for maximum of four units with different course topics.

ENGRD 310 Critical Reading as Critical Thinking 3 Units

Prerequisite: ENGRD 116 with a grade of "C" or better; or placement through the assessment process.

Corequisite: ENGRD 314

Advisory: Concurrent enrollment in ENGWR 300.

General Education: AA/AS Area II(b)

Course Transferable to CSU

Hours: 54 hours LEC

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.

ENGRD 312 Academic Textbook Reading 3 Units

Prerequisite: ENGRD 116 with a grade of "C" or better; or placement through the assessment process.

Corequisite: ENGRD 314

Advisory: Concurrent enrollment in ENGWR 300

General Education: AA/AS Area II(b)

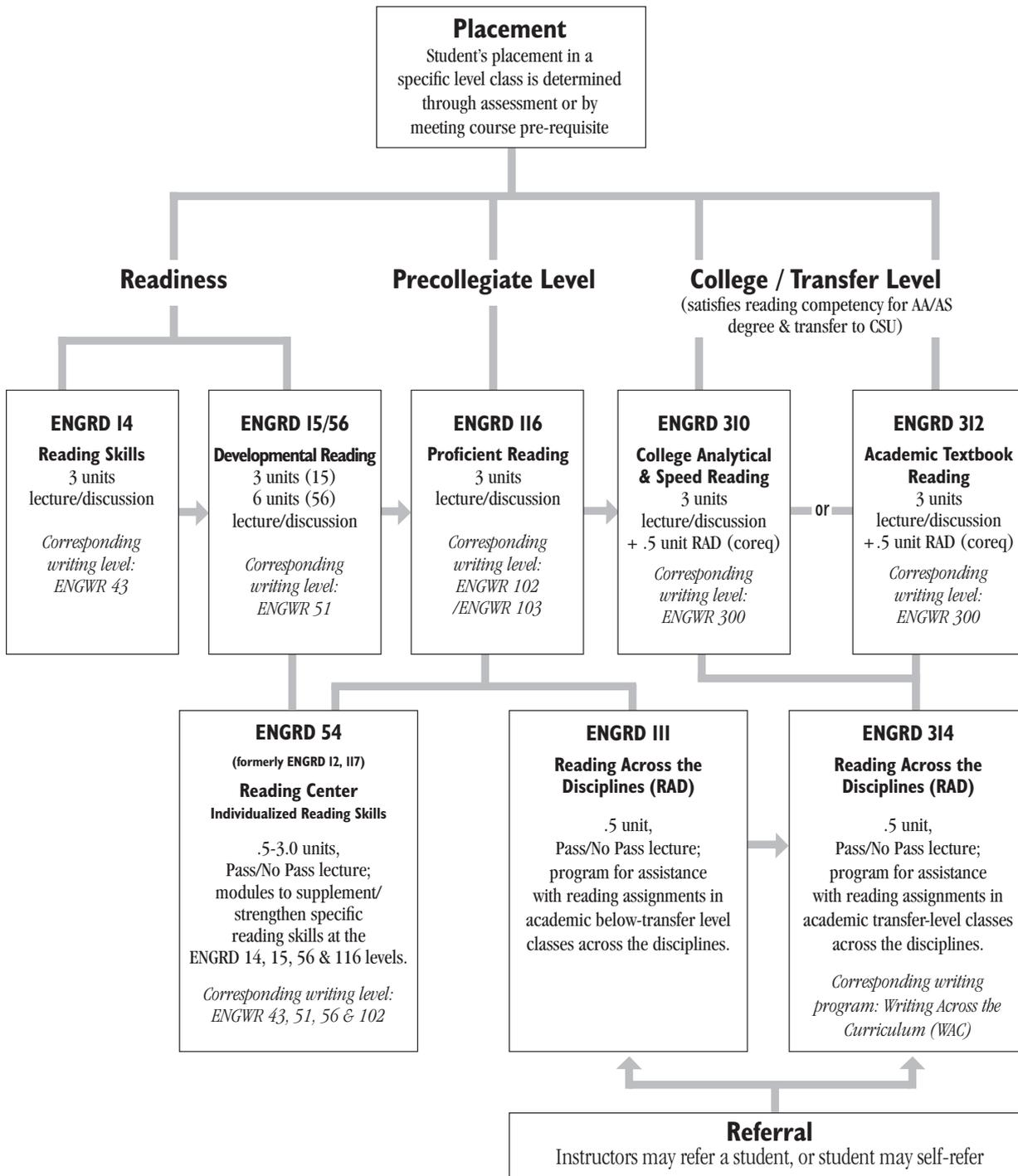
Course Transferable to CSU

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.

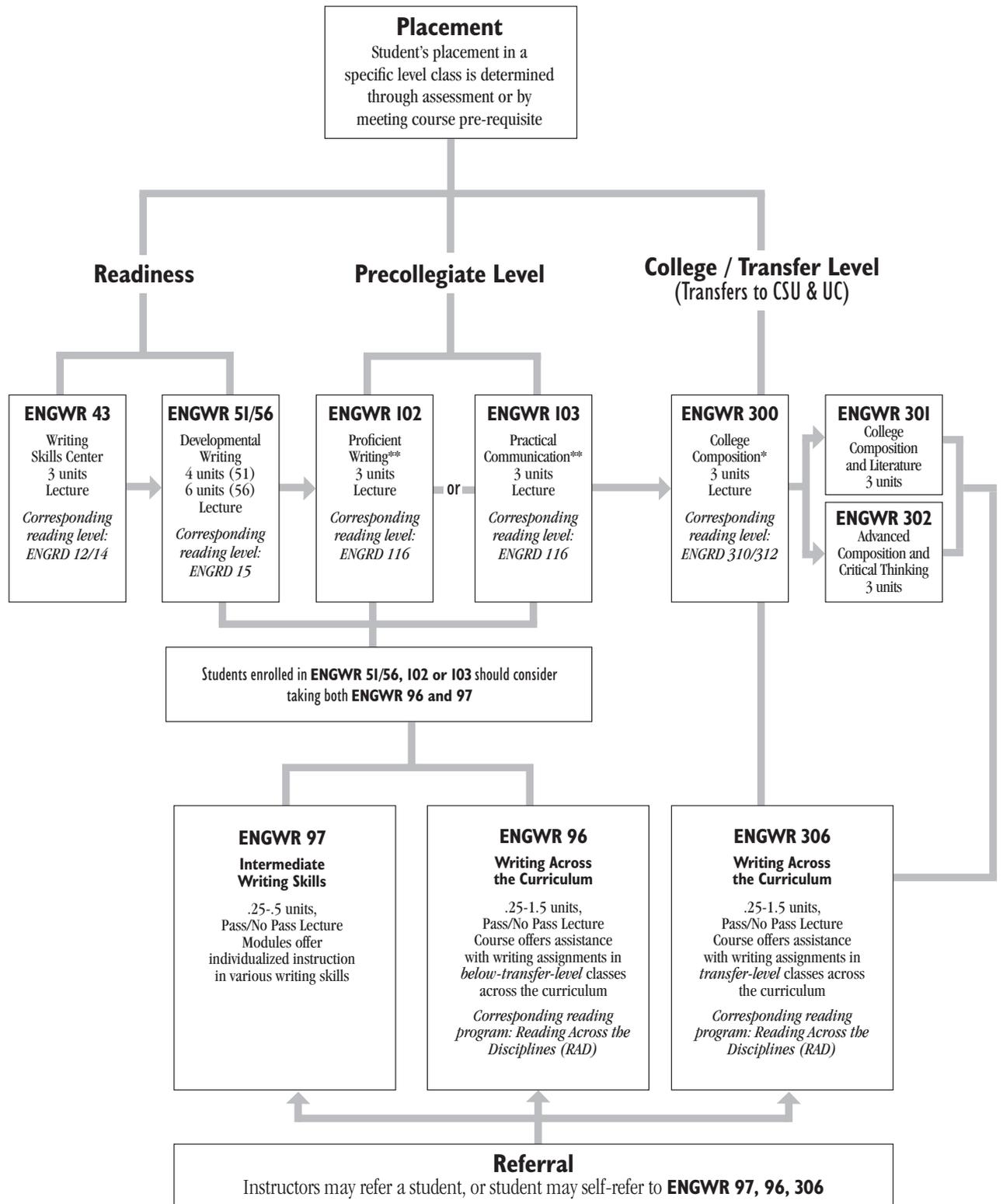
Reading Courses

with corresponding writing courses



Composition Courses

with corresponding reading courses



* Fulfills writing competency requirement for AA/AS degree
** Pre-requisite for ENGWR 300

ENGRD 314 Reading Across the Disciplines (R.A.D.) .5 Units

Corequisite: ENGRD 310 or ENGRD 312 or another transfer-level content-area course.

Course Transferable to CSU

Hours: 9 hours LEC

This course offers reading skills as they apply to various content-area courses. Topics include the following: strategies for textbook comprehension, note-taking, annotating, mastering discipline-based vocabulary, paraphrasing, reading graphics, test-taking, speed reading, and research techniques. Students must come to the R.A.D. Center and meet with a R.A.D. staff member before enrolling. This course may be taken 4 times for credit when used in conjunction with different content area courses. Pass/No Pass only.

ENGRD 1000 Reading Across the Disciplines .5 Units

Hours: 9 hours LEC

ENGRD 1000 Reading Across the Disciplines offers reading skills as applied to content area courses. Students will need to enroll in ENGRD 1000 Reading Across the Disciplines for 0.5 unit of lecture credit. Topics include the following: strategies for textbook comprehension, note-taking, annotating, mastering discipline-based vocabulary, paraphrasing, reading graphics, test-taking, speed reading, and research techniques. Students will be placed in ENGRD 111 or ENGRD 314. ENGRD 111 and ENGRD 314 may be taken 4 times each for credit when used in conjunction with different content area courses. Pass/No Pass only.

English - Writing**ENGWR 43 Writing Skills Center 3 Units**

Prerequisite: Placement through the assessment process.

Advisory: BUSTEC 300

Hours: 54 hours LEC

This course offers group and individualized instruction in basic writing skills, such as composing and punctuating complete sentences; drafting, developing, and proofreading paragraphs and short essays; revising drafts; and journal writing. The course is offered Pass/No Pass only.

ENGWR 51 Developmental Writing 4 Units

Prerequisite: Grade of "pass" in ENGWR 43 OR placement through the assessment process.

Advisory: Concurrent enrollment in ENGRD 15

Hours: 72 hours LEC

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.

ENGWR 56 Integrated Reading, Writing and Study Skills 6 Units

Same As: ENGRD 56

Prerequisite: ENGRD 14 with a grade of "C" or better or placement through the assessment process; AND ENGWR 43 with a grade of "Pass," or placement through the assessment process.

Hours: 108 hours LEC

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. The course includes reading and writing in response to a variety of fictional and non-fictional materials and reviews basic rules of grammar and usage to develop skills in sentence, paragraph, and essay writing. Additional topics include a review of campus services and programs and effective study strategies. This course requires a total of 3,500 words written throughout the semester in a variety of assignments. Completing this course is equivalent to completing both ENGWR 51 and ENGRD 15. This course is not open to students who have completed ENGRD 15, ENGRD 56, or ENGWR 51 with a grade of "C" or better.

ENGWR 96 Intermediate Writing Across the Curriculum .25-1.5 Units

Advisory: BUSTEC 300 or CISC 300

Hours: 27 hours LEC

This course offers both individualized and group instruction in appropriate writing processes and strategies for a variety of written assignments in all academic disciplines. Topics vary according to need and may include understanding writing assignments, strategies for revision, and basic documentation. The course is offered Pass/No Pass and may be taken four times for credit with different course topics.

ENGWR 97 Intermediate Writing Skills .25-.5 Units

Prerequisite: Placement through the assessment process.

Advisory: BUSTEC 300 or CISC 300

Hours: 9 hours LEC

This course offers individualized and small group instruction in various writing skills, such as correctly punctuating a variety of sentence types, proofreading for common errors, developing and organizing paragraphs, and creating a Works Cited list. The course is offered Pass/No Pass only and may be taken up to four times for credit with different course topics.

ENGWR 102 Proficient Writing 3 Units

Prerequisite: ENGRD 56, ENGWR 51, or ENGWR 56 with a grade of "C" or better; or placement through the assessment process.

Advisory: ENGRD 116

Hours: 54 hours LEC

This course emphasizes topic selection, focusing topics, prewriting, organization of ideas, and development of essays in preparation for ENGWR 300. It also includes the review and further development of sentence writing and editing skills and analysis of selected readings. Written final drafts totaling at least 4,500 words are required.

ENGWR 103 Practical Communication 3 Units

Prerequisite: ENGWR 51 with a grade of "C" or better; or placement through the assessment process.

Advisory: ENGRD 15

Hours: 54 hours LEC

This course covers writing formats used in the workplace. It includes the application of communication models to workplace communication, review and further development of sentence writing and editing skills, and application of workplace writing techniques as preparation for ENGWR 300. Written final drafts totaling a minimum of 4,500 words are required.

ENGWR 294 Topics in English Writing 1 Unit

Hours: 18 hours LEC

This course introduces a number of strategies for successful reading and writing. Although the course focuses on applying these strategies within the context of an English course, the course is intended to provide skills that apply to any course of study.

ENGWR 300 College Composition 3 Units

Prerequisite: ENGWR 102 with a grade of "C" or better; or placement through the assessment process.

Advisory: Concurrent enrollment in ENGRD 310 or 312.

General Education: AA/AS Area II(a); CSU Area A2; IGETC Area 1A

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course emphasizes writing and includes reading, research, and critical thinking skills essential for successful completion of a college degree. Writing assignments include expository and argumentative essays (6,500 words minimum for course) using MLA documentation and format. Reading assignments include a variety of transfer-level texts of substantial length.

ENGWR 301 College Composition and Literature 3 Units

Prerequisite: ENGWR 300 or 480 with a grade of "C" or better

General Education: AA/AS Area II(b); CSU Area A3; IGETC Area 1B

Course Transferable to UC/CSU

Hours: 54 hours LEC

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 (6,500 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.

ENGWR 302 Advanced Composition and Critical Thinking 3 Units

Prerequisite: ENGWR 300 with a grade of "C" or better

Advisory: ENGRD 310 or 312

General Education: AA/AS Area II(b); CSU Area A3; IGETC Area 1B

Course Transferable to UC/CSU

Hours: 54 hours LEC

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, it focuses on critically assessing, developing, and effectively expressing and supporting opinions. Essays written for the course (6,500 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.

ENGWR 304 Advanced Writing Across the Curriculum (W.A.C.) .25-.5 Units

Course Transferable to CSU

Hours: 9 hours LEC

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. This course is offered Pass/No Pass only and may be taken four times for credit with different course topics.

ENGWR 306 Advanced Writing Across the Curriculum .25-1.5 Units

Course Transferable to CSU

Hours: 27 hours LEC

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. This course is offered Pass/No Pass only and may be taken four times for credit with different course topics.

ENGWR 342 Introduction to Technical/Professional Communication 3 Units

Advisory: ENGWR 102 or 103; or placement through the assessment process.

General Education: AA/AS Area II(b)

Course Transferable to CSU

Hours: 54 hours LEC

This course emphasizes principles of reader-centered writing for the workplace, focusing specifically on aspects of technical and professional communication. The course teaches the writing of documents used in businesses, academia, industry, and government. These documents may include memos, letters, brochures, reports, procedures, proposals, grants, scientific reports, web sites, software documentation, and case studies. The course may include team projects that require collaboration outside the classroom. One or more additional hours per week may be required in the Learning Resource Center.

ENGWR 344 Technical/Professional Communication: Writing Reports 1.5 Units

Prerequisite: None

Advisory: ENGWR 103.

Course Transferable to CSU

Hours: 27 hours LEC

This course emphasizes the writing of reports for the workplace and for technical and scientific disciplines. The course covers audience analysis, standard report formats, research techniques, and concise, grammatical writing.

**ENGWR 348 Technical/Professional Communication:
Plain English 1.5 Units**

Prerequisite: None

Advisory: ENGWR 102 or 103.

Course Transferable to CSU

Hours: 27 hours LEC

This course emphasizes the use of clear, concise English in professional writing. The course begins with a brief review of English grammar and then covers common writing problems. The course also teaches professional editing techniques.

**ENGWR 350 Technical/Professional Communication:
Proposal Writing 1.5 Units**

Prerequisite: None

Advisory: ENGWR 342.

Course Transferable to CSU

Hours: 27 hours LEC

This course emphasizes the writing of proposals. It includes planning, writing, and evaluating proposals, both formal and informal, solicited and unsolicited. Special attention is given to requests for proposal (RFPs) and how to respond to them. The use of workplace projects is encouraged. A collaborative project is required.

**ENGWR 352 Technical/Professional Communication:
Writing Technical Manuals 3 Units**

Advisory: ARTNM 352, CISA 305, and ENGWR 342

Course Transferable to CSU

Hours: 54 hours LEC

This course is designed for professionals in all fields who need to design, create, and revise user and reference manuals in print or online formats. The course offers strategies for audience and task analysis, product learning, document design, drafting, procedure writing, and revision. Desktop publishing and/or online help development tools are used to produce a portfolio-quality print or online manual.

**ENGWR 353 Technical/Professional Communication:
Developing Help Systems 1.5 Units**

Advisory: CISA 305 and ENGWR 352

Course Transferable to CSU

Hours: 27 hours LEC

This course emphasizes the design, development, and delivery of self-contained and Web-based help systems. It reviews task and audience analysis and introduces strategies for designing, writing, organizing, revising, and publishing help projects. In addition, it introduces industry-standard help development tools.

ENGWR 480 Honors College Composition 3 Units

Prerequisite: Assessment into the class through the assessment process.

General Education: AA/AS Area II(a); CSU Area A2; IGETC Area 1A

Course Transferable to UC/CSU

Hours: 54 hours LEC

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 writing carefully reasoned, stylistically sophisticated essays of varying lengths and in varying rhetorical modes; at least one of those essays requires research and appropriate MLA documentation. Essays written during the term will total at least 6,500 words.

**ENGWR 481 Honors College Composition
and Literature 3 Units**

Prerequisite: Cumulative GPA of 3.0 or higher; ENGWR 480

with a grade of "C" or better; OR ENGWR 300 with a grade of "C" or better AND placement into ENGWR 480.

General Education: AA/AS Area II(b); CSU Area A3; IGETC Area 1B

Course Transferable to UC/CSU

Hours: 54 hours LEC

This is an advanced course 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 the written analysis of literature, requiring at least 6500 words of formal, analytical writing. Literary research, the use of primary and secondary sources, and documentation according to current Modern Language Association standards are also covered.

**ENGWR 482 Honors Advanced Composition
and Critical Thinking 3 Units**

Prerequisite: Cumulative GPA of 3.0 or higher; ENGWR 480

with a grade of "C" or better; OR ENGWR 300 with a grade of "C" or better AND placement into ENGWR 480.

General Education: AA/AS Area II(b); CSU Area A3; IGETC Area 1B

Course Transferable to UC/CSU

Hours: 54 hours LEC

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 the course focuses primarily on non-fictional texts, selected works of fiction may be included. The minimum word requirement of 6,500 words is divided among at least four formal essays, two of which include primary and secondary research; MLA format is required for all essays. Group and individual class presentations are required, and at least one essay assignment requires independent reading.

Area: Humanities
 Dean: Kate Jaques
 Phone: (916) 484-8653
 Counseling: (916) 484-8572

Certificates of Completion offered by the department:
 Advanced Proficiency
 Advanced-High Proficiency
 Intermediate Proficiency

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.

**CERTIFICATES OF COMPLETION
 (offered by the department)**

**Advanced Proficiency Certificate in
 English as a Second Language**

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.

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.

<u>Requirements for Certificate</u>	<u>16 Units</u>
ESLL 320 Advanced-Low Listening and Speaking.....	4
ESLG 320 Advanced-Low Grammar	4
ESLR 320 Advanced-Low Reading	4
ESLW 320 Advanced-Low Writing.....	4

**Advanced-High Proficiency Certificate in
 English as a Second Language**

This certificate recognizes attainment of English language abilities to an advanced-high 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.

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.

<u>Requirements for Certificate</u>	<u>16 Units</u>
ESL 350 Advanced Composition and Literature	4
ESLR 340 Advanced Reading Skills Through Literature.....	4
ESLW 340 Advanced Composition	4
A minimum of 4 units from the following: 4	
ESLG 320 Advanced-Low Grammar (4)	
ESLL 320 Advanced-Low Listening and Speaking (4)	

**Intermediate Proficiency Certificate in
 English as a Second Language**

This certificate recognizes attainment of English language abilities to an intermediate-mid level in listening, speaking, reading, writing, and grammar.

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 clear work and social contexts.
- write comprehensible, grammatical English on everyday topics.

<u>Requirements for Certificate</u>	<u>16 Units</u>
ESLG 50 Intermediate-Mid Grammar	4
ESLL 50 Intermediate-Mid Listening and Speaking.....	4
ESLR 50 Intermediate-Mid Reading	4
ESLW 50 Intermediate-Mid Writing.....	4

English as a Second Language

ESL 97 ESL Center: Integrated Topics in ESL .25-1 Units

Prerequisite: ESLL 20, ESLR 20, or ESLW 20 with a grade of "C" or better; or placement through the assessment process.
Hours: 54 hours LAB

This course enables English as a Second Language students placed at the novice-high through intermediate-high levels to develop, expand, and reinforce multiple English language skills while working independently and/or in small groups. Coursework includes integrated study topics relative to vocabulary and study skills, reading and grammar use, idiomatic language study and application, and assorted integrated software programs. Students may earn .25 of a unit of credit for every 13.5 hours of work. Late registration is allowed as long as space is available and with the permission of the instructor. This course may be taken four times for credit covering different modules. Pass/No Pass Only.

ESL 181 ESL Center: Integrated Topics in ESL .25-1 Units

Prerequisite: ESLL 310, ESLR 310, or ESLW 310 with a grade of "C" or better; or placement through the assessment process.
Hours: 54 hours LAB

This course enables English as a Second Language students placed at the advanced-low through advanced-high levels to develop, expand, and reinforce multiple English language skills while working independently and/or in small groups. Course work includes integrated study topics relative to vocabulary and study skills, reading and grammar use, idiomatic language study and application, TOEFL preparation, and assorted integrated software programs in addition to listening comprehension, conversational skills, pronunciation, vocabulary and oral grammar topics. Students may earn .25 of a unit of credit for every 13.5 hours of work. Late registration is allowed as long as space is available and with the permission of the instructor. This course may be taken four times for credit covering different modules. Pass/No Pass Only.

ESL 311 College ESL Newsletter Production 3 Units

Prerequisite: ESLL 50, ESLR 50, and ESLW 50 with grades of "C" or better; or placement through the assessment process.
Course Transferable to CSU
Hours: 36 hours LEC; 54 hours LAB

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). This course may be taken twice for credit.

ESL 350 Advanced Composition and Literature 4 Units

Prerequisite: ESLR 340 and ESLW 340 with grades of "C" or better;
General Education: AA/AS Area II(b); CSU Area A3
Course Transferable to UC/CSU
Hours: 72 hours LEC

This course covers reading and interpreting major types of literature, including poetry, drama and fiction. It includes study in critical thinking and essay writing. It also emphasizes reading and written analysis of major literary works. Writing assignments total at least 8,500 words. Field trips may be required.

English as a Second Language - Grammar

ESLG 50 Intermediate-Mid Grammar 4 Units

Prerequisite: ESLW 40 (Intermediate-Low Writing) with a grade of "C" or better; or, for those not previously enrolled in an ESL grammar or writing course within the Los Rios district, 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).
Hours: 72 hours LEC

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.

ESLG 310 Intermediate-High Grammar 4 Units

Prerequisite: ESLG 50 with a grade of "C" or better; or, for those not previously enrolled in an ESL grammar course within the Los Rios district, 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).
Course Transferable to CSU
Hours: 72 hours LEC

This course focuses on further practice of the forms, meanings, and usage of grammatical structures of English at the intermediate-high level. Verbal practice in class reinforces the structures studied.

ESLG 320 Advanced-Low Grammar 4 Units

Prerequisite: ESLG 310 with a grade of "C" or better; or, for those not previously enrolled in an ESL grammar course within the Los Rios district, 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).
Course Transferable to CSU
Hours: 72 hours LEC

This course focuses on practice in the forms and meanings of major structures used in writing with an emphasis on clause structure at the advanced-low level. Oral practice reinforces the structures studied. Assignments emphasize sentence structure in the context of longer written work.

English as a Second Language - Listening

ESLL 20 Novice Listening and Speaking 4 Units

Prerequisite: Placement through the assessment process.

Advisory: One year of adult school and concurrent enrollment in ESL Reading and Writing courses at the student's assessed levels are highly recommended.
Hours: 72 hours LEC

This course, intended for non-native speakers of English, focuses on understanding and producing appropriate language, utilizing learned phrases and expressions required for everyday communication. Basic clarification strategies are demonstrated and practiced. English sounds and intonation patterns are introduced.

ESLL 30 Novice-High Listening and Speaking 4 Units

Prerequisite: ESLL 20 with a grade of "C" or better; or, for those not previously enrolled in an ESL listening/speaking 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 levels are highly recommended.
Hours: 72 hours LEC

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 introduced.

ESLL 40 Intermediate-Low Listening and Speaking 4 Units

Prerequisite: ESLL 30 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 levels are highly recommended.
 Hours: 72 hours LEC

This is a course for non-native speakers that develops the listening and speaking skills needed to succeed in college courses. Activities focus on developing phrases and sentences to communicate ideas in familiar situations. It includes group and individual listening and speaking activities, an overview of American English sounds, and practice in stress, rhythm, and intonation.

ESLL 50 Intermediate-Mid Listening and Speaking 4 Units

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.
 Hours: 72 hours LEC

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.

ESLL 97 ESL Center: Listening Skills in ESL .25-1 Units

Prerequisite: ESLL 20, ESLR 20, and ESLW 20 with grades of "C" or better; or placement through the assessment process.
 Hours: 54 hours LAB

This course enables English as a Second Language students placed at the novice-high through high-intermediate levels to develop and reinforce specific listening and speaking skills while working independently and/or in small groups. Coursework includes offerings in listening comprehension, conversational skills, pronunciation, vocabulary and oral grammar topics. Students may register until the twelfth week of the semester as space permits and may earn .25 unit of credit for every 13.5 hours of work. ESLL 97 is graded pass/no pass and may be taken four times.

ESLL 310 Intermediate-High Listening and Speaking 4 Units

Prerequisite: ESLL 50 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.
 Course Transferable to CSU
 Hours: 72 hours LEC

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.

ESLL 320 Advanced-Low Listening and Speaking 4 Units

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.
 Course Transferable to CSU
 Hours: 72 hours LEC

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.

English as a Second Language - Reading**ESLR 20 Novice Reading 4 Units**

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.
 Hours: 72 hours LEC

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.

ESLR 30 Novice-High Reading 4 Units

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 an ESL Listening and Speaking and Writing course at the student's assessed level.
 Hours: 72 hours LEC

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.

ESLR 40 Intermediate-Low Reading 4 Units

Prerequisite: ESLR 30 (Novice-High Reading) 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 and Speaking and Writing course at the student's assessed level.
 Hours: 72 hours LEC

This course, intended for non-native speakers of English, focuses on understanding of vocabulary and readings at the Intermediate-Low level. There is an emphasis on developing reading skills, building vocabulary, and increasing fluency. Additional class activities include discussing and writing about readings.

ESLR 50 Intermediate-Mid Reading 4 Units

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.
 Hours: 72 hours LEC

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.

English as a Second Language - Writing

ESLR 97 ESL Center: Reading Skills in ESL .25-1 Units

Prerequisite: ESLL 20, ESLR 20, and ESLW 20 with grades of "C" or better; or placement through the assessment process.

Hours: 54 hours LAB

This course enables English as a Second Language students placed at the novice-high through intermediate-high levels to develop, expand and reinforce a variety of reading and vocabulary skills while working independently and/or in small groups. Coursework includes topics relative to the development of word parts and form, vocabulary expansion, dictionary skills, as well as comprehension, fluency, and summarization skills. Students may register until the twelfth week of the semester as space permits and may earn .25 unit of credit for every 13.5 hours of work. ESLR 97 is graded cr/pass/no pass and may be taken four times.

ESLR 310 Intermediate-High Reading 4 Units

Prerequisite: ESLR 50 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.

Course Transferable to CSU

Hours: 72 hours LEC

This course, intended for non-native speakers of English, focuses on the introduction of academic reading skills with an emphasis on speed, vocabulary expansion, and comprehension of ideas. Practice is provided in understanding, paraphrasing, summarizing, and responding, either orally or in writing, to ideas expressed in reading.

ESLR 320 Advanced-Low Reading 4 Units

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.

Course Transferable to CSU

Hours: 72 hours LEC

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.

ESLR 340 Advanced Reading Skills Through Literature 4 Units

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.

Course Transferable to CSU

Hours: 72 hours LEC

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 readings.

ESLW 20 Novice Writing 4 Units

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.

Hours: 72 hours LEC

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.

ESLW 30 Novice-High Writing 4 Units

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 ESL Reading and Writing courses at the student's assessed level.

Hours: 72 hours LEC

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 and paragraph structures within the context of topic assignments.

ESLW 40 Intermediate-Low Writing 4 Units

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 for new ESL students.

Advisory: Concurrent enrollment in an ESL Listening and Speaking and Reading course at the student's assessed level.

Hours: 72 hours LEC

This intermediate-low course, intended for non-native speakers of English, provides revision and practice in writing multiple drafts of paragraphs with a clear beginning, middle, and end while introducing how to organize and focus paragraphs within basic essay structure. In the process of doing so, critical thinking skills and grammar and sentence structure in writing are also stressed.

ESLW 50 Intermediate-Mid Writing 4 Units

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 for new ESL students.

Advisory: Concurrent enrollment in an ESL Listening and Speaking and Reading course at the student's assessed level.

Hours: 72 hours LEC

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.

ESLW 97 ESL Center: Writing Skills in ESL .25-1 Units

Prerequisite: ESLL 20, ESLR 20, and ESLW 20 with grades of "C" or better; or placement through the assessment process.

Hours: 54 hours LAB

This course enables English as a Second Language students placed at the novice-high through intermediate-high levels to develop and reinforce specific English language skills while working independently and/or in small groups. Coursework includes level-appropriate topics relative to all forms of written communication including grammar, sentence structure and punctuation, paragraph and essay formats, and related vocabulary and spelling. Students may register until the twelfth week of the semester as space permits and may earn .25 unit of credit for every 13.5 hours of work. ESLW 97 is graded pass/no pass and may be taken four times.

ESLW 310 Intermediate-High Writing 4 Units

Prerequisite: ESLW 50 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 at the student's assessed level.

Course Transferable to UC/CSU

Hours: 72 hours LEC

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.

ESLW 320 Advanced-Low Writing 4 Units

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.

Course Transferable to UC/CSU

Hours: 72 hours LEC

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.

ESLW 340 Advanced Composition 4 Units

Prerequisite: ESLW 320 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 an ESL Reading and an ESL Listening and Speaking course at the student's assessed levels.

General Education: AA/AS Area II(a); CSU Area A2

Course Transferable to UC/CSU

Hours: 72 hours LEC

This college composition course emphasizes reading analysis, writing, and critical thinking skills, while also addressing the specific language and cultural needs of non-native speakers. These skills are essential for successful completion of a two or four-year college program. Writing assignments include expository and argumentative prose based on analysis of a variety of assigned readings and original research. Students write a minimum of 8,500 words divided among 6-8 essays, including a fully documented research paper and in-class essays. This course satisfies the Written Expression Competency requirement for graduation and the English composition requirement of some California colleges and universities.

Area: Fine & Applied Arts
 Dean: Dr. Adam Karp
 Phone: (916) 484-8433
 Counseling: (916) 484-8572

Degree: A.A. - Fashion Design
 A.A. - Fashion Merchandising
 Certificate: Fashion Design
 Fashion Merchandising
 Certificates of Completion offered by the department:
 Apparel Construction
 Fashion Entrepreneur
 Fashion Illustration
 Fashion Retailing

DEGREES AND CERTIFICATES

Fashion Design Degree

This degree develops the skills necessary to coordinate original 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.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- create sample constructions utilizing basic apparel sewing skills.
- assess interrelationships between current fashion trends and cultural, social, political, technological, and environmental issues.
- analyze characteristics of various fibers and how they relate to the finished fabric.
- appraise fashion and style features of selected historical periods of the western world.
- utilize free-hand and computer-generated techniques to create illustrations.
- evaluate fashion trends and forecasting techniques.
- construct patterns by computer generation and the flat pattern method.
- utilize draping techniques to create original garment designs.
- conceive designs, construct patterns, and sew garments, to be shown in a fashion show.
- appraise and evaluate opportunities to start a design business in the fashion industry.

Career Opportunities

This program prepares students for entry-level jobs in apparel production companies, apparel manufacturing plants, designer workrooms, and custom sewing workrooms. This program 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.

Requirements for Degree

42 Units

FASHN 300	Introduction to the Fashion Industry.....	3
FASHN 310	Fashion Analysis/Clothing Selection.....	3
FASHN 320	Textiles.....	3
FASHN 330	History of Western World Fashion.....	3
FASHN 342	Fashion Illustration.....	3
FASHN 344	Apparel Line Development.....	3
FASHN 357	Apparel Construction I.....	3
FASHN 358	Apparel Construction II.....	3
FASHN 374	Pattern Making and Design.....	3
FASHN 378	Advanced Pattern Making and Design.....	3
FASHN 379	Draping.....	3
FASHN 380	Computer Patternmaking.....	3
FASHN 382	Collection Design and Production.....	3
FASHN 398	Fashion Entrepreneur.....	3

Associate Degree Requirements: 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.

Fashion Design Certificate

The certificate in Fashion Design develops the skills necessary to coordinate original design concepts with manufacturing, marketing, and merchandising practices. Course work concentrates on basic industry sewing, pattern drafting, historic and current fashion trends, hand and computer illustration, textiles, and entrepreneurial opportunities as they relate to the fashion industry.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- create a business plan related to fashion.
- analyze fashion fundamentals as they relate to changes within the fashion industry.
- evaluate how one's dress influences image projection and silent communication.
- identify characteristics of various fibers and how they relate to the finished fabric.
- distinguish between a flat working sketch and a fashion illustration.
- construct patterns and slopers utilizing the flat pattern method.
- conceive designs, construct patterns, and sew garments to be shown in a fashion show.

Career Opportunities

This program prepares students for entry-level jobs in apparel production companies, apparel manufacturing plants, designer workrooms, and custom sewing workrooms.

(continued on next page)

(Fashion Design Certificate continued)

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.

Requirements for Certificate		42 Units
FASHN 300	Introduction to the Fashion Industry	3
FASHN 310	Fashion Analysis/Clothing Selection	3
FASHN 320	Textiles.....	3
FASHN 330	History of Western World Fashion	3
FASHN 342	Fashion Illustration	3
FASHN 344	Apparel Line Development.....	3
FASHN 357	Apparel Construction I.....	3
FASHN 358	Apparel Construction II.....	3
FASHN 374	Pattern Making and Design.....	3
FASHN 378	Advanced Pattern Making and Design	3
FASHN 379	Draping.....	3
FASHN 380	Computer Patternmaking.....	3
FASHN 382	Collection Design and Production.....	3
FASHN 398	Fashion Entrepreneur	3

Fashion Merchandising Degree and Certificate

This program develops the skills necessary for jobs in fashion coordinating, promotion, visual presentation, management, merchandising, retail buying, and entrepreneurial opportunities.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- evaluate how one’s dress influences image projection and silent communication.
- 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.
- develop a business plan for a fashion related business.

Career Opportunites

This program 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. This program also prepares students for self-employment or entrepreneurship.

Requirements for Degree and Certificate		32 Units
FASHN 300	Introduction to the Fashion Industry	3
FASHN 320	Textiles	3
FASHN 330	History of Western World Fashion	3
FASHN 342	Fashion Illustration	3
FASHN 344	Apparel Line Development.....	3
FASHN 393	Fashion Promotion	3
FASHN 395	Visual Merchandising	2
FASHN 397	Fashion Retail Buying	3
FASHN 398	Fashion Entrepreneur	3

A minimum of 6 units from the following:		6
ARTPH 370	Fashion, Wedding, and Portrait Photography (3)	
MGMT 362	Techniques of Management (3)	
MKT 310	Selling Professionally (3)	
MKT 314	Advertising (3)	
MKT 332	Advertising on the Internet (Electronic Commerce) (3)	
MKT 312	Retailing (3)	

Associate Degree Requirements: 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.

CERTIFICATES OF COMPLETION (offered by the department)

Apparel Construction Certificate

The certificate in Apparel Construction consists of four core Fashion courses. Topics include an introduction to the fashion industry and its job opportunities. It also provides students with the necessary background in fabrics and sewing skills needed to enter the job market.

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 ready-to-wear garments.

Career Opportunities

This certificate program prepares students for entry-level jobs in apparel production companies, designer workrooms, and custom sewing workrooms.

Requirements for Certificate		12 Units
FASHN 300	Introduction to the Fashion Industry	3
FASHN 320	Textiles.....	3
FASHN 357	Apparel Construction I	3
FASHN 358	Apparel Construction II	3

Fashion Entrepreneur Certificate

This certificate consists of four core Fashion courses that allow students to 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.

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.

(continued on next page)

(Fashion Entrepreneur Certificate continued)

- research current trends, formulate stock plans, and calculate market purchases.
- formulate a business plan that relates to a specific fashion business.

Career Opportunities

This program 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.

Requirements for Certificate	17 Units
FASHN 300 Introduction to the Fashion Industry	3
FASHN 395 Visual Merchandising	2
FASHN 397 Fashion Retail Buying	3
FASHN 398 Fashion Entrepreneur	3
A minimum of 6 units from the following:	6
ARTPH 370 Fashion, Wedding, and Portrait Photography (3) or FASHN 393 Fashion Promotion (3) or MKT 310 Selling Professionally (3) or MKT 312 Retailing (3) or MKT 314 Advertising (3) or MKT 332 Advertising on the Internet (Electronic Commerce) (3)	

Fashion Illustration Certificate

The certificate in Fashion Illustration consists of three core Fashion courses and two Art courses. Topics in the Fashion component include the awareness of apparel details and styles, and drawing flats and fashion illustrations. Topics in the Art component include the elements and principles of design, the elements used in drawing a figure, and the creation of a personal artistic style. Both freehand and computer illustration techniques are utilized.

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 a human form.
- 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 Opportunities

This program prepares students for entry-level jobs in the following areas: Assistant Designer, Design Room Assistant, Fashion Illustrator, Textile Colorist, Textile Croquis Painter, and Textile Designer. It also prepares students for self-employment or entrepreneurship.

Requirements for Certificate	15 Units
ART 300 Elementary Drawing and Composition	3
ART 304 Figure Drawing and Composition	3
FASHN 310 Fashion Analysis/Clothing Selection	3
FASHN 342 Fashion Illustration	3
FASHN 344 Apparel Line Development	3

Fashion Retailing 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.

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.

Career Opportunities

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.

Requirements for Certificate	15 Units
FASHN 300 Introduction to the Fashion Industry	3
FASHN 344 Apparel Line Development	3
FASHN 397 Fashion Retail Buying	3
MGMT 362 Techniques of Management	3
A minimum of 3 units from the following:	3
FASHN 320 Textiles (3) or FASHN 393 Fashion Promotion (3) or MKT 312 Retailing (3)	

Fashion

FASHN 294 Topics in Fashion .5-4 Units

Hours: 72 hours LEC

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. This course may be taken four times for a maximum of six units, provided there is no duplication of topics.

FASHN 300 Introduction to the Fashion Industry 3 Units

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.

Course Transferable to CSU

Hours: 54 hours LEC

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.

**FASHN 310 Fashion Analysis/
Clothing Selection 3 Units**

Course Transferable to CSU
Hours: 54 hours LEC

This course explores how influences on fashion (social, political, cultural, technological, and environmental) are reflected in current fashion trends. The function, aesthetics, and attitude of dress, including image projection, perceptions, and gender roles, are explored as a form of silent communication. A generational approach to consumer buying behavior and response towards fashion is examined. Other aspects of fashion analysis include identifying apparel details, styles, and elements of design.

FASHN 320 Textiles 3 Units

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.
Course Transferable to UC/CSU
Hours: 36 hours LEC; 54 hours LAB

This course is a study of natural and man-made fibers, methods of fabrication and finishes. Topics include the selection, use and care of modern fabrics as they relate to clothing and home furnishings.

FASHN 330 History of Western World Fashion 3 Units

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
General Education: AA/AS Area I; CSU Area C1
Course Transferable to CSU
Hours: 54 hours LEC

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.

FASHN 334 Vintage Costuming .5-2 Units

Prerequisite: None
Advisory: ENGWR 51 and ENGRD 15, or ESLW 310 and ESLR 310; or placement through assessment process.
Course Transferable to UC/CSU
Hours: 18 hours LEC; 54 hours LAB

This course covers the factors that influence historical costume design and production. Principles and techniques involved in developing and constructing a period costume. The course will demonstrate these by fabricating their own costumes. The historical period will change each semester. May be taken four times for credit on different topics with a maximum of 8 units. Not open to those who have completed TA 416 on the same topic.

FASHN 342 Fashion Illustration 3 Units

Advisory: ART 300 and 304
Course Transferable to CSU
Hours: 36 hours LEC; 54 hours LAB

This course is an introduction to freehand and computer-generated fashion illustration. Illustration concepts unique to fashion are explored using various freehand drawing techniques and computer design software. Design elements and principles including color, texture, line, balance, and apparel details are incorporated into the illustrations.

FASHN 344 Apparel Line Development 3 Units

Prerequisite: FASHN 342 with a grade of "C" or better
Course Transferable to CSU
Hours: 36 hours LEC; 54 hours LAB

This course applies the skills used in computer-based fashion illustration and design. Emphasis is placed on the principles and elements of design to develop a line of apparel including researching fashion trends, determining a target market, selecting colors and fabrics and designing a line using computer software.

FASHN 357 Apparel Construction I 3 Units

Hours: 36 hours LEC; 54 hours LAB

This course introduces basic apparel construction techniques. Emphasis is on the development of sewing skills, the use and care of equipment, and selection of proper tools and fabric. No previous sewing experience is required.

FASHN 358 Apparel Construction II 3 Units

Prerequisite: FASHN 357 with a grade of "C" or better; or placement through the assessment process.
Course Transferable to CSU
Hours: 36 hours LEC; 54 hours LAB

This course focuses on the application and evaluation of apparel construction techniques, fit, and pattern alterations. New and unique fashion fabrics and shaping materials are introduced. Emphasis is on developing advanced skills in garment construction.

FASHN 359 Knitwear Construction 1.5 Units

Prerequisite: FASHN 357 with a grade of "C" or better
Course Transferable to CSU
Hours: 18 hours LEC; 27 hours LAB

This course introduces basic knitwear apparel construction techniques. Emphasis is on 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.

FASHN 362 Tailoring Techniques 3 Units

Prerequisite: FASHN 358 and 374 with grades of "C" or better
Course Transferable to CSU
Hours: 36 hours LEC; 54 hours LAB

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.

**FASHN 363 Fashion Accessories
and Embellishments 1.5 Units**

Prerequisite: FASHN 357 with a grade of "C" or better
Course Transferable to CSU
Hours: 18 hours LEC; 27 hours LAB

This course provides students with embellishment skills for couture level garments. Topics may include embroidery, beading, fabric manipulation, applique, trims, and threadwork, with an emphasis on up-to-date interpretations of classic techniques.

FASHN 374 Pattern Making and Design 3 Units

Prerequisite: FASHN 357 or TA 430 with a grade of "C" or better
Advisory: ENGRD 116 and ENGWR 102 OR ESLR 320 and ESLW 320, and MATH 25, all with a grade of "C" or better
Course Transferable to CSU
Hours: 36 hours LEC; 54 hours LAB

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.

FASHN 378 Advanced Pattern Making and Design 3 Units

Prerequisite: FASHN 358 and 374 with a grade of "C" or better
Course Transferable to CSU
Hours: 36 hours LEC; 54 hours LAB

This course covers advanced patternmaking techniques including pattern drafting and grading. It focuses on industry methods of duplicating ready-to-wear apparel. Industry fit specifications and construction techniques are refined. Field trips may be required.

FASHN 379 Draping 3 Units

Prerequisite: FASHN 374 with a grade of "C" or better
Course Transferable to CSU
Hours: 36 hours LEC; 54 hours LAB

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.

FASHN 380 Computer Patternmaking 3 Units

Prerequisite: FASHN 378 with a grade of "C" or better
Course Transferable to CSU
Hours: 36 hours LEC; 54 hours LAB

This advanced pattern drafting course introduces industry computer software. It makes comprehensive use of patternmaking skills acquired in previous patternmaking classes. Working from a designer's sketch, patterns are drafted and completed. A production pattern is made according to industry requirements and a muslin sample of the garment is constructed.

FASHN 381 Couture Draping for Eveningwear 3 Units

Prerequisite: FASHN 379 with a grade of "C" or better
Course Transferable to CSU
Hours: 36 hours LEC; 54 hours LAB

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.

FASHN 382 Collection Design and Production 3 Units

Prerequisite: FASHN 358, 374, and 379 with a grade of "C" or better
Corequisite: FASHN 378
Course Transferable to CSU
Hours: 36 hours LEC; 54 hours LAB

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. The role of accessorizing the completed design is explored, including the use of hats, jewelry, shoes, and scarves. Finished collections are presented on the runway in a fashion show. This course may be taken two times for credit, showcasing different design collections.

FASHN 393 Fashion Promotion 3 Units

Course Transferable to CSU
Hours: 36 hours LEC; 54 hours LAB

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. Planning and technical skills are developed through the activity of producing a fashion show. Field trips may be required.

FASHN 395 Visual Merchandising 2 Units

Course Transferable to CSU
Hours: 18 hours LEC; 54 hours LAB

This course introduces current visual merchandising techniques, including equipment, lighting, and materials. The application of principles and practices in arranging and displaying fashion merchandise are covered. This practical experience with showcases, windows, and on-floor displays provides familiarity with professional fashion promotional presentations. Field trips may be required.

FASHN 397 Fashion Retail Buying 3 Units

Course Transferable to CSU
Hours: 54 hours LEC

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.

FASHN 398 Fashion Entrepreneur 3 Units

Advisory: BUS 100
Course Transferable to CSU
Hours: 54 hours LEC

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, marketing, selling techniques, tracking costs, and securing financing. A model business plan is developed by exploring resources necessary to be successful in a fashion business.

FASHN 498 Work Experience in Fashion 1-4 Units

Advisory: ENGRD 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.

Enrollment Limitation: Be in a paid or non-paid internship, volunteer opportunity or job related to fashion. Students are advised to consult with the Fashion Department faculty to review specific certificate and degree work experience requirements.

Course Transferable to CSU
Hours: 300 hours LAB

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 required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to fulfill a weekly orientation and 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. The weekly orientation is required for first time participants, returning participants are not required to attend the orientation but are required to meet with the instructor as needed to complete all program forms and assignments. Work Experience may be taken for a total of 16 units when there are new or expanded learning objectives.

Dean: James Thompson
 Director: Albert Iannone
 Phone: (916) 570-5000
 Counseling: (916) 484-8572

Degree: A.A. - Fire Technology
 Certificate: Fire Technology

Fire Technology Degree and Certificate

Firefighting is a public safety profession that requires special knowledge of safety, rescue, emergency medical operations, and hazardous materials. The Fire Technology A.A. degree focuses on the preparation 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.

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 and assess how it is used by fire departments at emergencies
- compare and contrast the make up of a moderate size fire department with a large fire department and a fully paid department with a volunteer 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 principals; the laws of matter and the conservation of energy; and the chemical reaction called fire
- classify and compare the 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

Career Opportunities

A variety of career opportunities are open to students who successfully complete specific portions of this program of study. Employment opportunities may be found in areas such as firefighter-paramedic, fire investigation, fire prevention, hazardous materials, public education, and firefighting.

Requirements for Degree or Certificate		29 Units
FT 300	Fire Protection Organization	3
FT 301	Fire Prevention Technology.....	3
FT 302	Fire Protection Equipment and Systems	3
FT 303	Building Construction for Fire Protection	3
FT 304	Fire Behavior and Combustion	3
And a minimum of 14 units from the following:		14 ¹
PMED 100	Emergency Medical Technician - Basic (5)	
FT 110	Fire Apparatus (3)	
FT 130	Fire Company Organization and Management (3)	
FT 170	Fire Investigation (3)	
FT 180	Rescue Practices (3)	
FT 190	Fire Tactics and Strategy (3)	
FT 192	Wildland Fire Control (3)	
FT 310	Fire Service Hydraulics (3)	
FT 320	Hazardous Materials (3)	

¹Most fire departments in the State of California require that an applicant be at least a certified EMT, when applying for a firefighter position.

Associate Degree Requirements: 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.

Fire Technology

FT 110 Fire Apparatus 3 Units

Advisory: FT 300
Hours: 54 hours LEC

This course covers various aspects of fire apparatus. Topics include design, typing, specifications, construction, performance capabilities, and maintenance. Also included are warning devices and the utilization of apparatus in fire service emergencies.

FT 130 Fire Company Organization and Management 3 Units

Advisory: Fire 1090 or FT 300; ENGWR 51 and ENGRD 15;
OR ESLR 310 and ESLW 310
Hours: 54 hours LEC

This course explores the organization and management of a fire department and the relationship of government agencies to the fire service. The emphasis of this course is on 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.

FT 170 Fire Investigation**3 Units***Advisory: FT 300**Hours: 54 hours LEC*

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; arrest, detention, and court procedures.

FT 180 Rescue Practices**3 Units***Advisory: FIRE 1090 or FT 300; ENGWR 51 and ENGRD 15; or ESLR 310 and ESLW 310**Hours: 54 hours LEC*

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.

FT 190 Fire Tactics and Strategy**3 Units***Advisory: FT 300**Hours: 54 hours LEC*

This course of instruction is a basic requirement of 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.

FT 192 Wildland Fire Control**3 Units***Advisory: FT 300**Hours: 54 hours LEC*

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.

FT 200 Emergency Medical Technician I**5 Units***Same As: PMED 100**Prerequisite: HEED 323 with a grade of "C" or better**Enrollment Limitation: Not open to students with a current EMT - Basic certificate.**Hours: 72 hours LEC; 72 hours LAB*

This course is designed to provide instruction to the level of Emergency Medical Technician - Basic. Topics include skills necessary to provide emergency medical care at a basic life support level with a fire, ambulance, or other specialized service. This course is conducted in compliance with Title 22, Division 9, Chapter 2 of the California Code of Regulations and Emergency Medical Technician - Basic (EMT-I). A "C" or better is required for certification as Emergency Medical Technician - Basic. Field trips are required. This course may be taken four times for credit.

FT 300 Fire Protection Organization**3 Units***Prerequisite: None**Course Transferable to CSU**Hours: 54 hours LEC*

This course provides an introduction to fire protection, 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, laws and regulations affecting the fire service, fire service nomenclature, specific fire protection functions, basic fire chemistry and physics, introduction to fire protection systems, and introduction to fire strategy and tactics.

FT 301 Fire Prevention Technology**3 Units***Prerequisite: None**Corequisite: FIRE 1090 or FT 300.**Course Transferable to CSU**Hours: 54 hours LEC*

This course provides fundamental information regarding the history and philosophy of fire prevention. Topics include organization and operation of a fire prevention bureau, use of fire and building codes, fire investigation, identification and correction of fire hazards, plan review, report and record keeping, and duties and responsibilities of a fire prevention officer.

FT 302 Fire Protection Equipment and Systems**3 Units***Prerequisite: None**Corequisite: FIRE 1090 or FT 300.**Course Transferable to CSU**Hours: 54 hours LEC*

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, special protection and sprinkler systems, water supply for fire protection, standpipe systems, and portable fire extinguishers.

FT 303 Building Construction for Fire Protection**3 Units***Prerequisite: None**Corequisite: FT 300**Course Transferable to CSU**Hours: 54 hours LEC*

This course is the study of 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 when inspecting buildings, pre-planning fire operations and emergency operations at fires. Topics include wood, ordinary, steel, and concrete construction, principles of fire and smoke growth, and fire resistance construction.

FT 304 Fire Behavior and Combustion**3 Units***Corequisite: FT 300**General Education: AA/AS Area IV**Course Transferable to CSU**Hours: 54 hours LEC*

This course provides the theories and fundamentals of how and why fires start, spread and are controlled. Topics include an in-depth study of fire chemistry and physics, fire characteristics of materials, extinguishing agents, and fire control techniques.

FT 310 Fire Service Hydraulics 3 Units

Advisory: FT 300 and MATH 32

Course Transferable to CSU

Hours: 54 hours LEC

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. Other topics focus on standpipe systems, automatic sprinkler systems, and foam systems.

FT 320 Hazardous Materials 3 Units

Advisory: FT 300; ENGWR 102 and ENGRD 116;

or ESLR 310 and ESLW 310

Course Transferable to CSU

Hours: 54 hours LEC

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.

Area: Humanities
 Dean: Kate Jaques
 Phone: (916) 484-8653
 Counseling: (916) 484-8572

Degree: A.A. - Language Studies

- French
- German
- Italian
- Japanese
- Russian
- Spanish

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.

- SPAN 402 Elementary Spanish (4)
- SPAN 411 Intermediate Spanish (4)
- SPAN 412 Intermediate Spanish (4)

Language Studies Degree

The Language Studies 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 work place. 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.

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.

Requirements for Degree 18 Units

A minimum of 6 units from the following:6

- ENGWR 300 College Composition (3)
- or ENGWR 480 Honors College Composition (3)
- ENGWR 301 College Composition and Literature (3)
- or ENGWR 481 Honors College Composition and Literature (3)
- ENGWR 302 Advanced Composition and Critical Thinking (3)
- or ENGWR 482 Honors Advanced Composition and Critical Thinking (3)
- SPEECH 301 Public Speaking (3)
- SPEECH 331 Group Discussion (3)
- SPEECH 361 The Communication Experience (3)

And a minimum of 12 units from the following: 12

- FREN 401 Elementary French (4)
- FREN 402 Elementary French (4)
- FREN 411 Intermediate French (4)
- FREN 412 Intermediate French (4)
- GERM 401 Elementary German (4)
- GERM 402 Elementary German (4)
- GERM 411 Intermediate German (4)
- GERM 412 Intermediate German (4)
- ITAL 401 Elementary Italian (4)
- ITAL 402 Elementary Italian (4)
- ITAL 411 Intermediate Italian (4)
- JAPAN 401 Elementary Japanese (4)
- JAPAN 402 Elementary Japanese (4)
- JAPAN 405 Japanese Writing (1)
- RUSS 401 Elementary Russian (4)
- RUSS 402 Elementary Russian (4)
- SILA 305 American Sign Language 1 (4)
- SILA 306 American Sign Language 2 (4)
- SILA 315 American Sign Language 3 (4)
- SILA 316 American Sign Language 4 (4)
- SILA 318 American Sign Language 5 (4)
- SPAN 401 Elementary Spanish (4)

French

FREN 351 Conversational French, Elementary 3 Units

Prerequisite: None
Course Transferable to CSU
Hours: 54 hours LEC

This course is designed for students at the elementary or 401 level in French. Conversations and discussions, both controlled and spontaneous, are used to develop basic conversational skills in French. Emphasis will include oral proficiency and development of French cultural awareness.

FREN 352 Conversational French, Elementary 3 Units

Prerequisite: FREN 351 with a grade of "C" or better or two years of high school French.
Course Transferable to CSU
Hours: 54 hours LEC

This course is designed for students at the elementary or 402 level in French. Students will continue the development of oral-aural skills in French through conversations and discussions, both controlled and spontaneous. Emphasis will include oral proficiency and development of French cultural awareness.

FREN 361 Conversational French, Intermediate 3 Units

Prerequisite: FREN 352 with a grade of "C" or better or three years of high school French.
Course Transferable to CSU
Hours: 54 hours LEC

Students will continue the development of oral-aural skills in French through small group conversations and class discussions, both directed and open-ended. Grammar structures, idiomatic expressions, and verb usage will be reviewed. Reports, discussions on current events, assigned readings, and personal interest topics will be used in individual and group presentations.

FREN 362 Conversational French, Intermediate 3 Units

Prerequisite: FREN 361 with a grade of "C" or better or four years of high school French.
Course Transferable to CSU
Hours: 54 hours LEC

Students will continue to develop oral proficiency through emphasis on individual and small group presentation. Simple French readings will be used as a vehicle to continue the study and appreciation of the French culture and folklore through discussions and debates.

FREN 401 Elementary French 4 Units

General Education: AA/AS Area I; IGETC Area 6
Course Transferable to UC/CSU
Hours: 72 hours LEC

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.

FREN 402 Elementary French**4 Units**

Prerequisite: FREN 401 with a grade of "C" or better or 2 years of high school French.

General Education: AA/AS Area I; IGETC Area 6

Course Transferable to UC/CSU

Hours: 72 hours LEC

This course provides continued development of the language and culture of the French-speaking world. It includes further development of listening, speaking, reading, and writing French with emphasis on communicative skills, as well as the fundamentals of French pronunciation and grammar.

FREN 411 Intermediate French**4 Units**

Prerequisite: FREN 402 with a grade of "C" or better or 3 years of high school French.

General Education: AA/AS Area I; CSU Area C2; IGETC Area 3B;

IGETC Area 6

Course Transferable to UC/CSU

Hours: 72 hours LEC

This course includes speaking, listening, and writing practice at the intermediate level of French. It also reviews French grammar, and offers readings of varied texts, many of which explore the historic, artistic and cultural backgrounds of France and French-speaking countries.

FREN 412 Intermediate French**4 Units**

Prerequisite: FREN 411 with a grade of "C" or better or 4 years of high school French.

General Education: AA/AS Area I; CSU Area C2; IGETC Area 3B;

IGETC Area 6

Course Transferable to UC/CSU

Hours: 72 hours LEC

This course is a further exploration of the culture, history and arts of French-speaking countries, begun in French 411. Grammar and syntax are examined as a means to that exploration.

German**GERM 351 Conversational German, Elementary 3 Units**

Prerequisite: None

Course Transferable to CSU

Hours: 54 hours LEC

This course is designed for students at the elementary or 401 level in German. Conversations and discussions, both controlled and spontaneous, are used to develop basic conversational skills in German. Emphasis will include oral proficiency and development of German cultural awareness.

GERM 352 Conversational German, Elementary 3 Units

Prerequisite: GERM 351 with a grade of "C" or better or two years of high school German.

Course Transferable to CSU

Hours: 54 hours LEC

This course is designed for students at the elementary or 402 level in German. Students will continue the development of oral-aural skills in German through conversations and discussions, both controlled and spontaneous. Emphasis will include oral proficiency and development of German cultural awareness.

GERM 401 Elementary German**4 Units**

General Education: AA/AS Area I; IGETC Area 6

Course Transferable to UC/CSU

Hours: 72 hours LEC

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.

GERM 402 Elementary German**4 Units**

Prerequisite: GERM 401 with a grade of "C" or better or two years of high school German

General Education: AA/AS Area I; IGETC Area 6

Course Transferable to UC/CSU

Hours: 72 hours LEC

This course is a further development of the four basic skills: listening, speaking, reading and writing. It is a continued study of pronunciation, fundamentals of German grammar and German culture.

GERM 411 Intermediate German**4 Units**

Prerequisite: GERM 402 with a grade of "C" or better or three years of high school German

General Education: AA/AS Area I; CSU Area C2; IGETC Area 3B;

IGETC Area 6

Course Transferable to UC/CSU

Hours: 72 hours LEC

This course includes speaking, listening, and writing practice at the intermediate level; review of German grammar; reading of varied texts and further study of historical and cultural background.

GERM 412 Intermediate German**4 Units**

Prerequisite: GERM 411 with a grade of "C" or better or four years of high school German.

General Education: AA/AS Area I; CSU Area C2; IGETC Area 3B;

IGETC Area 6

Course Transferable to UC/CSU

Hours: 72 hours LEC

This course continues development of the four basic skills through reading and interpreting various works of German literature, continue writing summaries, reports and short compositions, and studying the historical and cultural background of the German speaking world.

Italian**ITAL 351 Conversational Italian, Elementary 3 Units**

Prerequisite: None

Course Transferable to CSU

Hours: 54 hours LEC

This course is designed for students at the elementary or 401 level in Italian. Conversations and discussions, both controlled and spontaneous, are used to develop basic conversational skills in Italian. Emphasis will include oral proficiency and development of Italian cultural awareness.

ITAL 352 Conversational Italian, Elementary 3 Units

Prerequisite: ITAL 351 with a grade of "C" or better or two years of high school Italian.

Course Transferable to CSU

Hours: 54 hours LEC

This course is designed for students at the elementary or 402 level in Italian. Students will continue the development of oral-aural skills in Italian through conversations and discussions, both controlled and spontaneous. Emphasis will include oral proficiency and development of Italian cultural awareness.

ITAL 401 Elementary Italian**4 Units**

General Education: AA/AS Area I; IGETC Area 6

Course Transferable to UC/CSU

Hours: 72 hours LEC

This course is an introduction to the Italian language and culture of Italy. It includes 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.

ITAL 402 Elementary Italian**4 Units**

Prerequisite: ITAL 401 with a grade of "C" or better; or 2 years of high school Italian.

General Education: AAI/AS Area I; IGETC Area 6

Course Transferable to UC/CSU

Hours: 72 hours LEC

This is the second course in a series of four Italian courses. It continues to develop proficiency in speaking, reading and writing Italian. It also explores the culture of the rich and diverse Italian nation and affords opportunities to make cross-linguistic and cross-cultural comparisons.

ITAL 411 Intermediate Italian**4 Units**

Prerequisite: ITAL 402 with a grade of "C" or better; or 3 years of high school Italian.

General Education: AAI/AS Area I; CSU Area C2; IGETC Area 3B; IGETC Area 6

Course Transferable to UC/CSU

Hours: 72 hours LEC

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.

Japanese**JAPAN 401 Elementary Japanese****4 Units**

General Education: AAI/AS Area I; IGETC Area 6

Course Transferable to UC/CSU

Hours: 72 hours LEC

This class teaches pronunciation, intonation, basic vocabulary and grammar of spoken Japanese. The grammar emphasis is word order, postposition and some conjunction in simple sentences. Students are required to learn Hiragana script. The course includes introduction to Japanese culture.

JAPAN 402 Elementary Japanese**4 Units**

Prerequisite: Japanese 401 with a grade of "C" or better

General Education: AAI/AS Area I; IGETC Area 6

Course Transferable to UC/CSU

Hours: 72 hours LEC

Japanese 402 continues teaching vocabulary, idioms, and grammar including more complex subordinate phrases and clauses. In addition to Hiragana, students are required to learn Katakana and simple Kanji ideographs. Discussions on Japanese culture continue.

JAPAN 405 Japanese Writing**1 Unit**

Prerequisite: JAPAN 401.

Course Transferable to UC/CSU

Hours: 18 hours LEC

This is a course in the study of written scripts in the Japanese language. Fundamentals of the Japanese written language will be taught with an emphasis on reading and writing (Hiragana, Katakana, and Kanji) common in daily usage. This course may be taken twice.

Russian**RUSS 401 Elementary Russian****4 Units**

General Education: AAI/AS Area I; IGETC Area 6

Course Transferable to UC/CSU

Hours: 72 hours LEC

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.

RUSS 402 Elementary Russian**4 Units**

Prerequisite: RUSS 401 with a grade of "C" or better or two years of high school Russian.

General Education: AAI/AS Area I; IGETC Area 6

Course Transferable to UC/CSU

Hours: 72 hours LEC

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.

RUSS 411 Intermediate Russian**4 Units**

Prerequisite: RUSS 402 or three years of high school Russian.

General Education: AAI/AS Area I; CSU Area C; IGETC Area 3B

Course Transferable to UC/CSU

Hours: 72 hours LEC

Intermediate levels listening and speaking practice. Further development of grammatical structures. Reading of modern prose.

Spanish**SPAN 131 Foreign Language Lab:****Integrated Topics in Spanish****.5-1 Units**

Hours: 54 hours LAB

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 SPAN 401, 402, and 411. Students may register until the twelfth week of the semester as space permits and may earn .5 unit of credit for every 27 hours of work. This course is graded credit/no-credit and may be taken four times on different topics up to a maximum of 4 units.

SPAN 311 Conversational Spanish, Intermediate**2 Units**

Prerequisite: SPAN 402 with a grade of "C" or better or two years of high school Spanish

Course Transferable to CSU

Hours: 36 hours LEC

This intermediate-level Spanish course focuses on the further development of oral/aural skills through conversations and discussions, both directed and spontaneous. Emphasis is on fostering oral proficiency and continuing the development of Hispanic cultural awareness. Topics include nature, environment, art, politics, society, people and geography.

- SPAN 312 Conversational Spanish, Intermediate** **2 Units**
Prerequisite: SPAN 311 with a grade of "C" or better; or three years of high school Spanish
Course Transferable to UC/CSU
Hours: 36 hours LEC
 This intermediate-level Spanish course focuses on the further development of oral-aural skills through conversations and discussions, both directed and spontaneous. Emphasis is on fostering oral proficiency and continuing the development of Hispanic cultural awareness. Topics include gender issues, ethical questions, and ancient civilizations.
- SPAN 351 Conversational Spanish, Elementary** **3 Units**
Prerequisite: None
Course Transferable to CSU
Hours: 54 hours LEC
 This course is designed for students at the elementary or 401 level in Spanish. Conversations and discussions, both controlled and spontaneous, are used to develop basic conversational skills in Spanish. Emphasis will include oral proficiency and development of Hispanic cultural awareness.
- SPAN 352 Conversational Spanish, Elementary** **3 Units**
Prerequisite: SPAN 351 with a grade of "C" or better or two years of high school Spanish.
Course Transferable to CSU
Hours: 54 hours LEC
 This course is designed for students at the elementary level in Spanish. Students will continue the development of oral-aural skills in Spanish through conversations and discussions, both controlled and spontaneous. Emphasis will include oral proficiency and development of Spanish cultural awareness.
- SPAN 361 Conversational Spanish, Intermediate** **3 Units**
Prerequisite: Spanish 352 with a grade of "C" or better or three years of high school Spanish.
Course Transferable to CSU
Hours: 54 hours LEC
 Students will continue the development of oral-aural skills in Spanish through small group conversations and class discussions, both directed and open-ended. Grammar structures, idiomatic expressions, and verb usage will be reviewed. Reports, discussions on current events, assigned readings, and personal interest topics will be used in individual and group presentations.
- SPAN 362 Conversational Spanish, Intermediate** **3 Units**
Prerequisite: Spanish 361 with a grade of "C" or better or four years of high school Spanish.
Course Transferable to CSU
Hours: 54 hours LEC
 Students will continue to develop oral proficiency through emphasis on individual and small group presentation. Simple Hispanic readings will be used as a vehicle to continue the study and appreciation of the Hispanic culture and folklore through discussions, and debates.
- SPAN 401 Elementary Spanish** **4 Units**
General Education: AA/AS Area I; IGETC Area 6
Course Transferable to UC/CSU
Hours: 72 hours LEC
 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.
- SPAN 402 Elementary Spanish** **4 Units**
Prerequisite: SPAN 401 with a grade of "C" or better or two years of high school Spanish.
General Education: AA/AS Area I; IGETC Area 6
Course Transferable to UC/CSU
Hours: 72 hours LEC
 This course provides continued development of the language 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.
- SPAN 408 Elementary Spanish I Multimedia Enhancement** **2 Units**
Prerequisite: None
Corequisite: SPAN 401.
Course Transferable to CSU
Hours: 36 hours LEC
 This course is designed at the introductory level using multimedia with focus on listening and speaking skills in Spanish. Opportunities to practice and speak Spanish in both small and large group formats will be provided in the course. Activities further reinforce what is introduced in Spanish 401. May be taken two times for credit. Credit/no credit only.
- SPAN 409 Elementary Spanish II Multimedia Enhancement** **2 Units**
Prerequisite: SPAN 409.
Advisory: SPAN 402.
Course Transferable to CSU
Hours: 36 hours LEC
 This course is designed at the introductory level using multimedia with focus on listening and speaking skills in Spanish. The opportunity to practice and speak Spanish in both small and large group formats will be provided in the course. Activities further reinforce what is introduced in Spanish 402. May be taken two times for credit. Credit/no credit only.
- SPAN 411 Intermediate Spanish** **4 Units**
Prerequisite: SPAN 402 with a grade of "C" or better or three years of high school Spanish.
General Education: AA/AS Area I; CSU Area C2; IGETC Area 3B; IGETC Area 6
Course Transferable to UC/CSU
Hours: 72 hours LEC
 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.

SPAN 412 Intermediate Spanish 4 Units

*Prerequisite: SPAN 411 with a grade of "C" or better
or 4 years of high school Spanish*

*General Education: AAIAS Area I; CSU Area C2; IGETC Area 3B;
IGETC Area 6*

Course Transferable to UC/CSU

Hours: 72 hours LEC

This course continues the development of the four basic skills through reading and discussion of major types of Spanish literature (short story, drama, poetry). Writing of paragraphs and short compositions is included. Students read and discuss the historical and cultural background of the Spanish-speaking world.

**SPAN 418 Intermediate Spanish I
Multimedia Enhancement 2 Units**

Prerequisite: SPAN 409.

Advisory: SPAN 411.

Course Transferable to CSU

Hours: 36 hours LEC

This course is designed at the intermediate level using multimedia with focus on listening and speaking skills in Spanish. Opportunities to practice and speak Spanish in both small and large group formats will be provided in this course. Activities further reinforce what is introduced in Spanish 411. May be taken two times for credit. Credit/no credit only.

**SPAN 419 Intermediate Spanish II
Multimedia Enhancement 2 Units**

Prerequisite: SPAN 418.

Corequisite: SPAN 411.

Course Transferable to CSU

Hours: 36 hours LEC

This course is designed at the intermediate level using multimedia with focus on listening and speaking skills in Spanish. Opportunities to practice and speak Spanish in both small and large group formats will be provided in this course. Activities further reinforce what is introduced in Spanish 411. May be taken two times for credit. Credit/no credit only.

Area: Health & Education
 Dean: Dr. Steven Boyd
 Coordinator: Aron Davis
 Phone: (916) 484-8350 or 484-8432
 Counseling: (916) 484-8572

Degree: A.S. - Funeral Service Education

http://www.arc.losrios.edu/Programs_of_Study/Health_and_Education/Funeral_Service.htm

Funeral Service Education Degree

The Funeral Service Education program is a two-year associate of science degree that prepares students for entry-level positions in funeral service. The program is designed to meet the prerequisites for licensure and employment in the field of funeral service as funeral directors or embalmers.

The Funeral Service Education Program at American River College is accredited by the American Board of Funeral Service Education (ABFSE) 3432 Ashland Avenue, Suite G, St. Joseph, Missouri 64506 (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).

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- choose the correct techniques for each embalming case.
- analyze information given by the family to complete the necessary paperwork for the state of California and other government agencies.
- recommend options for the appropriate disposition of the decedent’s remains.
- contact the appropriate clergy, agencies and organizations for the disposition of the remains.
- evaluate and prioritize the funeral choices of the family in a timely manner.
- create a funeral service for the family.
- participate as a volunteer in a community service activity.

Career Opportunities

The student is eligible to take the state board examination to become a licensed funeral director in California. The student also meets the criteria to take the state embalmer’s examination.

Program Goals and Objectives

- 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
- To enlarge the background and knowledge of students about the funeral service profession
- To educate students in every phase of funeral service, and to help enable them to develop the proficiency and skills necessary for the profession as defined by the American Board of Funeral Service Education, Inc.
- To educate students concerning the responsibilities of the funeral services profession to the community at large
- To emphasize high standards of ethical conduct
- To provide a curriculum at the post secondary level of instruction
- To encourage student and faculty research in the field of funeral service
- To equip students with information related to the social, legal, psychological, religious and public health issues that are associated with death
- To offer students a comprehensive curriculum that will challenge their academic abilities that are consistent with the curriculum required by the American Board of Funeral Service Education, Inc.
- To prepare students for success on the National Board Examination, as well as, state examinations

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, ENGWR 300 or ENGWR 480, FSE 100, and MATH 100 or MATH 104 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.

(continued on next page)

(Funeral Service Education Degree continued)

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 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 need to reapply.

Requirements for Degree 62.5 - 64.5 Units

Pre-FSE Semester	
BIOL 102	Essentials of Human Anatomy and Physiology (4)4
or BIOL 103	Human Anatomy for Funeral Services (4)
ENGWR 300	College Composition (3)3
or ENGWR 480	Honors College Composition (3)
FSE 100	Introduction to Funeral Service.....2
MATH 100	Elementary Algebra (5) 3 - 5
or MATH 104	Elementary Algebra, Part II (3)
1st Semester	
BUS 340	Business Law3
CHEM 130	Chemistry for Funeral Service4
FSE 110	Funeral Directing I2
FSE 160	Funeral Service Law and Ethics3
SPEECH 301	Public Speaking (3)3
or SPEECH 331	Group Discussion (3)
2nd Semester	
BIOL 130	Microbiology for Funeral Services3
FSE 111	Funeral Directing II2
FSE 140	Pathology for Funeral Service2
FSE 155	Merchandising in the Funeral Service Industry3
3rd Semester	
ACCT 101	Fundamentals of College Accounting.....3
FSE 120	Embalming I3
FSE 130	Restorative Art3.5
FSE 150	Funeral Service Management3
4th Semester	
FSE 121	Embalming II2
FSE 170	Funeral Services Counseling3
FSE 297	Internship in Funeral Service Education5
PSYC 390	Psychology of Death and Dying3

Associate Degree Requirements: 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.

Funeral Service Education

FSE 100 Introduction to Funeral Service 2 Units

Corequisite: ENGWR 300
Hours: 36 hours LEC

This course is a survey of the history of the funeral service industry. A comprehensive overview of the field of funeral service is covered. Emphasis is on the role and skills of the funeral service practitioner. The course provides insight into the funeral service industry and the career opportunities available. Field trips are required.

FSE 110 Funeral Directing I 2 Units

Corequisite: BUS 340, CHEM 130, ENGWR 300, and FSE 160
Enrollment Limitation: Acceptance into the Funeral Service Education Program
Hours: 36 hours LEC

This course is designed to introduce the general practices of funeral directing. It introduces 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.

FSE 111 Funeral Directing II 2 Units

Prerequisite: FSE 110 with a grade of "C" or better
Corequisite: BIOL 130, FSE 140, and FSE 155
Hours: 36 hours LEC

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. Also included are procedures for fraternal, military, and celebrity funerals. Field trips may be required.

FSE 120 Embalming I 3 Units

Prerequisite: BIOL 130 and FSE 140 with grades of "C" or better
Corequisite: FSE 130 and 150
Hours: 54 hours LEC

This course is an introduction to 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.

FSE 121 Embalming II 2 Units

Prerequisite: FSE 120 and 130 with grades of "C" or better
Corequisite: FSE 170 and 297
Enrollment Limitation: Students must show proof they are within the final semester of coursework including general education.
Hours: 36 hours LEC

This course is a continuation of FSE 120. It is the study of vascular anatomy, case analysis, the selection and injection of embalming fluids, and treatment of specific conditions requiring special attention.

FSE 130 Restorative Art 3.5 Units

Prerequisite: FSE 140 with a grade of "C" or better.
Corequisite: FSE 120.
Hours: 54 hours LEC; 27 hours LAB

This course introduces the techniques of creating an acceptable physical appearance of the deceased for the benefit of the survivors. Included are the study of facial features, cosmetics, and restorative treatment for a variety of situations faced by the practitioner.

FSE 140 Pathology for Funeral Service 2 Units

*Prerequisite: CHEM 130 with a grade of "C" or better
Corequisite: BIOL 130, FSE 111, and FSE 155
Hours: 36 hours LEC*

This course offers a study of pathological disease conditions and how they affect various parts of the body. Particular conditions that relate to or affect the embalming or restorative art process are emphasized.

FSE 150 Funeral Service Management 3 Units

*Prerequisite: Accounting 101 or 301 and FSE 111 with grades of "C" or better
Corequisite: FSE 120 and 130
Hours: 54 hours LEC*

This course introduces the basic principles of management as they apply to the practice of the funeral profession. The role and function of an effective manager are explored. Emphasis is placed on the management functions of planning, organizing, motivating, directing, and controlling. Specific areas of funeral service practice and managerial guidelines for those areas are covered. Additionally, theory as it relates to funeral service practice is addressed. Field trips may be required.

FSE 155 Merchandising in the Funeral Service Industry 3 Units

*Prerequisite: FSE 110 with a grade of "C" or better
Corequisite: BIOL 130, FSE 111, and FSE 140
Hours: 54 hours LEC*

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 may be required.

FSE 160 Funeral Service Law and Ethics 3 Units

*Corequisite: BUS 340, CHEM 130, ENGWR 300, and FSE 110
Enrollment Limitation: Acceptance into the Funeral Service Education Program.
Hours: 54 hours LEC*

This course introduces law and the judicial system as they pertain to the funeral industry. Topics include: sources of law, the legal status of the 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.

FSE 170 Funeral Services Counseling 3 Units

*Prerequisite: FSE 111 with a grade of "C" or better
Corequisite: FSE 121, FSE 297, and PSYC 390
Hours: 54 hours LEC*

This course examines communication skills and the role of the funeral director as facilitator, counselor, and caregiver. Included are specific communications and counseling techniques as they are applied in funeral service practice. Field trips may be required.

FSE 297 Internship in Funeral Service Education 5 Units

*Prerequisite: ACCT 101, BIOL 130, BUS 340, FSE 111, FSE 130, and FSE 150 with grades of "C" or better
Corequisite: FSE 121, FSE 170, and PSYC 390
Enrollment Limitation: Students must show proof they are within the final semester of coursework including general education courses.
Hours: 18 hours LEC; 216 hours LAB*

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. Students must successfully complete the National Board Exam to receive a passing grade in this course. Students are responsible for fees associated with this exam.

FSE 1000 California Embalmer's Examination Review .5 Units

*Prerequisite: None
Advisory: FSE 120.
Hours: 9 hours LEC*

This course reviews embalming, restorative art, embalming chemistry, pathology, microbiology, safety, and California laws pertaining to the profession of embalming. The course identifies areas to study while preparing for the California Embalmer's Examination. Credit/No Credit only.

FSE 1001 National Board Examination Review 1 Unit

*Prerequisite: FSE 120, 130, and 150 with grades of "C" or better
Hours: 18 hours LEC*

This course reviews the content areas of the Funeral Service National Board Examination. Topics include embalming, restorative art, pathology, microbiology, chemistry, anatomy, funeral directing, merchandising, management, accounting, and funeral and business law. The course also identifies study strategies to use while preparing for the exam. Pass/No Pass only.

Area: Science and Engineering
 Dean: Dr. Rina Roy
 Phone: (916) 484-8107
 Counseling: (916) 484-8572

Degree: A.S. - Geography
 A.S. - Geographic Information Systems
 A.S. - General Science
 Certificate: Geographic Information Systems (GIS)

DEGREES AND CERTIFICATES

Geography Degree

Geography is the science of place and space. Geographers study the relationships among geographic places, natural systems, society, cultural activities, and the interdependence of all these over space.

There are two main branches of geography: human geography and physical geography. Human geography is concerned with the spatial aspects of human existence – how people and their activities are distributed in space, how people use and perceive space, and how people create and sustain the places that make up Earth’s surface. Physical geographers study the physical elements and spatial processes that make up and shape the environment, including energy, air, water, weather, climate, landforms, soils, animals, and plants. Many human and physical geographers also have skills in cartography and Geographic Information Systems (GIS).

Geographers also study the linkages between human activity and natural systems. Geographers were, in fact, among the first scientists to sound the alarm that human-induced changes to the environment were beginning to threaten the balance of life itself. Geographers today are active in the study of global warming, desertification, deforestation, loss of biodiversity, groundwater pollution, flooding, and more.

The A.S. degree in geography provides students with a solid foundation in geography as well as the standard prerequisites for upper division coursework leading to the baccalaureate degree. The required and elective coursework surveys a broad spectrum of physical geography, human geography, GIS, and related disciplines.

Note to Transfer Students:

For students planning to transfer to a four-year school with a major in geography, it is critical that you meet with an ARC counselor to select and plan the courses for your major. Schools can vary widely in terms of the required lower division preparation; the courses that ARC requires for an Associate’s degree in this major may be different from the courses needed for the Bachelor’s degree at the college or university you have chosen. Students can use PROJECT ASSIST (<http://www.assist.org>) to research lower division major requirements at transfer institutions in California.

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, common coordinate systems, and map 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 Opportunities

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 such as natural resource management, environmental consulting, urban and regional planning, and elementary and secondary teaching.

<u>Requirements for Degree</u>	<u>19.5 - 24 Units</u>
GEOG 300 Physical Geography: Exploring Earth’s Environmental Systems.....	3
GEOG 301 Physical Geography Laboratory	1
GEOG 310 Human Geography: Exploring Earth’s Cultural Landscapes	3
GEOG 330 Introduction to Geographic Information Systems (3).....	3
or GEOG 334 Introduction to GIS Software Applications (3)	
GEOG 390 Field Studies in Geography (0.5 -4)	0.5 - 4 ¹
or GEOL 390 Field Studies in Geology (0.5 -4)	
PSYC 330 Introductory Statistics for the Behavioral Sciences (3).....	3 - 4
or STAT 300 Introduction to Probability and Statistics (4)	
A minimum of 6 units from the following:	6²
ANTH 310 Cultural Anthropology (3)	
BIOL 310 General Biology (4)	
or BIOL 305 Natural History (4)	
or BIOL 352 Conservation Biology (3)	
ECON 304 Principles of Microeconomics (3)	
or ECON 302 Principles of Macroeconomics (3)	
GEOL 320 Global Climate Change (3)	
or GEOG 305 Global Climate Change (3)	
GEOG 306 Weather and Climate (3)	
GEOL 325 Environmental Hazards and Natural Disasters (3)	
or GEOG 307 Environmental Hazards and Natural Disasters (3)	
GEOL 330 Introduction to Oceanography (3)	
or GEOG 308 Introduction to Oceanography (3)	
GEOL 331 Introduction to Oceanography Lab (1)	
or GEOG 309 Introduction to Oceanography Lab (1)	
GEOG 320 World Regional Geography (3)	

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(Geography Degree continued)

GEOG 322	Geography of California (3)
GEOL 300	Physical Geology (3)
GEOL 301	Physical Geology Laboratory (1)
HIST 373	History of Mexico (3)
or HIST 367	History of Russia (3)
or HIST 365	Asian Civilization (3)
or HIST 364	Asian Civilization (3)
or HIST 341	History of California: 1879 to Present (3)
or HIST 340	History of California through 1879 (3)
or HIST 305	Women in Western Civilization (3)
or HIST 302	History of Western Civilization (3)
or HIST 300	History of Western Civilization (3)
or HIST 480	History of Western Civilization - Honors (3)
or HIST 481	History of Western Civilization - Honors (3)
HIST 307	History of World Civilizations to 1500 (3)
or HIST 308	History of World Civilizations, 1500 to Present (3)
or HIST 310	History of the United States (3)
or HIST 311	History of the United States (3)
or HIST 320	History of the United States: African-American Emphasis (3)
or HIST 321	History of the United States: African-American Emphasis (3)
or HIST 323	History of the United States: The American Indian Experience (3)
or HIST 325	History of Asian/Pacific Americans (3)
or HIST 327	History of the Chicano/Mexican American (3)
or HIST 330	Women in American History (3)
or HIST 483	History of the United States - Honors (3)
or HIST 484	History of the United States - Honors (3)
HUM 320	Asian Humanities (3)
or HUM 326	Middle Eastern Humanities (3)
or HUM 330	Humanities of the Americas (3)
NATR 300	Introduction to Natural Resource Conservation and Policy (4)
or NATR 303	Energy and Sustainability (3)
PHIL 350	Philosophy of Religion (3)
POLS 310	Introduction to International Relations (3)
SOC 300	Introductory Sociology (3)

¹One half unit of GEOG 390 or GEOL 390 is required for the degree; up to 1.5 additional units of GEOG 390 and/or GEOL 390 may be counted toward the six units of required electives.

²One half unit of GEOG 390 or GEOL 390 is required for the degree; up to 1.5 additional units of GEOG 390 and/or GEOL 390 may be counted toward the six units of required electives.

Associate Degree Requirements: 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.

Geographic Information Systems (GIS) Degree

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.

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 Opportunities

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

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(Geographic Information Systems (GIS) Degree continued)

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.

Requirements for Degree		35.5-38.5 Units
GEOG 330	Introduction to Geographic Information Systems	3
GEOG 334	Introduction to GIS Software Applications	3
GEOG 340	Cartographic Design for GIS.....	3
GEOG 342	Introduction to Remote Sensing and Digital Image Processing	3
GEOG 344	Spatial Analysis and Modeling in GIS.....	3
GEOG 350	Data Acquisition in GIS	3
GEOG 354	Introduction to the Global Positioning System (GPS) ...	1.5
GEOG 360	Database Design and Management in GIS	3
GEOG 362	Advanced Database Design and Management in GIS ...	3
GEOG 375	Introduction to GIS Programming	3
GEOG 380	Advanced GIS Software Applications	3
GEOG 385	Introduction to Web Based GIS Application Development	3
GEOG 498	Work Experience in Geography	1 - 4

Associate Degree Requirements: 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.

General Science Degree

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.

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.
- describe the basic definitions and fundamental theories of an introductory 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.
- recognize ethical components of scientific decision making and apply personal and social values within the process of decision making in scientific endeavors.

Requirements for Degree **18 Units**

A minimum of 18 units from the following: 18
Transfer level science courses including one laboratory course in a physical science and one laboratory course in a biological science. Courses may be selected from anthropology (physical), astronomy, biology, biotechnology, chemistry, geography (physical), geology, natural resources, physical science, physics, and psychology (biological).

Associate Degree Requirements: 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.

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.

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.

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(Geographic Information Systems (GIS) - Certificate continued)**Career Opportunities**

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.

Requirements for Certificate		32.5-35.5 Units
GEOG 330	Introduction to Geographic Information Systems.....	3
GEOG 334	Introduction to GIS Software Applications.....	3
GEOG 340	Cartographic Design for GIS.....	3
GEOG 342	Introduction to Remote Sensing and Digital Image Processing	3
GEOG 344	Spatial Analysis and Modeling in GIS.....	3
GEOG 350	Data Acquisition in GIS	3
GEOG 354	Introduction to the Global Positioning System (GPS)....	1.5
GEOG 360	Database Design and Management in GIS.....	3
GEOG 380	Advanced GIS Software Applications	3
GEOG 498	Work Experience in Geography	1 - 4
And a minimum of 6 units from the following:		6
GEOG 362	Advanced Database Design and Management in GIS (3)	
GEOG 375	Introduction to GIS Programming (3)	
GEOG 385	Introduction to Web Based GIS Application Development (3)	

Geography**GEOG 300 Physical Geography: Exploring Earth's Environmental Systems 3 Units**

Advisory: MATH 32 or 39; and 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.

General Education: AA/AS Area IV; CSU Area B1; IGETC Area 5A

Course Transferable to UC/CSU

Hours: 54 hours LEC

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.

GEOG 301 Physical Geography Laboratory 1 Unit

Corequisite: GEOG 300

Advisory: MATH 32 or 39 with a grade of "C" or better; and 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.

General Education: CSU Area B1; CSU Area B3; IGETC Area 5C

Course Transferable to UC/CSU

Hours: 54 hours LAB

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.

GEOG 305 Global Climate Change 3 Units

Same As: GEOL 320

Advisory: (ENGWR 102 or 103) or ESLW 310, (ENGRD 116 or ESLR 310), and MATH 100 with a grade of "C" or better.

General Education: AA/AS Area IV; CSU Area B1; IGETC Area 5A

Course Transferable to UC/CSU

Hours: 54 hours LEC

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. Field trips may be required. This course is not open to students who have completed GEOL 320.

GEOG 306 Weather and Climate 3 Units

Advisory: MATH 32 or 39; and 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.

General Education: AA/AS Area IV; CSU Area B1; IGETC Area 5A Course Transferable to UC/CSU

Hours: 54 hours LEC

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. Course content 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.

GEOG 307 Environmental Hazards and Natural Disasters 3 Units

Same As: GEOL 325

General Education: AA/AS Area IV; CSU Area B1; IGETC Area 5A Course Transferable to UC/CSU

Hours: 54 hours LEC

This course covers the environmental effects and applications of Earth-related processes. It focuses on earthquakes, volcanic eruptions, landslides, and flooding. 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. The course addresses geology, engineering, environmental studies, natural resources, geography, and science education. One field trip is required. Not open to students who have completed GEOL 325.

GEOG 308 Introduction to Oceanography 3 Units

Same As: GEOL 330

Advisory: GEOG 300 or GEOL 300

General Education: AA/AS Area IV; CSU Area B1; IGETC Area 5A Course Transferable to UC/CSU

Hours: 54 hours LEC

This course is an integrated study of water on Earth emphasizing physical oceanography. Topics include ocean and shoreline processes, plate tectonics, sea floor morphology, types and distribution of seafloor sediment, ocean sediment transport, ocean chemistry, ocean currents, marine resources, and environmental concerns. 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.

GEOG 309 Introduction to Oceanography Lab 1 Unit

Same As: GEOL 331

Corequisite: GEOG 308 or GEOL 330

Advisory: GEOG 300 or GEOL 300

General Education: CSU Area B3; IGETC Area 5C

Course Transferable to UC/CSU

Hours: 54 hours LAB

This course is a laboratory investigation of water on Earth, emphasizing the shape of the sea floor, marine navigation, plate tectonics, sea floor materials and their utilization, the spatial distribution of ocean sediment, the physical and chemical nature of sea water, currents, tides, and marine weather. This course is not open to students who have completed GEOL 331.

GEOG 310 Human Geography: Exploring Earth's Cultural Landscapes 3 Units

Advisory: MATH 32 or 39; and 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.

General Education: AA/AS Area V(b); AA/AS Area VI; CSU Area D5; IGETC Area 4E

Course Transferable to UC/CSU

Hours: 54 hours LEC

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.

GEOG 320 World Regional Geography 3 Units

Advisory: MATH 32 or 39; and 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.

General Education: AA/AS Area V(b); AA/AS Area VI; CSU Area D5; IGETC Area 4E

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course is a global survey of the world's cultural regions. Basic geographic concepts and ideas are used to study and compare people, resources, landscapes, livelihood, economics, and origins across Earth's major geographic regions. The interaction of countries and regions, their global roles, and the conflicting pressures of cultural diversity versus globalization are presented. The widening gap between more developed and less developed countries is integrated throughout the course. Cultural and ethnic diversity, as it pertains to the expanding population of the United States, is evaluated throughout the course.

GEOG 322 Geography of California 3 Units

Advisory: MATH 32 or 39 with a grade of "C" or better; and 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.

General Education: AA/AS Area V(b); AA/AS Area VI; CSU Area D5; IGETC Area 4E

Course Transferable to UC/CSU

Hours: 54 hours LEC

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.

GEOG 330 Introduction to Geographic Information Systems 3 Units

Advisory: CISC 300

General Education: AA/AS Area II(b)

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course provides an introduction to the concepts, methods, and applications of Geographic Information Systems (GIS). Emphasis is on 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.

**GEOG 334 Introduction to GIS
Software Applications 3 Units**

Advisory: CISC 300 and GEOG 330
Course Transferable to CSU
Hours: 50 hours LEC; 12 hours LAB

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. This course may be taken four times using a different software package or version.

GEOG 340 Cartographic Design for GIS 3 Units

Prerequisite: GEOG 330 with a grade of "C" or better
Course Transferable to CSU
Hours: 54 hours LEC

This course provides an introduction to map design and production in the context of Geographic Information Systems (GIS). Emphasis is on 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.

**GEOG 342 Introduction to Remote Sensing
and Digital Image Processing 3 Units**

Prerequisite: GEOG 330 with a grade of "C" or better
Course Transferable to CSU
Hours: 48 hours LEC; 18 hours LAB

This course introduces the principles and concepts of remote sensing and digital image processing as it relates to Geographic Information Systems (GIS). Fundamentals of remote sensing, aerial photography, satellite imagery, photogrammetry, Radio Detection and Ranging (RADAR) and Light Detection and Ranging (LIDAR), and hyperspectral imaging systems are taught. A variety of digital image processing techniques are presented to analyze various remote sensing platforms.

**GEOG 344 Spatial Analysis
and Modeling in GIS 3 Units**

Prerequisite: GEOG 330 with a grade of "C" or better
Course Transferable to CSU
Hours: 54 hours LEC

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). Emphasis is on the investigation of spatial distributions and relationships, and the methods used to answer spatial questions and solve spatial problems. Specific topics include statistical and spatial analysis, geoprocessing, spatial modeling, and map algebra. Additional topics include distance and density surfaces, cluster analysis, surface interpolation and resampling, hydrologic analysis, 3D display/animation, and regression analysis.

GEOG 350 Data Acquisition in GIS 3 Units

Corequisite: GEOG 330
Course Transferable to CSU
Hours: 54 hours LEC

This course is an introduction to 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, creating data utilizing digital cameras and scanners, the utilization of remotely sensed data, and use of the Global Positioning System (GPS).

**GEOG 354 Introduction to the Global
Positioning System (GPS) 1.5 Units**

Advisory: GEOG 300 and 301
Course Transferable to CSU
Hours: 27 hours LEC

This course introduces the Global Positioning System (GPS). Topics include the basic concepts of GPS and hands-on operation of the technology, computer interfaces, Geographic Information Systems (GIS) software, and its use in real-world applications.

**GEOG 360 Database Design and
Management in GIS 3 Units**

Prerequisite: GEOG 330 with a grade of "C" or better
Course Transferable to CSU
Hours: 54 hours LEC

This course examines principles of Geographic Information Systems (GIS) database management and design including conversion fundamentals, modeling techniques, and strategic planning. The needs, alternatives, and pitfalls of spatial database development and conversion are discussed. In addition, this course examines various types of spatial data applicable to GIS, and relevant issues including hardware and software requirements. Particular attention is paid to determining an appropriate methodology, conversion plan, and data quality assurance procedure. This course includes hands-on practical exercises in spatial database management skills.

**GEOG 362 Advanced Database Design
and Management in GIS 3 Units**

Prerequisite: GEOG 360 with a grade of "C" or better
Advisory: CISA 320 and CISC 300
Course Transferable to CSU
Hours: 54 hours LEC

This course extends the concepts presented in GEOG 360. The advanced applications of organizing, inputting, and editing spatial data are examined and implemented, including topology, performance tuning, spatial service management, and data organization. Traditional spatial database topics are rigorously examined in a GIS context, including data integration, warehousing, complex SQL coding, metadata management, and multi-level security.

GEOG 375 Introduction to GIS Programming 3 Units

Prerequisite: GEOG 330 with a grade of "C" or better
Advisory: GEOG 334
General Education: AA/AS Area II(b)
Course Transferable to CSU
Hours: 45 hours LEC; 27 hours LAB

This course provides the concepts and skills necessary to become a proficient GIS applications developer using the Python scripting language, in conjunction with ArcObjects, to develop commonly used GIS procedures and functions. It focuses on common GIS methods for querying, selecting geographic features, working with selection sets, editing tables, and performing geoprocessing operations. This course may be taken four times for credit using a different software version.

GEOG 380 Advanced GIS Software Applications 3 Units

Prerequisite: GEOG 334 with a grade of "C" or better
Course Transferable to CSU
Hours: 50 hours LEC; 12 hours LAB

This course involves the in-depth study of industry standard Geographic Information Systems (GIS) software applications (such as ArcMap and ArcCatalog). GIS software is used to perform advanced geoprocessing in order to solve spatial problems. Emphasis is placed on the creation, modification, analysis, and presentation of spatial data. Specific topics include a review of basic GIS functionality, the use of tools and models to geoprocess data, vector editing and topology, georeferencing and data conversion, network analysis, and data aggregation. This course may be taken four times on a different software package or version.

GEOG 385 Introduction to Web Based GIS Application Development 3 Units

Prerequisite: GEOG 330 with a grade of "C" or better
Advisory: CISW 300
Course Transferable to CSU
Hours: 50 hours LEC; 12 hours LAB

This course introduces the development of Web-based Geographic Information Systems (GIS) solutions. Web-authoring tools and Internet map servers (such as ArcIMS and ArcServer) are used to teach the techniques of Internet mapping and interactive user interface design for GIS applications. Focus is on the theories and principles behind Internet mapping to perform map display and spatial analysis, on GIS application development, and on Web design for Internet mapping systems. This course may be taken four times on a different software package or version.

GEOG 386 Using GIS for Disaster Management 3 Units

Prerequisite: GEOG 330 or 334 with a grade of "C" or better.
Course Transferable to CSU
Hours: 44 hours LEC; 30 hours LAB

This course provides an introduction to the use of GIS as a powerful tool in disaster management. Techniques and skills in the application of spatial information and analysis technologies to the problems of disaster and complex emergency management are investigated. GIS software and GPS technology are used to visualize, analyze, and represent spatial data in the protection of life, property, and critical infrastructure from natural disasters. Key GIS applications include natural hazard identification and mapping, multi-hazard analysis, shelter planning, mitigation, damage assessment, and recovery monitoring.

GEOG 390 Field Studies in Geography .5-4 Units

Same As: GEOL 390
Course Transferable to CSU
Hours: 24 hours LEC; 144 hours LAB

This course involves field study of selected locations of geographic interest. Course content varies according to field trip destination but may include topics in physical geography (e.g., plant and animal communities, climate and weather, geology and geomorphology, natural hazards, environmental impacts, etc.), human geography (e.g., cultural landscapes, economic activities, transportation issues, land use patterns, etc.), and/or introduction to tools and techniques used for geographic 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. This course may be taken 4 times using different field trip destinations.

GEOG 498 Work Experience in Geography 1-4 Units

Enrollment Limitation: Be in a paid or non-paid internship, volunteer opportunity, or job related to geography or Geographic Information Systems (GIS). Students are advised to consult with the Geography Department faculty to review specific certificate and degree work experience requirements.
General Education: AA/AS Area III(b)
Course Transferable to CSU
Hours: 300 hours LAB

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 required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Rigor is ensured through the development of appropriate level learning objectives set between the student and the employer. During the course of the semester, the student is required to fulfill a weekly orientation and 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. The weekly orientation is required for first time participants; returning participants are not required to attend the orientation but are required to meet with the instructor as needed to complete all program forms and assignments. GEOG 498 may be taken for a total of 16 units when there are new or expanded learning objectives. Students can earn a total of 16 Work Experience units.

Area: Science and Engineering
 Dean: Dr. Rina Roy
 Phone: (916) 484-8107
 Counseling: (916) 484-8572

Degree: A.S. for Transfer - Geology
 A.S. - General Science

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.

Career Opportunities

- Geologist • Geophysicist • Groundwater Geologist
- Oil and Gas Geologist • Mineralogist • Paleontologist
- Marine Geologist • Environmental Geologist
- Photogeologist • Seismologist • Consulting Geologist
- Soils Engineer • Land Use Planner • Volcanologist
- Planetary Geologist • Geochemist • Economic Geologist
- Mining Geologist • Hydrologist • Government Geologist
- Coal Geologist • Glacial Geologist
- Vertebrate Paleontologist • Geology Professor
- Earth Science Teacher • Forensic Geologist

Geology A.S. for Transfer Degree

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) 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 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 Opportunities

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.

Requirements for Degree		28 Units
CHEM 400	General Chemistry.....	5
CHEM 401	General Chemistry.....	5
GEOL 300	Physical Geology.....	3
GEOL 301	Physical Geology Laboratory.....	1
GEOL 310	Historical Geology.....	3
GEOL 311	Historical Geology Laboratory.....	1
MATH 400	Calculus I.....	5
MATH 401	Calculus II.....	5

Associate in Science for Transfer Degree Requirements: 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) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

General Science Degree

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.

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.
- describe the basic definitions and fundamental theories of an introductory 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.
- recognize ethical components of scientific decision making and apply personal and social values within the process of decision making in scientific endeavors.

Requirements for Degree 18 Units

A minimum of 18 units from the following: 18
Transfer level science courses including one laboratory course in a physical science and one laboratory course in a biological science. Courses may be selected from anthropology (physical), astronomy, biology, biotechnology, chemistry, geography (physical), geology, natural resources, physical science, physics, and psychology (biological).

Associate Degree Requirements: 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.

Geology

GEOL 300 Physical Geology 3 Units

Advisory: MATH 100 and ENGRD 116, ENGWR 51, or ESLW 310; or placement through the assessment process.
General Education: AA/AS Area IV; CSU Area B1; IGETC Area 5A
Course Transferable to UC/CSU
Hours: 54 hours LEC

This in-depth 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.

GEOL 301 Physical Geology Laboratory 1 Unit

Corequisite: GEOL 300
General Education: CSU Area B1; CSU Area B3; IGETC Area 5C
Course Transferable to UC/CSU
Hours: 54 hours LAB

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.

GEOL 305 Earth Science 3 Units

Advisory: MATH 32 or 39; and 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.
General Education: AA/AS Area IV; CSU Area B1; IGETC Area 5A
Course Transferable to UC/CSU
Hours: 54 hours LEC

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.

GEOL 306 Earth Science Laboratory 1 Unit

Corequisite: GEOL 305
General Education: CSU Area B3; IGETC Area 5C
Course Transferable to UC/CSU
Hours: 54 hours LAB

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.

GEOL 310 Historical Geology 3 Units

Advisory: GEOL 300 or 305 ; (ENGWR 102 or 103) or ESLW 310, (ENGRD 116 or ESLR 310), and MATH 100 with a grade of "C" or better.
General Education: AA/AS Area IV; CSU Area B1; IGETC Area 5A
Course Transferable to UC/CSU
Hours: 54 hours LEC

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. Assembly and breakup of supercontinents, growth and erosion of mountains and changing sea levels are studied. The evolution of 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.

GEOL 311 Historical Geology Laboratory 1 Unit

Corequisite: GEOL 310
Advisory: GEOL 300 and 301
General Education: CSU Area B3; IGETC Area 5C
Course Transferable to UC/CSU
Hours: 54 hours LAB

This course is a laboratory study in historical geology. Principles of physical geology and paleontology are applied in the reconstruction of the history of the earth. Exercises in stratigraphy, paleontology and interpretation of geologic maps are utilized. Field trips may be required.

GEOL 320 Global Climate Change 3 Units

Same As: GEOG 305

Advisory: (ENGWR 102 or 103) or ESLW 310, (ENGRD 116 or ESLR 310), and MATH 100 with a grade of "C" or better.

General Education: AA/AS Area IV; CSU Area B1; IGETC Area 5A

Course Transferable to UC/CSU

Hours: 54 hours LEC

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. Field trips may be required.

GEOL 325 Environmental Hazards and Natural Disasters 3 Units

Same As: GEOG 307

General Education: AA/AS Area IV; CSU Area B1; IGETC Area 5A

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course covers the environmental effects and applications of Earth-related processes. It focuses on earthquakes, volcanic eruptions, landslides, and flooding. 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. The course addresses geology, engineering, environmental studies, natural resources, geography, and science education. One field trip is required. Not open to students who have completed GEOG 307.

GEOL 330 Introduction to Oceanography 3 Units

Same As: GEOG 308

Advisory: GEOG 300 or GEOL 300

General Education: AA/AS Area IV; CSU Area B1; IGETC Area 5A

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course is an integrated study of water on earth emphasizing physical oceanography. Topics include ocean and shoreline processes, plate tectonics, sea floor morphology, types and distribution of seafloor sediment, ocean sediment transport, ocean chemistry, ocean currents, marine resources, and environmental concerns. 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.

GEOL 331 Introduction to Oceanography Lab 1 Unit

Same As: GEOG 309

Corequisite: GEOG 308 or GEOL 330; GEOL 330 or GEOG 308

Advisory: GEOG 301 or GEOL 301

General Education: CSU Area B3; IGETC Area 5C

Course Transferable to UC/CSU

Hours: 54 hours LAB

This course is a laboratory investigation of water on Earth, emphasizing the shape of the sea floor, marine navigation, plate tectonics, sea floor materials and their utilization, the spatial distribution of ocean sediment, the physical and chemical nature of sea water, currents, tides, and marine weather. This course is not open to students who have completed GEOG 309.

GEOL 342 Geology of the National Parks 3 Units

Advisory: GEOL 300 and 301

General Education: AA/AS Area IV; CSU Area B1; IGETC Area 5A

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course introduces Earth's geologic story as revealed by the rocks and landscapes in our National Parks. Attention is on how natural earth processes have shaped our National Parks and National Monuments. This course covers geological processes, such as volcanism, plutonism, deformation, sedimentation, glaciation, shoreline and fluvial activities, as displayed in our western parks and monuments as well as the methods used to study them. Field trips may be required.

GEOL 345 Geology of California 3 Units

Advisory: MATH 32 or 39; and 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.

General Education: AA/AS Area IV; CSU Area B1; IGETC Area 5A

Course Transferable to UC/CSU

Hours: 54 hours LEC

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.

GEOL 390 Field Studies in Geology .5-4 Units

Same As: GEOG 390

Course Transferable to CSU

Hours: 24 hours LEC; 144 hours LAB

This course involves field trips to 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. This course may be taken 4 times using different field trip destinations.

Area: Behavioral & Social Sciences
 Dean: Carol Pottorff
 Phone: (916) 484-8283
 Counseling: (916) 484-8572

A.A. Gerontology Degree and Certificate concentrations:
 Business
 Case Management/Social Services
 Environmental Design
 Health Care
 Recreation
 Social Policy/Advocacy
 Certificates of Completion offered by the department:
 Activity Coordinator Certification
 Social Service Designee

The Gerontology program at American River College offers continuing education 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 is co-host for the Alzheimer's Aid Society annual conference, as well as co-sponsoring 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.

DEGREES AND CERTIFICATES

Gerontology Degrees/Certificates (Core Requirements)

Core Requirements for Degree or Certificate	24 Units
GERON 300 Sociology of Aging (3)	3
or SOC 335 Sociology of Aging (3)	
GERON 302 Psychology of Aging: Adult Development and Aging (3)	3
or PSYC 374 Psychology of Aging: Adult Development and Aging (3)	
GERON 311 Social Services Designee:	
Legal Issues and End-of-Life Decisions	1
GERON 330 Communicating with and Validating Older Adults	3
GERON 334 Reminiscence Therapy (3)	3
or PSYC 379 Reminiscence Therapy (3)	
GERON 335 Wellness for Older Adults	3
GERON 340 Nutrition for Healthy Aging (3)	3
or NUTRI 324 Nutrition for Healthy Aging (3)	
GERON 360 Ethnic Diversity and Aging	0.5
GERON 362 Biology of Aging	0.5
GERON 366 Coping with Death and Related Bereavement	0.5
GERON 368 Mental Health and Aging	0.5
GERON 490 Aging Policy and Practice	3

Gerontology: Business Degree

The Gerontology: Business 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. The focus is 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.

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
- analyze the role of nutrition in the aging process and its impact on health
- 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 Opportunities

Entry-level positions with private industry, government and non-profit agencies providing goods and services to senior adults.

Gerontology: Business Degree Requirements 36 Units

Core Requirements	24
And a minimum of 3 units from the following:	3
GERON 498 Work Experience in Gerontology (1 - 4)	
And a minimum of 9 units from the following:	9
ACCT 101 Fundamentals of College Accounting (3)	
or ACCT 301 Financial Accounting (4)	
BUS 105 Business Mathematics (3)	
or BUS 110 Business Economics (3)	
BUS 320 Concepts in Personal Finance (3)	
or ECON 320 Concepts in Personal Finance (3)	
BUS 330 Managing Diversity in the Workplace (3)	
BUS 340 Business Law (3)	
GERON 304 Ethical Issues and Client's Rights (3)	
or HSER 310 Ethical Issues and Client's Rights (3)	
MGMT 300 Introduction to Leadership in Action(3)	
or MGMT 362 Techniques of Management (3)	
MGMT 304 Introduction to Management Functions (3)	

Associate in Arts Degree: 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.

Gerontology: Case Management/ Social Services Degree

The Gerontology: Case Management/Social Services 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. The focus is on preparation for entry-level positions with private industry, government and non-profit agencies providing case management and/or social services to senior adults and/or preparation for further gerontology/case management/social services study at a four-year college or university.

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
- analyze the role of nutrition in the aging process and its impact on health
- 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 Opportunities

Entry-level positions with private industry, government and non-profit agencies providing case management and/or social services to senior adults.

Case Management/Social Services Degree Requirements 36 Units

Core Requirements	24
And a minimum of 3 units from the following:	3
GERON 498 Work Experience in Gerontology (1 - 4)	
And a minimum of 9 units from the following:	9
GERON 310 Social Service Designee: Role and Responsibility (2.5)	
GERON 312 Social Services Designee: Fieldwork (1)	
HSER 300 Introduction to Human Services (3)	
HSER 310 Ethical Issues and Client's Rights (3)	
or GERON 304 Ethical Issues and Client's Rights (3)	
HSER 330 Issues of Diverse Populations (3)	
or PSYC 365 Issues of Diverse Populations (3)	
HSER 340 Introduction to Chemical Dependency (3)	
or PSYC 400 Introduction to Chemical Dependency (3)	
PSYC 390 Psychology of Death and Dying (3)	

Associate in Arts Degree: 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.

Gerontology: Environmental Design Degree

The Gerontology: Environmental Design 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. The focus is 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.

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
- analyze the role of nutrition in the aging process and its impact on health
- 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 Opportunities

Entry-level positions with private industry, government and non-profit agencies providing design services to senior adults.

Gerontology: Environmental Design Degree Requirements 36 Units

Core Requirements	24
And a minimum of 3 units from the following:	3
GERON 498 Work Experience in Gerontology (1 - 4)	
And a minimum of 9 units from the following:	9 ¹
ART 320 Design: Fundamentals (3)	
IDES 300 Fundamentals of Interior Design (3)	
IDES 330 Beginning Interior Design Studio (3)	
IDES 334 Interior Environment and Space Planning (3)	
¹ Prerequisite is required for IDES 334	

Associate in Arts Degree: 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.

Gerontology: Health Care Degree

The Gerontology: Health Care 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. The focus is 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.

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
- analyze the role of nutrition in the aging process and its impact on health
- 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 Opportunities

Entry-level positions with private industry, government and non-profit agencies providing health services to senior adults.

Gerontology: Health Care Degree Requirements **36 Units**

Core Requirements24

And a minimum of 3 units from the following:3

GERON 498 Work Experience in Gerontology (1 - 4)

And a minimum of 9 units from the following: 9¹

AH 110 Medical Language for Health-Care Providers (3)

BIOL 102 Essentials of Human Anatomy and Physiology (4)

or BIOL 115 Basic Anatomy and Physiology (3)

GERON 304 Ethical Issues and Client's Rights (3)

or HSER 310 Ethical Issues and Client's Rights (3)

NURSE 100 Nurse Assistant (6)

NURSE 101 Home Health Aide (2)

KINES 312 Theory and Techniques of Adapted Physical Education (3)

KINES 313 Laboratory in Adapted Physical Education (1 - 2)

PSYC 390 Psychology of Death and Dying (3)

SLPA 300 Introduction to Communication Disorders (3)

¹Prerequisite required for NURSE 101.

Associate in Arts Degree: 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.

Gerontology: Recreation Degree

The Gerontology: Recreation 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. The focus is 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.

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
- analyze the role of nutrition in the aging process and its impact on health
- 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 Opportunities

Entry-level positions with private industry, government and non-profit agencies providing recreational services to senior adults.

Gerontology: Recreation Degree Requirements **36 Units**

Core Requirements24

And a minimum of 3 units from the following:3

GERON 498 Work Experience in Gerontology (1 - 4)

And a minimum of 9 units from the following:9

GERON 430 Activity Coordinator Certification (6.5)

KINES 302 Introduction to Physical Education (3)

KINES 312 Theory and Techniques of Adapted Physical Education (3)

KINES 405 Special Populations (2)

KINES 408 Administration of Fitness Programs (2)

Associate in Arts Degree: 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.

Gerontology: Social Policy/Advocacy Degree

The Gerontology: Social Policy/Advocacy 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. The focus is 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.

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
- analyze the role of nutrition in the aging process and its impact on health
- 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 Opportunities

Entry-level positions with private industry, government and non-profit agencies providing input to social policy and advocacy for senior adults.

Gerontology: Advocacy Concentration Requirements 36 Units

Core Requirements	24
And a minimum of 3 units from the following:	3
GERON 498 Work Experience in Gerontology (1 - 4)	
And a minimum of 9 units from the following:	9
GERON 304 Ethical Issues and Client's Rights (3)	
or HSER 310 Ethical Issues and Client's Rights (3)	
MGMT 362 Techniques of Management (3)	
POLS 304 Introduction to Government: California (3)	
SPEECH 301 Public Speaking (3)	

Gerontology: Social Policy Concentration Requirements 36 Units

Core Requirements	24
And a minimum of 3 units from the following:	3
GERON 498 Work Experience in Gerontology (1 - 4)	
And a minimum of 9 units from the following:	9
GERON 304 Ethical Issues and Client's Rights (3)	
or HSER 310 Ethical Issues and Client's Rights (3)	
POLS 301 Introduction to Government: United States (3)	
HSER 330 Issues of Diverse Populations (3)	
or PSYC 365 Issues of Diverse Populations (3)	
SPEECH 301 Public Speaking (3)	

Associate Degree Requirements: 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.

Gerontology: Business Certificate

The Gerontology: Business 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. The focus is on preparation for entry-level positions with private industry, government and non-profit agencies providing goods and services to senior adults.

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
- analyze the role of nutrition in the aging process and its impact on health
- 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 Opportunities

Entry-level positions with private industry, government and non-profit agencies providing goods and services to senior adults.

Gerontology: Business Certificate 36 Units

Core Requirements	24
And a minimum of 3 units from the following:	3
GERON 498 Work Experience in Gerontology (1 - 4)	
And a minimum of 9 units from the following:	9
ACCT 101 Fundamentals of College Accounting (3)	
or ACCT 301 Financial Accounting (4)	
BUS 105 Business Mathematics (3)	
or BUS 110 Business Economics (3)	
BUS 320 Concepts in Personal Finance (3)	
or ECON 320 Concepts in Personal Finance (3)	
BUS 330 Managing Diversity in the Workplace (3)	
BUS 340 Business Law (3)	
GERON 304 Ethical Issues and Client's Rights (3)	
or HSER 310 Ethical Issues and Client's Rights (3)	
MGMT 300 Introduction to Leadership in Action (3)	
or MGMT 362 Techniques of Management (3)	
MGMT 304 Introduction to Management Functions (3)	

Gerontology: Case Management/ Social Services Certificate

The Gerontology: Case Management/Social Services 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. The focus is on preparation for entry-level positions with private industry, government and non-profit agencies providing case management and/or social services to senior adults.

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
- analyze the role of nutrition in the aging process and its impact on health
- 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 Opportunities

Entry-level positions with private industry, government and non-profit agencies providing case management and/or social services to senior adults.

Gerontology: Case Management/Social Services Certificate 36 Units

Core Requirements	24
And a minimum of 3 units from the following:	3
GERON 498 Work Experience in Gerontology (1 - 4)	
And a minimum of 9 units from the following:	9
GERON 310 Social Service Designee: Role and Responsibility (2.5)	
GERON 312 Social Services Designee: Fieldwork (1)	
HSER 300 Introduction to Human Services (3)	
HSER 310 Ethical Issues and Client's Rights (3)	
or GERON 304 Ethical Issues and Client's Rights (3)	
HSER 330 Issues of Diverse Populations (3)	
or PSYC 365 Issues of Diverse Populations (3)	
HSER 340 Introduction to Chemical Dependency (3)	
or PSYC 400 Introduction to Chemical Dependency (3)	
PSYC 390 Psychology of Death and Dying (3)	

Gerontology: Environmental Design Certificate

The Gerontology: Environmental Design 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. The focus is on preparation for entry-level positions with private industry, government and non-profit agencies providing design services to senior adults.

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
- analyze the role of nutrition in the aging process and its impact on health
- 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 Opportunities

Entry-level positions with private industry, government and non-profit agencies providing environmental design services to senior adults.

Gerontology: Environmental Design Certificate 36 Units

Core Requirements	24
And a minimum of 3 units from the following:	3
GERON 498 Work Experience in Gerontology (1 - 4)	
And a minimum of 9 units from the following:	9 ¹
ART 320 Design: Fundamentals (3)	
IDES 300 Fundamentals of Interior Design (3)	
IDES 330 Beginning Interior Design Studio (3)	
IDES 334 Interior Environment and Space Planning (3)	
¹ Prerequisite required for IDES 334	

Gerontology: Health Care Certificate

The Gerontology: Health Care 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. The focus is on preparation for entry-level positions with private industry, government and non-profit agencies providing health services to senior adults.

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

(continued on next page)

(Gerontology: Health Care Certificate continued)

- 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
- analyze the role of nutrition in the aging process and its impact on health
- 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 Opportunities

Entry-level positions with private industry, government and non-profit agencies providing health services to senior adults.

Gerontology: Health Care Certificate 36 Units

Core Requirements24

And a minimum of 3 units from the following:3

GERON 498 Work Experience in Gerontology (1 - 4)

And a minimum of 9 units from the following: 9¹

AH 110 Medical Language for Health-Care Providers (3)

BIOL 102 Essentials of Human Anatomy and Physiology (4)

or BIOL 115 Basic Anatomy and Physiology (3)

GERON 304 Ethical Issues and Client's Rights (3)

or HSER 310 Ethical Issues and Client's Rights (3)

NURSE 100 Nurse Assistant (6)

NURSE 101 Home Health Aide (2)

KINES 312 Theory and Techniques of Adapted Physical Education (3)

KINES 313 Laboratory in Adapted Physical Education (1 - 2)

PSYC 390 Psychology of Death and Dying (3)

SLPA 300 Introduction to Communication Disorders (3)

¹Prerequisite required for NURSE 101.

Gerontology: Recreation Certificate

The Gerontology: Recreation 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. The focus is on preparation for entry-level positions with private industry, government and non-profit agencies providing recreational services to senior adults.

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

- analyze the role of nutrition in the aging process and its impact on health
- 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 Opportunities

Entry-level positions with private industry, government and non-profit agencies providing recreational services to seniors.

Gerontology: Recreation Certificate 36 Units

Core Requirements24

And a minimum of 3 units from the following:3

GERON 498 Work Experience in Gerontology (1 - 4)

And a minimum of 9 units from the following:9

GERON 430 Activity Coordinator Certification (6.5)

KINES 302 Introduction to Physical Education (3)

KINES 312 Theory and Techniques of Adapted Physical Education (3)

KINES 405 Special Populations (2)

KINES 408 Administration of Fitness Programs (2)

Gerontology: Social Policy/Advocacy Certificate

The Gerontology: Social Policy/Advocacy 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. The focus is on preparation for entry-level positions with private industry, government and non-profit agencies providing input to social policy and advocacy for senior adults.

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
- analyze the role of nutrition in the aging process and its impact on health
- 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 and advocacy situations

Career Opportunities

Entry-level positions with private industry, government and non-profit agencies providing input to social policy and advocacy for senior adults.

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(Gerontology: Social Policy/Advocacy Certificate continued)

Gerontology: Advocacy Concentration Certificate		36 Units
Core Requirements		24
And a minimum of 3 units from the following:		3
GERON 498	Work Experience in Gerontology (1 - 4)	
And a minimum of 9 units from the following:		9
GERON 304	Ethical Issues and Client's Rights (3)	
or HSER 310	Ethical Issues and Client's Rights (3)	
MGMT 362	Techniques of Management (3)	
POLS 304	Introduction to Government: California (3)	
SPEECH 301	Public Speaking (3)	

Gerontology: Social Policy Concentration Certificate		39 Units
Core Requirements		30
And a minimum of 3 units from the following:		3
GERON 498	Work Experience in Gerontology (1 - 4)	
And a minimum of 9 units from the following:		9
GERON 304	Ethical Issues and Client's Rights (3)	
or HSER 310	Ethical Issues and Client's Rights (3)	
POLS 301	Introduction to Government: United States (3)	
HSER 330	Issues of Diverse Populations (3)	
or PSYC 365	Issues of Diverse Populations (3)	
SPEECH 301	Public Speaking (3)	

**CERTIFICATES OF COMPLETION
(offered by the department)****Activity Coordinator Certification Certificate**

The Activity Coordinator certificate provides a comprehensive overview of the role and duties of an activity coordinator in a long-term care facility. The certificate meets State of California, Title 22 (Department of Social Service) requirements for activity coordinator certification.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- articulate the role and responsibilities of the activity coordinator 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 relevancy to an activity program
- develop appropriate activities and monthly activity calendar to meet the needs of individual residents in long-term care

Career Opportunities

Activity Coordinator in long-term care, assisted living, and retirement facilities.

Requirements for Certificate		6.5 Units
GERON 430	Activity Coordinator Certification	6.5

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.

Student Learning Outcomes

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 Opportunities

Social Services Designee in long-term care, assisted living, and retirement facilities.

Requirements for Certificate		4.5 Units
GERON 310	Social Service Designee: Role and Responsibility	2.5
GERON 311	Social Services Designee: Legal Issues and End-of-Life Decisions	1
GERON 312	Social Services Designee: Fieldwork	1

Gerontology**GERON 201 Leadership and Team Building
in Long-term Care Facilities .5 Units**

Hours: 9 hours LEC

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.

**GERON 202 Professionalism and Ethics
in Long-term Care .5 Units**

Hours: 9 hours LEC

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.

**GERON 203 Communication for Supervision
in Long-term Care .5 Units**

Hours: 9 hours LEC

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.

GERON 204 Alzheimer's Disease and Other Dementias .5 Units*Hours: 9 hours LEC*

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.

GERON 205 Validation: Theory and Practice .5 Units*Hours: 9 hours LEC*

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.

GERON 206 Dementia: Behavior Management .5 Units*Hours: 9 hours LEC*

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.

GERON 207 Elder Abuse .5 Units*Hours: 9 hours LEC*

This course is an overview of elder abuse. It focuses on occurrence, prevention strategies, and resources to prevent elder abuse. Pass/No Pass only.

GERON 208 Stress Management: New Approaches .5 Units*Hours: 9 hours LEC*

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.

GERON 209 Strategies for Caregivers: Effectively Caring for the Elderly in the Community .5 Units*Hours: 9 hours LEC*

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.

GERON 210 Aging Experience in Asian Families .5 Units*Hours: 9 hours LEC*

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.

GERON 211 Aging Experience in Hispanic Families .5 Units*Hours: 9 hours LEC*

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.

GERON 212 Aging Experience in African-American Families .5 Units*Hours: 9 hours LEC*

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.

GERON 213 Aging Experience in Native American Families .5 Units*Hours: 9 hours LEC*

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 members of sovereign nations, and tribal and governmental institutions that impact their lives, family relationships, and caregiving. Pass/No Pass only.

GERON 220 RCFE Administrator Training 2.5 Units*Hours: 45 hours LEC*

This course covers the State requirements to be licensed as an administrator of a residential care facility for the elderly (RCFE). Topics include: philosophy, mission, and operations of an 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.

GERON 271 Dementia: Behaviors and Activity .5 Units*Hours: 9 hours LEC*

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.

GERON 280 Home Adaptations for Safety and Independence .5 Units*Hours: 9 hours LEC*

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.

GERON 300 Sociology of Aging 3 Units

Same As: SOC 335

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.

General Education: AA/AS Area III(b); CSU Area E1

Course Transferable to UC/CSU

Hours: 54 hours LEC

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.

GERON 302 Psychology of Aging: Adult Development and Aging 3 Units

Same As: PSYC 374

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.

General Education: AA/AS Area V(b); CSU Area E1

Course Transferable to UC/CSU

Hours: 54 hours LEC

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.

GERON 304 Ethical Issues and Client's Rights 3 Units

Same As: HSER 310

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.

Course Transferable to CSU

Hours: 54 hours LEC

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.

GERON 310 Social Service Designee: Role and Responsibility 2.5 Units

Prerequisite: None

Advisory: ENGWR 102 or ENGWR 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.

Course Transferable to CSU

Hours: 45 hours LEC

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.

GERON 311 Social Services Designee: Legal Issues and End-of-Life Decisions 1 Unit

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.

Course Transferable to CSU

Hours: 18 hours LEC

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.

GERON 312 Social Services Designee: Fieldwork 1 Unit

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.

Course Transferable to CSU

Hours: 18 hours LEC

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.

GERON 330 Communicating with and Validating Older Adults 3 Units

Same As: PSYC 378

Prerequisite: GERON 302 or PSYC 374 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.

Enrollment Limitation: Current tuberculosis clearance

General Education: AA/AS Area III(b)

Course Transferable to CSU

Hours: 54 hours LEC

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. This class is held off campus in a long-term care setting. For online students, supervision by an activity professional in a long-term care setting is required. It is not open to students who have completed PSYC 378.

GERON 334 Reminiscence Therapy 3 Units

Same As: PSYC 379

Prerequisite: GERON 302 or PSYC 374 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.

General Education: AA/AS Area III(b)

Course Transferable to CSU

Hours: 54 hours LEC

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. Off-campus supervision by an activity professional in a long-term care setting is required for the internet modality. It is not open to students who have completed PSYC 379.

GERON 335 Wellness for Older Adults 3 Units

Prerequisite: None

Advisory: ENGWR 102 or ENGWR 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.

Course Transferable to CSU

Hours: 54 hours LEC

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.

GERON 340 Nutrition for Healthy Aging 3 Units

Same As: NUTRI 324

Advisory: ENGWR 102 or 103, and ENGRD 116, or ESLR 320, ESLL 320, and ESLW 320.

Course Transferable to CSU

Hours: 54 hours LEC

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. Some additional topics include 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.

GERON 360 Ethnic Diversity and Aging .5 Units

Prerequisite: None

Course Transferable to CSU

Hours: 9 hours LEC

This course is an overview of ethnicity as a factor in the aging process. Emphasis is on values, beliefs and culture, and their impact on the design and delivery of senior services. Credit/No Credit only.

GERON 362 Biology of Aging .5 Units

Prerequisite: None

Course Transferable to CSU

Hours: 9 hours LEC

This course is an overview of the biology of aging and health of the older adult. It focuses on chronic and acute illnesses, normal aging changes, sexuality, nutrition, and strategies for good health. Credit/No Credit only.

GERON 366 Coping with Death and Related Bereavement .5 Units

Prerequisite: None

Course Transferable to CSU

Hours: 9 hours LEC

This course is an exploration of our societal and personal views of death, dying, and bereavement with the focus on ways in which our Western society treats the subject of death. Topics include right-to-die issues and the theoretical stages of death and bereavement. Credit/No Credit only.

GERON 368 Mental Health and Aging .5 Units

Prerequisite: None

Course Transferable to CSU

Hours: 9 hours LEC

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. Credit/No Credit only.

GERON 378 Body Mechanics and Safety .5 Units

Prerequisite: None

Advisory: ENGWR 102 or ENGWR 103, and ENGRD 116 or ESLR 320, ESLW 320 or placement through assessment process.

Course Transferable to CSU

Hours: 9 hours LEC

This course is an overview of body mechanics emphasizing a problem-solving approach and focusing on basic methods and techniques of positioning, transfer, and ambulation, as well as personal safety, adaptive exercise and assistive devices. Credit/No Credit only.

GERON 380 Nutrition and Aging .5 Units

Course Transferable to CSU

Hours: 9 hours LEC

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.

GERON 430 Activity Coordinator Certification 6.5 Units

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.

Course Transferable to CSU

Hours: 117 hours LEC

This course covers the role and responsibilities of an Activity Coordinator 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. Pass/No Pass only.

GERON 490 Aging Policy and Practice 3 Units

Corequisite: GERON 498

Course Transferable to CSU

Hours: 54 hours LEC

This course provides an overview of social policy as it relates to aging issues and the funding path from the federal government to the senior consumer. It provides an introduction to local agencies, businesses, and organizations providing services to seniors and senior programs. It also explores different career fields in aging to assist students in defining their personal areas of interest.

GERON 498 Work Experience in Gerontology 1-4 Units

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.

Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position or job related to gerontology. Students are advised to consult with the Gerontology Department faculty to review specific certificate and degree work experience requirements.

Course Transferable to CSU

Hours: 300 hours LAB

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 required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to attend a weekly orientation and 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. The weekly orientation is required for first time participants, returning participants are not required to attend the orientation but are required to meet with the instructor as needed to complete all program forms and assignments. Work Experience may be taken for a total of 16 units when there are new or expanded learning objectives.

GERON 1003 Intergenerational Family Dynamics .5 Units

Prerequisite: None
Hours: 9 hours LEC

This course focuses on changing dynamics in the family as members are confronted with their own developmental stages and issues related to the aging process. A family systems theory approach is used to examine and analyze communication patterns, areas of conflict and coping strategies in the family. Credit/No Credit only

GERON 1004 Pharmacology and Aging .5 Units

Prerequisite: None
Hours: 9 hours LEC

This course is an overview of drugs commonly prescribed for the elderly. It also examines how the aging process impacts medication effects, compliance, and adverse reactions. Drug therapy and interactions are also covered. Credit/No Credit only.

GERON 1005 Professionalism and Ethics in Long-term Care .5 Units

Hours: 9 hours LEC

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, transference/counter-transference, and listening skills. Pass/No Pass only.

GERON 1006 Parkinson's Disease and Other Movement Disorders .5 Units

Prerequisite: None
Hours: 9 hours LEC

This course explores the current knowledge of Parkinson's Disease and other movement disorders. Topics include medical treatments and coping mechanisms. Credit/No Credit only.

GERON 1010 Understanding Licensed Residential Care .5 Units

Prerequisite: None
Hours: 9 hours LEC

This course is an introduction to residential care and the role of regulators. Topics include regulatory function and perspective, function of the California Community Care Licensing Division, and rights and responsibilities of licensees. Credit/No Credit only.

GERON 1013 Protecting Your Back .5 Units

Prerequisite: None
Hours: 9 hours LEC

This course examines proper spine care and body mechanics. Proper exercises to prevent or minimize back injuries are demonstrated. Credit/No Credit only.

GERON 1014 Aging and Long-term Care .5 Units

Hours: 9 hours LEC

This course provides a broad knowledge of gerontology and long-term care. It covers biological and psychosocial changes of age, dilemmas facing caregivers and care receivers, and decision making when an individual needs long-term care. Credit/No Credit only.

GERON 1015 Diabetes and Aging .5 Units

Hours: 9 hours LEC

This course examines the causes and risk factors associated with diabetes, focusing on how the aging body influences these risk factors and the course of the disease. Recommendations for lifestyle changes that can reduce risks and complications associated with diabetes are also presented. Credit/No Credit only.

GERON 1016 Issues in Gerontology as Seen through Film .5 Units

Hours: 9 hours LEC

This course examines certain aspects of the aging experience and how the media influences society's perception of age by viewing selected excerpts from films dealing with aging issues. Topics include developmental and cultural perspectives, relationships, sexuality, and life review. Credit/No Credit only.

GERON 1017 Heart Health and Aging .5 Units

Hours: 9 hours LEC

This course examines the causes and risk factors associated with cardiovascular disease, focusing on how the aging body influences these risk factors and the course of the heart disease and stroke. In addition, recommendations for lifestyle changes that can reduce risks and complications associated with cardiovascular disease are presented. Credit/No Credit only.

GERON 1018 Social Security – Past, Present, and Future .5 Units

Hours: 9 hours LEC

This course examines the Social Security, Medicare, and Supplemental Security Income (SSI) programs from before their inception through today's current controversies. Topics include population demographics and their impact on social programs and historical overviews of program development. Credit/No Credit only.

GERON 1020 Demographic Changes and the Effect on Caregiving .5 Units

Prerequisite: None
Hours: 9 hours LEC

This course examines issues surrounding the current "Age Wave" in relationship to the historical views of the elderly, ageism, stereotypes and myths, and how these issues affect caregiving. The implications that an aging society has on health care delivery including acute, sub-acute, and community based services are discussed. Credit/No Credit only.

GERON 1022 Aging and Family Dynamics .5 Units

Prerequisite: None
Hours: 9 hours LEC

This course is an overview of how the aging process affects not only individuals, but also families and relationships. The focus is on changing roles and the relationship strategies for negotiating these transitions to help families resolve aging issues. Credit/No Credit only.

GERON 1023 Interpersonal Relationships .5 Units

Prerequisite: None
Hours: 9 hours LEC

This course covers listening and communication skills. The focus is on understanding emotions, family involvement, and adaptive behavior in long-term care settings. Demonstrations with role play provides practical experience to enhance understanding. Credit/No Credit only.

GERON 1024 Exploring the Field of Gerontology .5 Units

Prerequisite: None
Hours: 9 hours LEC

This course covers aspects of Gerontology which relate to marketing oneself and developing a business as a provider of services to the elderly. Topics include diversity of the field of Gerontology, resumes, interviews, marketing, and future projections. Credit/No Credit only.

- GERON 1025 The Gerontologist .5 Units**
Prerequisite: None
Hours: 9 hours LEC
 This course examines the field of Gerontology. Topics include the role/responsibilities of the Gerontologist and the educational process required to become a Gerontologist. Current and future employment are covered. Credit/No Credit only.
- GERON 1026 Health of Older Women .5 Units**
Prerequisite: None
Hours: 9 hours LEC
 This course analyzes the uniqueness of older women's health needs. Topics focus on gender differences, activities of daily living, caregiver role, economics, self-care, and long-term care. Credit/No Credit only.
- GERON 1027 HIV/AIDS and the Elderly .5 Units**
Prerequisite: None
Hours: 9 hours LEC
 This course examines HIV/AIDS as a disease process and its effect on the aging population. Topics include transmission, universal precautions, treatment options, and psychosocial issues. Credit/No Credit only.
- GERON 1028 Men as Caregivers .5 Units**
Prerequisite: None
Hours: 9 hours LEC
 This course is an overview of specific issues of men as caregivers. Topics include changing roles, research, future projections, and resources relating to men as caregivers. Credit/No Credit only.
- GERON 1029 End-Stage Life Care .5 Units**
Prerequisite: None
Hours: 9 hours LEC
 This course focuses on effective strategies for assisting the dying patient and his/her family. Topics include concepts of sub-acute care, physician-assisted suicide, euthanasia, and the effect of these issues on the elderly population. Credit/No Credit only.
- GERON 1030 Legislation: Origin and Influence .5 Units**
Prerequisite: None
Hours: 9 hours LEC
 This course is an overview of how the political process affects issues of aging and delivery of services. It focuses on means of impact on the legislative process and the influence of this process on community resources for older adults. Credit/No Credit only.
- GERON 1032 Illness in Later Life .5 Units**
Prerequisite: None
Hours: 9 hours LEC
 This course examines chronic diseases associated with age. Topics covered are osteoarthritis, hypertension, diabetes, coronary artery disease, and stroke. In addition, the prevention and management of chronic illness through lifestyle choices are covered. Credit/No Credit only.
- GERON 1033 Spirituality, Religion and the Elderly .5 Units**
Prerequisite: None
Hours: 9 hours LEC
 This course examines religion and belief systems practiced by the elderly population in the U.S. The differences between spirituality and religiosity are discussed, as well as how both are integrated and manifested in the lives of the elderly. Spirituality as a coping mechanism and source of strength and hope is also discussed. Credit/No Credit only.
- GERON 1034 Sexuality and Aging .5 Units**
Hours: 9 hours LEC
 This course examines basic sexual anatomy and physiology of men and women with emphasis on the changes that occur with aging. Topics include sexuality, menopause, impotence, sexually transmitted diseases, heterosexuality, and homosexuality of the older population. Credit/No Credit only.
- GERON 1035 Special Need Seniors: Mentally Ill and Homeless .5 Units**
Prerequisite: None
Hours: 9 hours LEC
 This course is an overview of the unique factors involved in caring for the mentally ill and the homeless senior population. Topics covered are types and stages of mental illness, social stereotypes, resources for the mentally ill, effects of homelessness on elders, acceptance of aged homeless, and resources for elderly homeless. Credit/No Credit only.
- GERON 1036 Right-to-Die Movements and Issues .5 Units**
Prerequisite: None
Hours: 9 hours LEC
 This course examines both the right-to-die and right-to-life movements as they address the elderly and the dying. Topics include assisted suicide, advance directives, hospice, and palliative care. Credit/No Credit only.
- GERON 1040 Emotional Health and Aging .5 Units**
Prerequisite: None
Hours: 9 hours LEC
 This course is an overview of the factors involved in emotional health and aging. Topics include social support systems, having a purpose and role, goals, effects of stereotypes, the continuation of life skills, and the development of wisdom. Credit/No Credit only.
- GERON 1041 Psychological Treatment Modalities and Aging .5 Units**
Prerequisite: None
Hours: 9 hours LEC
 This course explores different treatment modalities relevant to mental health and aging. Topics include the following therapies as they apply to seniors: grief, cognitive-behavioral, family-intergenerational, and psychoanalytical. Credit/No credit only.
- GERON 1042 Life Review and Reminiscence .5 Units**
Prerequisite: None
Hours: 9 hours LEC
 This course explores the role and techniques of life review and reminiscence in older age and their therapeutic effects. Topics include history of storytelling, group process, facilitating groups, and the art of listening. Credit/No Credit only.
- GERON 1043 Caregiving .5 Units**
Prerequisite: None
Hours: 9 hours LEC
 This course examines theories and research on caregiving. Topics include developmental stages of aging, managing and defining caregiver roles, palliative care, coping with stress and burnout, and community resources. Credit/No credit only.

GERON 1044 Creativity and Aging .5 Units

Prerequisite: None
Hours: 9 hours LEC

This course covers the diversity of creative expression and the changes which may come with age. Topics include differing definitions of creativity, nurturing life-long creativity, opening new creative paths, and creative exercises. Credit/No Credit only.

GERON 1045 Super Centenarians .5 Units

Prerequisite: None
Hours: 9 hours LEC

This course examines the new phenomenon of large numbers of people living 100 or more years. Topics include the reasons for this increased longevity and its implications for society. Credit/No credit only.

**GERON 1046 Fundamentals of Aging:
Working with Older Adults .5 Units**

Prerequisite: None
Hours: 9 hours LEC

This course is designed for those who provide direct and indirect care and services for seniors. It focuses on population changes; physical, social and psychological changes with age; ethical choices in working with seniors; independence and dependency; and communication skills. Credit/No Credit only.

GERON 1048 The Graying of America .5 Units

Prerequisite: None
Hours: 9 hours LEC

This course examines the increase in the aging population and its impact on long-term care. Topics include changes in population groups, life expectancy, family structure, and long-term care. Credit/No Credit only.

GERON 1049 Economics of Aging .5 Units

Prerequisite: None
Hours: 9 hours LEC

This course provides an overview of the economics of retirement including Social Security, pensions, Medicare, and MediCal. It also covers economic problems and proposed solutions, fiduciary abuses and fraud. Credit/No credit only.

GERON 1050 Alcohol and the Elderly .5 Units

Prerequisite: None
Hours: 9 hours LEC

This course explains how alcohol affects seniors in both independent and assisted living environments and explores treatment options for seniors. Credit/No Credit only.

**GERON 1052 Professionalism and Ethics
in Gerontology .5 Units**

Prerequisite: None
Hours: 9 hours LEC

This course explores professionalism and ethical conduct for those working with seniors in independent and long-term care environments. Topics include the difference between ethics and morals as well as professional conduct and listening skills. Credit/No Credit only.

**GERON 1055 Motivating Older Adults
to Stay Active .5 Units**

Prerequisite: None
Hours: 9 hours LEC

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.

GERON 1056 Suicide and the Elderly .5 Units

Prerequisite: None
Hours: 9 hours LEC

This course examines the risk of suicide among older adults including factors of loss, depression, religiosity, and poverty. Suicide prevention programs are also explored. Credit/No Credit only.

GERON 1057 Generational Interdependency .5 Units

Prerequisite: None
Hours: 9 hours LEC

This course explores the changing relationships among generations. Topics include intergenerational programming and community building, aging policy and its effects on society, and community program development. Credit/No Credit only.

GERON 1058 Aging of the Brain .5 Units

Prerequisite: None
Hours: 9 hours LEC

This course explores how the human brain works and how it ages. Emphasis is on the difference between normal aging and pathology associated with age as well as strategies to maximize healthy functioning of the brain throughout the aging process. Credit/No Credit only.

**GERON 1059 Exploring Case Management
as a Career .5 Units**

Prerequisite: None
Hours: 9 hours LEC

This course is an overview of the roles and functions of the Case Manager in long-term care. Topics include the skills and education required to be a Case Manager and the career benefits, earnings, and advancement potential.

GERON 1060 Housing Options and Aging .5 Units

Prerequisite: None
Hours: 9 hours LEC

This course is an overview of the different housing options available for senior living. Public and private resources, financial issues, and misconceptions about senior housing are analyzed. Credit/No Credit only.

**GERON 1061 Case Management:
Processes and Skills .5 Units**

Prerequisite: None
Hours: 9 hours LEC

This course examines the skills and processes involved in geriatric case management. The process of creating and conducting a biological, psychological, and social assessment; developing a care plan; coordinating services; and managing a caseload are explored. Focus is on communication skills and tools needed to practice ethical geriatric case management in a variety of settings. Credit/No Credit only.

GERON 1062 Gerontological Social Work .5 Units*Prerequisite: None**Hours: 9 hours LEC*

This course examines the field of gerontological social work and its nature, settings, roles, skills, educational requirements, and the projected employment rates. Focus is on the increased need for educated social workers and the roles and settings in which they practice. Credit/No Credit only.

GERON 1063 Aging and Leisure Services .5 Units*Prerequisite: None**Hours: 9 hours LEC*

This course explores the many facets of leisure as it applies to the aging population. Emphasis is on activities for both high and low functioning adults. Adaptive leisure programs and materials are identified. Other topics include indoor and outdoor recreation options, such as travel, lifelong learning, volunteerism, camps, and community services. Credit/No Credit only.

GERON 1065 Movement Matters .5 Units*Course Transferable to CSU**Hours: 9 hours LEC*

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.

GERON 1081 RCFE Licensing Regulations and Resident Services .5 Units*Hours: 9 hours LEC*

This course covers Residential Care Facilities for the Elderly (RCFE) requirements and Community Care Licensing regulations. Topics include fingerprinting and criminal record clearances, licensing regulations, psychosocial needs of residents, and specialized services. Pass/No Pass only.

GERON 1082 RCFE Facility, Residents, Records, and Food Service .5 Units*Prerequisite: GERON 1081**Hours: 9 hours LEC*

This course covers the requirements for the Residential Care Facility for the Elderly (RCFE) license. It includes physical plant requirements; resident assessment, retention, and eviction; resident records and services; and food service regulations. Pass/No Pass only.

GERON 1083 RCFE Residents and Services .5 Units*Prerequisite: GERON 1082**Hours: 9 hours LEC*

This course covers residents and services in Residential Care Facilities for the Elderly (RCFE). It includes resident accommodations, assistance, individual assessment, admission agreement, special diets, and services required. Pass/No Pass only.

GERON 1084 RCFE Medications, Reporting, Rights, Resources .5 Units*Prerequisite: GERON 1083**Hours: 9 hours LEC*

This course covers residents and services in Residential Care Facilities for the Elderly (RCFE). It includes requirements regarding resident medications, abuse reporting, residents' rights, theft and loss, and community resources. Pass/No Pass only.

GERON 1090 Independent Living Skills for the Physically/Neurologically Limited 3-5 Units*Enrollment Limitation: Physician certification of disability is required.**Hours: 54 hours LEC; 108 hours LAB*

This course explores all aspects of independent living skills necessary for students with adult-acquired physical/neurological limitations to gain successful reintegration into the community and workforce. Topics include functional mobility/fitness, activities of daily living, speech/language, and computer proficiency. An assessment of needs and goals and a Student Education Contract (SEC) determines which aspects of the course are taken. Field trips may be required. This course may be taken four times for credit, for a maximum of 12 units, emphasizing different assessed needs. Pass/No Pass only.

GERON 1091 Applied Theories of Disabilities for the Physically/Neurologically Limited 1-4 Units*Corequisite: GERON 1090**Hours: 72 hours LEC*

This course explores student/caregiver support systems to increase understanding and management of disabilities for students with adult-acquired physical/neurological limitations. Topics include self-esteem and using community resources to facilitate reintegration into the community and workforce. An assessment of needs and a Student Education Contract (SEC) determines which aspects of the course are taken. This course may be taken four times for credit, for a maximum of eight units, emphasizing different assessed needs. Pass/No Pass only.

GERON 1092 Orientation to the Community for the Physically Limited 1-4 Units*Corequisite: GERON 1091**Hours: 72 hours LEC; 216 hours LAB*

This course provides experience for students with physical disabilities to explore educational, recreational, and vocational opportunities in the community. It includes an orientation session and field trips into the community. This course is designed for students with a physician's certification of adult-acquired disability. An assessment of needs and goals and an Student Education Contract (SEC) determines which aspects of course are taken. This course may be taken four times for credit, for a maximum of eight units, emphasizing different assessed needs. Pass/No Pass only.

Area: Kinesiology and Athletics
 Dean: Jean Snuggs
 Phone: (916) 484-8201
 Counseling: (916) 484-8572

Courses: HEED 310, 311, 315, 316, 323

Area: Science and Engineering
 Dean: Dr. Rina Roy
 Phone: (916) 484-8107
 Counseling: (916) 484-8572

Courses: HEED 300, 308, 352

The college program in health education is designed to provide students the essential information for the evaluation and maintenance of individual health.

Health Education

HEED 300 Health Science 3 Units

General Education: AAIAS Area III(b); CSU Area E1
 Course Transferable to UC/CSU
 Hours: 54 hours LEC

This course focuses upon those elements of human behavior 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 lifestyle disease especially cancer, cardiovascular disease and lung disease.

HEED 308 Environmental Health Science 3 Units

General Education: AAIAS Area IV
 Course Transferable to UC/CSU
 Hours: 54 hours LEC

This course provides a survey of society's interaction with the environment, current environmental factors, and the influence of these interactions on human health. These factors include population dynamics, poverty, hunger, the atmosphere, climate change, air pollution, the water cycle, water resources, water pollution, solid and hazardous wastes, food management, pests and pesticides, toxic substances, and environmental diseases that are associated with these factors. The focus is on sustainable solutions and the reduction of environmentally related disease in humans. Field trips may be required.

HEED 310 Community CPR and Adult AED 1 Unit

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.
 Course Transferable to UC/CSU
 Hours: 18 hours LEC

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. This course may be taken four times.

HEED 311 CPR and Pediatric First Aid 1.5 Units

Same As: ECE 414
 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.
 Course Transferable to UC/CSU
 Hours: 27 hours LEC

This course covers emergency life saving and first aid techniques involving infants and children. Respiratory distress, non-breathing, unconsciousness, choking, and other pediatric emergencies are addressed. CPR for adults is another major component of this course. The California Child Care first aid certificate examination, the Adult CPR, and the Infant and Child CPR examination are included. ECE 410 and this course fulfill Title 22 (California Department of Social Services) Health and Safety requirements for staff. ECE 414/HEED 311 may be taken four times.

HEED 315 First Aid .5 Units

Advisory: ENGRD 116 or ESLR 320; or placement through the assessment process.
 Course Transferable to CSU
 Hours: 9 hours LEC

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. This course may be taken 4 times for credit to maintain certification.

HEED 316 First Aid: Responding to Emergencies 2 Units

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.
 Course Transferable to UC/CSU
 Hours: 36 hours LEC

This course provides consistent guidelines that enable the citizen responder to give appropriate care, regardless of the type of emergency. It is designed for anyone desiring a general knowledge of first aid procedures (parents, foster parents, teachers, recreation majors, police officers, lifeguards, etc.). Situations involving heart attacks, breathing difficulties, lack of pulse, and severe bleeding are covered. Injuries and sudden illnesses are also addressed. The following certification examinations are included: Responding to Emergency (first aid), Adult CPR/AED, and Infant and Child CPR.

**HEED 323 Cardio Pulmonary Resuscitation (CPR)/
Automated External Defibrillators (AED)
for the Professional Rescuer .5 Units**

Prerequisite: Current American Red Cross Community CPR or American Heart Association Basic Life Support Certification.
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.

Course Transferable to CSU

Hours: 9 hours LEC

This course meets the requirements for Red Cross certification as a professional rescuer. It includes legal considerations, disease transmission, severe bleeding, and moving the victims, as well as professional rescuer situation practice sessions. May be taken four times for credit.

HEED 352 Stress Management and Health 3 Units

Same As: PSYC 359

General Education: AA/AS Area III(b); CSU Area E1

Course Transferable to CSU

Hours: 54 hours LEC

This course examines productive and nonproductive stress and the influence of various types of stress on health and wellness. Topics include the physiological aspects of stress and its effects on health, assessments of personal coping style, strategies for coping effectively with stress, relaxation techniques, and positive reinforcers. Emphasis is placed on practical application of stress management techniques in daily life. This course is not open to students who have completed PSYC 359.

HEED 494 Topics in Health Education .5-3 Units

Prerequisite: None

Course Transferable to CSU

Hours: 54 hours LEC

This course provides opportunities to study contemporary topics in health which are not included in current offerings or which require emphasis beyond existing courses. The course may be taken four times for a maximum of 6 units providing there is no duplication of topics.

Area: Health & Education
 Dean: Dr. Steven Boyd
 Program Director:
 Victoria Maryatt
 Phone: (916) 484-8254 or 484-8176
 Counseling: (916) 484-8572

Certificate: Healthcare Interpreting

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.

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 Opportunities

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.

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.

Requirements for Certificate 22.5-28.5 Units

Pre-HCI Semester:	
HCI 300	Introduction to Healthcare Interpreting.....0.5
1st Semester:	
AH 110	Medical Language for Health-Care Providers3
[BIOL 102	Essentials of Human Anatomy and Physiology (4) ... 4-10
or [BIOL 115	Basic Anatomy and Physiology (3)
and BIOL 116	Basic Anatomy and Physiology (3)]
or [BIOL 430	Anatomy and Physiology (5)
and BIOL 431	Anatomy and Physiology (5)]]
HCI 310	Healthcare Interpreting I.....3
2nd Semester:	
HCI 320	Healthcare Interpreting II3
HCI 330	Healthcare Interpreting III3
3rd Semester:	
HCI 340	Healthcare Interpreting IV.....3
HCI 350	Healthcare Interpreting Fieldwork3

Healthcare Interpreting

HCI 300 Introduction to Healthcare Interpreting .5 Units

Course Transferable to CSU
Hours: 9 hours LEC

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.

HCI 310 Healthcare Interpreting I 3 Units

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
Course Transferable to CSU
Hours: 48 hours LEC; 18 hours LAB

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.

HCI 320 Healthcare Interpreting II 3 Units

Prerequisite: HCI 310 with a grade of "C" or better
Advisory: SPEECH 301
Course Transferable to CSU
Hours: 48 hours LEC; 18 hours LAB

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.

HCI 330 Healthcare Interpreting III 3 Units

Prerequisite: HCI 320 with a grade of "C" or better
Advisory: SPEECH 301
Course Transferable to CSU
Hours: 48 hours LEC; 18 hours LAB

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.

HCI 340 Healthcare Interpreting IV 3 Units

Prerequisite: HCI 330 with a grade of "C" or better
Advisory: SPEECH 301
Course Transferable to CSU
Hours: 48 hours LEC; 18 hours LAB

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.

HCI 350 Healthcare Interpreting Fieldwork 3 Units

Prerequisite: HCI 330 with a grade of "C" or better
Corequisite: HCI 340
Advisory: SPEECH 301
Course Transferable to CSU
Hours: 18 hours LEC; 108 hours LAB

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.

Area: Behavioral & Social Sciences
 Dean: Carol Pottorff
 Phone: (916) 484-8283
 Counseling: (916) 484-8572

The study of history equips the student with cultural literacy and promotes critical thinking and well-informed perspectives on today's world.

History

HIST 300 History of Western Civilization 3 Units

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.

General Education: AA/AS Area V(b); AA/AS Area I; CSU Area C2; CSU Area D6; IGETC Area 3B

Course Transferable to UC/CSU

Hours: 54 hours LEC

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.

HIST 302 History of Western Civilization 3 Units

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.

General Education: AA/AS Area V(b); AA/AS Area I; CSU Area C2; CSU Area D6; IGETC Area 3B

Course Transferable to UC/CSU

Hours: 54 hours LEC

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.

HIST 305 Women in Western Civilization 3 Units

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.

General Education: AA/AS Area V(b); AA/AS Area I; CSU Area C2; CSU Area D6; IGETC Area 3B

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course is a survey of women's contributions to the major ideas, institutions, and events of Western Civilization, emphasizing the diversified roles of women from antiquity to the present. The focus of the course is on the interaction between the sexes, the effects of the patriarchal family structure on society, and the pervasive impact of patriarchy on all institutions of western culture.

HIST 307 History of World Civilizations to 1500 3 Units

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.

General Education: AA/AS Area V(b); AA/AS Area I; AA/AS Area VI; CSU Area C2; CSU Area D6; IGETC Area 4F

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course surveys world civilizations from antiquity to the 1500's, with a particular emphasis on the dynamic interaction and comparison of peoples and cultures. The focus is on the role played by social, political, economic, cultural, and religious forces in shaping the major world civilization and the legacy of these subsequent civilizations for our world today.

HIST 308 History of World Civilizations, 1500 to Present 3 Units

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.

General Education: AA/AS Area V(b); AA/AS Area I; AA/AS Area VI; CSU Area C2; CSU Area D6; IGETC Area 4F

Course Transferable to UC/CSU

Hours: 54 hours LEC

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.

HIST 310 History of the United States 3 Units

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.

General Education: AA/AS Area V(a); CSU Area D6; CSU Area F1; IGETC Area 4F

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course is a survey of United States history from its European, African, and Native American backgrounds to 1865. The course examines the origin and development of many of this nation's political, social, economic and intellectual institutions including their influences upon contemporary American life. These analyses also emphasize such historical concepts as cause and effect, multiple causation, and historical interpretation. This course is not open to students who have completed HIST 483.

HIST 311 History of the United States 3 Units

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.
General Education: AA/AS Area V(a); CSU Area D6; CSU Area F1; IGETC Area 4F
Course Transferable to UC/CSU
Hours: 54 hours LEC

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.

HIST 318 American Intellectual and Cultural History 3 Units

Advisory: ENGWR 102 or 103, and ENGRD 116; OR ESLR 320 and ESLW 320
General Education: AA/AS Area V(a); CSU Area D6; CSU Area F1; IGETC Area 4F
Course Transferable to UC/CSU
Hours: 54 hours LEC

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.

HIST 320 History of the United States: African-American Emphasis 3 Units

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.
General Education: AA/AS Area V(a); AA/AS Area VI; CSU Area D6; CSU Area F1; IGETC Area 4F
Course Transferable to UC/CSU
Hours: 54 hours LEC

This course covers U.S. history from the founding of Jamestown in 1607 through the Civil War. The 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.

HIST 321 History of the United States: African-American Emphasis 3 Units

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.
General Education: AA/AS Area V(a); AA/AS Area VI; CSU Area D6; CSU Area F1; IGETC Area 4F
Course Transferable to UC/CSU
Hours: 54 hours LEC

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.

HIST 323 History of the United States: The American Indian Experience 3 Units

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.
General Education: AA/AS Area V(a); AA/AS Area VI; CSU Area D6; CSU Area F1; IGETC Area 4F
Course Transferable to UC/CSU
Hours: 54 hours LEC

This course is a survey of the North American Indian nations. The course covers the effects of European contact, trade, and colonization. It examines the effects of United States political, economic, and social policies on Indians throughout U.S. history. Also, emphasis is placed on American Indian people's attempts to protect their sovereignty and revitalize their societies across time.

HIST 325 History of Asian/Pacific Americans 3 Units

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
General Education: AA/AS Area V(a); AA/AS Area VI; CSU Area D3; CSU Area D6; CSU Area F1; IGETC Area 4F
Course Transferable to UC/CSU
Hours: 54 hours LEC

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.

HIST 327 History of the Chicano/Mexican American 3 Units

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.
General Education: AA/AS Area V(a); CSU Area D6; CSU Area F1; IGETC Area 4F
Course Transferable to UC/CSU
Hours: 54 hours LEC

This course is a study of the relationship between the development of American and Mexican civilization in the Western Hemisphere. Focus is on the role of the Mexican American experience as it was affected by social, political, and economic events in the U.S. Emphasis is placed on socio-cultural contributions of Mexican Americans to American institutions.

HIST 330 Women in American History 3 Units

Advisory: ENGWR 102 and ENGRD 116 with a "C" or better; OR ESLR 320 and ESLW 320, with a grade of "C" or better.
General Education: AA/AS Area V(a); AA/AS Area VI; CSU Area D6; CSU Area F1; IGETC Area 4F
Course Transferable to UC/CSU
Hours: 54 hours LEC

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.

HIST 340 History of California through 1879 3 Units

Advisory: ENGWR 102 and ENGRD 116 with a "C" or better; OR ESLR 320 and ESLW 320, with a grade of "C" or better.

General Education: AAIAS Area V(b); CSU Area C2; CSU Area D6; IGETC Area 3B

Course Transferable to UC/CSU

Hours: 54 hours LEC

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.

HIST 341 History of California: 1879 to Present 3 Units

Advisory: ENGWR 102 and ENGRD 116 with a "C" or better; OR ESLR 320 and ESLW 320, with a grade of "C" or better.

General Education: AAIAS Area V(b); CSU Area C2; CSU Area D6; IGETC Area 3B

Course Transferable to UC/CSU

Hours: 54 hours LEC

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.

HIST 343 The California Mother Lode .5-3 Units

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.

General Education: AAIAS Area V(b); CSU Area D6

Course Transferable to CSU

Hours: 54 hours LEC

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. This course may be taken four times for a maximum of three units using different field trip destinations.

HIST 364 Asian Civilization 3 Units

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.

General Education: AAIAS Area V(b); AAIAS Area I; CSU Area C2; CSU Area D6; IGETC Area 3B

Course Transferable to UC/CSU

Hours: 54 hours LEC

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.

HIST 365 Asian Civilization 3 Units

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.

General Education: AAIAS Area V(b); AAIAS Area I; CSU Area C2; CSU Area D6; IGETC Area 3B

Course Transferable to UC/CSU

Hours: 54 hours LEC

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.

HIST 367 History of Russia 3 Units

Advisory: ENGWR 102 or 103, and ENGRD 116;

OR ESLR 320 and ESLW 320

General Education: AAIAS Area V(b); CSU Area C2; CSU Area D6; IGETC Area 3B

Course Transferable to UC/CSU

Hours: 54 hours LEC

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.

HIST 373 History of Mexico 3 Units

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.

General Education: AAIAS Area V(b); CSU Area C2; CSU Area D6; IGETC Area 3B

Course Transferable to UC/CSU

Hours: 54 hours LEC

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.

HIST 399 Studying in Italy: Italian History and Culture 4 Units

General Education: AAIAS Area I; AAIAS Area III(b); CSU Area C2

Course Transferable to CSU

Hours: 72 hours LEC

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, the course focuses on the ancient and religious sources of Italian culture. In Florence, students explore and examine how human expression in art, literature, and philosophy served to create a new sense of the possible during the Renaissance. Also studied is how culture reflects human values and how those values can be transformed and at times ennobled by creative genius.

HIST 480 History of Western Civilization – Honors 3 Units

Prerequisite: Placement into ENGWR 480 through the assessment process.

General Education: AA/AS Area V(b); AA/AS Area I; CSU Area C2; CSU Area D6; IGETC Area 3B

Course Transferable to UC/CSU

Hours: 54 hours LEC

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.

HIST 481 History of Western Civilization – Honors 3 Units

Prerequisite: Placement into ENGWR 480 through the assessment process.

General Education: AA/AS Area V(b); AA/AS Area I; CSU Area C2; CSU Area D6; IGETC Area 3B

Course Transferable to UC/CSU

Hours: 54 hours LEC

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.

HIST 483 History of the United States – Honors 3 Units

Prerequisite: Placement into ENGWR 480 through the assessment process.

General Education: AA/AS Area V(a); CSU Area D6; CSU Area F1; IGETC Area 4F

Course Transferable to UC/CSU

Hours: 54 hours LEC

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.

HIST 484 History of the United States – Honors 3 Units

Prerequisite: Placement into ENGWR 480 through the assessment process.

General Education: AA/AS Area V(a); CSU Area D6; CSU Area F1; IGETC Area 4F

Course Transferable to UC/CSU

Hours: 54 hours LEC

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.

HIST 494 Topics in History .5-4 Units

Advisory: HIST 302

Course Transferable to CSU

Hours: 72 hours LEC

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.

Coordinator: Kathy Rodgers
 Phone: (916) 484-8359
 Counseling: (916) 484-8572

Certificate: Honors Transfer

Honors Transfer Certificate

The American River College Honors Program is a community of students and faculty who are dedicated to the pursuit of intellectual and personal enrichment in an open and challenging academic environment. Students may earn the Honors Transfer Certificate by completing any five Honors courses. With the exception of ACCT 481 and ACCT 482 (which fulfill lower division requirements in the Business major at many colleges and universities but do not fulfill general education requirements), all of these courses will also partially fulfill the general education graduation requirements for the ARC A.A. and A.S. degrees, the Intersegmental General Education Transfer Curriculum (IGETC), and the CSU General Education Certification Pattern. Completion of the certificate with a cumulative grade point average (GPA) of 3.5 or better offers enhanced prospects for transfer to elite four-year schools and enables students to participate in ARC's Transfer Alliance Partnership with UCLA. Honors students must meet with a counselor to ensure completion of ARC graduation and/or transfer requirements. In addition, Honors students should meet regularly with an Honors faculty advisor to ensure completion of the Honors certificate in a timely fashion.

For course information and a description of each Honors course offered at American River College, please refer to the individual sections of the catalog, Accounting, Anthropology, Biology, English-Writing, History, and Psychology.

Student Learning Outcomes

Upon completion of this certificate program, the student will be able to:

- analyze the broad areas of human knowledge that contribute to purposeful and meaningful lives
- incorporate argumentative reasoning and logic involved in the process of advanced problem solving in an academic setting
- investigate advanced methods of inquiry and analysis employed in a variety of disciplines
- justify personal accomplishments as a highly motivated, self-directed individual in an advanced academic setting

Requirements for Certificate 15 Units

A minimum of 15 units from the following: 15

ACCT 481	Honors Financial Accounting (4)
ACCT 482	Honors Managerial Accounting (4)
ANTH 480	Honors Physical Anthropology (3)
BIOL 482	Honors Marine Biology (4)
ENGWR 480	Honors College Composition (3)
ENGWR 481	Honors College Composition and Literature (3)
ENGWR 482	Honors Advanced Composition and Critical Thinking (3)
HIST 480	History of Western Civilization - Honors (3)
HIST 481	History of Western Civilization - Honors (3)
HIST 483	History of the United States - Honors (3)
HIST 484	History of the United States - Honors (3)
PSYC 480	Honors General Principles (3)
PSYC 481	Honors Abnormal Behavior (3)

Area: Technical Education
 Dean: Gabriel Meehan
 Phone: (916) 484-8354
 Counseling: (916) 484-8572
web.arc.losrios.edu/~hort/

Degree: A.S. - Horticulture
 A.S. - Landscape Design Technology
 Certificates: Horticulture
 Landscape Design Technology
 Certificates of Completion offered by the department:
 Floristry
 Horticulture Skills
 Landscape Design
 Plant Production
 Sustainable Landscape

DEGREES AND CERTIFICATES

Horticulture Degree

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 horticulturists 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.

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 Opportunities

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.

Requirements for Degree 38-41 Units

HORT 100	Integrated Pest Management in the Landscape.....	3
HORT 143	Horticulture Skills Development.....	1
HORT 298	Work Experience in Horticulture	1 - 4
HORT 300	Introduction to Horticulture.....	3
HORT 302	Soils, Soil Management, and Plant Nutrition	3
HORT 305	Plant Identification-Fall Selections	3
HORT 306	Plant Identification-Spring Selections.....	3
HORT 312	Plant Propagation.....	3
HORT 316	Plant Production, Facilities and Sales.....	3
HORT 320	Sustainable Landscape Construction	3
HORT 322	Landscape and Irrigation Graphics and Design.....	3
HORT 324	Sustainable Landscape Maintenance	3
HORT 329	Landscape CAD Design.....	3
A minimum of 3 units from the following:..... 3		
BUS 212	Marketing for Small Businesses (1)	
BUS 216	Essential Records for the Small Business (1)	
BUS 218	Management Skills for the Small Business (1)	
ET 196	Sensors, Measurement, and Control (2)	
HORT 105	Pest Control Licensing For Certification (2)	
HORT 200	Introduction to Retail Floristry (2)	
HORT 308	Viticulture-Vineyard Establishment (1)	
HORT 309	Viticulture - Sustainable Vineyard Management (1)	
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)	

Associate Degree Requirements: 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.

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 horticulturists 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.

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 Opportunities

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.

Requirements for Certificate		37 Units
HORT 100	Integrated Pest Management in the Landscape	3
HORT 143	Horticulture Skills Development.....	1
HORT 300	Introduction to Horticulture.....	3
HORT 302	Soils, Soil Management, and Plant Nutrition	3
HORT 305	Plant Identification-Fall Selections	3
HORT 306	Plant Identification-Spring Selections.....	3
HORT 312	Plant Propagation.....	3
HORT 316	Plant Production, Facilities and Sales.....	3
HORT 320	Sustainable Landscape Construction	3
HORT 322	Landscape and Irrigation Graphics and Design.....	3
HORT 324	Sustainable Landscape Maintenance	3
HORT 329	Landscape CAD Design.....	3

A minimum of 3 units from the following:.....		3
BUS 212	Marketing for Small Businesses (1)	
BUS 216	Essential Records for the Small Business (1)	
BUS 218	Management Skills for the Small Business (1)	
ET 196	Sensors, Measurement, and Control (2)	
HORT 105	Pest Control Licensing For Certification (2)	
HORT 200	Introduction to Retail Floristry (2)	
HORT 308	Viticulture-Vineyard Establishment (1)	
HORT 309	Viticulture - Sustainable Vineyard Management (1)	
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)	

Landscape Design Technology Degree and Certificate

This program 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.

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 Opportunities

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.

Requirements for Degree and Certificate		34 Units
HORT 110	Irrigation Design.....	2
HORT 300	Introduction to Horticulture.....	3
HORT 305	Plant Identification-Fall Selections (3).....	3
or HORT 306	Plant Identification-Spring Selections (3)	
HORT 320	Sustainable Landscape Construction	3
HORT 322	Landscape and Irrigation Graphics and Design	3
HORT 326	Landscape Design.....	3
HORT 329	Landscape CAD Design.....	3
DESN 100	Introduction to Computer Aided Drafting and Design (CADD).....	3
DESN 302	Technical Documentation with CADD	3
DESN 300	Introduction to Design Resources.....	3
DESN 350	Surveying and Land Planning	5

Associate Degree Requirements: The Landscape Design 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.

**CERTIFICATES OF COMPLETION
(offered by the department)**

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 prepares students to participate in the varied floral enterprises.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- identify floral specimens used in commercial floristry by scientific name and availability
- assess and utilize floral materials and design to create a visually appealing and salable arrangement
- demonstrate methods in the care and merchandising of floral materials
- resource and purchase floral materials
- apply the distinctive marketing skills for both the retail and mass market in the floral industry

Career Opportunities

Completion of the certificate provides satisfactory qualification for employment in retail and mass market floristry industries. The program also is a means to upgrade skills of those already working in the industry.

Requirements for Certificate	8 Units
HORT 200 Introduction to Retail Floristry	2
HORT 201 Floral Design	2
HORT 202 Corsage and Wedding Floral Design	2
HORT 203 Multi Occasion, Sympathy Design and the Mass Market	2

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.

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
- identify the external and internal parts of 2-cycle and 4-cycle small engines
- disassemble, inspect, repair, and assemble a single cylinder 2-cycle and 4-cycle engine

Career Opportunities

This certificate helps individuals, new to or already in the field, market themselves to both landscape and plant production horticulture fields.

Requirements for Certificate	17 Units
HORT 100 Integrated Pest Management in the Landscape	3
HORT 143 Horticulture Skills Development.....	1
HORT 300 Introduction to Horticulture.....	3
HORT 312 Plant Propagation.....	3
HORT 320 Sustainable Landscape Construction	3
HORT 330 Small Gas Engines, Outdoor Power Equipment.....	4

Landscape Design Certificate

This certificate provides individuals with a basic horticulture background and a broad experience in landscape design, including landscape CADD.

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 Opportunities

Career opportunities exist with design firms and landscape contractors.

Requirements for Certificate	12 Units
HORT 300 Introduction to Horticulture.....	3
HORT 322 Landscape and Irrigation Graphics and Design.....	3
HORT 326 Landscape Design	3
HORT 329 Landscape CAD Design.....	3

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.

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 Opportunities

Career opportunities exist with plant researchers, wholesale nurseries, and retail nurseries.

Requirements for Certificate	11 Units
HORT 105 Pest Control Licensing For Certification	2
HORT 300 Introduction to Horticulture.....	3
HORT 312 Plant Propagation	3
HORT 316 Plant Production, Facilities and Sales	3

Sustainable Landscape Certificate

This certificate provides individuals with a basic horticulture background and specific experience in sustainable landscape installation and maintenance, including the use of eco-Landscape principles and practices.

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

Career Opportunities

Career opportunities exist with landscape construction and maintenance firms, municipalities and the state.

Requirements for Certificate	14 Units
HORT 300 Introduction to Horticulture.....	3
HORT 308 Viticulture-Vineyard Establishment	1
HORT 309 Viticulture - Sustainable Vineyard Management.....	1
HORT 320 Sustainable Landscape Construction	3
HORT 321 Sustainable and Ecolandscape Practices.....	3
HORT 324 Sustainable Landscape Maintenance.....	3

Horticulture

HORT 100 Integrated Pest Management in the Landscape 3 Units

Corequisite: HORT 300

Hours: 36 hours LEC; 54 hours LAB

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.

HORT 105 Pest Control Licensing For Certification 2 Units

Prerequisite: HORT 300 with a grade of "C" or better.

Hours: 36 hours LEC

This course covers the laws and regulations for operators, applicators, and advisors including the study of weeds, diseases and insects and accepted standards for control.

HORT 110 Irrigation Design 2 Units

Prerequisite: HORT 300 with a grade of "C" or better.

Hours: 36 hours LEC

This course is a study of water hydraulics, irrigation equipment inclusive of heads, pipes, pumps, clocks, and valves. Irrigation design, which includes preparing plans, dealing with measurement, head layout, pipe sizing and specifications, is covered.

HORT 140 Advanced Student Projects 2 Units

Prerequisite: HORT 300 with a grade of "C" or better.

Hours: 108 hours LAB

This course provides the student with an opportunity to pursue advanced projects which are selected by the department. This course may be taken twice for credit.

HORT 143 Horticulture Skills Development 1 Unit

Corequisite: Completion or current enrollment in a college level horticulture class.

Hours: 54 hours LAB

This course offers the opportunity to develop technical, creative, and business skills learned in other horticulture classes. Participation in assigned, supervised projects to expand and enhance knowledge of horticulture practices is included. This course may be taken up to four times for credit when participating in different projects. Field trips may be required.

HORT 200 Introduction to Retail Floristry 2 Units

Hours: 18 hours LEC; 54 hours LAB

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. This course may be taken two times using different seasonal product.

HORT 201 Floral Design 2 Units*Hours: 18 hours LEC; 54 hours LAB*

This course builds on the theory, techniques and skills developed in HORT 200. Identification of wholesale sources, origin of product, and seasonal price fluctuations in the industry and market are discussed. The emphasis of the course is on design techniques. Field trips may be required. This course may be taken two times using different seasonal product.

HORT 202 Corsage and Wedding Floral Design 2 Units*Hours: 18 hours LEC; 54 hours LAB*

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 corsages, tools and materials for creating them, and other body flower designs are taught and experienced. Field trips may be required. This course may be taken two times using different seasonal product.

HORT 203 Multi Occasion, Sympathy Design and the Mass Market 2 Units*Hours: 18 hours LEC; 54 hours LAB*

This course presents the theory of sympathy, tribute, party and multi-occasion floral design. Design applications for standing, flat sprays, set work, large multi-occasion arrangements and casket covers are included, as well as their delivery and set up. The mass market place in floral design is explored. Field trips may be required. This course may be taken two times using different seasonal product.

HORT 204 Sympathy Tributes 1 Unit*Hours: 18 hours LEC*

This course emphasizes principles and elements of sympathy tributes in the funeral business. It also includes the practical application of sympathy design. It covers trends, care and handling, customs, etiquette, and display of sympathy tributes.

HORT 205 Oriental Floral Design .5 Unit*Hours: 9 hours LEC*

This course provides an introduction and overview of oriental floral arranging. The art, principles, and skills of Asian floral design are explored. This course has a class material fee. This course can be taken four times for credit as different oriental schools are covered.

HORT 206 Floral Arranging for Bereavement .5 Unit*Hours: 9 hours LEC*

This course provides an introduction and overview of floral arrangements used in burial rituals. It also covers significant trends in the use of sympathy flowers and how they have evolved over time. A material fee is required for this course. This course may be taken four times for credit emphasizing flowers available in each of the four seasons.

HORT 207 Floral Designs For Special Events .5 Unit*Hours: 9 hours LEC*

This course provides an introduction and overview of floral arranging for special events. The art, principles, and skills of floral designs for weddings, corporate events, high school events and special occasion designs are explored. This course has a class materials fee. This course can be taken four times for credit as different types of events are covered.

HORT 298 Work Experience in Horticulture 1-4 Units

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.

Enrollment Limitation: Students must be in a paid or non-paid internship, volunteer position, or job related to Horticulture.

Students must consult with the Horticulture Department faculty to review specific certificate and degree work experience requirements.

*General Education: AA/AS Area III(b)**Hours: 300 hours LAB*

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 occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to attend a weekly orientation and 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. The weekly orientation is required for first time participants; returning participants are not required to attend the orientation weekly but are required to meet with the instructor as needed to complete all program forms and assignments. Work Experience may be taken for a total of 16 units when there are new or expanded learning objectives.

HORT 300 Introduction to Horticulture 3 Units*General Education: AA/AS Area IV**Course Transferable to CSU**Hours: 54 hours LEC*

This course is a survey of principles and practices of horticulture designed to improve the knowledge of the home gardener as well as those seeking a career in horticulture. Topics include basic plant structure and function, general knowledge of plant usage, landscape planning and maintenance.

HORT 302 Soils, Soil Management, and Plant Nutrition 3 Units*Corequisite: HORT 300**Course Transferable to UC/CSU**Hours: 36 hours LEC; 54 hours LAB*

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.

HORT 305 Plant Identification-Fall Selections 3 Units*Corequisite: HORT 300**Course Transferable to UC/CSU**Hours: 36 hours LEC; 54 hours LAB*

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.

HORT 306 Plant Identification – Spring Selections 3 Units

Corequisite: HORT 300
Course Transferable to UC/CSU
Hours: 36 hours LEC; 54 hours LAB

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.

HORT 308 Viticulture – Vineyard Establishment 1 Unit

Course Transferable to CSU
Hours: 18 hours LEC

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.

HORT 309 Viticulture – Sustainable Vineyard Management 1 Unit

Course Transferable to CSU
Hours: 18 hours LEC

This course covers sustainable management of vineyards, large and small, to serve the needs of the owner while maintaining the environment. Topics include vine growth, fruit development, irrigation, nutrition, pruning systems and canopy management, grapes as a wildlife habitat, management of the vineyard floor, pest identification and control, harvest considerations, use of the fruit, and vineyard laws and ordinances. Field trips may be required.

HORT 310 Nursery Practices 3 Units

Prerequisite: HORT 300 with a grade of “C” or better.
Advisory: HORT 100, 302, 305, and 306.
Course Transferable to CSU
Hours: 36 hours LEC; 54 hours LAB

This course is an overview of the practices involved in commercial nursery operations. Topics include selling techniques, displays and advertising, and customer assistance with basic garden practices.

HORT 312 Plant Propagation 3 Units

Prerequisite: HORT 300 with a grade of “C” or better.
Course Transferable to CSU
Hours: 36 hours LEC; 54 hours LAB

This course is a study of the fundamental principles involved in propagating plants including identification of facilities, equipment and techniques utilized in plant production. Topics include seed and vegetative propagation, media selection and structures.

HORT 314 Greenhouse Operations 3 Units

Prerequisite: HORT 300 with a grade of “C” or better.
Advisory: HORT 100, 302, 305, and 306.
Course Transferable to CSU
Hours: 36 hours LEC; 54 hours LAB

This course is a study of the problems and practices in the management of greenhouses, including the production of specific greenhouse crops.

HORT 316 Plant Production, Facilities and Sales 3 Units

Corequisite: HORT 300
Advisory: ENGR 102 and ENGR 116 with grades of “C” or better OR ESLR 320 and ESLW 320 with grades of “C” or better
Course Transferable to CSU
Hours: 36 hours LEC; 54 hours LAB

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.

HORT 320 Sustainable Landscape Construction 3 Units

Prerequisite: HORT 300 with a grade of “C” or better
Course Transferable to CSU
Hours: 36 hours LEC; 54 hours LAB

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.

HORT 321 Sustainable and Ecolandscape Practices 3 Units

Course Transferable to CSU
Hours: 54 hours LEC

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.

HORT 322 Landscape and Irrigation Graphics and Design 3 Units

Prerequisite: HORT 300 with a grade of “C” or better
Course Transferable to UC/CSU
Hours: 36 hours LEC; 54 hours LAB

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.

HORT 324 Sustainable Landscape Maintenance 3 Units

Prerequisite: HORT 300 with a grade of “C” or better
Course Transferable to CSU
Hours: 36 hours LEC; 54 hours LAB

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.

HORT 326 Landscape Design 3 Units

Prerequisite: HORT 322 with a grade of "C" or better.

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

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.

HORT 327 Advanced Landscape Design 3 Units

Prerequisite: HORT 322 with a grade of "C" or better

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

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.

HORT 328 Turf Grass Management 3 Units

Prerequisite: Horticulture 300 with a grade of "C" or better.

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course is a study of the maintenance and management of turfgrass areas including golf greens, athletic fields, parks, as well as residential lawns.

HORT 329 Landscape CAD Design 3 Units

Prerequisite: HORT 322 with a grade of "C" or better

Advisory: DESGN 100

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

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. Design emphasis includes site plan development and landscape planting and landscape irrigation plans, with the generation of materials lists based on the design created for the site.

HORT 330 Small Gas Engines, Outdoor Power Equipment 4 Units

Same As: AT 301

Course Transferable to CSU

Hours: 54 hours LEC; 54 hours LAB

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.

AT 301 and/or HORT 330 may be taken two times for credit for a maximum of 8 units, using different equipment.

Area: Fine & Applied Arts
 Dean: Dr. Adam Karp
 Phone: (916) 484-8433
 Counseling: (916) 484-8572

Degree: A.A. - Culinary Arts/Restaurant Management
 Certificates: Culinary Arts/Restaurant Management
 Restaurant Management
 Introductory Baking

DEGREES AND CERTIFICATES

Culinary Arts/Restaurant Management Degree

This degree focuses on basic and advanced culinary techniques, related to both hot food and baking. There is additional emphasis on supervisory and management skills, marketing, law, and financial accountability. The Oak Cafe is a small, fine dining restaurant that provides a management training lab for advanced students in the program.

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, 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 Opportunities

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.

Requirements for Degree	43 Units
HM 100	Calculations in Foodservice Occupations.....3
HM 110	Management and Supervision in the Hospitality Industry 2
HM 115	Advertising and Sales in Food Service.....2
HM 120	Beverage Operation.....2
HM 125	Legal Aspects of the Hospitality Industry.....2
HM 300	Becoming a Chef.....3
HM 310	Sanitation, Safety and Equipment.....3
HM 315	Food Theory and Preparation..... 4 ¹
HM 320	Breads, Yeast Doughs and Pastry2
HM 325	Fine Baking and Pastry (European)2
HM 340	Cost Control in the Food Service Industry2
HM 360	Professional Cooking3
HM 370	Dining Room Management 2 ²
HM 380	Restaurant Management and Production 3 ³

And a minimum of 5 units from the following:	5
HM 498	Work Experience in Hospitality Management (1 - 4)
And a minimum of 3 units from the following:	3
HM 150	Catering (3)
HM 155	Mediterranean Cuisine (3)
HM 165	Regional American Cuisine (3)
HM 180	Garde Manger (3)
HM 297	Internship in Hospitality Management (1 - 4)
HM 330	Advanced Baking and Pastry (3)

¹HM 315 is a prerequisite for all HM hot-food lab classes

²HM 370 requires an additional minimum of 8 hours per week in the Oak Cafe

³HM 380 requires an additional minimum of 16 hours per week in the Oak Cafe

Associate Degree Requirements: 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.

Culinary Arts/Restaurant Management Certificate

This Certificate focuses on basic and advanced culinary techniques, related to both hot food and baking. There is additional emphasis on supervisory and management skills, marketing, law, and financial accountability. The Oak Cafe is a small, fine dining restaurant that provides a management training lab for advanced students in the program.

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, 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 Opportunities

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.

(continued on next page)

(Culinary Arts/Restaurant Management Certificate continued)

Requirements for Certificate 43 Units

HM 100	Calculations in Foodservice Occupations.....	3
HM 110	Management and Supervision in the Hospitality Industry	2
HM 115	Advertising and Sales in Food Service	2
HM 120	Beverage Operation.....	2
HM 125	Legal Aspects of the Hospitality Industry	2
HM 300	Becoming a Chef.....	3
HM 310	Sanitation, Safety and Equipment	3
HM 315	Food Theory and Preparation	4 ¹
HM 320	Breads, Yeast Doughs and Pastry	2
HM 325	Fine Baking and Pastry (European)	2
HM 340	Cost Control in the Food Service Industry	2
HM 360	Professional Cooking	3
HM 370	Dining Room Management	2 ²
HM 380	Restaurant Management and Production	3 ³
And a minimum of 5 units from the following:5		
HM 498	Work Experience in Hospitality Management (1 - 4)	
And a minimum of 3 units from the following:3		
HM 150	Catering (3)	
HM 155	Mediterranean Cuisine (3)	
HM 165	Regional American Cuisine (3)	
HM 180	Garde Manger (3)	
HM 330	Advanced Baking and Pastry (3)	

¹HM 315 is a prerequisite for all HM hot-food lab classes

²HM 370 requires an additional minimum of 8 hours per week in the Oak Cafe

³HM 380 requires an additional minimum of 16 hours per week in the Oak Cafe

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.

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.

Career Opportunities

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.

Requirements for Certificate 28 Units

HM 100	Calculations in Foodservice Occupations.....	3
HM 110	Management and Supervision in the Hospitality Industry	2
HM 115	Advertising and Sales in Food Service.....	2
HM 120	Beverage Operation.....	2
HM 300	Becoming a Chef.....	3
HM 310	Sanitation, Safety and Equipment.....	3
HM 315	Food Theory and Preparation.....	4
HM 340	Cost Control in the Food Service Industry	2
HM 370	Dining Room Management	2 ¹
And a minimum of 5 units from the following:5		
HM 498	Work Experience in Hospitality Management (1 - 4)	

¹HM 370 requires an additional minimum of 8 hours per week in the Oak Cafe

Introductory Baking Certificate

The Introductory Baking certificate provides hands-on learning, focusing on job skills with an emphasis on baking and pastry. It includes production baking, candies, wedding and specialty cakes, plated desserts and artisan breads.

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 in include: biscuits, artisan breads, Danish pastry, muffins, coffee cakes, pies, tarts, puff pastry, cakes, cookies, pastry cream, pate a choux, icings, souffles, ice creams and meringues.

Requirements for Certificate 17 Units

HM 300	Becoming a Chef	3
HM 310	Sanitation, Safety and Equipment	3
HM 315	Food Theory and Preparation	4
HM 320	Breads, Yeast Doughs and Pastry	2
HM 325	Fine Baking and Pastry (European)	2
HM 330	Advanced Baking and Pastry	3

Hospitality Management

HM 100 Calculations in Foodservice Occupations 3 Units

Advisory: MATH 25; or placement through the assessment process.
Hours: 54 hours LEC

This course is a study of mathematical principles in the context of commercial food production. Topics include recipe conversion and yields, production baking formulas, weights and measures, product yield tests, and recipe and food cost analysis.

HM 101 Introductory Culinary Skills 1.5 Units

Prerequisite: None
Hours: 27 hours LEC

This introductory course is designed to provide the foundation for all entry level food preparation courses. It focuses extensively on the development of job skills, equipment utilization, weights, measurements, knife speed and accuracy, as well as kitchen product identification.

HM 110 Management and Supervision in the Hospitality Industry 2 Units

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
Hours: 36 hours LEC

This course covers the effective management of human resources in the hospitality industry. Topics include the application of human resource techniques in planning, recruitment, selection, training, performance management, coaching, counseling, discipline, delegation, decision-making, and leadership.

HM 115 Advertising and Sales in Food Service 2 Units

Prerequisite: None
Advisory: ENGWR 102 or 103 and ENGRD 116 or ESLR 320, ESLL 320, and ESLW 320, or placement through assessment.
Hours: 36 hours LEC

This course is an introductory presentation of 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.

HM 120 Beverage Operation 2 Units

Prerequisite: None
Advisory: ENGWR 102 or 103 and ENGRD 116 or ESLR 320, ESLL 320, and ESLW 320, or placement through assessment.
Hours: 36 hours LEC

This course is a study of beverages, both alcoholic and non-alcoholic, used in the food service industry. Topics include: beverage composition, production methods and regions, quality, characteristics, uses in drinks and food, beverage service; wine analysis, service and pairing with food; government regulations and licenses. Field trips are included.

HM 125 Legal Aspects of the Hospitality Industry 2 Units

Prerequisite: None
Advisory: ENGWR 102 or 103 and ENGRD 116 or ESLR 320, ESLL 320, and ESLW 320, or placement through assessment.
Hours: 36 hours LEC

This course provides an explanation of legal aspects of the food service industry. Topics include government regulations, patron safety and rights; liability issues for food, alcohol, property and ownership protection; employee issues of fair hire and termination and forms of business organization.

HM 150 Catering 3 Units

Prerequisite: HM 315 with a grade of "C" or better.
Advisory: ENGWR 102 or 103 and ENGRD 116 or ESLR 320, ESLL 320, and ESLW 320, or placement through assessment.
Hours: 18 hours LEC; 108 hours LAB

This course covers the business and culinary aspects of catering. Topics include starting a catering business, laws, licenses, taxes, insurance and contracts. Also included are interviewing clients and organizing catered menus and events; pricing menus and services; staffing, equipping, and transporting catered services; culinary techniques; and weddings and receptions. Off-campus catering events are required.

HM 155 Mediterranean Cuisine 3 Units

Prerequisite: HM 315 with a grade of "C" or better.
Advisory: HM 100 and 310.
Hours: 36 hours LEC; 54 hours LAB

This course presents the study of ingredients and culinary techniques used in preparing foods from the Mediterranean including France, Italy, Sicily, Greece, Spain, North Africa and regional focuses within these areas. The laboratory component includes skills development, production and the use of equipment specific to preparation of Mediterranean foods.

HM 165 Regional American Cuisine 3 Units

Prerequisite: None
Advisory: HM 100, 310, and 315.
Hours: 36 hours LEC; 54 hours LAB

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, Floridian, Cajun, Californian, Midwestern, Southern, Pacific Northwestern, and others. 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.

HM 180 Garde Manger 3 Units

Prerequisite: HM 315 with a grade of "C" or better.
Advisory: ENGWR 102 or 103 and ENGRD 116 or ESLR 320, ESLL 320, and ESLW 320, or placement through assessment.
Hours: 36 hours LEC; 54 hours LAB

This course focuses on the art of the cold kitchen with emphasis on both modern and classical techniques. Topics covered include hors d'oeuvre, canapés, salads, brining, pickling, curing, and smoking. It also includes basic charcuterie with emphasis on forcemeats, mousselines, terrines, patés, galantines and sausages.

HM 290 Competitive Culinary Training 2-4 Units

Prerequisite: Hospitality Management 315 with a "C" or better.
Hours: 18 hours LEC; 225 hours LAB

This course is a cooperative effort between the college, The American Culinary Federation and The Capital Chef's Associations. Students will work with instructors and local chefs to prepare themselves to compete in regional and national culinary competitions, using the American Culinary Federation format. Labs will include knife skills and hot food preparation. Field trips to local restaurants will be included to work with local chefs. This course may be taken 4 times for a maximum of 12 units.

HM 297 Internship in Hospitality Management 1-4 Units

Prerequisite: Must have completed 15 units in Hospitality Management with a grade of "C" or better.

Advisory: MATH 25, ENGWR 102 or 103 and ENGRD 116 or ESLR 320, ESLL 320, and ESLW 320, or placement through assessment process.

Hours: 18 hours LEC; 225 hours LAB

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. May be taken 4 times for credit for a maximum of 8 units.

HM 300 Becoming a Chef 3 Units

Course Transferable to CSU

Hours: 54 hours LEC

This course covers the history of the culinary profession, 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 and provide exposure to different types of kitchens, industry food shows, and/or markets.

HM 310 Sanitation, Safety and Equipment 3 Units

Prerequisite: None

Advisory: ENGWR 102 or 103 and ENGRD 116 or ESLR 320, ESLL 320, and ESLW 320, or placement through assessment process.

Course Transferable to CSU

Hours: 54 hours LEC

This course covers all phases of food sanitation; cause, control and investigation of illnesses caused by food contamination; sanitary practices in food preparation, proper dishwashing procedures; sanitation of kitchen, dining room, and all equipment; cleaning materials and procedures; garbage and refuse disposal. The course includes general safety precautions, including elementary first aid; maintenance and operation of appropriate food service equipment; and elements of kitchen planning and types of equipment used.

HM 315 Food Theory and Preparation 4 Units

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.

Course Transferable to CSU

Hours: 36 hours LEC; 108 hours LAB

This course is a comprehensive study of basic principles of food science and theory and techniques involved in food preparation. A study of the factors that influence foods and the changes which occur in foods during preparation is included. Emphasis is on basic cooking skills, theory application, product and quality identification.

HM 320 Breads, Yeast Doughs and Pastry 2 Units

Corequisite: HM 315

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.

Course Transferable to CSU

Hours: 18 hours LEC; 54 hours LAB

This course covers theory and principles of doughs, yeast and pastries with emphasis in bread production, sweet and savory doughs, and egg doughs. Topics include croissant, puff dough, and 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. Laboratory work allows individual and quantity production of products studied.

HM 325 Fine Baking and Pastry (European) 2 Units

Prerequisite: HM 320 with a grade of "C" or better.

Advisory: MATH 25, 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.

Course Transferable to CSU

Hours: 18 hours LEC; 54 hours LAB

This course covers the theory and principles of fine baking and pastry with emphasis on the European tradition. Concentration is on cakes, fine pastry, chocolate work, decoration, and classic and modern desserts. All lecture and laboratory material is intended for students interested in commercial application in restaurants, bakeries and other food service facilities. Laboratory work allows individual and quantity production of products studied.

HM 330 Advanced Baking and Pastry 3 Units

Prerequisite: HM 310, 320, and 325 with grades of "C" or better.

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course focuses on commercial production of baked products, pastries, candies, restaurant style desserts and wedding cakes. Lecture emphasizes advanced baking science; laboratory hours are spent in commercial production. Products include European style breads, restaurant style plate presentation, frozen desserts, tortes, cakes, sauces, tarts, pulled sugar, piping and chocolate work. Emphasis is placed on production of high quality products and professional presentation. Field trips to professional bakeries are required.

HM 340 Cost Control in the Food Service Industry 2 Units

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.

Course Transferable to CSU

Hours: 36 hours LEC

This course covers accounting and cost control principles in the foodservice industry. It includes the use of accounting techniques to analyze food and labor cost control, business operations, budgeting, financing, and profit and loss statements.

HM 360 Professional Cooking 3 Units

Prerequisite: HM 315 with a grade of "C" or better.

Advisory: HM 100 and 310.

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course presents the study of intermediate culinary techniques, 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.

HM 370 Dining Room Management 2 Units

Prerequisite: HM 100 and 310 with grades of "C" or better.

Corequisite: HM 498, to include a minimum of 8 hours per week of work experience in the operation of the front of the house for The Oak Cafe at American River College.

Course Transferable to CSU

Hours: 36 hours LEC

This course focuses on restaurant management with emphasis on service and the dining room. Topics include the historical view of service, quality and exceeding expectations, methods of service, management of service operations and personnel, internal and external marketing, and daily reports and controls. Work experience component allows for hands-on experience running the dining room of the Oak Cafe two days a week.

HM 375 Bakery Management and Production 2 Units

Prerequisite: HM 310, 315, and 325 with grades of “C” or better
Corequisite: HM 498
Course Transferable to CSU
Hours: 36 hours LEC

This course focuses on bakery production, merchandising and management for a professional bakery/cafe outlet. Topics include 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.

HM 380 Restaurant Management and Production 3 Units

Prerequisite: HM 100, 310, 315, 320, 325, and 360 with grades of “C” or better.
Corequisite: HM 498 (to include a minimum of 16 hours per week of work experience in the commercial kitchen of *The Oak Café American River College*, or other site as assigned-effectively and efficiently producing food for the campus restaurant, campus catering or other commercial use).
Course Transferable to CSU
Hours: 54 hours LEC

This course focuses on 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. Students practice concepts in the work experience portion of the class as they work in the Oak Café two days a week.

HM 494 Topics in Hospitality Management .5-4 Units

Prerequisite: None
Advisory: ENGWR 102 or 103 and ENGRD 116 or ESLR 320, ESLL 320, and ESLW 320, or placement through assessment process.
Course Transferable to CSU
Hours: 72 hours LEC

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.

HM 498 Work Experience in Hospitality Management 1-4 Units

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.
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position or job related to hospitality management. Students are advised to consult with the Hospitality Management Department faculty to review specific certificate and degree work experience requirements.
General Education: AA/AS Area III(b)
Course Transferable to CSU
Hours: 300 hours LAB

This course provides students with opportunities to develop marketable skills in preparation for employment or advancement within the field of hospitality and culinary 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 required forms which document the student’s progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to attend weekly orientations and 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. The weekly orientation is required for first time participants; returning participants are not required to attend the orientation but are required to meet with the instructor as needed to complete all program forms and assignments. Work Experience may be taken for a total of 16 units when there are new or expanded learning objectives.

Area: Student Services
 Dean: Jeffrey Stephenson
 Phone: (916) 484-8375

American River College's counseling and guidance classes are designed to help the student in achieving success in college through a variety of classes, which include study skills, exploration of careers, and field experience in the disabled student services program.

Human Career Development

HCD 111 College Discovery Program 1 Unit

Hours: 18 hours LEC

This course is designed to teach about options and resources relevant to student success at American River College. The focus is on academic and personal goal setting, campus resources, academic requirements, basic study skill development and strategies that are compatible with academic success.

HCD 114 Human Potential Seminar 2 Units

Hours: 36 hours LEC

This course provides an in-depth examination of techniques to be used in enhancing one's chances for success in college. It is designed to meet the needs of students who are experiencing difficulty in achieving their goals in higher education. Course topics include: motivation, goal setting, communication skills, time management, exam preparation, note taking and reading college textbooks. It is required for most dismissed students for readmission to the college.

HCD 115 Orientation to College .5 Units

*Prerequisite: None
 Hours: 9 hours LEC*

This course is an introduction to college services and programs at American River College. Topics covered include campus resources, procedures and college requirements. Additionally, a campus tour is required.

HCD 122 Study Skills 1 Unit

*Same As: INDIS 100
 Hours: 18 hours LEC*

This course covers specific study skills strategies. It provides the opportunity to analyze attitudes toward studying, and current study skill 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. This course is not open to students who have completed INDIS 100.

HCD 136 Career Preparation and the World of Work 3 Units

Hours: 54 hours LEC

This course provides career planning based on the assessment of interests, personality traits, values, and skills. It develops strategies for a career campaign, including cover letter/resume writing. It concentrates on the physical and emotional demands of work, the study of work among professional, technical, and laboring groups, as well as large and small companies.

HCD 160 Applied Life and Success Skills 2 Units

*General Education: AA/AS Area III(b)
 Hours: 36 hours LEC*

This course covers the skills and tools necessary for daily independent living and success as a college student. It focuses specifically on disability management, personal goals and community and campus resources. It also serves as preparation for those individuals who are interested in careers in human services and disability services.

HCD 310 College Success 3 Units

*Advisory: ENGRD 116 or ESLR 320; ENGWR 102 or 103 or ESLW 320
 General Education: AA/AS Area III(b); CSU Area E1
 Course Transferable to UC/CSU
 Hours: 54 hours LEC*

This course covers the skills and knowledge necessary for college success. 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. Additionally, it covers personal issues that are commonly encountered by many college students. 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.

HCD 318 Transfer: Making It Happen 2 Units

*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.
 General Education: AA/AS Area III(b)
 Course Transferable to UC/CSU
 Hours: 36 hours LEC*

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, transfer admissions requirements, college research, major selection, transfer resources, student support services, transitional issues, the college application process, and preparation for graduate and professional education. Field trips may be required.

HCD 330 Life and Career Planning 1 Unit

*Advisory: ENGWR 51, ESLR 310, or ESLW 310
 General Education: AA/AS Area III(b)
 Course Transferable to CSU
 Hours: 18 hours LEC*

This course is a comprehensive approach to life and career planning based on extensive measurement of aptitude, interests, personality type, values, and skills. Personal and career goals are formulated using career research and decision-making strategies. Course topics include changing career trends and job search techniques.

HCD 331 Career and Job Search Strategies 1 Unit*Advisory: HCD 330**General Education: AA/AS Area III(b)**Course Transferable to CSU**Hours: 18 hours LEC*

This course is designed to assist in the development of research skills in preparation for future employment in a competitive employment market. Topics include researching career fields, setting specific career/educational goals, and examining employment trends. It also includes resume writing, interview skills, and job search strategies.

HCD 336 Exploring Health Careers 1 Unit*General Education: AA/AS Area III(b)**Course Transferable to CSU**Hours: 18 hours LEC*

This course will introduce a wide variety of health-related occupations with particular emphasis on educational programs and career opportunities. Through analysis of interests, personality, and research, an individual college and career plan will be developed.

HCD 337 Exploring Health Careers 1 Unit*Advisory: ENGWR 102 or 103, or ESLW 320 with a grade of "C" or better; and ESLL 320 with a grade of "C" or better; or placement through the assessment process.**Course Transferable to CSU**Hours: 18 hours LEC*

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.

HCD 364 Introduction to Peer Mentoring 1.5-4 Units*Prerequisite: HCD 111, 114, 115, 310, or 318 with a grade of "C" or better**Course Transferable to CSU**Hours: 18 hours LEC; 162 hours LAB*

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 Re-entry Center, Spot, Journey program, MESA, Puente, EOP&S, and Umoja.

HCD 380 Specific Learning Skills Assessment 1 Unit*Enrollment Limitation: Course requires a mandatory orientation to determine appropriateness of assessment for learning disabilities.**Course Transferable to CSU**Hours: 18 hours LEC*

This course is designed for the student with special learning difficulties who may have a specific learning disability. This course includes a series of individual assessments of learning strengths and weaknesses to determine eligibility for Learning Disabilities services using criteria mandated by the California Community College Learning Disabilities Eligibility and Services Model (LDESM). Pass/No Pass only.

HCD 382 Specific Learning Strategies 3 Units*Advisory: ENGRD 116 and ENGWR 102 with a grade of "C" or better; OR ESLR 320 and ESLW 320 with a grade of "C" or better**Course Transferable to CSU**Hours: 54 hours LEC*

This course provides learning support related to specific learning disabilities. It presents academic strategies to compensate for learning disabilities in order to provide for success in other college course work.

HCD 384 Field Experience in Disabled Student Programs and Services 3 Units*Prerequisite: None**Advisory: ENGWR 102 or 103 or ESLW 320 or ESLR 320.**Course Transferable to CSU**Hours: 162 hours LAB*

This course provides the student with an in-depth understanding, increased knowledge, and direct application of the techniques and skills required to assist disabled students to be successful in the college setting. The majority of course time will be spent providing support services to students with disabilities. Placement will be determined by the instructor. May be taken three times for credit.

HCD 386 Experiences in Disabled Student Programs and Services .5-3 Units*Prerequisite: None**Advisory: ENGWR 102 or 103 or ESLW 320 or ESLL 320.**Course Transferable to CSU**Hours: 162 hours LAB*

This course allows students an initial opportunity to provide direct, supervised services to disabled college students, thereby assisting in their adaptation to the physical and academic environment of the community college setting. Placement on campus determined by instructor. Course can be entered up to twelfth (12th) week. May be taken for a maximum of nine (9) units.

Area: Behavioral & Social Sciences
 Dean: Carol Pottorff
 Phone: (916) 484-8283
 Counseling: (916) 484-8572

Degree: A.A. - Human Services
 A.A. - Chemical Dependency Studies
 Certificate: Human Services
 Chemical Dependency Studies

DEGREES AND CERTIFICATES

Human Services Degree and Certificate

The 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.

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

Requirements for Degree or Certificate	31-34 Units
HSER 300 Introduction to Human Services	3
HSER 310 Ethical Issues and Client’s Rights (3)	3
or GERON 304 Ethical Issues and Client’s Rights (3)	
HSER 330 Issues of Diverse Populations (3)	3
or PSYC 365 Issues of Diverse Populations (3)	
HSER 340 Introduction to Chemical Dependency (3)	3
or PSYC 400 Introduction to Chemical Dependency (3)	
HSER 360 Techniques of Interviewing and Counseling	3
HSER 365 Techniques of Group Counseling	3
PSYC 300 General Principles (3)	3
or PSYC 305 Personal Growth and Adjustment (3)	
PSYC 340 Abnormal Behavior	3
SOC 300 Introductory Sociology	3
HSER 362 Practices in Human Services	3 ¹
HSER 498 Work Experience in Human Services	1 - 4 ²

¹HSER 362 may be taken twice.

²Students must complete a minimum of 108 internship hours for HSER 498.

Associate Degree Requirements: The Human 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.

Chemical Dependency Studies Degree and Certificate

The 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.

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 Opportunities

Upon completion of the program a student possesses the coursework required for initial certification as a California drug and alcohol counselor (CDAC).

Requirements for Degree or Certificate	34-37 Units
HSER 300 Introduction to Human Services	3
HSER 310 Ethical Issues and Client’s Rights (3)	3
or GERON 304 Ethical Issues and Client’s Rights (3)	
HSER 330 Issues of Diverse Populations (3)	3
or PSYC 365 Issues of Diverse Populations (3)	
HSER 340 Introduction to Chemical Dependency (3)	3
or PSYC 400 Introduction to Chemical Dependency (3)	
HSER 341 Physiology and Pharmacology: Alcohol & Other Drugs (3)	3
or PSYC 401 Physiology and Pharmacology: Alcohol & Other Drugs (3)	
HSER 342 Alcoholism: Intervention, Treatment & Recovery (3)	3
or PSYC 402 Alcoholism: Intervention, Treatment & Recovery (3)	
HSER 360 Techniques of Interviewing and Counseling	3
HSER 365 Techniques of Group Counseling	3
PSYC 300 General Principles (3)	3
or PSYC 305 Personal Growth and Adjustment (3)	

(continued on next page)

(Chemical Dependency Studies Degree and Certificate continued)

PSYC 340	Abnormal Behavior.....	3
HSER 362	Practices in Human Services.....	3 ¹
HSER 498	Work Experience in Human Services.....	1 - 4 ²

¹HSER 362 may be taken twice.

²Students must complete a minimum of 255 internship hours for HSER 498.

Associate Degree Requirements: 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.

Human Services

HSER 300 Introduction to Human Services 3 Units

Prerequisite: ENGWR 102 with a grade of “C” or better.
Course Transferable to CSU
Hours: 54 hours LEC

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. Emphasis is on the roles and skills of associate professionals, such as drug and alcohol counselors, health workers, activity directors with the elderly, and child welfare assistants. Group techniques are emphasized. An off-campus site visit is required.

HSER 310 Ethical Issues and Client’s Rights 3 Units

Same As: GERON 304
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.
Course Transferable to CSU
Hours: 54 hours LEC

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.

HSER 330 Issues of Diverse Populations 3 Units

Same As: PSYC 365
Prerequisite: 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; OR placement through assessment process.
General Education: AA/AS Area V(b); AA/AS Area VI; CSU Area E1
Course Transferable to CSU
Hours: 54 hours LEC

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.

HSER 340 Introduction to Chemical Dependency 3 Units

Same As: PSYC 400
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.
General Education: AA/AS Area III(b); CSU Area E1
Course Transferable to CSU
Hours: 54 hours LEC

This course examines the physiological effects of chemical dependency on the individual. It includes an analysis of the effects of substance abuse on the family; the sociological, 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 PSYC 400.

HSER 341 Physiology and Pharmacology: Alcohol & Other Drugs 3 Units

Same As: PSYC 401
Prerequisite: ENGWR 102 or ESLW 320 and HSER 340 or PSYC 400 with a grade of “C” or better.
Course Transferable to CSU
Hours: 54 hours LEC

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.

HSER 342 Alcoholism: Intervention, Treatment & Recovery 3 Units

Same As: PSYC 402
Prerequisite: HSER 341 or PSYC 401 with a grade of “C” or better
Course Transferable to CSU
Hours: 54 hours LEC

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.

HSER 360 Techniques of Interviewing and Counseling 3 Units

Prerequisite: HSER 300 with a grade of “C” or better
Corequisite: GERON 304 or HSER 310
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; AND ESLL 310 or ESLL 320 with a grade of “C” or better.
Course Transferable to CSU
Hours: 54 hours LEC

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.

HSER 362 Practices in Human Services 3 Units

Corequisite: HSER 365 and 498

Enrollment Limitation: Completion of the American River College Human Services Agency Placement Process.

Course Transferable to CSU

Hours: 54 hours LEC

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.

HSER 365 Techniques of Group Counseling 3 Units

Prerequisite: HSER 360 with a grade of "C" or better

Course Transferable to CSU

Hours: 54 hours LEC

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.

HSER 494 Topics in Human Services 3 Units

Prerequisite: None

Advisory: ENGWR 102 or ENGWR 103, ENGRD 116 or ESLR 320, ESLW 320 or placement through the assessment process.

Course Transferable to CSU

Hours: 54 hours LEC

This course is a concentrated study of current issues in the field of psychosocial rehabilitation. Topics will reflect contemporary issues and problems in the areas of treatment, recovery, advocacy, and future trends. Emphasis will be in the promotion and support of community-based systems of service.

HSER 498 Work Experience in Human Services 1-4 Units

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.

Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position or job related to human services. Students are advised to consult with the Human Services Department faculty to review specific certificate and degree work experience requirements.

General Education: AA/AS Area III(b)

Course Transferable to CSU

Hours: 300 hours LAB

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 required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to attend a weekly orientation and 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. The weekly orientation is required for first time participants, returning participants are not required to attend the orientation but are required to meet with the instructor as needed to complete all program forms and assignments. Work Experience may be taken for a total of 16 units when there are new or expanded learning objectives.

HSER 1000 Supervised Tutoring 0 Units

Prerequisite: None

Corequisite: Student must be enrolled in a college credit course and be referred by an instructor or counselor.

Hours: 5.6 hours LAB

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.

Area: Humanities
 Dean: Kate Jaques
 Phone: (916) 484-8653
 Counseling: (916) 484-8572

Humanities courses at ARC emphasize the connections between the arts of major cultures in a process which analyzes the core values of a specific age, place, or tradition of ideas. Art, literature, music, and philosophy are viewed in the historical contexts of classical and modern Europe, the cultures of the Americas, and the civilizations of Asia and the Middle East. Courses also provide introductions to understanding the arts themselves. Traditions of thought found in the biblical Old and New Testaments are introduced, as are approaches to culture from atheistic viewpoints.

Humanities

HUM 300 Classical Humanities 3 Units

Advisory: ENGWR 102, ENGWR 103, or ESLW 320; or placement through the assessment process.
General Education: AA/AS Area I; CSU Area C2; IGETC Area 3B
Course Transferable to UC/CSU
Hours: 54 hours LEC

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.

HUM 301 Introduction to the Humanities 3 Units

Advisory: ENGWR 102, ENGWR 103, or ESLW 320
General Education: AA/AS Area I; CSU Area C2
Course Transferable to UC/CSU
Hours: 54 hours LEC

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.

HUM 302 Global Humanities: Atheism in Creativity, Thought, and Inspiration Traditions 3 Units

Advisory: ENGWR 102, ENGWR 103, ESLR 320, and ESLW 320
General Education: AA/AS Area I; AA/AS Area VI; CSU Area C2
Course Transferable to CSU
Hours: 54 hours LEC

This academic and non-sectarian course emphasizes the historical and cultural frameworks of atheism. It takes a basic, integrated humanities approach to global non-religious traditions. The course analyzes a broad range of visual and performance arts, as well as literary documents, that explore diverse atheist philosophies over time and around the world. It reviews the difference between atheism and related conceptual traditions in creative expression. The course studies works and ideas comparatively, analyzing their relation to their contexts and to their impacts.

HUM 310 Modern Humanities 3 Units

Advisory: ENGWR 102, ENGWR 103, or ESLW 320; or placement through the assessment process.
General Education: AA/AS Area I; CSU Area C2; IGETC Area 3B
Course Transferable to UC/CSU
Hours: 54 hours LEC

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 period from the Renaissance to the Modern Age.

HUM 320 Asian Humanities 3 Units

Advisory: ENGWR 102, ENGWR 103, or ESLW 320; or placement through the assessment process.
General Education: AA/AS Area I; AA/AS Area VI; CSU Area C2; IGETC Area 3B
Course Transferable to UC/CSU
Hours: 54 hours LEC

This course surveys traditions, cultures, literature, 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.

HUM 326 Middle Eastern Humanities 3 Units

Advisory: ENGWR 102, ENGWR 103, or ESLW 320; or placement through the assessment process.
General Education: AA/AS Area I; CSU Area C2; IGETC Area 3B
Course Transferable to UC/CSU
Hours: 54 hours LEC

This course surveys the cultures of the Middle East, with an emphasis on the analysis and appreciation of the arts, architecture, music, and sacred and secular texts of Egypt, Israel, Saudi Arabia, Iran, Iraq, Turkey and other countries from ancient to modern times, as they apply to cultural and political developments.

HUM 330 Humanities of the Americas 3 Units

Advisory: ENGWR 102 or ENGWR 103 and ENGRD 116 with a grade of "C" or better OR ESLR 320 and ESLW 320.
General Education: AA/AS Area I; AA/AS Area VI; CSU Area C2; IGETC Area 3B
Course Transferable to UC/CSU
Hours: 54 hours LEC

This course examines the fine arts of the Western Hemisphere from antiquity to contemporary times, with an emphasis on an awareness of and a sensitivity to the literature, philosophy, art, and music of the past and present. It compares the various cultures indigenous to the Western Hemisphere both among themselves and in contrast to the cultures of Europe on their arrival in the 15th century. The course explores the ethnic and cultural conflicts and resolutions that constitute the confluence of ideas and beliefs in the Americas. It provides specific attention to the distinctively American aspects of the arts and their difference from the European tradition.

**HUM 360 Introduction to the Old Testament
(The Hebrew Bible) 3 Units**

Advisory: ENGWR 102, ENGWR 103, ESLR 320, or ESLW 320; or placement through the assessment process.

General Education: AA/AS Area I; CSU Area C2; IGETC Area 3B

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course provides a literary and historical approach to the Hebrew Bible. This academic and non-sectarian course explores the ancient Israelite society prior to the Common Era through a study of the Old Testament of the Bible, culture artifacts, and other writings of contemporaneous societies of the ancient Middle East, and a study of scholarly theories and archaeological studies related to biblical texts and ancient Israelite material culture.

HUM 365 Introduction to the New Testament 3 Units

Advisory: ENGWR 102, ENGWR 103, ESLR 320, or ESLW 320; or placement through the assessment process.

General Education: AA/AS Area I; CSU Area C2; IGETC Area 3B

Course Transferable to UC/CSU

Hours: 54 hours LEC

This academic and non-sectarian course emphasizes the historical and cultural contexts of the New Testament. It analyzes the documents of the early Christian community in relation to both Judaism and the Greco-Roman world. Topics include contemporary religious ideas such as the messiah, the afterlife, the origin of the gospels, the nature of inspiration, transmission of documents and ideas, important Jewish groups, politics of Palestine under the Romans, and the role of Paul.

HUM 481 Honors Classical Humanities 1 Unit

Prerequisite: Cumulative GPA of 3.0 or above; ENGWR 300 or 480 with a grade of "C" or better.

Corequisite: HUM 300

General Education: CSU Area C2

Course Transferable to UC/CSU

Hours: 18 hours LEC

This honors course supplements HUM 300. It is an in-depth investigation of seminal works and thought in Western culture from antiquity to the Renaissance. The seminar format requires significant reading and presentation commitments.

HUM 482 Honors Modern Humanities 1 Unit

Prerequisite: Cumulative GPA of 3.0 or above; ENGWR 300 or 480 with a grade of "C" or better.

Corequisite: HUM 310

General Education: CSU Area C2

Course Transferable to UC/CSU

Hours: 18 hours LEC

This honors course supplements HUM 310. It is an in-depth investigation of seminal works and thought in Western culture from the Renaissance to the present. The seminar format requires significant reading and presentation commitments.

HUM 494 Topics in Humanities .5-4 Units

Prerequisite: None

Advisory: ENGWR 102 or ESLW 320 or placement through assessment.

Course Transferable to CSU

Hours: 72 hours LEC

This course will provide 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. Course may be taken for a maximum of 6 units.

Contact: Instruction Office
 Phone: (916) 484-8478
 Counseling: (916) 484-8572

Degrees: A.A. - English Communication and Literature
 A.A. - History of Creative Arts
 A.A. - The Individual and Society
 Certificates: CSU General Education
 Honors Transfer
 Intersegmental General Education Transfer (IGETC)

DEGREES AND CERTIFICATES

English Communication and Literature Degree

This degree provides an area of emphasis in verbal and written communication skills, along with the study of literature. It offers a general background in communication skills which can be used in the work place. Students who work closely with their counselor can also use this area of emphasis to prepare for majoring at a four-year college in English Composition, Literature and Communication.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- apply the elements of style in writing.
- identify 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.

Requirements for Degree 18 Units

A minimum of 3 units from the following: 3

- ENGWR 301 College Composition and Literature (3)
- or ENGWR 481 Honors College Composition and Literature (3)
- ENGWR 302 Advanced Composition and Critical Thinking (3)
- or ENGWR 482 Honors Advanced Composition and Critical Thinking (3)
- SPEECH 301 Public Speaking (3)
- SPEECH 331 Group Discussion (3)
- SPEECH 361 The Communication Experience (3)

And a minimum of 12 units from the following: 12

- ENGLT 300 Introduction to Fiction (3)
- ENGLT 304 Introduction to Poetry (3)
- ENGLT 308 The Graphic Novel and Manga (3)
- ENGLT 310 English Literature (3)
- ENGLT 311 English Literature (3)
- ENGLT 320 American Literature (3)
- ENGLT 321 American Literature (3)
- ENGLT 327 Literature of California (3)
- ENGLT 338 Native American Literature (3)
- ENGLT 340 World Literature (3)
- ENGLT 341 World Literature (3)
- ENGLT 345 Mythologies of the World (3)
- ENGLT 360 Women in Literature (3)
- ENGLT 370 Children and Literature (3)
- ENGLT 372 Children and Literature: Storytelling (1)
- ENGLT 374 Children and Literature: Folklore and Fairy Tales (1)
- ENGLT 376 Children and Literature: Reader's Theater (1)
- ENGLT 378 Young Adult Literature (3)
- ENGLT 380 Introduction to Shakespeare (3)
- ENGLT 382 Introduction to Dramatic Literature (3)
- ENGLT 392 Science Fiction and Fantasy (3)
- ENGLT 403 Film Adaptations (3)

- SPEECH 302 Persuasive Speech (3)
- SPEECH 311 Argumentation and Debate (3)
- SPEECH 321 Interpersonal Communication (3)

And a minimum of 3 units from the following: 3

A minimum of 3 additional units chosen from either of the groups of courses listed above.

Associate Degree Requirements: The English Communication and Literature 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.

History of the Creative Arts Degree

This degree provides an area of emphasis in the history of art, fashion, music and theatre. It is intended for students who wish to work in the creative arts. Students who work closely with their counselor can also use this area of emphasis to prepare for majoring at a four-year college in Art, Music, Theatre and Humanities.

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.

Requirements for Degree 18 Units

A minimum of 18 units from the following: 18

- ARTH 300 Introduction to Art (3)
- ARTH 302 Art: Stone Age Through the Middle Ages (3)
- ARTH 308 Renaissance Tradition in Art (3)
- ARTH 310 Modern Art (3)
- ARTH 322 Art History of the Non-Western World (3)
- ARTH 333 Introduction to Islamic Art (3)
- ARTH 334 International Contemporary Art (3)
- ARTNM 305 History of Graphic Design (3)
- FASHN 330 History of Western World Fashion (3)
- HUM 300 Classical Humanities (3)
- HUM 302 Global Humanities: Atheism in Creativity, Thought, and Inspiration Traditions (3)
- HUM 310 Modern Humanities (3)
- HUM 320 Asian Humanities (3)
- HUM 326 Middle Eastern Humanities (3)
- HUM 330 Humanities of the Americas (3)
- HUM 360 Introduction to the Old Testament (The Hebrew Bible) (3)
- HUM 365 Introduction to the New Testament (3)
- MUFHL 300 Introduction to Music (3)
- MUFHL 308 Introduction to Music: Rock & Roll (3)
- MUFHL 310 Survey of Music History and Literature (3)
- MUFHL 311 Survey of Music History and Literature (3)

(continued on next page)

(History of the Creative Arts Degree continued)

MUFHL 315	Jazz History (3)
MUFHL 330	World Music (3)
MUFHL 480	Honors Introduction to Music (3)
TA 300	Introduction to the Theatre (3)
TA 302	History and Theory of the Theatre I (3)
TA 303	History and Theory of the Theatre II (3)
TA 306	Diversity in American Drama (1960 to Present) (3)
TA 310	Introduction to Film (3)
TA 312	History of Film (3)
TA 314	History of Film: 1880's through 1950's (3)
TA 315	History of Film: 1950's to Present (3)
TA 318	Diversity in American Film (3)
TA 320	Cinema Genres (3)

Associate Degree Requirements: 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.

The Individual and Society Degree

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.

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.

Requirements for Degree 18 Units

A minimum of 18 units from the following: 18

ANTH 310	Cultural Anthropology (3)
ANTH 311	Cultural Anthropology Discussion (1)
ANTH 312	Anthropology of Gender (1)
ANTH 315	Cultures in Focus (3)
ANTH 320	Introduction to Archaeology and World Prehistory (3)
ANTH 330	Magic, Witchcraft, and Religion (3)
ANTH 333	American Indians of California (3)
ANTH 334	Native Peoples of North America (3)
ANTH 341	Introduction to Linguistics (3)
ECE 312	Child Development (3)
or PSYC 372	Child Development (3)
ECE 314	The Child, the Family and the Community (3)
ECE 330	Infant Development (3)
ECE 404	Children with Special Needs (3)
ECE 430	Culture and Diversity in Early Childhood Education (3)
ECE 432	Leadership in Diversity (3)
HSER 330	Issues of Diverse Populations (3)
or PSYC 365	Issues of Diverse Populations (3)
PSYC 300	General Principles (3)
PSYC 305	Personal Growth and Adjustment (3)
PSYC 320	Social Psychology (3)

PSYC 340	Abnormal Behavior (3)
PSYC 342	Introduction to Applied Behavior Analysis (3)
PSYC 354	The Psychology of Family Life and Intimate Relationships in a Diverse Society (3)
PSYC 356	Human Sexuality (3)
PSYC 358	Principles of Interpersonal Relations (3)
HEED 352	Stress Management and Health (3)
or PSYC 359	Stress Management and Health (3)
PSYC 361	Psychology of Women in a Multicultural Society (3)
PSYC 370	Human Development: A Life Span (3)
PSYC 373	Child Psychology (3)
GERON 302	Psychology of Aging: Adult Development and Aging (3)
or PSYC 374	Psychology of Aging: Adult Development and Aging (3)
PSYC 383	Introduction to Organizational Psychology (3)
PSYC 390	Psychology of Death and Dying (3)
PSYC 480	Honors General Principles (3)
PSYC 481	Honors Abnormal Behavior (3)
SOC 300	Introductory Sociology (3)
SOC 301	Social Problems (3)
SOC 318	Introduction to Crime, Deviance, and Social Control (3)
SOC 320	Minorities in America (3)
SOC 325	Chicano Culture (3)
GERON 300	Sociology of Aging (3)
or SOC 335	Sociology of Aging (3)
SOC 342	Gender Relations in American Society (3)
SOC 350	Sociology of Popular Culture (3)

Associate Degree Requirements: 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.

CSU General Education Certificate

The CSU General Education 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.

Student Learning Outcomes

Upon completion of this certificate 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.

Requirements for Certificate 39 Units

A minimum of 39 units from the following: 39

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.

Intersegmental General Education Transfer (IGETC) Certificate

The Intersegmental General Education Transfer (IGETC) 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.

Student Learning Outcomes

Upon completion of this certificate 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.

Requirements for Certificate 39 Units

A minimum of 39 units from the following:39
 Students must complete a minimum of 39 units used to satisfy IGETC certification requirements. See the IGETC pattern in the American River College (ARC) catalog or consult with an ARC counselor.

Honors Transfer Certificate

The American River College Honors Program is a community of students and faculty who are dedicated to the pursuit of intellectual and personal enrichment in an open and challenging academic environment. Students may earn the Honors Transfer Certificate by completing any five Honors courses. With the exception of ACCT 481 and ACCT 482 (which fulfill lower division requirements in the Business major at many colleges and universities but do not fulfill general education requirements), all of these courses will also partially fulfill the general education graduation requirements for the ARC A.A. and A.S. degrees, the Intersegmental General Education Transfer Curriculum (IGETC), and the CSU General Education Certification Pattern. Completion of the certificate with a cumulative grade point average (GPA) of 3.5 or better offers enhanced prospects for transfer to elite four-year schools and enables students to participate in ARC's Transfer Alliance Partnership with UCLA. Honors students must meet with a counselor to ensure completion of ARC graduation and/or transfer requirements. In addition, Honors students should meet regularly with an Honors faculty advisor to ensure completion of the Honors certificate in a timely fashion.

Student Learning Outcomes

Upon completion of this certificate program, the student will be able to:

- analyze the broad areas of human knowledge that contribute to purposeful and meaningful lives
- incorporate argumentative reasoning and logic involved in the process of advanced problem solving in an academic setting
- investigate advanced methods of inquiry and analysis employed in a variety of disciplines
- justify personal accomplishments as a highly motivated, self-directed individual in an advanced academic setting

Requirements for Certificate 15 Units

A minimum of 15 units from the following: 15	
ACCT 481	Honors Financial Accounting (4)
ACCT 482	Honors Managerial Accounting (4)
ANTH 480	Honors Physical Anthropology (3)
BIOL 482	Honors Marine Biology (4)
ENGWR 480	Honors College Composition (3)
ENGWR 481	Honors College Composition and Literature (3)
ENGWR 482	Honors Advanced Composition and Critical Thinking (3)
HIST 480	History of Western Civilization - Honors (3)
HIST 481	History of Western Civilization - Honors (3)
HIST 483	History of the United States - Honors (3)
HIST 484	History of the United States - Honors (3)
PSYC 480	Honors General Principles (3)
PSYC 481	Honors Abnormal Behavior (3)

Interdisciplinary Studies

INDIS 100 Study Skills 1 Unit

Same As: HCD 122

Hours: 18 hours LEC

This course covers specific study skills strategies. It provides the opportunity to analyze attitudes toward studying, and current study skill 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. This course is not open to students who have completed HCD 122.

INDIS 320 Introduction to Tutor Training 1 Unit

Prerequisite: None

Advisory: A grade of "B" or better in the course the student will serve as a tutor.

Course Transferable to CSU

Hours: 18 hours LEC

This course is offered in coordination with the American River College Tutorial Services Program. It is designed to train students to become effective tutors.

INDIS 321 Introduction to Group Tutoring 1 Unit

Advisory: ENGWR 102 and ENGRD 116 w/ a grade of C or better; OR ESLR 320 and ESLW 320 w/ a grade of C or better.

Enrollment Limitation: A grade of B or better in the course to be tutored.

Faculty recommendation to be a Beacon or LRC group tutor.

Course Transferable to CSU

Hours: 18 hours LEC

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.

INDIS 400 Teaching Online 1 Unit

Prerequisite: ENGWR 300 with a grade of "C" or better.

Advisory: Working knowledge of Macintosh/PC.

Course Transferable to CSU

Hours: 18 hours LEC

This course offers the opportunity to integrate the usage of software, hardware, and Internet tools and their related pedagogies into online teaching. The course will require specific hands-on activities and development of materials using technologies featured within the course. This course will provide a brief overview of how to teach a course online. The course will show how to facilitate a class discussion online, how to create quizzes online, and how to send and receive assignments online.

Area: Fine & Applied Arts
 Dean: Dr. Adam Karp
 Phone: (916) 484-8433
 Counseling: (916) 484-8572

Degree: A.A. - Interior Planning and Design
 Certificates: Kitchen and Bath Design
 Interior Retail Merchandising
 Para Professional Interior Planning and Design
 Certificates of Completion offered by the department:
 Designed 4 Life
 Green Building and Sustainable Design for Interiors

DEGREES AND CERTIFICATES

Interior Planning and Design Degree

This degree provides a foundation of education and skills for students 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 reading construction documents, and architectural and furniture history.

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.
- identify building types and occupancy classifications.
- prepare construction and presentation drawings both manually and via Computer Aided Drafting and Design (CADD) that meet building codes.
- assess client's needs and plans with the American 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 as well as incorporating sound design principles.

Career Opportunities

The field of interior design offers a variety of career options, including residential design by itself or with a specialty of kitchen and bath design, transgenerational design, home office and theater design. It also offers commercial design, which includes space planning, hospitality (restaurant, hotel, cruise ship) design, set design, historical and adaptive re-use design. It also offers commercial design opportunities, which include space planning, hospitality (restaurant, hotel, cruise ship) design, set design, historical and adaptive re-use design. (Additional career opportunities are available as product designers, retailers, buyers, manufacturer's representatives, and facilities managers.)

Requirements for Degree	47 Units
ART 320 Design: Fundamentals	3
FASHN 320 Textiles.....	3
IDES 300 Fundamentals of Interior Design	3
IDES 310 History of Interior Architecture and Furnishings I.....	3
IDES 312 History of Interior Architecture and Furnishings II.....	3
IDES 322 Materials of Interior Design.....	3
IDES 324 Interior Design Business Practices.....	3
IDES 326 Interior Design Sales.....	3
IDES 330 Beginning Interior Design Studio	3
IDES 332 Interior Illustration and Rendering.....	3

IDES 334 Interior Environment and Space Planning	3
IDES 340 Beginning CADD for Interior Design	3
IDES 341 Intermediate CADD for Interior Design	3
IDES 350 Codes and Universal Access for Interior Design.....	2
IDES 351 Codes and Universal Access Lab.....	1
IDES 354 Reading Construction Documents	2
And a minimum of 3 units from the following:	3
ART 300 Elementary Drawing and Composition (3)	
ART 323 Design: Color Theory (3)	
ARTH 302 Art: Stone Age Through the Middle Ages (3)	
ARTH 308 Renaissance Tradition in Art (3)	
ARTH 310 Modern Art (3)	
ARTH 322 Art History of the Non-Western World (3)	
DESGN 100 Introduction to Computer Aided Drafting and Design (CADD) (3)	
DESGN 320 Three Dimensional Graphics and Design (3)	
IDES 110 Estimating and Calculating for Interior Design (3)	
IDES 498 Work Experience in Interior Design (1 - 4)	

Associate Degree Requirements: The Interior Planning and 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.

Kitchen and Bath Design Certificate

This certificate covers the design of efficient and aesthetic kitchens and baths, including space considerations, equipment, materials, building codes and human factors. Designing for clients with special needs, working with challenging spaces, and theme design are included. Residential lighting is included. This certificate facilitates the needs of those trying to pass the National Kitchen and Bath Association certification exam.

Student Learning Outcomes

Upon completion of this certificate program, the student will be able to:

- draft and draw efficient and attractive work spaces for kitchens and baths to meet the client's needs.
- plan and specify types of cabinets and finishes suitable for kitchens and baths.
- appraise and specify suitable appliances for kitchens and baths.
- design kitchens and baths that meet current building codes, including Universal Design.
- evaluate and prioritize client needs specific to the kitchen and bath industry.
- select equipment and finishes for clients with special style requests.
- develop design solutions for challenging spaces and for clients with specific physical needs.
- express design ideas using drafting, written specifications and verbal skills.

(continued on next page)

(Kitchen and Bath Design Certificate continued)

Career Opportunities

Students completing this certificate can have careers in the kitchen and bath industry. It might include being a designer, a product representative, or showroom work.

Requirements for Certificate		29 Units
IDES 330	Beginning Interior Design Studio.....	3
IDES 334	Interior Environment and Space Planning	3
IDES 341	Intermediate CADD for Interior Design	3
IDES 342	CADD for Kitchen and Bath Design	2
IDES 350	Codes and Universal Access for Interior Design.....	2
IDES 354	Reading Construction Documents	2
IDES 361	Beginning Kitchen Design	3
IDES 362	Advanced Kitchen Design	3
IDES 375	Beginning Bath Design	3
IDES 376	Advanced Bath Design.....	2
And a minimum of 3 units from the following:		3
IDES 498	Work Experience in Interior Design (1 - 4)	

Interior Retail Merchandising Certificate

This certificate provides a foundation of education and skills for students in the expanding field of interior design. Topics include the materials of interior design, architectural and furniture history, and business practices.

Student Learning Outcomes

Upon completion of this certificate 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 as well as incorporating sound design principles.

Career Opportunities

Interior design merchandising offers a variety of career options in residential design. Additional career opportunities are available as product designers, retailers, buyers, manufacturer’s representatives, and facilities managers.

Requirements for Certificate		24 Units
ART 320	Design: Fundamentals	3
FASHN 320	Textiles.....	3
IDES 300	Fundamentals of Interior Design	3
IDES 310	History of Interior Architecture and Furnishings I.....	3
IDES 322	Materials of Interior Design.....	3
IDES 324	Interior Design Business Practices.....	3
IDES 330	Beginning Interior Design Studio.....	3
IDES 340	Beginning CADD for Interior Design	3

Para Professional Interior Planning and Design Certificate

This certificate provides a foundation of education and skills for students in the expanding field of interior design. Topics include space planning, building and life-safety codes, the Americans with Disabilities Act (ADA), as well as, reading construction documents, architectural and furniture history. This degree includes an internship within the interior design industry.

Student Learning Outcomes

Upon completion of this certificate program, the student will be able to:

- categorize building types and occupancy classifications.
- prepare construction and presentation drawings both manually and via Computer-Aided Drafting and Design (CADD) that would meet building codes.
- appraise the client’s needs and plans with the Americans with Disabilities Act (ADA), Life-Safety Codes and Universal/Barrier-Free Design.

Career Opportunities

The field of interior design offers a variety of career options, including residential design by itself or with a specialty of kitchen and bath design, transgenerational design, home office and theater design. It also offers commercial design opportunities, which include space planning, hospitality (restaurant, hotel, cruise ship) design, set design, historical and adaptive re-use design. Additional career opportunities are available as product designers, retailers, buyers, manufacturer’s representatives, and facilities managers.

Requirements for Certificate		47 Units
ART 320	Design: Fundamentals	3
FASHN 320	Textiles.....	3
IDES 110	Estimating and Calculating for Interior Design.....	3
IDES 300	Fundamentals of Interior Design	3
IDES 310	History of Interior Architecture and Furnishings I.....	3
IDES 312	History of Interior Architecture and Furnishings II.....	3
IDES 322	Materials of Interior Design.....	3
IDES 324	Interior Design Business Practices.....	3
IDES 330	Beginning Interior Design Studio	3
IDES 332	Interior Illustration and Rendering	3
IDES 334	Interior Environment and Space Planning	3
IDES 340	Beginning CADD for Interior Design	3
IDES 341	Intermediate CADD for Interior Design	3
IDES 350	Codes and Universal Access for Interior Design.....	2
IDES 351	Codes and Universal Access Lab.....	1
IDES 354	Reading Construction Documents	2
And a minimum of 3 units from the following:		3
ART 300	Elementary Drawing and Composition (3)	
ART 323	Design: Color Theory (3)	
ARTH 302	Art: Stone Age Through the Middle Ages (3)	
ARTH 308	Renaissance Tradition in Art (3)	
ARTH 310	Modern Art (3)	
ARTH 322	Art History of the Non-Western World (3)	
DESN 100	Introduction to Computer Aided Drafting and Design (CADD) (3)	
DESN 320	Three Dimensional Graphics and Design (3)	
IDES 326	Interior Design Sales (3)	
IDES 498	Work Experience in Interior Design (1 - 4)	

**CERTIFICATES OF COMPLETION
(offered by the department)**

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.

Student Learning Outcomes

Upon completion of this certificate 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 Opportunities

Our aging population is requiring more specialized design for long-term independence. This certificate offers opportunities in careers for both gerontology and interior design.

Requirements for Certificate		9 Units
GERON 302	Psychology of Aging: Adult Development and Aging.....	3
GERON 362	Biology of Aging.....	0.5
GERON 280	Home Adaptations for Safety and Independence.....	0.5
IDES 350	Codes and Universal Access for Interior Design.....	2
IDES 355	Residences: Designed 4 Life.....	3

Green Building and Sustainable Design for Interiors Certificate

This certificate provides students with expertise in the requirements for designing green and sustainable interiors.

Student Learning Outcomes

Upon completion of this certificate 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 Opportunities

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.

Requirements for Certificate		11 Units
IDES 300	Fundamentals of Interior Design.....	3
IDES 302	Introduction to Green Building and Sustainable Design in Interiors.....	3
IDES 354	Reading Construction Documents.....	2
IDES 381	Lighting and Electrical for Green and Sustainable Interiors.....	3

Interior Design

IDES 110 Estimating and Calculating for Interior Design 3 Units

*Prerequisite: None
Hours: 54 hours LEC*

This course includes techniques for accurately calculating yardage and materials of interior products for residential and commercial installations. Field trips are required.

IDES 300 Fundamentals of Interior Design 3 Units

*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; or placement through assessment process.
Course Transferable to CSU
Hours: 54 hours LEC*

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 are required.

IDES 302 Introduction to Green Building and Sustainable Design in Interiors 3 Units

*Course Transferable to CSU
Hours: 54 hours LEC*

This course introduces the basic principles of green building and sustainable design (GBSD). It focuses on applications in the practice of commercial or residential interior space planning and design. It includes an historic perspective and the appropriate application of these principles in the profession. It also introduces issues involved in Leadership in Energy and Environmental Design (LEED) certification. Field trips are required.

IDES 310 History of Interior Architecture and Furnishings I 3 Units

*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.
General Education: AA/AS Area I
Course Transferable to CSU
Hours: 54 hours LEC*

This course covers the historical relationship between the decorative arts, period furniture and interior architecture from antiquity through English Regency. Emphasis is placed on identification of specific furniture styles and architectural features.

IDES 312 History of Interior Architecture and Furnishings II 3 Units

*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.
General Education: AA/AS Area I
Course Transferable to CSU
Hours: 54 hours LEC*

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 included.

IDES 322 Materials of Interior Design 3 Units

Prerequisite: None
Advisory: ENGWR 102 or 103 and ENGRD 116 or ESLR 320, ESLL 320, ESLW 320; or placement through assessment process.
Course Transferable to CSU
Hours: 54 hours LEC

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 lighting, plumbing fixtures and appliances will be included. Field trips required.

IDES 324 Interior Design Business Practices 3 Units

Prerequisite: None
Advisory: CISC 300.
Course Transferable to CSU
Hours: 54 hours LEC

This course covers the business and practical aspects of interior design. Topics include ethical practices, methods of compensation, establishing clients' budget, estimating costs, purchasing, billing, marketing, and sales. Field trips are required.

IDES 326 Interior Design Sales 3 Units

Prerequisite: IDES 324 with a grade of "C" or better.
Course Transferable to CSU
Hours: 54 hours LEC

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 are required.

IDES 330 Beginning Interior Design Studio 3 Units

Prerequisite: None
Course Transferable to CSU
Hours: 36 hours LEC; 54 hours LAB

This course covers basic manual drafting and presentation techniques for interior designers. Topics include development of floor plans, furniture arrangements, and elevations for interior space planning. Presentation boards and other methods of presentation are explored.

IDES 332 Interior Illustration and Rendering 3 Units

Prerequisite: IDES 330 with a grade of "C" or better.
Course Transferable to CSU
Hours: 36 hours LEC; 54 hours LAB

This course covers procedures for developing finished presentation drawings and boards for interior design. It includes methods for illustrating plan views, elevations, mechanical and free-hand perspectives to scale, shades, shadows and techniques for color application.

IDES 334 Interior Environment and Space Planning 3 Units

Prerequisite: IDES 330 with a grade of "C" or better
Corequisite: IDES 350
Course Transferable to CSU
Hours: 36 hours LEC; 54 hours LAB

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.

IDES 340 Beginning CADD for Interior Design 3 Units

Prerequisite: IDES 330 with a grade of "C" or better.
Advisory: IDES 334
Course Transferable to CSU
Hours: 36 hours LEC; 54 hours LAB

This course employs beginning CADD (computer and drafting design) for interior design projects. Floor plans, space planning, elevations, and perspectives are created. Field trips are required.

IDES 341 Intermediate CADD for Interior Design 3 Units

Prerequisite: IDES 340 with a grade of "C" or better
Advisory: IDES 334 and 354
Course Transferable to CSU
Hours: 36 hours LEC; 54 hours LAB

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.

IDES 342 CADD for Kitchen and Bath Design 2 Units

Advisory: IDES 340 and 354
Course Transferable to CSU
Hours: 24 hours LEC; 36 hours LAB

This course explores the technical aspects of creating interior design construction documents for kitchen and bath using Computer Aided Drafting and Design (CADD) software. This CADD course uses software specifically for the kitchen and bath industry. Field trips may be required. This course may be taken four times with a different version of 20-20 software.

IDES 350 Codes and Universal Access for Interior Design 2 Units

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.
Course Transferable to CSU
Hours: 36 hours LEC

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.

IDES 351 Codes and Universal Access Lab 1 Unit

Prerequisite: IDES 334 and IDES 350 with a grade of "C" or better..
Advisory: ENGWR 102 or 103 and ENGRD 116 or ESLR 320, ESLL 320, ESLW 320; or placement through assessment process.
Course Transferable to CSU
Hours: 54 hours LAB

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.

IDES 354 Reading Construction Documents 2 Units

Prerequisite: None

Advisory: ENGWR 102 or 103 and ENGRD 116 or ESLR 320, ESLL 320, ESLW 320; or placement through assessment process; MATH 32 or placement through assessment process; CISC 300.

Course Transferable to CSU

Hours: 36 hours LEC

This course covers the language of construction documents and specifications including: symbols, conventions, scales, nomenclature, contract documents, specifications and uniform building codes.

IDES 355 Residences: Designed 4 Life 3 Units

Prerequisite: GERON 302 and IDES 350 with grades of "C" or better

Course Transferable to CSU

Hours: 54 hours LEC

This course covers how to successfully design residences for a variety of users, regardless of age, size, and 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.

IDES 361 Beginning Kitchen Design 3 Units

Prerequisite: IDES 330 and 354 with grades of "C" or better

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course introduces the design of efficient and aesthetic kitchens. Space considerations, equipment, materials, building codes and human factors are included. This course facilitates the needs of those trying to pass the National Kitchen and Bath Association (NKBA) certification exam. Field trips are required.

IDES 362 Advanced Kitchen Design 3 Units

Prerequisite: IDES 361 with a grade of "C" or better

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course is a continuation of IDES 361. It refines the skills needed to design efficient and aesthetically pleasing kitchens. Designing for clients with special needs, working with challenging spaces, and theme design are covered. Residential lighting is included. This course facilitates the needs of those trying to pass the National Kitchen and Bath Association certification exam. Field trips are required.

IDES 375 Beginning Bath Design 3 Units

Prerequisite: IDES 330 and 350 with grades of "C" or better

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course introduces the design of efficient and aesthetic bathrooms. Space consideration, equipment, appropriate materials, building codes and other design considerations are included. This course facilitates the needs of those trying to pass the National Kitchen and Bath Association certification exam. Field trips are required.

IDES 376 Advanced Bath Design 2 Units

Prerequisite: IDES 375 with a grade of "C" or better

Course Transferable to CSU

Hours: 24 hours LEC; 36 hours LAB

This course is a continuation of IDES 375. It refines the skills needed to design efficient and aesthetically pleasing bathrooms. Designing for clients with special needs, working with challenging spaces, and theme design are covered.

IDES 381 Lighting and Electrical for Green and Sustainable Interiors 3 Units

Course Transferable to CSU

Hours: 54 hours LEC

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.

IDES 412 Specifications for Interior Design 3 Units

Course Transferable to CSU

Hours: 54 hours LEC

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.

IDES 494 Topics in Interior Design 2-4 Units

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.

Course Transferable to CSU

Hours: 72 hours LEC

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. May be taken 3 times up to a maximum of 6 units without duplication of topics.

IDES 498 Work Experience in Interior Design 1-4 Units

Advisory: ENGRD 116, ENGWR 102, ENGWR 103, ESLR 320, and ESLW 320

Enrollment Limitation: Students must be in a paid or non-paid internship, volunteer position or job related to interior design. Students are advised to consult with the Interior Design Department faculty to review specific certificate and degree work experience requirements.

General Education: AA/AS Area III(b)

Course Transferable to CSU

Hours: 300 hours LAB

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 required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to fulfill a weekly orientation and 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. The weekly orientation is required for first time participants, returning participants are not required to attend the orientation but are required to meet with the instructor as needed to complete all program forms and assignments. Work Experience may be taken for a total of 16 units when there are new or expanded learning objectives.

Area: Humanities
 Dean: Kate Jaques
 Phone: (916) 484-8653
 Counseling: (916) 484-8572

Degree: A.A. - Journalism and Mass Communication

Journalism and Mass Communication Degree

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.

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 Opportunities

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.

Requirements for Degree		29 Units
JOUR 300	Newswriting and Reporting	3
JOUR 310	Mass Media and Society	3
JOUR 320	Race and Gender in the Media	3
JOUR 351	Public Relations Writing and Media Techniques	3
JOUR 361	Multimedia Journalism	3
JOUR 404	Editing and Production	3
And a minimum of 9 units from the following:		9 ¹
JOUR 402	College Newspaper Production (3)	
And a minimum of 2 units from the following:		2
JOUR 405	Publications Production Skills Lab (0.5 - 3)	

¹JOUR 402 must be taken three times.

Associate Degree Requirements: 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.

Journalism

JOUR 300 Newswriting and Reporting 3 Units

Advisory: ENGRD 102 and ENGRD 116 with a grade of "C" or better; OR ESLR 320 and ESLW 320 with a grade of "C" or better. Ability to type.

General Education: AA/AS Area II(b)

Course Transferable to CSU

Hours: 54 hours LEC

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.

JOUR 301 Advanced Newswriting and Reporting 3 Units

Prerequisite: JOUR 300 with a grade of "C" or better

Course Transferable to CSU

Hours: 54 hours LEC

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.

JOUR 310 Mass Media and Society 3 Units

General Education: AA/AS Area V(b); CSU Area D7

Course Transferable to UC/CSU

Hours: 54 hours LEC

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.

JOUR 320 Race and Gender in the Media 3 Units

General Education: AA/AS Area V(b); AA/AS Area VI; CSU Area D3; CSU Area D4; CSU Area D7; IGETC Area 4C
Course Transferable to UC/CSU
Hours: 54 hours LEC

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.

JOUR 350 Writing for Broadcasting 3 Units

Course Transferable to CSU
Hours: 54 hours LEC

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.

JOUR 351 Public Relations Writing and Media Techniques 3 Units

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.
Course Transferable to CSU
Hours: 54 hours LEC

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. Field trips may be required.

JOUR 360 Photojournalism 3 Units

Prerequisite: ARTPH 300 or ARTPH 305 with a grade of "C" or better or equivalent photo experience as determined by the instructor
Course Transferable to CSU
Hours: 36 hours LEC; 54 hours LAB

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.

JOUR 361 Multimedia Journalism 3 Units

Prerequisite: JOUR 360 with a grade of "C" or better
Course Transferable to CSU
Hours: 36 hours LEC; 54 hours LAB

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. This course may be taken three times for credit using different software or techniques.

JOUR 402 College Newspaper Production 3 Units

Prerequisite: JOUR 300 with a grade of "C" or better; or placement through the assessment process.
Course Transferable to CSU
Hours: 36 hours LEC; 54 hours LAB

This course offers hands-on experience in producing a professional-level media product. Instruction covers researching, reporting, writing, editing, and designing the campus' student print/online news publication. This course may be taken four times for credit.

JOUR 404 Editing and Production 3 Units

Prerequisite: None
Advisory: JOUR 300
Course Transferable to CSU
Hours: 54 hours LEC

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 organizing publications.

JOUR 405 Publications Production Skills Lab .5-3 Units

Prerequisite: None
Corequisite: JOUR 404
Advisory: JOUR 300
Course Transferable to CSU
Hours: 162 hours LAB

This course provides applicable skills to enhance editing and production skills learned in JOUR 404. It also includes instruction in photo illustrations, infographics, typography and project management. May be taken 4 times for credit.

Area: Kinesiology and Athletics
 Dean: Jean Snuggs
 Phone: (916) 484-8201
 Counseling: (916) 484-8572

Degrees: A.S. Physical Education
 A.S. Sports Medicine
 Certificates: Fitness Specialist

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. Semester activity courses may be taken up to four times in each activity area (e.g. four Tennis, four Weight Training, four Modern Dance, etc.) unless otherwise noted in the units column. Sport classes may be taken three times for credit. The prefixes “ADAPT, DANCE, FITNS, PACT, TMACT, and SPORT” refer to courses used to satisfy the physical education requirement.

Physical Education-Theory (PET) classes are now under the Kinesiology (KINES) heading. All KINES courses are formerly known as PET courses.

Courses which are designated with a KINES or PET prefix are theory-oriented rather than activity-oriented and DO NOT satisfy the physical education activity requirement.

DEGREES AND CERTIFICATES

Physical Education Degree

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.

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 Opportunities

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.

Requirements for Degree 19 - 20.5 Units

BIOL 300	The Foundations of Biology (3).....	3 - 4
or BIOL 310	General Biology (4)	
or PSYC 310	Biological Psychology (3)	
HEED 310	Community CPR and Adult AED (1)	1 - 1.5 ¹
or HEED 311	CPR and Pediatric First Aid (1.5)	
NUTRI 300	Nutrition (3).....	3
or NUTRI 302	Nutrition for Physical Performance (3)	
KINES 302	Introduction to Physical Education	3
KINES 330	Care and Prevention of Athletic Injuries.....	3
PSYC 300	General Principles (3).....	3
or PSYC 305	Personal Growth and Adjustment (3)	
A minimum of 3 units from the following:		3
DANCE 330	Modern Dance (1)	
FITNS 380	Circuit Weight Training (1)	
FITNS 381	Weight Training (1)	
HEED 300	Health Science (3)	
PACT 350	Golf (1)	
PACT 390	Tennis (1)	
PACT 400	Track and Field (1)	
TMACT 302	Soccer - Outdoor (1)	
TMACT 320	Basketball (1)	
TMACT 330	Volleyball (1)	

¹If 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.

Associate Degree Requirements: 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.

Sports Medicine Degree

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.

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

Requirements for Degree		27 Units
BIOL 430	Anatomy and Physiology.....	5
BIOL 431	Anatomy and Physiology.....	5
CHEM 305	Introduction to Chemistry (5)	5
or CHEM 400	General Chemistry (5)	5
NUTRI 300	Nutrition	3
KINES 330	Care and Prevention of Athletic Injuries	3
KINES 334	Practical Applications in Athletic Training/Sports Medicine	3
PSYC 300	General Principles.....	3

Associate 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.

Fitness Specialist Certificate

This one-year 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 American College of Sports Medicine (ACSM) or the American Council of Exercise (ACE).

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 ACSM and ACE.

Career Opportunities

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.

Requirements for Certificate		19 Units
KINES 400	Applied Physiology of Exercise	2
KINES 401	Applied Kinesiology	2
KINES 402	Nutrition for Fitness (2).....	2
or NUTRI 307	Nutrition for Fitness (2)	2
KINES 403	Fitness and Exercise Assessment	2
KINES 404	Identification and Management of Fitness Injuries	2
KINES 405	Special Populations.....	2
KINES 406	Techniques of Strength Training Instruction.....	2
KINES 407	Techniques of Group Fitness Instruction	2
KINES 408	Administration of Fitness Programs	2
A minimum of 1 unit from the following:		1
WEXP 498	Work Experience in (Subject) (1 - 4)	

Adapted Physical Education

ADAPT 310 Adapted Lifetime Sports 1 Unit

Advisory: ENGRD 116 with a grade of "C" or better; or ESLR 320 and ESLL 320 with a grade of "C" or better; or placement through assessment process.

Enrollment Limitation: A statement from a health care professional verifying the disability, contraindications, and recommended activities.

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

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. This course may be taken four times for credit.

ADAPT 314 Wheelchair Sports and Games 1 Unit

Enrollment Limitation: A health care professional's statement describing 1) the student's disability, 2) contraindications, and 3) recommended activities

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

This course is designed for individuals with physical disabilities who are confined to a wheelchair or who are ambulatory, but more successful in sports when using a wheelchair. Sports will include, but not be limited to, basketball, quad rugby, volleyball, badminton, and tennis. This course may be taken four times for credit.

ADAPT 316 Adapted Personal Safety 1 Unit

Enrollment Limitation: A physician's statement describing 1) student's disability, 2) contraindications, and 3) recommended activities.

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

This course is designed for the student who is unable to participate in the 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. This course may be taken four times.

ADAPT 330 Adapted Weight Training and Fitness 1 Unit

Enrollment Limitation: A statement signed by a health professional verifying the disability, contraindications, and recommended activities

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

Adapted weight training and fitness is designed for the student who is unable to participate in a general physical education activity class. This course includes individualized physical fitness programs including activities to develop muscular strength, flexibility, and cardiovascular endurance. This course may be taken four times for credit.

ADAPT 332 Adapted Aquatics 1 Unit

Enrollment Limitation: A physician's statement verifying the disability, contraindications, and recommended activities

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

Adapted aquatics is an individualized swimming, water safety, and fitness class designed for individuals with disabilities. It focuses on cardiovascular endurance, range of motion, mobility, muscular strength, and muscular endurance. This course may be taken four times for credit.

ADAPT 337 Adapted Walk and Wheel 1 Unit

Enrollment Limitation: A physician's statement verifying the disability, contraindications, and recommended activities

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

This course is designed for the student who is unable to participate in a general physical education activity class. Individualized programs are designed which include walking or wheeling for cardiovascular endurance and specific exercises for muscular strength, muscular endurance, and flexibility. Small group games and activities are included to promote fitness and fun. This course may be taken four times for credit.

ADAPT 338 Adapted Aerobic Activity 1 Unit

Advisory: ENGRD 116 (Proficient Reading), ENGWR 102 (Proficient Writing), ENGWR 103 (Practical Communication), ESLR 320 (Advanced-Low Reading), or ESLW 320 (Advanced-Low Writing); or placement through the assessment process.

Enrollment Limitation: A physician's statement verifying: 1) disability 2) contraindications 3) recommended activities.

Hours: 54 hours LAB

This course is designed for the student who is 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, chair aerobics, circuit training and cardio equipment workouts.

Dance**DANCE 300 Diverse Cultures in Dance 1 Unit**

General Education: AA/AS Area III(a); AA/AS Area VI; CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

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. This course may be taken four times for credit.

DANCE 302 African Dance 1 Unit

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

This course covers basic movements from African and West African styles of dance. Afro-Haitian, Afro-Caribbean, and Congolese styles may also be included. Classes consist of beginning level warm ups, across the floor movement, and center combination movements to varied drum rhythms. This course may be taken four times for credit.

DANCE 304 Polynesian Dance 1 Unit

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

This course covers basic dances from Polynesia, including dances from Tahiti, Hawaii, and New Zealand. Class sessions consist of warm ups, center dances, and cultural vocabulary. An opportunity to study the history, origin, and cultural importance of Polynesian dance is presented. This course may be taken four times for credit.

DANCE 305 Hawaiian Dance 1 Unit

General Education: AA/AS Area III(a)

Course Transferable to UC/CSU

Hours: 54 hours LAB

CSU Area E2*This course covers the basic components of Hawaiian dance within its traditional context. Class sessions consist of warm ups, center dances, and cultural dance vocabulary. An opportunity to study the history, origin, and cultural importance of hula is also presented. Basic Hawaiian vocabulary for dance and instructions for creating floral adornments are included. This course may be taken four times for credit.

DANCE 310 Jazz Dance 1 Unit

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

This course is offered as beginning or intermediate jazz dance. Beginning jazz dance covers basic skills of alignment, balance and technique. It gives a foundation in the basic steps, vocabulary, history, and traditions of jazz dance. Intermediate jazz dance refines the basic skills, introduces varied rhythms and methods of counting, and initiates more complex transitions and steps in center combinations. This course may be taken four times for credit.

DANCE 311 Urban Hip Hop 1 Unit

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

This course includes basic urban-style Hip Hop moves and rapid level changes for 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 Freestyle, Old Style, Poppin', Lockin', and Dance Poetry exploration is offered. This course may be taken four times for credit.

DANCE 320 Ballet**1 Unit***General Education: AA/AS Area III(a); CSU Area E2**Course Transferable to UC/CSU**Hours: 54 hours LAB*

This course is offered as beginning or intermediate ballet. Beginning ballet covers basic skills, alignment, steps and technique suitable for beginners. It gives a foundation in the etiquette, vocabulary, history and traditions of classical ballet. Intermediate ballet refines the basic skills, introduces more complex steps and initiates more difficult center combinations. Both levels include a progression of barre exercises and warm-ups designed to develop strength and range of motion as well as balance and alignment. Classical ballet technique, and vocabulary are emphasized at the barre and repeated across the floor and in center. This course may be taken four times for credit.

DANCE 330 Modern Dance**1 Unit***General Education: AA/AS Area III(a); CSU Area E2**Course Transferable to UC/CSU**Hours: 54 hours LAB*

This course is offered as beginning or intermediate modern dance. Beginning modern dance includes basic movement technique, alignment and vocabulary. It gives a foundation in the history and traditions of modern dance in America and encourages individual expression and creativity. Intermediate modern dance refines the basic skills and utilizes improvisation and problem solving techniques in dealing with space, design, time, shape, and energy. This course may be taken four times for credit.

DANCE 340 Ballroom Dance**1 Unit***General Education: AA/AS Area III(a); CSU Area E2**Course Transferable to UC/CSU**Hours: 54 hours LAB*

This course is offered as beginning or intermediate ballroom dance. Beginning ballroom covers basic partnering skills, alignment, technique, and footwork. It gives a foundation in the etiquette, vocabulary and traditions of ballroom dance. Intermediate ballroom refines the basic skills, introduces varied rhythms, and initiates more complex foot patterns and partnering. This course may be taken four times for credit.

DANCE 348 Ballroom Challenge: Competition and Performance**1 Unit***Enrollment Limitation: Audition**General Education: AA/AS Area III(a); CSU Area E2**Course Transferable to UC/CSU**Hours: 54 hours LAB*

This course includes ballroom training for competition and performance. Dancers work on an intermediate to advanced level and perform in at least three basic styles, such as Waltz, Foxtrot, and East Coast Swing, as well as three Latin styles. Topics include audition skills, 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. This course may be taken four times for credit.

DANCE 350 Country Western Dance**1 Unit***General Education: AA/AS Area III(a); CSU Area E2**Course Transferable to UC/CSU**Hours: 54 hours LAB*

This course is offered as beginning or intermediate country western dance. Beginning country western dance covers basic partnering and line dance skills, alignment, technique and footwork. It gives a foundation in the etiquette, vocabulary and traditions of country western dance. Intermediate country western dance refines the basic skills, introduces varied rhythms, and initiates more complex footwork. This course may be taken four times for credit.

DANCE 360 Tap Dance**1 Unit***General Education: AA/AS Area III(a); CSU Area E2**Course Transferable to UC/CSU**Hours: 54 hours LAB*

This course is offered as beginning or intermediate tap dance. Beginning tap covers basic tap rhythms, walks, alignment, technique, and footwork. It gives a foundation in the history, etiquette, vocabulary, and traditions of tap dance. Intermediate tap refines the basic skills, introduces varied rhythms, and initiates more complex footwork. This course may be taken four times for credit.

DANCE 374 Dance Production**3 Units***Enrollment Limitation: Audition**General Education: AA/AS Area III(a); CSU Area E2**Course Transferable to UC/CSU**Hours: 36 hours LEC; 54 hours LAB*

This course focuses on lecture, choreography, and performance with an emphasis on performance skills. Choreographic studies and intermediate to advanced contemporary dance technique are included. Organizational skills for rehearsal, choreography, and performance are explored. Field trips may be required. This course is by audition only and may be taken four times for credit.

DANCE 375 Jazz Dance Performance Group**3 Units***Enrollment Limitation: Audition**General Education: AA/AS Area III(a); CSU Area E2**Course Transferable to UC/CSU**Hours: 36 hours LEC; 54 hours LAB*

This course is a jazz dance lecture and performance group for intermediate to advanced dancers with an emphasis on 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. Field trips may be required. This course is by audition only and may be taken four times for credit.

DANCE 376 Choreography**1 Unit***General Education: AA/AS Area III(a); CSU Area E2**Course Transferable to UC/CSU**Hours: 54 hours LAB*

This course covers basic elements of choreography and provides an opportunity to explore choreographic structure. Choreographic concepts are introduced, developed, and applied to various dance styles in a manner appropriate for all levels of dance skill. Emphasis is on the choreographic process. This course may be taken four times for credit.

DANCE 377 Theatre Dance**1 Unit***General Education: AA/AS Area III(a); CSU Area E2**Course Transferable to UC/CSU**Hours: 54 hours LAB*

This course provides opportunities to experience theatre dance and gain skill in musical theatre style presentational movement. Dance styles covered include cultural, modern, tap, and jazz. Choreographed routines, audition techniques for musical theatre dance, and basic group and partnering skills for presentational dance are utilized. There is an opportunity for student choreography. This course may be taken four times for credit.

DANCE 498 Work Experience in Dance 1-4 Units

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.

Enrollment Limitation: Be in a paid or non-paid internship, volunteer opportunity or job related to dance. Students are advised to consult with the Dance Department faculty to review specific certificate and degree work experience requirements.

General Education: AA/AS Area III(b); AA/AS Area III(a)

Course Transferable to CSU

Hours: 300 hours LAB

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 required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to fulfill a weekly orientation and 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. The weekly orientation is required for first time participants, returning participants are not required to attend the orientation but are required to meet with the instructor as needed to complete all program forms and assignments. Work Experience may be taken for a total of 16 units when there are new or expanded learning objectives.

Fitness

FITNS 303 Dance Aerobics 1 Unit

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

This course promotes cardiovascular fitness and endurance through aerobic dance movement. It encourages core strength and flexibility with strength and toning exercises. The importance of taking individual pulse rates is studied, and basic nutrition, health, and safety issues are discussed. This course may be taken four times for credit.

FITNS 305 Hip Hop Aerobics 1 Unit

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

Based on hip hop dance movement, this course promotes cardiovascular fitness, flexibility, and overall strength. Endurance and core strength are developed by incorporating the level changes, rhythms, and isolations of hip hop dance into an aerobic and anaerobic conditioning program. Safety, target heart rates, perceived intensity workouts, and healthy lifestyle issues are discussed. This course may be taken four times for credit.

FITNS 306 Aerobics: Cardio-Kickboxing 1 Unit

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.

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

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. This course may be taken four times for credit.

FITNS 307 Aerobic Mix 1 Unit

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.

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

This course includes a variety of aerobic activities that provide a new approach to each workout. The emphasis is on rotating aerobic forms such as aerobic dance, step, cardio-kickboxing, and aerobic circuit to keep the workouts challenging and interesting. Basic heart rate calculations, nutrition, and workout facts are covered. This course may be taken four times for credit.

FITNS 308 Step Aerobics 1 Unit

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

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. This course may be taken four times for credit.

FITNS 310 Aqua Aerobics 1 Unit

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

This is a fitness course using the resistance of water for low-or non-weight bearing exercise for improvement in cardiovascular fitness, muscular endurance, flexibility and strength. The course includes exercises in deep and shallow water and provides information related to overall health and fitness. No swimming skills are needed. This course may be taken four times for credit.

FITNS 312 Aquatic Fitness 1 Unit

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

This is a self-paced "overload" method of training using a workout approach that stresses aerobic and anaerobic fitness. Deep and shallow water running is emphasized. Stroke efficiency and lap swimming are also included. This course may be taken four times for credit.

FITNS 314 Deep Water Jogging 1 Unit

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.

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

This fitness course uses the resistance of water for non-weight bearing exercises. Emphasis will be on cardiovascular fitness, muscular endurance, strength and flexibility. Progress will be monitored through appropriate fitness testing. No swimming skills are needed. An optional flotation belt will be provided. This course may be taken 4 times for credit.

- FITNS 316 Lap Swimming 1 Unit**
General Education: AA/AS Area III(a); CSU Area E2
Course Transferable to UC/CSU
Hours: 54 hours LAB
 This course provides a workout approach to swimming that emphasizes aerobic and anaerobic fitness through lap swimming. It utilizes interval training, cardiovascular conditioning, swimming technique, and aerobic training principles. This course may be taken four times for credit.
- FITNS 321 Core Conditioning 1 Unit**
General Education: AA/AS Area III(a); CSU Area E2
Course Transferable to UC/CSU
Hours: 54 hours LAB
 This course incorporates a variety of activities including exercises with the stability ball, Bosu ball, Pilates mat, and yoga styles of core work to enhance abdominal, lower back, gluteal, and hip strength with toning benefits to the entire body. This course may be taken 4 times for credit.
- FITNS 325 Pilates 1 Unit**
Prerequisite: None
General Education: AA/AS Area III(a); CSU Area E2
Course Transferable to UC/CSU
Hours: 54 hours LAB
 The focus of this course is on precision alignment, core strength, and building an awareness of the body. Pilates 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. This course may be taken four times for credit.
- FITNS 331 Boot Camp Fitness 1 Unit**
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.
General Education: AA/AS Area III(a); CSU Area E2
Course Transferable to UC/CSU
Hours: 54 hours LAB
 This course is designed as an intense boot camp fitness class conducted on and off campus using indoor and outdoor facilities. Training includes aerobic, anaerobic conditioning, strength and endurance training, individual and team fitness concepts. May be taken four times for credit.
- FITNS 332 Off Season Conditioning .5-1 Units**
General Education: AA/AS Area III(a); CSU Area E2
Course Transferable to UC/CSU
Hours: 54 hours LAB
 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 four times for credit.
- FITNS 339 Triathlon Training 1 Unit**
General Education: AA/AS Area III(a); CSU Area E2
Course Transferable to UC/CSU
Hours: 54 hours LAB
 This course covers physical fitness triathlon training sessions utilizing a variety of training methods 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. This course may be taken four times for credit.
- FITNS 350 Fitness And Weight Control 2 Units**
General Education: AA/AS Area III(a); CSU Area E2
Course Transferable to UC/CSU
Hours: 18 hours LEC; 54 hours LAB
 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.
- FITNS 351 Exercise, Balance and Mobility 1 Unit**
General Education: AA/AS Area III(a); CSU Area E2
Course Transferable to UC/CSU
Hours: 54 hours LAB
 This course is specifically designed for adults starting a fitness program. It provides safe and effective exercises to gain balance, flexibility and mobility. Students develop a personal fitness program that can also be carried out at home. Periodic fitness assessments measure progress in individualized fitness program. This course may be taken 4 times for credit.
- FITNS 358 Workforce Wellness 1 Unit**
Enrollment Limitation: Students must be enrolled in a pre-apprenticeship or apprenticeship program.
General Education: AA/AS Area III(a)
Course Transferable to CSU
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. This course may be taken four times for credit.
- FITNS 380 Circuit Weight Training 1 Unit**
General Education: AA/AS Area III(a); CSU Area E2
Course Transferable to UC/CSU
Hours: 54 hours LAB
 This course presents the student with a system of exercise using weights and cardiovascular activities to provide a balanced approach to physical fitness training. There is an emphasis on increasing strength, muscular endurance, cardiovascular endurance and flexibility while decreasing body fat. This course may be taken four times.
- FITNS 381 Weight Training 1 Unit**
General Education: AA/AS Area III(a); CSU Area E2
Course Transferable to UC/CSU
Hours: 54 hours LAB
 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. This course may be taken four times for credit.
- FITNS 385 Weight Training for Competition 1 Unit**
General Education: AA/AS Area III(a); CSU Area E2
Course Transferable to UC/CSU
Hours: 54 hours LAB
 This course is a strength training program for students involved in intercollegiate athletics. It is designed to develop strength, power, and muscle endurance appropriate to specific athletic events. This course may be taken four times for credit.

FITNS 392 Yoga 1 Unit

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

This course in Hatha Yoga emphasizes breathing, stretching, and relaxing techniques. Yoga positions and philosophies are examined. This course may be taken four times.

FITNS 395 Stretch 1 Unit

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

This course emphasizes stretching for 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. This course may be taken four times for credit.

FITNS 400 Body Fitness (Walking or Jogging) 1 Unit

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

This course promotes physical well-being through stress reduction and weight control. Attention is given to increasing cardiovascular efficiency, muscular strength and endurance. Individual workout schedules are based on heart rate readings related to a variety of training methods. This course may be taken 4 times for credit.

FITNS 405 Marathon Training 1 Unit

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.

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

This course emphasizes a personal approach to attaining a higher level of fitness through the attempt to complete a marathon (26.2 miles) in one day. Individual workout programs will be established and monitored to include endurance and self-pacing. Pre- and post-fitness testing will also be evaluated. This course may be taken 4 times for credit.

FITNS 412 Martial Arts: Taekwondo 1 Unit

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

This course is a physical fitness program that concentrates on muscle development, improvement of coordination and flexibility, and increased aerobic capacity through the practice of various poomsae, sparring techniques and self-defense movements used in martial arts. It is offered at beginning, intermediate, and advanced levels. This course may be taken four times. Fields trips may be required.

FITNS 414 Tai Chi 1 Unit

Prerequisite: None

General Education: A/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

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. This course may be taken four times for credit.

FITNS 440 Swimming 1 Unit

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.

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

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. This course may be taken four times for credit.

FITNS 450 Personal Safety 1 Unit

Advisory: ENGRD 116 and ENGWR 102

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

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. This course may be taken four times for credit.

Kinesiology

KINES 302 Introduction to Physical Education 3 Units

Advisory: ENGWR 102 or 103, and ENGRD 116;

OR ESLR 320 and ESLW 320; or placement through assessment process.

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course covers the responsibilities and opportunities associated with the physical education profession. Course topics include leadership, theory, history, and principles of physical education. This course is formerly known as PET 302.

KINES 307 Mental Skills for Sport Performance 3 Units

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.

Course Transferable to CSU

Hours: 54 hours LEC

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.

KINES 312 Theory and Techniques of Adapted Physical Education 3 Units

Course Transferable to CSU
Hours: 54 hours LEC

This course provides an orientation to specific disabilities and important principles of physical activity for individuals with disabilities. Basic knowledge of movement-related terminology, exercise principles and concepts, transfer techniques, and characteristics of specific disabilities as they relate to exercise are covered. This course is invaluable for students interested in pursuing a career in adapted physical education, physical therapy, occupational therapy, nursing, physical education, gerontology, early childhood education, teaching, or fields requiring one to work with individuals with disabilities. It may be of interest to students with disabilities who desire more information about personal health and fitness as they live with their particular disability. This course is formerly known as PET 312.

KINES 313 Laboratory in Adapted Physical Education 1-2 Units

Advisory: ENGWR 102 or ENGWR 103, and ENGRD 116 OR ESLR 320 and ESLW 320.
Course Transferable to CSU
Hours: 108 hours LAB

This course offers practical experience in the implementation of physical activity for students with disabilities. This course may be taken three times for credit. This course is formerly known as PET 313.

KINES 330 Care and Prevention of Athletic Injuries 3 Units

Advisory: ENGWR 102 or 103, and ENGRD 116; OR ESLR 320 and ESLW 320.
Course Transferable to UC/CSU
Hours: 54 hours LEC

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.

KINES 334 Practical Applications in Athletic Training/Sports Medicine 3 Units

Corequisite: KINES 330
Advisory: BIOL 102; 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.
Course Transferable to CSU
Hours: 36 hours LEC; 54 hours LAB

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.

KINES 336 Health Concerns in Athletics 1 Unit

Course Transferable to CSU

Hours: 18 hours LEC

This course provides basic information on a variety of athletic issues ranging from the prevention and treatment of athletic injuries and illnesses to the use of performance enhancement supplements. Topics reflect concerns for athletic performance in competitive sports and wellness. This course is formerly known as PET 336.

KINES 337 Common Injuries in Athletics 1 Unit

Course Transferable to CSU
Hours: 18 hours LEC

This course provides basic information on common athletic injuries ranging from muscle strains and tendinitis to ligament sprains and overuse injuries. Topics reflect contemporary concerns for wellness and athletic performance in competitive sport. This course is formerly known as PET 337.

KINES 340 Theory of Baseball 1 Unit

Prerequisite: None
Advisory: High school or college level baseball playing experience; ENGWR 102 or ENGWR 103, and ENGRD 116 or ESLR 320, ESLW 320, or placement through assessment.
Course Transferable to UC/CSU
Hours: 18 hours LEC

This course develops a thorough understanding of baseball. Emphasis 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. May be taken twice for credit.

KINES 350 Theory of Football 1 Unit

Course Transferable to UC/CSU
Hours: 18 hours LEC

This course covers applications of different strategies when football teams face various schemes. This course may be taken two times for credit. This course is formerly known as PET 350.

KINES 356 Theory of Softball 1 Unit

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.
Course Transferable to UC/CSU
Hours: 18 hours LEC

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. This course may be taken 2 times for credit.

KINES 400 Applied Physiology of Exercise 2 Units

Course Transferable to CSU
Hours: 36 hours LEC

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.

KINES 401 Applied Kinesiology 2 Units

Course Transferable to CSU
Hours: 36 hours LEC

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. This course is formerly known as PET 401.

KINES 402 Nutrition for Fitness 2 Units*Same As: NUTRI 307**Course Transferable to CSU**Hours: 36 hours LEC*

This course covers the basic principles of nutrition and the ramifications of nutrition on fitness training. Topics in this course include dietary practices and nutrient intake modifications that impact physical performance, including intake of energy nutrients, vitamins, water, electrolytes, and dietary supplements. This course also includes the study of body weight and body composition, as well as factors that affect body weight and the impact of body weight on physical performance. This course is formerly known as PET 402. This course is not open to students who have completed NUTRI 307.

KINES 403 Fitness and Exercise Assessment 2 Units*Course Transferable to CSU**Hours: 36 hours LEC*

This course covers the assessment of cardiorespiratory endurance, body fat analysis, muscular strength and endurance, blood pressure, and evaluation of exercise test results. Additional topics include factors influencing exercise programs, development of individual exercise programs, and the risk factors associated with exercise programs. This course is formerly known as PET 403.

KINES 404 Identification and Management of Fitness Injuries 2 Units*Course Transferable to CSU**Hours: 36 hours LEC*

This course addresses elementary human anatomy and the injuries that can occur to the muscular skeletal system as it relates to physical activity. The treatment and rehabilitation of these injuries and the use of protective equipment are presented. This course is formerly known as PET 404.

KINES 405 Special Populations 2 Units*Advisory: ENGRD 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.**Course Transferable to CSU**Hours: 36 hours LEC*

This course covers the effects of exercise on special populations and provides information to modify exercise based on age and medical conditions. Special groups discussed include seniors, children with disabilities, adults with disabilities or chronic conditions, and individuals requiring exercise modifications due to physical impairments. This course is formerly known as PET 405.

KINES 406 Techniques of Strength Training Instruction 2 Units*Course Transferable to CSU**Hours: 36 hours LEC*

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.

KINES 407 Techniques of Group Fitness Instruction 2 Units*Course Transferable to CSU**Hours: 36 hours LEC*

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.

KINES 408 Administration of Fitness Programs 2 Units*Course Transferable to CSU**Hours: 36 hours LEC*

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.

KINES 494 Topics in Physical Education Theory .5-4 Units*Course Transferable to CSU**Hours: 18 hours LEC*

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 may be taken four times for credit on different topics. This course is formerly known as PET 494.

KINES 497 Internship in Physical Education - Theory 1.5 Units*Prerequisite: A grade of "C" or better in at least 8 units from the following courses: KINES 400, 401, 402 (or NUTRI 307), 403, 404, 405, 406, 407, 408.**Course Transferable to CSU**Hours: 9 hours LEC; 54 hours LAB*

This course is designed to provide students in the Fitness Specialist Certificate Program with practical experience in screening, performing fitness assessment tests, and formulating an exercise prescription based on fitness test indicators. In addition to the lecture schedule, there will be additional practicum hours to be arranged at local fitness centers and health clubs.

KINES 498 Work Experience in Physical Education 1-4 Units*Advisory: ENGRD 116, ENGRD 102, ENGRD 103, ESLR 320, or ESLW 320**Enrollment Limitation: Students must be in a paid or non-paid internship, volunteer opportunity or job related to physical education. Students are advised to consult with the Physical Education Department faculty to review specific certificate and degree work experience requirements.**General Education: AA/AS Area III(a)**Course Transferable to CSU**Hours: 300 hours LAB*

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 required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to fulfill a weekly orientation and 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. The weekly orientation is required for first time participants; returning participants are not required to attend the orientation weekly but are required to meet with the instructor as needed to complete all program forms and assignments. Work Experience may be taken for a total of 16 units when there are new or expanded learning objectives. This course is formerly known as PET 498.

Personal Activity

PACT 300 Archery **1 Unit**

General Education: AA/AS Area III(a); CSU Area E2
Course Transferable to UC/CSU
Hours: 54 hours LAB

The course is offered as beginning or intermediate recurve archery. In beginning archery, emphasis is on safety, knowledge, and basic skill development in a variety of beginning recurve archery activities. The intermediate course includes instruction and practice in more advanced skills of archery. It also reviews basic techniques with an emphasis on development of the physical and mental strengths necessary to perform at greater distances with greater accuracy. This course may be taken four times for credit.

PACT 310 Badminton **1 Unit**

General Education: AA/AS Area III(a); CSU Area E2
Course Transferable to UC/CSU
Hours: 54 hours LAB

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. This course may be taken four times for credit.

PACT 320 Bowling **1 Unit**

General Education: AA/AS Area III(a); CSU Area E2
Course Transferable to UC/CSU
Hours: 54 hours LAB

This course includes scoring, fundamentals, techniques, rules and social etiquette of bowling. It is designed to accommodate the beginning, intermediate and advanced bowler. This course may be taken four times.

PACT 350 Golf **1 Unit**

General Education: AA/AS Area III(a); CSU Area E2
Course Transferable to UC/CSU
Hours: 54 hours LAB

This course covers 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, the rules and etiquette necessary to play the game, and course management strategies in order to negotiate a golf course. There are beginning, intermediate and advanced levels of this course. Some sections of this course are held on area regulation golf courses in which students must bring their own golf clubs. This course may be taken four times for credit.

PACT 390 Tennis **1 Unit**

General Education: AA/AS Area III(a); CSU Area E2
Course Transferable to UC/CSU
Hours: 54 hours LAB

This course is offered as beginning, intermediate, or advanced tennis. Beginning tennis covers the basic technique of strokes, rules of play, simple strategies, and the etiquette of the sport. Intermediate tennis focuses on refining basic skills, introducing more complicated technique, teaching players more advanced strategies for singles, and includes an introduction to doubles. In advanced tennis, players work on improving the more complicated skills and techniques of the sport and competitive play takes a higher priority. This course may be taken four times for credit.

PACT 394 Tennis, Doubles **1 Unit**

Prerequisite: PACT 390 with a grade of "C" or better
General Education: AA/AS Area III(a); CSU Area E2
Course Transferable to UC/CSU
Hours: 54 hours LAB

This course provides instruction for intermediate and advanced players in competitive doubles tennis. Game tactics and skills development are emphasized. This course may be taken four times for credit.

PACT 400 Track and Field **1 Unit**

General Education: AA/AS Area III(a); CSU Area E2
Course Transferable to UC/CSU
Hours: 54 hours LAB

This course covers the basic fundamentals of track and field. It provides opportunities to obtain knowledge and practical experience in track and field activities. This course may be taken four times for credit.

Sport

SPORT 300 Baseball, Intercollegiate – Men **2 Units**

Prerequisite: At least one year of high school varsity baseball or equivalent
Enrollment Limitation: Tryout
General Education: AA/AS Area III(a); CSU Area E2
Course Transferable to UC/CSU
Hours: 180 hours LAB

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 3 times for credit.

SPORT 311 Basketball, Intercollegiate – Men, Fall **1 Unit**

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.
Enrollment Limitation: Tryout
General Education: AA/AS Area III(a); CSU Area E2
Course Transferable to UC/CSU
Hours: 90 hours LAB

This course covers fundamentals, rules, individual and/or team strategy appropriate to intercollegiate athletic competition. May be taken three times for credit.

SPORT 312 Basketball, Intercollegiate – Men, Spring **1 Unit**

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.
Enrollment Limitation: Tryout
General Education: AA/AS Area III(a); CSU Area E2
Course Transferable to UC/CSU
Hours: 90 hours LAB

This course covers fundamentals, rules, individual and/or team strategy appropriate to intercollegiate athletic competition. May be taken three times for credit.

SPORT 316 Basketball, Intercollegiate – Women, Fall 1 Unit

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.

Enrollment Limitation: Tryout

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 90 hours LAB

This course covers fundamentals, rules, individual and/or team strategy appropriate to intercollegiate athletic competition. May be taken three times for credit.

SPORT 317 Basketball, Intercollegiate – Women, Spring 1 Unit

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.

Enrollment Limitation: Tryout

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 90 hours LAB

This course covers fundamentals, rules, individual and/or team strategy appropriate to intercollegiate athletic competition. May be taken three times for credit.

SPORT 320 Cross Country, Intercollegiate – Men 2 Units

Enrollment Limitation: Tryout

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 180 hours LAB

This course covers fundamentals, rules, and individual and team strategy 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 three times for credit.

SPORT 325 Cross Country, Intercollegiate – Women 2 Units

Enrollment Limitation: Tryout

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 180 hours LAB

This course is an intercollegiate sport providing opportunities for competition in women's cross country. It provides instruction in cross country fundamentals and skills, including rules and individual and team strategies appropriate for intercollegiate athletic competition. This course may be taken three times for credit.

SPORT 330 Football, Intercollegiate – Men 2 Units

Enrollment Limitation: Tryout

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 180 hours LAB

This course is an intercollegiate sport providing opportunity for competition in men's football. This course provides football fundamentals, skills, rules, and individual and team strategies appropriate for intercollegiate athletic competition. This course may be taken three times for credit.

SPORT 340 Golf, Intercollegiate – Men 2 Units

Enrollment Limitation: Tryout

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 180 hours LAB

This course is an intercollegiate sport providing 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 three times for credit.

SPORT 345 Golf, Intercollegiate – Women 2 Units

Enrollment Limitation: Tryout

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 180 hours LAB

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 three times for credit.

SPORT 350 Soccer, Intercollegiate – Men 2 Units

Enrollment Limitation: Tryout

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 180 hours LAB

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 3 times for credit.

SPORT 355 Soccer, Intercollegiate – Women 2 Units

Enrollment Limitation: Tryout

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 180 hours LAB

This course is an intercollegiate sport providing opportunity for competition in women's soccer. It provides soccer fundamentals and skills and includes rules, individual and team strategy appropriate for intercollegiate athletic competition. This course may be taken 3 times for credit.

SPORT 365 Softball, Intercollegiate – Women 2 Units

Enrollment Limitation: Tryouts

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 180 hours LAB

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 three times for credit.

SPORT 370 Swimming and Diving, Intercollegiate – Men 2 Units

Enrollment Limitation: Tryout

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 180 hours LAB

This is an advanced swimming and diving activity course that provides competition with other community college teams. This course provides swimmers and divers with fundamentals, rules, team strategy, and aquatic skills. This course may be taken three times for credit.

SPORT 375 Swimming and Diving, Intercollegiate – Women 2 Units

Enrollment Limitation: Tryout
General Education: AA/AS Area III(a); CSU Area E2
Course Transferable to UC/CSU
Hours: 180 hours LAB

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 three times for credit.

SPORT 380 Tennis, Intercollegiate – Men 2 Units

Advisory: ENGRD 102 and ENGRD 116 with a grade of “C” or better; OR ESLR 320 and ESLW 320 with a grade of “C” or better.
Enrollment Limitation: Tryout
General Education: AA/AS Area III(a); CSU Area E2
Course Transferable to UC/CSU
Hours: 180 hours LAB

This course covers fundamentals, rules, and individual and/or team strategy appropriate to intercollegiate athletic competition in tennis. This course may be taken 3 times for credit.

SPORT 385 Tennis, Intercollegiate – Women 2 Units

Advisory: ENGRD 102 and ENGRD 116 with a grade of “C” or better; OR ESLR 320 and ESLW 320 with a grade of “C” or better.
Enrollment Limitation: Tryout
General Education: AA/AS Area III(a); CSU Area E2
Course Transferable to UC/CSU
Hours: 180 hours LAB

This course covers fundamentals, rules, and individual and/or team strategy appropriate to intercollegiate athletic competition in tennis. This course may be taken three times for credit.

SPORT 390 Track and Field, Intercollegiate – Men 2 Units

Enrollment Limitation: Tryout
General Education: AA/AS Area III(a); CSU Area E2
Course Transferable to UC/CSU
Hours: 180 hours LAB

The intercollegiate track and field course provides specialized training for competition with other community college teams. Each student is trained in the fundamental and advanced techniques needed for his specific events, along with the rules, strategies, sportsmanship and teamwork appropriate for intercollegiate competition. This course may be taken three times for credit.

SPORT 395 Track and Field, Intercollegiate – Women 2 Units

Enrollment Limitation: Tryout
General Education: AA/AS Area III(a); CSU Area E2
Course Transferable to UC/CSU
Hours: 180 hours LAB

This course is an intercollegiate sport providing opportunities in women's track and field. It provides instruction in track and field fundamentals and skills, including rules and both individual and team strategies appropriate for intercollegiate athletic competition. This course may be taken three times for credit.

SPORT 405 Volleyball, Intercollegiate – Women 2 Units

Enrollment Limitation: Tryout
General Education: AA/AS Area III(a); CSU Area E2
Course Transferable to UC/CSU
Hours: 180 hours LAB

This course is an intercollegiate sport providing opportunity for competition in women's volleyball. This course provides volleyball fundamentals and skills. It also includes rules, individual and team strategies appropriate for intercollegiate athletic competition. This course may be taken three times for credit.

SPORT 410 Water Polo, Intercollegiate – Men 2 Units

Advisory: ENGRD 116, ENGRD 102, ENGRD 103, ESLR 320, and ESLW 320; or placement through the assessment process.
Enrollment Limitation: Tryout
General Education: AA/AS Area III(a); CSU Area E2
Course Transferable to UC/CSU
Hours: 180 hours LAB

This course is an intercollegiate sport providing opportunity for competition in men's water polo. This course provides water polo fundamentals and skills and includes rules, individual and team strategy appropriate for intercollegiate athletic competition. This course may be taken 3 times for credit.

SPORT 415 Water Polo, Intercollegiate – Women 2 Units

Enrollment Limitation: Tryout
General Education: AA/AS Area III(a); CSU Area E2
Course Transferable to UC/CSU
Hours: 180 hours LAB

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 three times for credit.

Team Activities

TMACT 300 Soccer, Indoor 1 Unit

General Education: AA/AS Area III(a); CSU Area E2
Course Transferable to UC/CSU
Hours: 54 hours LAB

This course emphasizes defense, offense, passing, trapping, heading, and shooting. It covers the skills, strategy, and rules that govern the play of indoor soccer. This course may be taken four times for credit.

TMACT 302 Soccer – Outdoor 1 Unit

General Education: AA/AS Area III(a); CSU Area E2
Course Transferable to UC/CSU
Hours: 54 hours LAB

This course covers the skills of passing, trapping, kicking, and heading. Basic rules and strategies, as well as individual and team play, are covered. This course may be taken four times for credit.

TMACT 310 Baseball 1 Unit

Prerequisite: Have completed at least one year of varsity high school baseball or equivalent.
General Education: AA/AS Area III(a); CSU Area E2
Course Transferable to UC/CSU
Hours: 54 hours LAB

This course emphasizes defense, offense, pitching, base running, team strategy, and conditioning for college level, advanced baseball.

TMACT 320 Basketball 1 Unit

Advisory: Participation on a high school basketball team

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

This course features tournament scrimmage play to improve offensive, defensive, and team skills for basketball. This course may be taken four times for credit.

TMACT 330 Volleyball 1 Unit

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.

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

This course is designed to develop advanced skills in those students who have already participated at the elementary level. Lecture and demonstration will provide the knowledge to continue this activity at a higher skill level. This course may be taken 4 times for credit.

TMACT 340 Football 1 Unit

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.

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

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.

This course may be taken four times for credit.

TMACT 350 Softball, Fast Pitch 1 Unit

Advisory: Previous softball experience is required.

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

This course emphasizes defense, offense, pitching, base running, and conditioning. It covers advanced skills in fielding, pitching, base running, and hitting. Additionally, offensive and defensive team strategies are introduced at an advanced playing level. Field trips may be required. This course may be taken four times for credit.

TMACT 352 Softball, Slow Pitch 1 Unit

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

Slow pitch softball is a physical education course designed to teach the basic softball skills of throwing, catching, pitching, and hitting. Rules and strategies are also covered, including position play and baserunning. This course may be taken four times for credit.

Area: Behavioral & Social Sciences
 Dean: Carol Pottorff
 Phone: (916) 484-8283
 Counseling: (916) 484-8572

Degree: A.A. - Legal Assisting
 Certificates: Legal Assisting
 Law Office Clerical Assistant

DEGREES AND CERTIFICATES

Legal Assisting Degree

'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.

The Legal Assisting degree is a two year A.A. degree. The program includes general education requirements in addition to legal specialty classes. The Legal Assisting Program requires a General Education pattern for completion of the associate degree that is DIFFERENT FROM some other programs at the college. 18 units of General Education course work must come from the approved General Education courses for the A.A. in Legal Assisting list and be distributed over at least three different areas. See an academic counselor for the appropriate courses.

Legal courses cover basic substantive and procedural areas including civil litigation, legal research and legal writing, contracts and torts in preparation for an entry level position as a legal assistant.

The associate degree program is in full compliance with California Business and Professions Code section 6450 regarding preparation for work in this field.

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 Opportunities

Career opportunities for Legal Assistants have an excellent outlook. According to the US Department of Labor's Job Outlook, legal assistant jobs are projected to grow faster than average through 2018. This translates to an increase of 20% or higher.

Legal assistants find employment in both the State and Federal government as well as private practice and corporate settings.

Requirements for Degree	30 Units
LA 300	Introduction to Law and the American Legal System.... 3 ¹
LA 310	Civil Procedures and Litigation3
LA 312	Torts and Personal Injury3
LA 314	Contract Law for Legal Assistants3
LA 320	Legal Research3
LA 321	Legal Writing3
LA 350	Law Office Management3
And a minimum of 9 units from the following:9	
LA 330	Family Law and Procedure (3)
LA 332	Administrative Law and Procedure (3)
LA 334	Criminal Law and Procedure (3)
LA 340	Techniques of Interview (1)
LA 342	Evidence (3)
LA 360	Corporations Law (3)
LA 362	Estate Planning and Probate Procedure (3)
LA 364	Landlord Tenant Law (3)
LA 366	Basic Bankruptcy Law (3)
LA 368	Workers' Compensation Law (3)
LA 498	Work Experience in Legal Assisting (1 - 4)
LA 499	Experimental Offerings in Legal Assisting (.5 - 4)

¹The Legal Assisting Program requires a General Education pattern for completion of the associate degree that is DIFFERENT FROM some other programs at the college. 18 units of General Education course work must come from the approved General Education courses for the A.A. in Legal Assisting list and be distributed over at least three different areas. See an academic counselor for the appropriate courses.

Associate Degree Requirements: The Legal Assisting 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.

Legal Assisting Certificate

The student must possess an A.A. degree or higher from a regionally accredited institution to be eligible for the certificate. The Legal Assisting 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. The certificate program is in full compliance with California Business and Professions Code section 6450 regarding preparation for work in this field.

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.

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<u>Requirements for Certificate</u>	<u>30 Units</u>
LA 300	Introduction to Law and the American Legal System .. 3 ¹
LA 310	Civil Procedures and Litigation3
LA 312	Torts and Personal Injury3
LA 314	Contract Law for Legal Assistants3
LA 320	Legal Research3
LA 321	Legal Writing3
LA 350	Law Office Management3
And a minimum of 9 units from the following:9	
LA 330	Family Law and Procedure (3)
LA 332	Administrative Law and Procedure (3)
LA 334	Criminal Law and Procedure (3)
LA 340	Techniques of Interview (1)
LA 342	Evidence (3)
LA 360	Corporations Law (3)
LA 362	Estate Planning and Probate Procedure (3)
LA 364	Landlord Tenant Law (3)
LA 366	Basic Bankruptcy Law (3)

LA 368	Workers' Compensation Law (3)
LA 498	Work Experience in Legal Assisting (1 - 4)
LA 499	Experimental Offering in Legal Assisting (0.5 - 4)

¹The student must possess an A.A. degree or higher from a regionally accredited institution to be eligible for the certificate.

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.

Completion of the Law Office Assistant Certificate does not qualify the holder under California state law as a Legal Assistant or paralegal.

Student Learning Outcomes

Upon completion of this certificate 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 Opportunities

Typical career opportunities are entry-level clerical positions in a law office. In order to become a Legal Assistant/ Paralegal, see the program requirements for the A.A. or Certificate in Legal Assisting.

<u>Requirements for Certificate</u>	<u>16 Units</u>
LA 300	Introduction to Law and the American Legal System 3
LA 350	Law Office Management3
BUSTEC 100	Keyboarding Skills (1 -3) 1 - 3 ¹
or BUSTEC 300	Beginning Keyboarding/Applications (1 -3)
BUSTEC 122	Workplace Behavior and Communication Technologies3
BUSTEC 305	Introduction to Office Technology1
BUSTEC 310	Introduction to Word/Information Processing 1 - 3 ²

¹A total of 3 units from these courses must be taken.

²Must be taken for 3 units.

Legal Assisting

LA 300 Introduction to Law and the American Legal System 3 Units

Corequisite: ENGWR 300
Course Transferable to CSU
Hours: 54 hours LEC

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.

LA 310 Civil Procedures and Litigation 3 Units

Corequisite: LA 300
Course Transferable to CSU
Hours: 54 hours LEC

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. The phases of California court procedure, including State and Federal constitutional limitations, jurisdiction, venue, pleadings, and motions are covered. The course also includes the forms by which matters are submitted to the court system from pre-litigation through appeals.

LA 312 Torts and Personal Injury 3 Units

Corequisite: LA 300
Course Transferable to CSU
Hours: 54 hours LEC

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.

LA 314 Contract Law for Legal Assistants 3 Units

Corequisite: LA 300
Course Transferable to CSU
Hours: 54 hours LEC

This course covers basic contract principles. Topics include formation, validity, defenses, rights of third parties, performance, breach, remedies, and damages.

LA 320 Legal Research 3 Units

Corequisite: LA 300
Course Transferable to CSU
Hours: 54 hours LEC

This course covers the legal assistant with the basic tools of legal research in both federal and California law, with emphasis on California materials. Location and use of primary and secondary sources are studied. The elements of a court decision and how to brief a case are presented.

LA 321 Legal Writing 3 Units

Prerequisite: LA 320 with a grade of "C" or better
Course Transferable to CSU
Hours: 54 hours LEC

This course is a continuation of LA 320. It includes the application of research methods to gather information which may be used in a variety of written products. Information is synthesized into various documents typically used in the law office. Documents created may include interoffice memoranda, court briefs, and letters to clients.

LA 330 Family Law and Procedure 3 Units

Prerequisite: LA 300 with a grade of "C" or better
Advisory: LA 320
Course Transferable to CSU
Hours: 54 hours LEC

This course covers California Family Law relating to dissolution procedures, property issues, and non-marital relationships. Legal procedures, preparation of necessary forms and their significance are emphasized.

LA 332 Administrative Law and Procedure 3 Units

Prerequisite: LA 300 with a grade of "C" or better
Course Transferable to CSU
Hours: 54 hours LEC

This course covers administrative law and procedure. Topics include comparison of administrative law to civil and criminal law, and administrative due process.

LA 334 Criminal Law and Procedure 3 Units

Prerequisite: LA 300 with a grade of "C" or better
Course Transferable to CSU
Hours: 54 hours LEC

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.

LA 340 Techniques of Interview 1 Unit

Prerequisite: LA 300 with a grade of "C" or better
Course Transferable to CSU
Hours: 18 hours LEC

This course covers the skills used by a legal assistant in interviewing clients and witnesses. Topics include active and passive listening, and types of questions.

LA 342 Evidence 3 Units

Prerequisite: LA 300 with a grade of "C" or better
Advisory: LA 310
Course Transferable to CSU
Hours: 54 hours LEC

This course covers the rules of evidence in federal and state courts. Topics include Hearsay Rule, Best Evidence Rule, and organizing deposition transcripts.

LA 350 Law Office Management 3 Units

Corequisite: LA 300
Course Transferable to CSU
Hours: 54 hours LEC

This course covers aspects of the legal assistant's role in a law office. Law office technology, accounting, time and records management, and communication skills are examined.

LA 360 Corporations Law 3 Units

Prerequisite: LA 300 with a grade of "C" or better
Course Transferable to CSU
Hours: 54 hours LEC

This course covers corporation terminology and legal requirements governing corporations. Topics include formation, dissolution and liquidation of a corporation.

LA 362 Estate Planning and Probate Procedure 3 Units

Prerequisite: LA 300 and 320 with grades of "C" or better
Course Transferable to CSU
Hours: 54 hours LEC

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.

LA 364 Landlord Tenant Law 3 Units

Prerequisite: LA 300 with a grade of "C" or better
Course Transferable to CSU
Hours: 54 hours LEC

This course focuses on the most common types of landlord-tenant disputes. Litigation and non-litigation matters are covered. Topics include the different types of tenancy, what constitutes habitability, and tenant's rights and obligations.

LA 366 Basic Bankruptcy Law 3 Units

Prerequisite: LA 300 with a grade of "C" or better
Course Transferable to CSU
Hours: 54 hours LEC

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.

LA 368 Workers' Compensation Law 3 Units

Prerequisite: LA 300 with a grade of "C" or better
Course Transferable to CSU
Hours: 54 hours LEC

This course provides an overview of the Workers' Compensation Law in California. The focus is on the procedural aspects of handling a Workers' Compensation claim from both the applicant perspective and the defense perspective.

LA 498 Work Experience in Legal Assisting 1-4 Units

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.
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position or job related to legal assisting. Students are advised to consult with the Legal Assisting department faculty to review specific certificate and degree work experience requirements.
General Education: AA/AS Area III(b)
Course Transferable to CSU
Hours: 300 hours LAB

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 required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to attend a weekly orientation and 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. The weekly orientation is required for first time participants; returning participants are not required to attend the orientation but are required to meet with the instructor as needed to complete all program forms and assignments. Work Experience may be taken for a total of 16 units when there are new or expanded learning objectives.

Area: Instruction and Learning Resources
 Associate Vice President:
 Dr. David Redfield
 Phone: (916) 484-8407
 Counseling: (916) 484-8572

Library courses develop the skills necessary to conduct academic and personal research.

Library

LIBR 102 Introduction to Library Resources 1 Unit

Hours: 18 hours LEC

This course introduces basic library services and resources. It explores the services and functions of an academic library and develops 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 is required.

LIBR 310 Introduction to Genealogy Research 1 Unit

General Education: AA/AS Area III(b)

Course Transferable to CSU

Hours: 18 hours LEC

This course introduces genealogy research methods utilizing sources dating from colonial times to the present. Topics include evaluating and choosing genealogical resources, developing skills to analyze data, and organizing family history information using print forms or a software program.

LIBR 318 Library Research and Information Literacy 1 Unit

Advisory: LIBR 302

General Education: AA/AS Area III(b)

Course Transferable to UC/CSU

Hours: 18 hours LEC

This course provides the information competency skills necessary to conduct academic or personal research. It offers a step-by-step guide to the research process that is applicable to term papers, course work, and life-long learning.

LIBR 320 Introduction to Internet Research 1 Unit

Course Transferable to CSU

Hours: 18 hours LEC

This course provides an introduction to the Internet as an information and resources search tool for academic and personal use. It includes a brief history of the Internet, as well as various skills and strategies for locating, retrieving and evaluating information from the Internet. Topics include basic Internet navigation techniques, search tools, website evaluation criteria, searching strategies and ethical/legal issues involving the Internet.

LIBR 325 Internet Research Skills 3 Units

*Advisory: ENGWR 102 or 103, and ENGRD 116;
 OR ESLR 320 and ESLW 320; and CISC 300.*

General Education: AA/AS Area III(b)

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course is a comprehensive survey of 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, online databases, email, newsgroups, listservs, blogs and the deep web. Database search strategies and techniques are covered. Historical and social issues surrounding the Internet are also discussed.

LIBR 494 Topics in Library Science .5-4 Units

Course Transferable to CSU

Hours: 72 hours LEC

This course provides an opportunity to study current topics in library science that are not included in existing courses. It may be taken four times for a maximum of six units, providing there is no duplication of topics.

Area: Business & Computer Science
 Dean: Dr. Derrick Booth
 Phone: (916) 484-8361
 Counseling: (916) 484-8572

Degrees: A.A. - Management
 A.A. - Leadership
 Certificates: Management
 Leadership
 Introduction to Leadership in Action
 Certificates of Completion offered by the department:
 Leadership in Action: Psychology and Team Facilitation
 Leadership in Action: Systems Thinking
 Leadership in Action: Theory of Knowledge/Prediction
 Leadership in Action: Variation and Statistics

DEGREES AND CERTIFICATES

Management Degree

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.

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.

Requirements for Degree	24 Units
MGMT 300 Introduction to Leadership in Action.....	3
MGMT 304 Introduction to Management Functions.....	3
MGMT 308 Personnel and Human Resources Management.....	3
MGMT 360 Management Communication.....	3
MGMT 362 Techniques of Management.....	3
MGMT 372 Human Relations and Organizational Behavior.....	3
And a minimum of 6 units from the following:	6
BUS 340 Business Law (3)	
CISA 306 Intermediate Word Processing (2)	
CISA 308 Exploring Word Processing and Presentation Software (1)	
CISA 316 Intermediate Electronic Spreadsheets (2)	
CISA 318 Exploring Spreadsheet Software (1)	
CISA 340 Presentation Graphics (2)	
MGMT 142 Project Management Techniques and Software (3)	

Associate Degree Requirements: 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.

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.

Student Learning Outcomes

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.

Requirements for Certificate 15 Units

MGMT 304 Introduction to Management Functions.....	3
MGMT 308 Personnel and Human Resources Management.....	3
MGMT 360 Management Communication.....	3
MGMT 362 Techniques of Management.....	3
MGMT 372 Human Relations and Organizational Behavior.....	3

Leadership Degree

The Leadership 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.

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.

(continued on next page)

(Leadership Degree continued)

- 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 production strategies.

Requirements for Degree		24 Units
MGMT 300	Introduction to Leadership in Action.....	3
MGMT 320	Leadership in Action: Organizational Variation	3
MGMT 330	Leadership in Action: Organizational Teams	3
MGMT 340	Leadership in Action: Organizational Systems	3
MGMT 350	Leadership in Action: Organizational Learning	3
MGMT 142	Project Management Techniques and Software	3
And a minimum of 6 units from the following:		6
MGMT 374	Social Responsibility and Ethics in Management (3)	
PSYC 383	Introduction to Organizational Psychology (3)	
PHYS 310	Conceptual Physics (3)	

Associate Degree Requirements: 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.

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.

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.

Requirements for Certificate		27 Units
MGMT 142	Project Management Techniques and Software	3
MGMT 300	Introduction to Leadership in Action.....	3
MGMT 320	Leadership in Action: Organizational Variation	3
MGMT 330	Leadership in Action: Organizational Teams	3
MGMT 340	Leadership in Action: Organizational Systems	3
MGMT 350	Leadership in Action: Organizational Learning	3
MGMT 374	Social Responsibility and Ethics in Management	3
PHYS 310	Conceptual Physics.....	3
PSYC 383	Introduction to Organizational Psychology.....	3

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.

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 team-centered corporate cultures.

Requirements for Certificate		15 Units
MGMT 300	Introduction to Leadership in Action.....	3
MGMT 320	Leadership in Action: Organizational Variation	3
MGMT 330	Leadership in Action: Organizational Teams	3
MGMT 340	Leadership in Action: Organizational Systems	3
MGMT 350	Leadership in Action: Organizational Learning	3

**CERTIFICATES OF COMPLETION
(offered by the department)****Leadership in Action:
Psychology and Team Facilitation Certificate**

The Leadership in Action: Psychology and Team Facilitation 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.

Student Learning Outcomes

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.

Requirements for Certificate		9 Units
MGMT 300	Introduction to Leadership in Action	3
MGMT 330	Leadership in Action: Organizational Teams	3
PSYC 383	Introduction to Organizational Psychology.....	3

**Leadership in Action:
Systems Thinking Certificate**

The Leadership in Action: Systems Thinking 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.

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.

Requirements for Certificate		9 Units
MGMT 300	Introduction to Leadership in Action	3
MGMT 340	Leadership in Action: Organizational Systems	3
PHYS 310	Conceptual Physics	3

**Leadership in Action:
Theory of Knowledge/Prediction Certificate**

The Leadership in Action: Theory of Knowledge/Prediction 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.

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.

Requirements for Certificate		9 Units
MGMT 300	Introduction to Leadership in Action	3
MGMT 350	Leadership in Action: Organizational Learning	3
MGMT 374	Social Responsibility and Ethics in Management	3

**Leadership in Action:
Variation and Statistics Certificate**

The Leadership in Action: Variation and Statistics 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.

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.

Requirements for Certificate		6 Units
MGMT 300	Introduction to Leadership in Action	3
MGMT 320	Leadership in Action: Organizational Variation	3

Management

MGMT 120 Leadership for Personal Excellence 1 Unit

Hours: 18 hours LEC

This course is an introduction to the practical application of personal leadership tools. It explores concepts in the areas of the sources of leadership, external and personal factors, the impact of beliefs, the power of self rewards, imagination, and creativity. This course emphasizes the connection between effective self leadership and effective leadership of others.

MGMT 121 Leadership for Personal Excellence in Teams 1 Unit

Hours: 18 hours LEC

This course examines the practical application of personal leadership in teams. It presents an in-depth approach to the sources of leadership, external and personal factors; the impact of beliefs, the power of self rewards, imagination and creativity, and introduces the concepts of team self-leadership, and the application of tools to empower change. This course emphasizes the connection between effective personal leadership and effective leadership of others.

MGMT 122 Leadership for Personal Excellence in Organizations 1 Unit

Hours: 18 hours LEC

This course examines the practical application of personal leadership tools as applied to organizational process. It explores the areas of the sources of leadership, external and personal factors, the impact of beliefs, the power of self rewards, imagination and creativity, team self leadership, and the application of tools to empower change. This course emphasizes the connection between effective personal leadership and its application to organizations and the effective leadership of others.

MGMT 142 Project Management Techniques and Software 3 Units

Same As: CISA 160

Advisory: ENGWR 102 or 103, and ENGRD 116; OR ESLR 320 and ESLW 320; CISC 300

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.

MGMT 294 Topics in Management .5-5 Units

Hours: 90 hours LEC

This course examines topics in management that are not included in existing courses. It may be taken three times for a maximum of three units, providing there is no duplication of topics.

MGMT 300 Introduction to Leadership in Action 3 Units

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.

Course Transferable to CSU

Hours: 54 hours LEC

This course examines the underlying principles and practices of leadership and its implementation by both individuals and organizations. Topics include leadership traits, motivation, empowerment, communication, continuous process improvement, Total Quality Management, customer focused management, and leading change.

MGMT 304 Introduction to Management Functions 3 Units

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.

Course Transferable to CSU

Hours: 54 hours LEC

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.

MGMT 308 Personnel and Human Resources Management 3 Units

Course Transferable to CSU

Hours: 54 hours LEC

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.

MGMT 320 Leadership in Action: Organizational Variation 3 Units

Course Transferable to CSU

Hours: 54 hours LEC

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.

MGMT 330 Leadership in Action: Organizational Teams 3 Units

Course Transferable to CSU

Hours: 54 hours LEC

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.

MGMT 340 Leadership in Action: Organizational Systems 3 Units

Course Transferable to CSU

Hours: 54 hours LEC

This course covers basic knowledge of organizational systems with a focus on the practical application of vision, mission, key, essential, and support processes, and organizational improvement methodologies. Emphasis is placed on the immediate application of the tools to the work place.

MGMT 350 Leadership in Action: Organizational Learning 3 Units

Course Transferable to CSU

Hours: 54 hours LEC

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 work place.

MGMT 360 Management Communication 3 Units

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.

General Education: AA/AS Area II(b)

Course Transferable to CSU

Hours: 54 hours LEC

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.

MGMT 362 Techniques of Management 3 Units

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.

Course Transferable to CSU

Hours: 54 hours LEC

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.

MGMT 372 Human Relations and Organizational Behavior 3 Units

Course Transferable to CSU

Hours: 54 hours LEC

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.

MGMT 374 Social Responsibility and Ethics in Management 3 Units

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.

General Education: AA/AS Area V(b)

Course Transferable to CSU

Hours: 54 hours LEC

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.

Area: Business & Computer Science
 Dean: Dr. Derrick Booth
 Phone: (916) 484-8361
 Counseling: (916) 484-8572

Degree: A.A. - Advertising & Sales Promotion
 A.A. - Marketing
 A.A. - Retail Management
 Certificate: Retail Management (WAFC)

DEGREES AND CERTIFICATES

Marketing Degree

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.

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.

Requirements for Degree	41-42 Units
ACCT 101 Fundamentals of College Accounting (3) 3 - 4 or ACCT 301 Financial Accounting (4)	
BUS 110 Business Economics (3) 3 or ECON 302 Principles of Macroeconomics (3)	
BUS 300 Introduction to Business 3	
BUS 310 Business Communications 3	
BUS 340 Business Law 3	
CISA 305 Beginning Word Processing 2	
MGMT 300 Introduction to Leadership in Action (3) 3 or MGMT 304 Introduction to Management Functions (3)	
MKT 300 Principles of Marketing 3	
MKT 310 Selling Professionally 3	
MKT 312 Retailing 3	
MKT 314 Advertising 3	
CISA 340 Presentation Graphics 2	

And a minimum of 7 units from the following:7

BUS 320	Concepts in Personal Finance (3)
BUS 330	Managing Diversity in the Workplace (3)
BUS 350	Small Business Management/Entrepreneurship (3)
CISA 160	Project Management Techniques and Software (3)
or MGMT 142	Project Management Techniques and Software (3)
CISA 315	Introduction to Electronic Spreadsheets (2)
CISA 320	Introduction to Database Management (1)
CISA 330	Desktop Publishing (2)
GEOG 330	Introduction to Geographic Information Systems (3)
MGMT 308	Personnel and Human Resources Management (3)
MGMT 372	Human Relations and Organizational Behavior (3)

Associate Degree Requirements: 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.

Advertising and Sales Promotion Degree

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.

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 Opportunities

Sales, copywriter, in-house communications, public relations, technical communications, media planner, media buyer.

(continued on next page)

(Advertising and Sales Promotion Degree continued)

Requirements for Degree Major		39-40 Units
ACCT 101	Fundamentals of College Accounting (3)	3 - 4
or ACCT 301	Financial Accounting (4)	
ARTNM 324	Digital Design	3
ARTNM 303	Graphic Design: Typography	3
BUS 110	Business Economics (3)	3
or ECON 302	Principles of Macroeconomics (3)	
BUS 300	Introduction to Business	3
BUS 340	Business Law	3
CISA 330	Desktop Publishing	2
CISC 300	Computer Familiarization	1
GEOG 330	Introduction to Geographic Information Systems	3
MKT 300	Principles of Marketing	3
MKT 310	Selling Professionally	3
MKT 312	Retailing	3
MKT 314	Advertising	3
And a minimum of 3 units from the following:		3
BUSTEC 305	Introduction to Office Technology (1)	
BUSTEC 310	Introduction to Word/Information Processing (1 - 3)	
CISA 305	Beginning Word Processing (2)	
CISA 315	Introduction to Electronic Spreadsheets (2)	
CISA 331	Intermediate Desktop Publishing (2)	
CISA 340	Presentation Graphics (2)	

Associate Degree Requirements: 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.

Retail Management Degree

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.

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 Opportunities

Buyer, department manager, store director, sales associate, account executive, merchandiser, sales manager.

Requirements for Degree Major		41-42 Units
ACCT 101	Fundamentals of College Accounting (3)	3 - 4
or ACCT 301	Financial Accounting (4)	
BUS 110	Business Economics (3)	3
or ECON 302	Principles of Macroeconomics (3)	
BUS 300	Introduction to Business	3
BUS 310	Business Communications	3
BUS 340	Business Law (3)	3
or BUS 345	Law and Society (3)	
CISA 305	Beginning Word Processing	2
CISA 315	Introduction to Electronic Spreadsheets	2
MGMT 304	Introduction to Management Functions	3
MKT 300	Principles of Marketing	3
MKT 310	Selling Professionally	3
MKT 312	Retailing	3
MKT 314	Advertising	3
And a minimum of 7 units from the following:		7
BUS 330	Managing Diversity in the Workplace (3)	
or BUS 105	Business Mathematics (3)	
or BUS 224	Customer Service (1)	
or BUS 214	Financing a Small Business (1)	
or BUS 210	The Business Plan (1)	
or BUS 220	Retailing and Merchandising for the Small Business (1)	
or BUS 350	Small Business Management/Entrepreneurship (3)	
CISC 305	Introduction to the Internet (1)	
or CISA 330	Desktop Publishing (2)	
or CISA 320	Introduction to Database Management (1)	
MGMT 372	Human Relations and Organizational Behavior (3)	
or MGMT 362	Techniques of Management (3)	
or MGMT 360	Management Communication (3)	
or MGMT 308	Personnel and Human Resources Management (3)	

Associate Degree Requirements: 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.

Retail Management (WAFC) Certificate

The program gives an overview of the retail industry and the skills needed to succeed within this arena. It is designed to provide training for those wishing to be owners, managers, and employees of retail organizations. The Retail Management certificate meets the needs of industry leaders such as the Western Association of Food Chains (WAFC).

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- recognize retailing trends, applications and the variables involved in service retailing.
- incorporate principles of product development, pricing, distribution strategies, promotion strategies and market research.
- evaluate practical business problems.
- analyze the organization necessary for effective purchasing procedure in a large organization.
- integrate management principles in relationship to finance, personnel, products, services and information.
- utilize critical thinking in the determination of alternative solutions.

Career Opportunities

Buyer, department supervisor, store director, entrepreneur, customer service representative.

Requirements for Certificate		31-32 Units
ACCT 101 or ACCT 301	Fundamentals of College Accounting (3) Financial Accounting (4)	3 - 4
BUS 100 or BUS 310	English for the Professional (3) Business Communications (3)	3
BUS 105	Business Mathematics	3
CISA 305	Beginning Word Processing	2
CISA 315	Introduction to Electronic Spreadsheets	2
MGMT 304	Introduction to Management Functions	3
MGMT 308	Personnel and Human Resources Management	3
MGMT 372	Human Relations and Organizational Behavior	3
MKT 300	Principles of Marketing	3
MKT 312	Retailing	3
SPEECH 301 or SPEECH 321	Public Speaking (3) Interpersonal Communication (3)	3

Marketing

MKT 300 Principles of Marketing 3 Units

Course Transferable to CSU

Hours: 54 hours LEC

This course provides a general overview of the principles of marketing. The marketing concept and customer satisfaction are a primary focus of the course. 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. It also examines the topics of target marketing, market segmentation, consumer behavior, social responsibility, marketing research, and international marketing.

MKT 310 Selling Professionally 3 Units

Course Transferable to CSU

Hours: 54 hours LEC

The 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. It develops better selling and personal marketing techniques. Field trips may be required.

MKT 312 Retailing 3 Units

Course Transferable to CSU

Hours: 54 hours LEC

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.

MKT 314 Advertising 3 Units

Advisory: MKT 300

Course Transferable to CSU

Hours: 54 hours LEC

This course is an introduction to consumer advertising. It focuses on the advertising industry: advertisers, agencies, media, and suppliers. The course investigates how organizations identify and understand their target audience. Advertising media are studied in detail, including television, radio, magazines, newspapers, outdoor, Internet, direct mail, and other media. The highlight of the course involves working in groups, and developing and presenting an entire advertising campaign. This course is recommended for those interested in a career in advertising, or to help future entrepreneurs develop effective advertising for their business.

MKT 332 Advertising on the Internet (Electronic Commerce) 3 Units

Prerequisite: None

Advisory: ENGWR 102 or ENGWR 103 and ENGRD 116; or ESLR 320 and ESLW 320, or placement through assessment.

Course Transferable to CSU

Hours: 54 hours LEC

This course addresses the process of advertising in the electronic commerce environment. It focuses on discussing on-line marketing. The effects of electronic commerce on market research, demographics and traditional advertising channels and case studies of successful models will be studied and examined.

Area: Mathematics
 Dean: Nancy Reitz
 Phone: (916) 484-8215
 Counseling: (916) 484-8572

Degree: A.S. - Mathematics
 A.S. - Physical Science/Mathematics
 A.S. for Transfer Degree - Mathematics

Mathematics Degree

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.

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.

Requirements for Degree	25 Units
MATH 400 Calculus I	5
MATH 401 Calculus II	5
MATH 402 Calculus III	5
MATH 410 Introduction to Linear Algebra	3
MATH 420 Differential Equations	4
And a minimum of 3 units from the following:	3
MATH 320 Symbolic Logic (3)	
or PHIL 324 Symbolic Logic (3)	
STAT 300 Introduction to Probability and Statistics (4)	

Associate Degree Requirements: 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.

Physical Science/Mathematics Degree

This program provides a broad study in fields of physical science and mathematics. It provides a good foundation for transfer to a four-year program in science.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- recognize and utilize correctly 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.

Career Opportunities

This program is intended to provide a broad foundation of skills and knowledge to help students succeed in the completion of a bachelor's degree in a variety of science, math or engineering-related areas.

Requirements for Degree	18 Units
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A minimum of 18 units from the following:..... 18¹
 Transferable courses must be selected from the following areas:
 astronomy, chemistry, engineering, geology, mathematics,
 physical geography, physical science, physics, and statistics.

¹excludes GIS and cultural geography courses

Associate Degree Requirements: 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.

Mathematics A.S. for Transfer Degree

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 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) 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 Opportunities

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.

Requirements for Degree	22 Units
MATH 400 Calculus I.....	5
MATH 401 Calculus II.....	5
MATH 402 Calculus III.....	5
MATH 410 Introduction to Linear Algebra.....	3
MATH 420 Differential Equations.....	4

Associate in Science for Transfer Degree Requirements: The Mathematics Associate in Science for Transfer (A.S.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.

Mathematics

MATH 10 Developing Confidence in Math 1 Unit

Advisory: Concurrent enrollment in another math course
Hours: 18 hours LEC

This course helps students to recognize common fears and misconceptions of mathematics, and to overcome math anxiety and avoidance. Strategies to achieve success in mathematical situations are discussed. This course is also useful for tutors, counselors, and teachers interested in helping others overcome their math anxiety. Credit/No Credit only.

MATH 23 Computational Arithmetic - Part I 2 Units

Advisory: Confirm placement using ARC's Math Self-Assessment System
Hours: 36 hours LEC

This course introduces the fundamentals of arithmetic with an emphasis on computational skills. Topics include whole numbers, exponents, order of operations, factors, fractions, problem solving, and applications.

MATH 24 Computational Arithmetic - Part II 2 Units

Prerequisite: MATH 23 with a grade of "C" or better
Hours: 36 hours LEC

This course completes the fundamentals of arithmetic with an emphasis on computational skills. Topics include rounding decimals, operations on decimals, ratios, rates, proportions, percents, problem solving, and applications.

MATH 25 Computational Arithmetic 3 Units

Advisory: Confirm placement using ARC's Math Self-Assessment System
Hours: 54 hours LEC

This course covers fundamentals of arithmetic with an emphasis on computational skills. Topics include whole numbers, fractions, decimals, problem solving, and applications.

MATH 32 Pre-Algebra 3 Units

Prerequisite: MATH 24 or 25 with a grade of "C" or better; or placement through the assessment process.
Hours: 54 hours LEC

This course will briefly review the fundamentals of arithmetic, including whole numbers, fractions, and decimals. Course content will include order of operations, signed numbers, concepts of variables, exponents, ratios and proportions, area/perimeter/volume of geometric figures, and solving equations.

MATH 38 Pre-Algebra - Part I 2 Units

Prerequisite: MATH 24 or 25 with a grade of "C" or better; or placement through the assessment process.
Hours: 36 hours LEC

This course introduces material that is essential for success in algebra. Topics include order of operations, signed numbers, application problems, concepts of variables, exponents, and solving equations. In addition, the fundamentals of arithmetic are briefly reviewed, including operations on whole numbers, fractions, and decimals.

MATH 39 Pre-Algebra - Part II 2 Units

Prerequisite: MATH 38 with a grade of "C" or better
Hours: 36 hours LEC

This course completes material that is essential for success in algebra. Topics include percent problems, proportions, solving algebraic equations, applications of equations, polynomials, graphing points and lines, and area/perimeter/volume of geometric figures.

MATH 100 Elementary Algebra 5 Units

Prerequisite: MATH 32 or 39 with a grade of "C" or better; or placement through the assessment process.
Hours: 90 hours LEC

This course covers the fundamental concepts and operations of algebra with problem solving skills emphasized. Topics include properties of real numbers, linear equations and inequalities, integer exponents, polynomials, and factoring polynomials. Other topics include rational exponents, rational/radical expressions with associated equations, the rectangular coordinate system, graphs and equations of lines, systems of linear equations, and solving quadratic equations.

MATH 103 Elementary Algebra, Part I 3 Units

Prerequisite: MATH 32 or 39 with a grade of "C" or better; or placement through the assessment process.
Hours: 54 hours LEC

This course covers the first half of the traditional MATH 100 course and includes the fundamental concepts and operations of algebra with problem solving skills emphasized. Topics include properties of real numbers, linear equations and inequalities, integer exponents, polynomials, systems of linear equations and inequalities, the rectangular coordinate system, graphs and equations of lines, and applications.

MATH 104 Elementary Algebra, Part II 3 Units

Prerequisite: MATH 103 with a grade of "C" or better
Hours: 54 hours LEC

This course covers the second half of the traditional MATH 100 course. Topics include polynomial factorization, rational expressions and equations, radical expressions and equations, rational exponents, quadratic equations, and applications.

MATH 110 Elementary Geometry 5 Units

Prerequisite: MATH 100 or 104 with a grade of "C" or better; or placement through the assessment process.
Hours: 90 hours LEC

This course covers aspects of elementary geometry. Topics include terms and definitions, properties of parallel lines and parallelograms, congruent and similar triangles, properties of triangles, right triangles, and basic trigonometry. Later topics include properties of circles, construction of loci, areas, and volumes. The course also emphasizes problem solving strategies, elementary logic, and reading and writing proofs.

MATH 120 Intermediate Algebra 5 Units

Prerequisite: MATH 100 or 104 with a grade of "C" or better; or placement through the assessment process.
General Education: AA/AS Area II(b)
Hours: 90 hours LEC

This course reviews and extends the concepts of elementary algebra with an emphasis on problem solving. Topics which are reviewed and extended include linear and quadratic equations, inequalities, factoring polynomials, rational expressions, exponents, radicals, graphing, and system of equations. New 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.

MATH 123 Intermediate Algebra, Part I 3 Units

Prerequisite: MATH 100 or 104 with a grade of "C" or better; or placement through the assessment process.
Hours: 54 hours LEC

This course reviews and extends the concepts of elementary algebra with an emphasis on problem solving. Topics include solving linear equations and inequalities, factoring of polynomials, solving quadratic equations, rational expressions, exponents, solving equations containing rational expressions, equations of lines, functions, and absolute value equations and inequalities.

MATH 124 Intermediate Algebra, Part II 3 Units

Prerequisite: MATH 123 with a grade of "C" or better
General Education: AA/AS Area II(b)
Hours: 54 hours LEC

This course extends the concepts of elementary algebra and MATH 123 with problem solving skills emphasized throughout. Topics include graphs and their translations and reflections, radicals and complex numbers, composite and inverse functions, exponential and logarithmic functions, graphs of quadratic and polynomial functions, nonlinear systems of equations, and an introduction to conic sections.

MATH 125 Intermediate Algebra with Applications 4 Units

Prerequisite: MATH 100 or 104 with a grade of "C" or better; or placement through the assessment process.
General Education: AA/AS Area II(b)
Hours: 72 hours LEC

This course is designed for the intermediate algebra student who plans to continue on to MATH 300, 310, 320, 325, STAT 300 or complete an associate degree. It does not fulfill the prerequisite for MATH 315, 330, or higher numbered math courses. 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.

MATH 129 Elementary and Intermediate Algebra 9 Units

Prerequisite: MATH 32 or 39 with a grade of "C" or better; or placement through the assessment process.
General Education: AA/AS Area II(b) (effective Summer 2012)
Hours: 162 hours LEC

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.

MATH 290 PACE: Applications of Mathematics 1 Unit

Hours: 18 hours LEC

This course presents extended applications of mathematics not generally covered in the classroom. Topics include 2-D and 3-D geometry, measurement, proportion, and budgetary analysis. The course incorporates computer software as a learning tool. It culminates in a final project and presentation.

MATH 294 Topics in Mathematics 5-4 Units

Hours: 72 hours LEC

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. The course may be taken four times for a maximum of 6 credits with no duplication of topics.

MATH 300 Introduction to Mathematical Ideas 3 Units

Prerequisite: MATH 120, 124, 125, or 129 with a grade of "C" or better; or placement through the assessment process.

General Education: AA/AS Area II(b); CSU Area B4

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course focuses on elements of mathematical systems. It is designed to make fundamental concepts and processes more meaningful to the general student. Its content may include systems, logic, geometry, combinatorics, probability, statistics, sets, matrices, and number theory. Not recommended for students entering elementary school teaching or business administration majors.

MATH 310 Mathematical Discovery 3 Units

Prerequisite: Math 110 and either Math 120, Math 124, Math 125, or Math 129 with grades of "C" or better or placement through the assessment process.

General Education: AA/AS Area II(b); CSU Area B4

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course explores mathematical patterns and relations, and formulation and proof of conjectures. Topics from number theory, probability and statistics, and geometry will be investigated. Recommended for students interested in education.

MATH 315 Exploratory Field Experience in Mathematics 3 Units

Prerequisite: Math 120 (Intermediate Algebra) or Math 124 (Intermediate Algebra, Part II) or Math 129 (Elementary and Intermediate Algebra) with a grade of "C" or better or placement through the assessment process.

Enrollment Limitation: Current TB clearance is required prior to work in schools. Fingerprinting may also be required.

General Education: AA/AS Area III(b)

Course Transferable to UC/CSU

Hours: 36 hours LEC; 54 hours LAB

This course is an education-based field experience in mathematics allowing students to explore teaching as a career choice. Students are assigned to area schools to observe and/or assist in a mathematics classroom. Students have the opportunity to learn and practice essential skills to assist younger students with their progress through the mathematics sequence, and to learn about social, cultural, and educational issues related to mathematics and the school environment. Weekly seminars allow students to share experiences and compare observations. This course is recommended for those who may wish to pursue a single-subject credential in mathematics.

MATH 320 Symbolic Logic 3 Units

Same As: PHIL 324

Prerequisite: MATH 120, 124, 125, or 129 with a grade of "C" or better; or placement through the assessment process.

General Education: AA/AS Area II(b)

Course Transferable to UC/CSU

Hours: 54 hours LEC

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.

MATH 325 Problem-Solving 3 Units

Prerequisite: MATH 120, 124, 125, or 129 with a grade of "C" or better; or placement through the assessment process.

General Education: AA/AS Area II(b); CSU Area B4

Course Transferable to CSU

Hours: 54 hours LEC

This course focuses on the problem-solving skills necessary to solve both real-life and nontraditional mathematics problems. Problem-solving strategies presented in this course include: drawing a diagram, eliminating possibilities, making a systematic list, looking for a pattern, guessing and checking, solving an easier related problem, working backward, algebraic representation, finite differences, and other related techniques. Divergent thinking, group work, and the clear presentation of mathematical work will be emphasized throughout the course.

MATH 330 Trigonometry 3 Units

Prerequisite: MATH 110 with a grade of "C" or better; or placement through the assessment process.; MATH 120, MATH 124 or MATH 129 with a grade of "C" or better or placement through the assessment process.

General Education: AA/AS Area II(b); CSU Area B4

Course Transferable to CSU

Hours: 54 hours LEC

This course presents the fundamentals of trigonometry. Topics include definitions of trigonometric and circular functions, graphs, identities and applications. Other material covered includes solving trigonometric equations, solving triangles using the Laws of Sines and Cosines, vectors, polar coordinates and polar representations of complex numbers.

MATH 340 Calculus for Business and Economics 3 Units

Prerequisite: MATH 120, 124, or 129 with a grade of "C" or better; or placement through the assessment process.

General Education: AA/AS Area II(b); CSU Area B4; IGETC Area 2

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course is an introduction to differential and integral calculus with applications in the fields of business, economics, social science and biological science. It is not recommended for mathematics and physical science majors.

MATH 342 Modern Business Mathematics 3 Units

Prerequisite: MATH 120, 124, or 129 with a grade of "C" or better; or placement through the assessment process.

General Education: AA/AS Area II(b); CSU Area B4

Course Transferable to CSU

Hours: 54 hours LEC

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 including applications and optimization, and linear programming.

MATH 344 Finite Mathematics 3 Units

Prerequisite: MATH 120, 124, or 129 with a grade of "C" or better; or placement through the assessment process.

General Education: AA/AS Area II(b); CSU Area B4; IGETC Area 2

Course Transferable to UC/CSU

Hours: 54 hours LEC; 18 hours LAB

This course covers sets, probability and combinatorics, expected value, matrix theory systems of equations and inequalities, linear programming, and mathematics of finance with emphasis on applications in business administration, biological sciences, and social science. It also includes computer applications.

MATH 350 Calculus for the Life and Social Sciences I 3 Units

Prerequisite: MATH 330 with a grade of "C" or better

General Education: AA/AS Area II(b); CSU Area B4; IGETC Area 2

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course covers functions, limits, and derivatives, and introduces antiderivatives. Algebraic and computational techniques are emphasized in applications from business, and social and biological sciences. It is not recommended for math or engineering majors.

MATH 351 Calculus for the Life and Social Sciences II 3 Units

Prerequisite: MATH 350 with a grade of "C" or better

General Education: CSU Area B4; IGETC Area 2

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course is the continuation of MATH 350. It covers integration and differentiation of commonly used functions and applications of analytic geometry and calculus.

MATH 360 Introduction to Scientific Graphing Calculators 1 Unit

Prerequisite: MATH 330 with a grade of "C" or better

Course Transferable to CSU

Hours: 18 hours LEC

This course introduces the basic functions and applications of scientific graphic calculators. It covers plotting, evaluating, and solving functions. It also discusses calculator-based solutions of problems from algebra and trigonometry; and introduces techniques that will be useful in subsequent courses like precalculus and calculus. A calculator of a model and type that will be specified by instructor is required.

MATH 370 Pre-Calculus Mathematics 5 Units

Prerequisite: MATH 330 with a grade of "C" or better

General Education: AA/AS Area II(b); CSU Area B4; IGETC Area 2

Course Transferable to UC/CSU

Hours: 90 hours LEC

This course includes application and graphing of polynomial, logarithmic, exponential and trigonometric functions, as well as systems of linear and non-linear equations and inequalities. It also covers analytic geometry including straight lines, conic sections, graphing and curve sketching.

MATH 400 Calculus I 5 Units

Prerequisite: MATH 370 with a grade of "C" or better; or placement through the assessment process.

Advisory: Students who took Precalculus in a non-college setting should confirm adequate preparation for MATH 400 using ARC's Math Self-Assessment System

General Education: AA/AS Area II(b); CSU Area B4; IGETC Area 2

Course Transferable to UC/CSU

Hours: 90 hours LEC

This course is an introduction to differential and integral calculus. It includes limits, continuity, differentiation and integration of algebraic, trigonometric, logarithmic, exponential, and other transcendental functions. Some applications are also covered.

MATH 401 Calculus II 5 Units

Prerequisite: MATH 400 with a grade of "C" or better

General Education: CSU Area B4; IGETC Area 2

Course Transferable to UC/CSU

Hours: 90 hours LEC

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.

MATH 402 Calculus III 5 Units

Prerequisite: MATH 401 with a grade of "C" or better

General Education: CSU Area B4; IGETC Area 2

Course Transferable to UC/CSU

Hours: 90 hours LEC

This course is a continuation of MATH 401. It extends the concepts of limits, derivatives, and integrals to vector-valued functions and multi-variable functions. The topics include: multi-variable functions, partial derivatives, extrema of multi-variable 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.

MATH 410 Introduction to Linear Algebra 3 Units

Prerequisite: MATH 400 with a grade of "C" or better

Advisory: MATH 402

General Education: CSU Area B4; IGETC Area 2

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course provides an introduction to linear algebra including matrices, determinants, vector spaces, linear transformations, and eigenvectors. It is intended for majors in mathematics, engineering, economics, science, and related fields.

MATH 420 Differential Equations

4 Units

Prerequisite: MATH 401 with a grade of "C" or better

Advisory: MATH 402

General Education: CSU Area B4; IGETC Area 2

Course Transferable to UC/CSU

Hours: 72 hours LEC

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.

MATH 480 Honors Seminar in Mathematics

1 Unit

Prerequisite: MATH 370 with a grade of "C" or better

Course Transferable to CSU

Hours: 18 hours LEC

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.

MATH 481 Honors Applications of Calculus

1 Unit

Prerequisite: Cumulative GPA of 3.0 or better; MATH 402 with a grade of "C" or better, and ENGWR 300 or 480 with a grade of "C" or better.

Course Transferable to UC/CSU

Hours: 18 hours LEC

This course focuses on professional applications of mathematics in such fields as biomathematics, economics, political science, computer science, earth science, social sciences and psychology. AA/AS area 4C

MATH 1000 Individualized Mathematics

2-3 Units

Prerequisite: To enroll in a "Part I" course, confirm placement by one of the following: transcript, prerequisite verification slip from a counselor, or LRCCD assessment test. To enroll in a "Part II" course, students must first complete the corresponding "Part I" course.

Advisory: CISC 100, CISC 300, CISC 305, ENGRD 116, or ESLR 320

Hours: 54 hours LEC

Math 1000 is ARC's individualized math program, which is located in the Multimedia Math Learning Center (MMLC). Students are placed into Math 23, 24, 38, 39, 103, 104, 123, or 124 during orientation (first two class meetings are mandatory!) through the use of the required prerequisite. Students must purchase a textbook & online course website student access kit. Use of a computer with Internet access is required. Students work through the material on an independent study basis and take exams after each unit in the MMLC. Assistance such as instructors, instructional assistants, student tutors, video lectures, and one-on-one tutoring appointments are available to enrolled students only. Enrollment occurs only during first two weeks of the Fall/Spring semester and only during first week of Summer session. For the most updated info, please visit our website: http://www.arc.losrios.edu/Programs_of_study/Mathematics/mmlc.htm

Statistics

STAT 105 Statway, Part I

6 Units

Prerequisite: MATH 32 or 39 with a grade of "C" or better; or placement through both the COMPASS assessment test and the math self-assessment test.

Advisory: ENGRD 116 or ESLR 320

Hours: 108 hours LEC

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, and simple linear regression. 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.

STAT 300 Introduction to Probability and Statistics

4 Units

Prerequisite: MATH 120, 124, 125, or 129 with a grade of "C" or better; or placement through the assessment process.

General Education: AA/AS Area II(b); CSU Area B4; IGETC Area 2

Course Transferable to UC/CSU

Hours: 72 hours LEC

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). A calculator with two-variable statistics capabilities is required.

STAT 305 Statway, Part II

6 Units

Prerequisite: STAT 105 with a grade of "C" or better

Advisory: ENGRD 116 or ESLR 320

General Education: AA/AS Area II(b); CSU Area B4

Course Transferable to CSU

Hours: 108 hours LEC

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 three units of transfer-level statistics.

Area: Fine & Applied Arts
 Dean: Dr. Adam Karp
 Phone: (916) 484-8433
 Counseling: (916) 484-8572

Degrees: A.A. - Music
 A.A. - Commercial Music: Business
 A.A. - Commercial Music: Recording
 A.A. - Jazz Studies
 Certificates: Commercial Music: Business
 Commercial Music: Recording

The Music Degree program is designed to provide students with a foundation in music theory and history. In addition, ARC provides a degree program in Jazz Studies. Performance opportunities in both vocal and instrumental music enhance a student's understanding and skill levels.

The Commercial Music program provides opportunities for degrees and certificates in either the recording or music business.

DEGREES AND CERTIFICATES

Music Degree

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.

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 Opportunities

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.

Core Requirements for Degree		26 Units
MUFHL 310	Survey of Music History and Literature	3
MUFHL 311	Survey of Music History and Literature	3
MUFHL 400	Music Theory	4
MUFHL 401	Music Theory	4
MUFHL 410	Advanced Music Theory	4
MUFHL 411	Advanced Music Theory	4
MUIVI 420	Applied Music	1
MUIVI 421	Applied Music II	1
MUIVI 422	Applied Music III	1
MUIVI 423	Applied Music IV	1

Guitarists/Pianists Concentration 34 Units

Core Requirements	26
And a minimum of 8 units from the following:	8
MUP 310	Orchestra (2)
MUP 330	Concert Band (2)
MUP 340	Symphonic Band (2)
MUP 350	College Choir (2)
MUP 360	Chamber Singers (2)

Instrumentalists Concentration 34 Units

Core Requirements	26
And a minimum of 8 units from the following:	8
MUP 310	Orchestra (2)
MUP 330	Concert Band (2)
MUP 340	Symphonic Band (2)

Vocalists Concentration 34 Units

Core Requirements	26 units
And a minimum of 8 units from the following:	8
MUP 350	College Choir (2)
MUP 360	Chamber Singers (2)

Associate Degree Requirements: 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.

Jazz Studies Degree

The Jazz Studies degree provides a rigorous curriculum of jazz theory, history, performance groups, improvisation, piano, and individual applied instruction.

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 Opportunities

The Jazz Program prepares a student for careers in performance (concert and studio), education, arranging/composing, and in the music industry. The degree also prepares students for transfer to a four-year institution.

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(Jazz Studies Degree continued)

Requirements for Degree		38 Units
MUFHL 315	Jazz History	3
MUFHL 330	World Music	3
MUFHL 400	Music Theory	4
MUFHL 401	Music Theory	4
MUFHL 410	Advanced Music Theory	4
MUFHL 420	Beginning Jazz Theory	2
MUIVI 385	Jazz Styles and Improvisation (2)	2
or MUIVI 390	Beginning Jazz and Popular Vocal Styles (2)	
MUIVI 400	Beginning Jazz Piano	2
MUIVI 420	Applied Music	1
MUIVI 421	Applied Music II	1
MUIVI 425	Applied Music - Jazz I	1
MUIVI 426	Applied Music - Jazz II	1
MUSM 334	Introduction to Musical Instrument	
	Digital Interface (MIDI)	2
And a minimum of 8 units from the following:		8
MUP 320	Jazz Band (2)	
MUP 400	Vocal Jazz Ensemble (2)	

Associate Degree Requirements: 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.

Commercial Music: Business Degree and Certificate

The Commercial Music: Business program 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.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- develop a business and marketing plan for a music business and evaluate its quality
- 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
- 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 Opportunities

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.

Requirements for Degree or Certificate		33 Units
BUS 300	Introduction to Business	3
BUS 340	Business Law	3

BUS 350	Small Business Management/Entrepreneurship	3
MUFHL 321	Basic Musicianship	3
MUFHL 330	World Music	3
MUSM 110	The Business of Music	3
MUSM 111	The Business of Music	3
MUSM 112	The Business of Music/Artist Management	3
MUSM 113	The Business of Music/Promotion	3
MUSM 120	Contemporary Songwriting	3
And a minimum of 3 units from the following:		3

BUS 210	The Business Plan (1)	
BUS 212	Marketing for Small Businesses (1)	
BUS 214	Financing a Small Business (1)	
BUS 216	Essential Records for the Small Business (1)	
BUS 218	Management Skills for the Small Business (1)	
BUS 220	Retailing and Merchandising for the Small Business (1)	
BUS 224	Customer Service (1)	
BUS 228	Selling Techniques for the Small Business (1)	

Associate Degree Requirements: 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.

Commercial Music: Recording Degree and Certificate

The Commercial Music: Recording program 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.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- analyze the signal flow within a typical recording studio
- plan and employ the use of analog and digital mixing consoles for audio recording
- operate analog and digital multitrack recorders
- assess the efficacy of employing analog or digital equipment for the recording process
- compare and set up outboard signal processing equipment used for audio enhancement
- evaluate and demonstrate the use of recording, sequencing, and notation software
- design and equip a fully-functioning and acoustically-sound recording studio
- formulate and implement effective recording session techniques

Career Opportunities

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.

Requirements for Degree or Certificate		37 Units
BUS 350	Small Business Management/Entrepreneurship	3
ET 302	Principles of Electricity and Electronics	4
MUFHL 321	Basic Musicianship	3
MUFHL 330	World Music	3
MUIVI 340	Beginning Piano	2
MUSM 110	The Business of Music	3
MUSM 120	Contemporary Songwriting	3
MUSM 140	Concert Sound Reinforcement	2

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(Commercial Music: Recording Degree and Certificate continued)

MUSM 334	Introduction to Musical Instrument Digital Interface (MIDI)	2
MUSM 342	Recording Studio Techniques	3
MUSM 344	Recording Studio Techniques	3
MUSM 350	Recording Studio Techniques	3
MUSM 352	Recording Studio Techniques	3

Associate Degree Requirements: 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.

Music Fundamentals, History and Literature**MUFHL 300 Introduction to Music 3 Units**

Advisory: ENGRD 116 or ESLR 320; or placement through the assessment process.

General Education: AA/AS Area I; CSU Area C1; IGETC Area 3A

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course is an introductory examination of how composers and songwriters exploit 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.

MUFHL 308 Introduction to Music: Rock & Roll 3 Units

General Education: AA/AS Area I

Course Transferable to UC/CSU

Hours: 54 hours LEC

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.

MUFHL 310 Survey of Music History and Literature 3 Units

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.

General Education: AA/AS Area I; CSU Area C1; IGETC Area 3A

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course is a survey of the history of music, including the most significant composers and works from antiquity to the Baroque period. It is required for music majors and also designed for those students interested in humanities or the arts.

MUFHL 311 Survey of Music History and Literature 3 Units

Advisory: ENGWR 102 or 103 and ENGRD 116 or ESLR 320, ESLL 320, and ESLW 320, or placement through assessment

General Education: AA/AS Area I; CSU Area C1; IGETC Area 3A

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course is a survey of the history of music including its composers and most significant works from the Classical period to the present. It is required for music majors and also designed for those students having a background in music and who are particularly interested in humanities or arts.

MUFHL 315 Jazz History 3 Units

Advisory: ENGRD 116 or ESLR 320; or placement through the assessment process.

General Education: AA/AS Area I; AA/AS Area VI; CSU Area C1; IGETC Area 3A

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course is an historical, comprehensive, and comparative listener survey of the traditions of jazz music from around the world and in the United States. Concepts of ethnicity, ethnocentrism, racism, ageism, class differences, and gender issues are addressed. 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. Jazz styles of the Americas, Asia, Africa, India, and Europe are covered.

MUFHL 321 Basic Musicianship 3 Units

General Education: AA/AS Area I; CSU Area C1; IGETC Area 3A

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course is an introductory examination of the elements of music including scales, chords, aural skills, harmonic progression, form, notation, and composition. No previous musical study is required.

MUFHL 330 World Music 3 Units

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.

General Education: AA/AS Area I; AA/AS Area VI; CSU Area C1; IGETC Area 3A

Course Transferable to UC/CSU

Hours: 54 hours LEC

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, Australia and Europe are compared. No previous musical experience is required.

MUFHL 400 Music Theory 4 Units

Prerequisite: Knowledge of musical notation

Advisory: MUIVI 340

General Education: AA/AS Area I; CSU Area C1; IGETC Area 3A

Course Transferable to UC/CSU

Hours: 54 hours LEC; 54 hours LAB

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 students with experience in the application of materials learned in class. It includes analysis and composition and is required for music majors.

MUFHL 401 Music Theory 4 Units

Prerequisite: MUFHL 400 with a grade of "C" or better

Advisory: MUIVI 341

General Education: CSU Area C1; IGETC Area 3A

Course Transferable to UC/CSU

Hours: 54 hours LEC; 54 hours LAB

This course is a continuation of MUFHL 400. It provides a more in-depth study of scales, triads and seventh chords, diatonic harmonies, part writing, rhythms, sight singing, ear training, dictation, form, history, and performance. It includes analysis and composition and is required for music majors.

MUFHL 410 Advanced Music Theory 4 Units

Prerequisite: MUFHL 401 with a grade of "C" or better
Advisory: MUIVI 350

General Education: CSU Area C1; IGETC Area 3A
Course Transferable to UC/CSU
Hours: 54 hours LEC; 54 hours LAB

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.

MUFHL 411 Advanced Music Theory 4 Units

Prerequisite: MUFHL 410 with a grade of "C" or better
Advisory: MUIVI 351

General Education: CSU Area C1; IGETC Area 3A
Course Transferable to UC/CSU
Hours: 54 hours LEC; 54 hours LAB

This course is a continuation of MUFHL 410. It includes a more in-depth study of altered chords and late nineteenth- and twentieth-century writing techniques including: 9th, 11th and 13th chords; altered dominants; chromatic harmony; dodecaphony; set theory; aleatory; minimalism; and analysis techniques. Practice in rhythmic, melodic, harmonic and contrapuntal sight-singing, ear-training and dictation. This course is required for music majors.

MUFHL 420 Beginning Jazz Theory 2 Units

Prerequisite: MUFHL 400 with a grade of "C" or better
Advisory: MUIVI 385 and 400

Course Transferable to UC/CSU
Hours: 36 hours LEC; 18 hours LAB

This course introduces the elements of jazz theory including harmonic, melodic and formal analysis in the jazz idiom.

MUFHL 421 Advanced Jazz Theory 2 Units

Prerequisite: MUFHL 420 with a grade of "C" or better
Advisory: MUIVI 386 and 400

Course Transferable to CSU
Hours: 36 hours LEC; 18 hours LAB

This course presents a continuation of jazz concepts presented in MUFHL 420. The emphasis is on advanced elements of jazz theory including composition and arranging, as well as harmonic, melodic, and formal analysis in the jazz idiom.

MUFHL 480 Honors Introduction to Music 3 Units

Prerequisite: Cumulative GPA of 3.0 or above; ENGWR 300 or 480 with a grade of "C" or better

Advisory: Previous experience in music notation, theory, and/or performance is recommended.

General Education: CSU Area C1; IGETC Area 3A
Course Transferable to UC/CSU
Hours: 54 hours LEC

This course is designed as a seminar for the student who has previous experience in music notation, theory, and/or performance. Included in the course are (1) an analysis of the listening process and recognizing the roles of the composer, the performer and the listener, and (2) an evaluation of the intellectual and emotional elements of listening. This course also covers the distinctions between the functional and aesthetic purposes of music. Attendance at live musical performances and/or field trips is required.

Instrumental/Voice Instruction**MUIVI 310 Voice Class 2 Units**

Enrollment Limitation: Student must be able to match pitch.

General Education: CSU Area C1
Course Transferable to UC/CSU
Hours: 36 hours LEC; 18 hours LAB

This course emphasizes the development of the individual singer's voice. Basic vocal techniques of breathing and mouth position are practiced. Solo repertoire is learned and performed in class.

MUIVI 311 Voice Class 2 Units

Prerequisite: MUIVI 310 with a grade of "C" or better
Course Transferable to UC/CSU

Hours: 36 hours LEC; 18 hours LAB

This course emphasizes the continued development of the individual singer's voice. Topics include the International Phonetic Alphabet (IPA) and techniques of breathing and vowel formation. Solos are learned and performed in class.

MUIVI 320 Voice Class, Intermediate 2 Units

Prerequisite: MUIVI 311 with a grade of "C" or better
Course Transferable to UC/CSU

Hours: 36 hours LEC; 18 hours LAB

This course emphasizes the continued development of the individual's voice. The course offers solo singers the opportunity to further develop the concepts begun in the first and second semesters of vocal study. Solos are learned and performed in class.

MUIVI 321 Voice Class, Intermediate 2 Units

Prerequisite: MUIVI 320 with a grade of "C" or better
Course Transferable to UC/CSU

Hours: 36 hours LEC; 18 hours LAB

This course focuses on the practical application of bel canto technique with emphasis on English and Italian diction and literature. The course offers solo singers the opportunity to further develop the concepts begun in the first three semesters of vocal study. Performance in class is required.

MUIVI 340 Beginning Piano 2 Units

General Education: CSU Area C1
Course Transferable to UC/CSU

Hours: 36 hours LEC; 18 hours LAB

This course is designed for students interested in piano as a medium of expression and enjoyment, and for prospective nursery, kindergarten and elementary teachers. It is required for music majors who do not demonstrate equivalent piano proficiency.

MUIVI 341 Beginning Piano 2 Units

Prerequisite: MUIVI 340 with a grade of "C" or better;
 MUIVI 340 with a grade of "C" or better, or the ability to sight read an eight measure composition with a single line in each hand and the ability to play I-IV-I-V7-I in 5 major keys (C, G, F, D, A major)
Course Transferable to UC/CSU
Hours: 36 hours LEC; 18 hours LAB

This course is a continuation of MUIVI 340 and is designed for students interested in piano as a medium of expression and enjoyment, and for prospective nursery, kindergarten and elementary teachers. It is required for music majors who do not demonstrate equivalent piano proficiency.

MUIVI 350 Intermediate Piano 2 Units

Prerequisite: MUIVI 341 with a grade of "C" or better, or the ability to play major scales (one octave, hands together C, D, E, D, A, and E-major) and the ability to play a simple melody with basic choral accompaniment in a major or minor key.

Course Transferable to UC/CSU

Hours: 36 hours LEC; 18 hours LAB

This course expands on the piano playing foundations of MUIVI 341 and includes further study of the harmonization of melodies, major and minor scales, and repertoire.

MUIVI 351 Intermediate Piano 2 Units

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.

Course Transferable to UC/CSU

Hours: 36 hours LEC; 18 hours LAB

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.

MUIVI 370 Beginning Guitar 2 Units

General Education: CSU Area C1

Course Transferable to UC/CSU

Hours: 36 hours LEC; 18 hours LAB

This course provides guitar instruction emphasizing the fundamentals of music reading and basic technique. It may be taken two times for credit using different music.

MUIVI 371 Intermediate Guitar 2 Units

Prerequisite: MUIVI 370 with a grade of "C" or better

Course Transferable to UC/CSU

Hours: 36 hours LEC; 18 hours LAB

This course is a continuation of MUIVI 370 with emphasis on increased skills in note reading, improvisation, accompanying, and development of personal style.

MUIVI 385 Jazz Styles and Improvisation 2 Units

Prerequisite: Ability to play a melodic instrument or ability to sight sing; ability to read music in a clef.

Advisory: MUFHL 400

General Education: CSU Area C1

Course Transferable to UC/CSU

Hours: 36 hours LEC; 18 hours LAB

This course is the study of instrumental and vocal applications of jazz improvisation. This course may be taken twice for credit.

MUIVI 386 Jazz Styles and Improvisation 2 Units

Prerequisite: MUIVI 385 with a grade of "C" or better

Advisory: MUFHL 420

Course Transferable to UC/CSU

Hours: 36 hours LEC; 18 hours LAB

This course is the study of advanced instrumental and vocal applications of jazz improvisation. This course may be taken twice for credit.

MUIVI 390 Beginning Jazz and Popular Vocal Styles 2 Units

Prerequisite: MUIVI 310 with a grade of "C" or better; or by audition

Course Transferable to CSU

Hours: 36 hours LEC; 18 hours LAB

This course offers instruction in the stylistic and performance elements of jazz and popular solo singing styles and repertoire including blues, rhythm and blues, pop, rock and country. This course may be taken twice for credit.

MUIVI 391 Intermediate Jazz and Popular Vocal Styles 2 Units

Prerequisite: MUIVI 390 with a grade of "C" or better

Course Transferable to CSU

Hours: 36 hours LEC; 18 hours LAB

This course offers intermediate studies in jazz and popular solo singing styles. Topics included scat improvisation and singing in the following styles: Latin jazz, swing, funk, and blues. This course may be taken twice for credit.

MUIVI 400 Beginning Jazz Piano 2 Units

Prerequisite: MUIVI 340 with a grade of "C" or better

Advisory: MUFHL 400, MUFHL 420, and MUIVI 385

Course Transferable to CSU

Hours: 36 hours LEC; 18 hours LAB

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. This course requires at least five hours per week outside preparation. This course may be taken two times for credit.

MUIVI 401 Intermediate Jazz Piano 2 Units

Prerequisite: MUIVI 400 with a grade of "C" or better

Advisory: MUFHL 420

Course Transferable to CSU

Hours: 36 hours LEC; 18 hours LAB

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. This course requires at least five hours per week outside preparation. This course may be taken two times for credit.

MUIVI 420 Applied Music 1 Unit

Corequisite: Enrolled in 2 units from: MUP 310, 320, 330, 340, 350, 360, or 400; AND enrolled in 4 units from: MUFHL 400, 401, 410, 411, 420 or 421.

Enrollment Limitation: Audition

Course Transferable to UC/CSU

Hours: 7 hours LEC, 191 hours TBA

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 individualized instrumental or vocal instruction seven hours per semester with a private instructor, four hours per semester of solo performance and recital attendance, and a final juried performance. It also includes five and one-half hours monitored practice time per week, and six hours of additional research, rehearsal, and performance evaluation per week as scheduled in the semester syllabus. This course is required for all traditional performance and jazz music majors. Students must be concurrently enrolled in a large performance ensemble and a music theory course.

MUIVI 421 Applied Music II 1 Unit

Prerequisite: MUIVI 420 with a grade of "C" or better
Corequisite: Enrolled in 2 units from: MUP 310, 320, 330, 340, 350, 360, or 400; AND enrolled in 4 units from: MUFHL 400, 401, 410, 411, 420 or 421.

Enrollment Limitation: Audition

Course Transferable to UC/CSU

Hours: 7 hours LEC, 191 hours TBA

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 individualized instrumental or vocal instruction seven hours per semester with a private instructor, four hours per semester of solo performance and recital attendance, and a final juried performance. It also includes five and one-half hours monitored practice time per week, and six hours of additional research, rehearsal, and performance evaluation per week as scheduled in the semester syllabus. This course is required for all traditional performance and jazz music majors. Students must be concurrently enrolled in a large performance ensemble and a music theory course.

MUIVI 422 Applied Music III 1 Unit

Prerequisite: MUIVI 420 and 421 with grades of "C" or better
Corequisite: Enrolled in 2 units from: MUP 310, 330, 340, 350, or 360; AND enrolled in 4 units from: MUFHL 400, 401, 410, or 411.

Enrollment Limitation: Audition

Course Transferable to UC/CSU

Hours: 7 hours LEC, 191 hours TBA

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 individualized instrumental or vocal instruction seven hours per semester with a private instructor, four hours per semester of solo performance and recital attendance, and a final juried performance. It also includes five and one-half hours monitored practice time per week, and six hours of additional research, rehearsal, and performance evaluation per week as scheduled in the semester syllabus. This course is required for all traditional performance music majors. Students must be concurrently enrolled in a large performance ensemble and a music theory course.

MUIVI 423 Applied Music IV 1 Unit

Prerequisite: MUIVI 420, 421, and 422 with grades of "C" or better
Corequisite: Enrolled in 2 units from: MUP 310, 330, 340, 350, or 360; AND enrolled in 4 units from: MUFHL 400, 401, 410, or 411.

Enrollment Limitation: Audition

Course Transferable to UC/CSU

Hours: 7 hours LEC, 191 hours TBA

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 individualized instrumental or vocal instruction seven hours per semester with a private instructor, four hours per semester of solo performance and recital attendance, and a final juried performance. It also includes five and one-half hours monitored practice time per week, and six hours of additional research, rehearsal, and performance evaluation per week as scheduled in the semester syllabus. This course is required for all traditional performance music majors. Students must be concurrently enrolled in a large performance ensemble and a music theory course.

MUIVI 425 Applied Music - Jazz I 1 Unit

Prerequisite: MUIVI 421 with a grade of "C" or better
Corequisite: Enrolled in 2 units from: MUP 320 or 400. Also enrolled in 4 units from: MUFHL 400, 401, or 410; OR enrolled in 2 units from: MUFHL 420 or 421.

Enrollment Limitation: Audition

Course Transferable to UC/CSU

Hours: 7 hours LEC, 191 hours TBA

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 seven hours of individualized instrumental or vocal instruction with a private instructor, four hours per semester of solo performance and recital attendance, and a final juried performance. It also includes five and one-half hours monitored practice time per week, and six hours of additional research, rehearsal, and performance evaluation per week as scheduled in the semester syllabus. This course is required for all jazz studies majors. Students must be concurrently enrolled in a large performance jazz ensemble and a music theory course.

MUIVI 426 Applied Music - Jazz II 1 Unit

Prerequisite: MUIVI 425 with a grade of "C" or better
Corequisite: Enrolled in 2 units from: MUP 320 or 400. Also enrolled in 4 units from: MUFHL 400, 401, or 410; OR enrolled in 2 units from: MUFHL 420 or 421.

Enrollment Limitation: Audition

Course Transferable to UC/CSU

Hours: 7 hours LEC, 191 hours TBA

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 seven hours of individualized instrumental or vocal instruction with a private instructor, four hours per semester of solo performance and recital attendance, and a final juried performance. It also includes five and one-half hours monitored practice time per week, and six hours of additional research, rehearsal, and performance evaluation per week as scheduled in the semester syllabus. This course is required for all jazz studies majors. Students must be concurrently enrolled in a large performance jazz ensemble and a music theory course.

MUIVI 430 Beginning Organ 1 Unit

Prerequisite: Keyboard proficiency required. The student must be able to play a composition for piano comparable in difficulty to a Bach Two-Part Invention.

Course Transferable to UC/CSU

Hours: 54 hours LAB

This course is designed to introduce and develop fundamental organ/keyboard skills. It is required for organ majors. It may be taken twice for credit.

MUIVI 431 Intermediate Organ 1 Unit

Prerequisite: Two semesters of MUIVI 430.

Course Transferable to UC/CSU

Hours: 54 hours LAB

This course is a continuation of MUIVI 430. It includes the further development of skills relative to music written for the organ. Required for organ majors. May be taken twice for credit.

MUIVI 440 Brass Instruction 1 Unit

Enrollment Limitation: The ability to play a brass instrument is needed to be successful in this course

Course Transferable to UC/CSU

Hours: 9 hours LEC; 27 hours LAB

This course provides specialized instruction in aspects of applied literature and performance on a brass instrument. This course may be taken four times for credit.

MUIVI 442 String Instruction 1 Unit

Course Transferable to UC/CSU
Hours: 9 hours LEC; 27 hours LAB

This course provides specialized instruction, including aspects of applied literature and performance, on a string instrument. It may be taken four times for credit using different music.

MUIVI 444 Woodwind Instruction 1 Unit

Enrollment Limitation: The ability to play a woodwind instrument is needed to be successful in this course
General Education: CSU Area C1
Course Transferable to UC/CSU
Hours: 9 hours LEC; 27 hours LAB

This course provides specialized instruction in aspects of applied literature and performance on a woodwind instrument. This course may be taken four times for credit.

MUIVI 446 Percussion Instruction 1 Unit

Course Transferable to UC/CSU
Hours: 9 hours LEC; 27 hours LAB

This course provides specialized instruction, including aspects of applied literature and performance, on percussion instruments. It may be taken four times for credit using different music.

Music Performance

MUP 310 Orchestra 2 Units

Enrollment Limitation: Ability to play an orchestral instrument.
General Education: CSU Area C1
Course Transferable to UC/CSU
Hours: 18 hours LEC; 54 hours LAB

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 four times for credit.

MUP 311 Advanced Orchestra 1-2 Units

Prerequisite: MUP 310 with a grade of "C" or better; or an audition.
Course Transferable to CSU
Hours: 18 hours LEC; 54 hours LAB

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 four times for credit.

MUP 320 Jazz Band 2 Units

Enrollment Limitation: Ability to play at least one instrument commonly used in jazz ensemble; audition required.
General Education: CSU Area C1
Course Transferable to UC/CSU
Hours: 18 hours LEC; 54 hours LAB

This course is the study and performance of jazz band repertoire performing a wide variety of music in the jazz style. Public performance and field trips are required. This course may be taken four times for credit.

MUP 321 Advanced Jazz Band 1-2 Units

Prerequisite: MUP 320 (8 units)
Enrollment Limitation: Ability to play at least one instrument commonly used in jazz ensemble; audition required.
Course Transferable to CSU
Hours: 18 hours LEC; 54 hours LAB

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 performance, recording sessions, and field trips may be required. This course may be taken four times for credit.

MUP 327 Chamber Jazz Ensemble 2 Units

Prerequisite: Ability to play at least one instrument commonly found in a jazz ensemble; audition required.
Course Transferable to CSU
Hours: 18 hours LEC; 54 hours LAB

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.

MUP 328 Advanced Chamber Jazz Ensemble 2 Units

Prerequisite: Completion of 8 units of MUP 327 with a grade of "C" or better
Enrollment Limitation: Audition
Course Transferable to CSU
Hours: 18 hours LEC; 54 hours LAB

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.

MUP 330 Concert Band 2 Units

Enrollment Limitation: Ability to play a concert band instrument.
General Education: CSU Area C1
Course Transferable to UC/CSU
Hours: 18 hours LEC; 54 hours LAB

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 four times for credit.

MUP 331 Advanced Concert Band 1-2 Units

Prerequisite: MUP 330 (Concert Band) with a grade of "C" or better; or audition.
Course Transferable to CSU
Hours: 18 hours LEC; 54 hours LAB

This course is the continuing study and performance of concert band literature. Additional topics include experience in conducting, rehearsal technique, and section leading. Public performances and/or field trips are required. This course may be taken four times for credit.

MUP 340 Symphonic Band 2 Units

Enrollment Limitation: Ability to play a symphonic band instrument.
General Education: CSU Area C1
Course Transferable to UC/CSU
Hours: 18 hours LEC; 54 hours LAB

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 four times for credit.

MUP 341 Advanced Symphonic Band 1-2 Units

Prerequisite: MUP 340 (Symphonic Band) with a grade of "C" or better; or audition.

Course Transferable to CSU

Hours: 18 hours LEC; 54 hours LAB

This course is the continuing study and performance of advanced symphonic band literature. Additional topics include experience in conducting, rehearsal technique, and section leading. Public performances and/or field trips are required. This course may be taken four times for credit.

MUP 345 Wind Ensemble 2 Units

Prerequisite: Ability to play an instrument found in a wind or chamber ensemble

Enrollment Limitation: Audition

Course Transferable to CSU

Hours: 18 hours LEC; 54 hours LAB

This course offers the study and performance of various styles of wind literature designed for one-on-a-part performance. Chamber music literature, rehearsal technique, and performance practices are examined. Public performances and field trips may be required. This course may be taken four times for credit.

MUP 350 College Choir 2 Units

Enrollment Limitation: Ability to match pitch and produce a good tone demonstrated in the initial assessment

General Education: CSU Area C1

Course Transferable to UC/CSU

Hours: 18 hours LEC; 54 hours LAB

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 are required. This course may be taken four times for credit.

MUP 352 Advanced Concert Choir 1-2 Units

Prerequisite: 8 units of MUP 350 with a grade of "C" or better

Enrollment Limitation: Ability to match pitch and produce a good tone demonstrated in the initial assessment

Course Transferable to CSU

Hours: 18 hours LEC; 54 hours LAB

This course is the 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.

MUP 360 Chamber Singers 2 Units

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.

General Education: CSU Area C1

Course Transferable to UC/CSU

Hours: 18 hours LEC; 54 hours LAB

This course is an advanced choral ensemble of limited size performing a wide variety of music-classical, world music, folksong arrangements, and contemporary compositions. Public performances, festivals, and field trips are required. This course may be taken four times for credit.

MUP 361 Advanced Chamber Singers 1-2 Units

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.

Course Transferable to CSU

Hours: 18 hours LEC; 54 hours LAB

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.

MUP 370 Rehearsal and Performance – Musical Ensemble .5-3 Units

Same As: TA 466

Enrollment Limitation: Audition

Course Transferable to UC/CSU

Hours: 162 hours LAB

This course explores the development of a musical theatre production presented before the campus and community. A different production will be presented each semester the course is offered. May be taken four times for credit up to a maximum of twelve units. Not open to students who are taking TA 466 for the same production.

MUP 400 Vocal Jazz Ensemble 2 Units

Enrollment Limitation: Audition is required. The audition will include sight singing, aural skills, improvisation and the preparation of a short musical excerpt.

General Education: CSU Area C1

Course Transferable to UC/CSU

Hours: 18 hours LEC; 54 hours LAB

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 four times for credit.

MUP 401 Advanced Vocal Jazz Ensemble 1-2 Units

Prerequisite: MUP 400 with a grade of "C" or better

Enrollment Limitation: Audition is required. The audition will include sight singing, aural skills, improvisation and the preparation of a short musical excerpt.

Course Transferable to CSU

Hours: 18 hours LEC; 54 hours LAB

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 four times for credit.

MUP 410 Woodwind Ensemble 1 Unit

Enrollment Limitation: The ability to play a woodwind instrument is needed to be successful in this course

Course Transferable to UC/CSU

Hours: 9 hours LEC; 27 hours LAB

This course is designed for small ensemble experience and practice for woodwind players. Public performances and field trips are required. The course may be taken four times for credit.

MUP 412 Percussion Ensemble 1 Unit

Course Transferable to UC/CSU

Hours: 9 hours LEC; 27 hours LAB

This course is the study of percussion ensemble literature. Public performances and/or field trips are required. It may be taken four times for credit.

MUP 414 String Ensemble 1 Unit

Course Transferable to UC/CSU
Hours: 9 hours LEC; 27 hours LAB

This course is a study of string literature including duets, trios, quartets, and ensembles. Public performances and/or field trips are required. This course may be taken four times for credit.

MUP 416 Brass Ensemble 1 Unit

Enrollment Limitation: The ability to play a brass instrument is needed to be successful in this course
Course Transferable to UC/CSU
Hours: 9 hours LEC; 27 hours LAB

This course is designed for small ensemble experience and practice for brass players. Public performances and field trips are required. This course may be taken four times for credit.

MUP 418 Piano Ensemble 1 Unit

Enrollment Limitation: Audition required.
Course Transferable to UC/CSU
Hours: 9 hours LEC; 27 hours LAB

The emphasis of this class is on the artistic interpretation and performance of music for two or more pianists. This course is limited to advanced pianists who can read music. It is recommended for piano majors. The course may be taken four times for credit.

MUP 420 Special Ensemble Participation 2 Units

Enrollment Limitation: Audition
Course Transferable to UC/CSU
Hours: 18 hours LEC; 54 hours LAB

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/or field trips are required. This course may be taken four times for credit.

MUP 424 Commercial Music Ensemble 2 Units

Prerequisite: Ability to play at least one instrument or vocalize in a popular style. Performers must also sight read and improvise.
Enrollment Limitation: Audition
General Education: CSU Area C1
Course Transferable to CSU
Hours: 18 hours LEC; 54 hours LAB

The Commercial Music Ensemble studies and performs contemporary commercial music. Rock styles, rhythm and blues, country, funk, contemporary jazz, world beat, and other areas associated with popular music will be studied. Public performances and field trips are required. This course may be taken four times for credit.

Specializations in Music

MUSM 110 The Business of Music 3 Units

Hours: 54 hours LEC

This course covers 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.

MUSM 111 The Business of Music 3 Units

Prerequisite: MUSM 110 with a grade of "C" or better
Hours: 54 hours LEC

The course covers 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 servicemark points, as well as radio and record-industry relations.

MUSM 112 The Business of Music/Artist Management 3 Units

Hours: 54 hours LEC

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.

MUSM 113 The Business of Music/Promotion 3 Units

Hours: 54 hours LEC

This course covers the process of music promotion. Topics include definitions of promotion, developing media/industry fan lists, and assembling a promotion packet. The 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.

MUSM 114 The Business of Music, Advanced 3 Units

Prerequisite: MUSM 111, MUSM 112, and MUSM 113 with a grade of "C" or better.
Hours: 54 hours LEC

The course meets the requirements at an advanced high level of application and integration into the music industry majors. Course contents include application, evaluation and formulation of recording contracts, publishing and management agreements, and career plans at a high level with an integration into the music industry.

MUSM 120 Contemporary Songwriting 3 Units

Prerequisite: MUFHL 321 with a grade of "C" or better
Hours: 54 hours LEC

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.

MUSM 121 Contemporary Songwriting 3 Units

Prerequisite: MUSM 120 with a grade of "C" or better
Hours: 54 hours LEC

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.

MUSM 140 Concert Sound Reinforcement 2 Units

Prerequisite: MUSM 342 with a grade of "C" or better
Hours: 36 hours LEC; 18 hours LAB

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.

MUSM 334 Introduction to Musical Instrument Digital Interface (MIDI) 2 Units

Advisory: MUFHL 321 or MUIVI 340
Course Transferable to CSU
Hours: 18 hours LEC; 54 hours LAB

This course is an introduction to professional music software and MIDI electronic instruments. It explores various music hardware and software options, including keyboards, synthesizers, virtual instruments, and music workstations. A series of MIDI projects introduces music sequencing, notation, and Computer Assisted Instruction (CAI) software.

MUSM 335 Intermediate Musical Instrument Digital Interface (MIDI) 2 Units

Prerequisite: MUSM 334 with a grade of "C" or better
Course Transferable to CSU
Hours: 18 hours LEC; 54 hours LAB

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 music notation and sound editing software.

MUSM 342 Recording Studio Techniques 3 Units

General Education: CSU Area C1
Course Transferable to CSU
Hours: 36 hours LEC; 54 hours LAB

This first course in a four-part series covers entry-level techniques in audio/music production. It also covers microphone fundamentals and applications, studio equipment, recording console functions, and multi-track recording procedures. Field trips may be required.

MUSM 344 Recording Studio Techniques 3 Units

Prerequisite: MUSM 342 with a grade of "C" or better
Course Transferable to CSU
Hours: 36 hours LEC; 54 hours LAB

This second course in a four-part series covers intermediate techniques of audio and music production. It also introduces mixdown session techniques, outboard gear application, remote recording, and studio design. Field trips may be required.

MUSM 350 Recording Studio Techniques 3 Units

Prerequisite: MUSM 344 with a grade of "C" or better
Course Transferable to CSU
Hours: 36 hours LEC; 54 hours LAB

This third course in a four-part series covers the techniques and tools for managing a recording studio. Topics include studio design, equipment budgeting, business basics, studio personnel roles, and operation of high-end recording equipment. Field trips may be required.

MUSM 352 Recording Studio Techniques 3 Units

Prerequisite: MUSM 350 and 356 with grades of "C" or better
Course Transferable to CSU
Hours: 36 hours LEC; 54 hours LAB

This fourth course in a four-part series covers advanced techniques of audio engineering. It 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.

MUSM 353 Advanced Digital Recording 3 Units

Prerequisite: MUSM 352 with a grade of "C" or better.
Course Transferable to CSU
Hours: 36 hours LEC; 54 hours LAB

This course requires the analysis and critique of techniques in digital and surround recording. The course covers evaluation and application of areas in surround audio, digital technology, post production, mastering and album production. There are both team and independent projects using advanced methods beyond those learned in MUSM 350 and 352.

MUSM 356 Pro Tools 101, Introduction to Pro Tools 1.5 Units

Prerequisite: MUSM 342 (Recording Studio Techniques) with a grade of "C" or better.
Course Transferable to CSU
Hours: 27 hours LEC

This course is an introduction to Digidesign'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. It includes how to record, edit, and mix music and Musical Instrument Digital Interface (MIDI) tracks within the Pro Tools LE application. This course is the first in a series of four courses leading to certification as a Pro Tools Operator. It may be taken twice for credit using different software versions.

MUSM 357 Pro Tools 110 Intermediate Pro Tools 1.5 Units

Prerequisite: MUSM 356 with a grade of "C" or better
Course Transferable to CSU
Hours: 27 hours LEC

This is an intermediate course in Digidesign'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. It includes 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 four courses leading to certification as a Pro Tools Operator. It may be taken twice for credit using different software versions.

MUSM 366 Pro Tools 201, Advanced Pro Tools 1.5 Units

Prerequisite: MUSM 344 and 357 with grades of "C" or better
Course Transferable to CSU
Hours: 27 hours LEC

This is an advanced course in Digidesign's Pro Tools digital audio workstation hardware and software application. It covers the core concepts and skills needed to operate a Digidesign 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 four courses leading to certification as a Pro Tools Operator. It may be taken twice for credit using different software versions.

MUSM 370 Music for Children 3 Units

General Education: AA/AS Area I; CSU Area C1
Course Transferable to CSU
Hours: 54 hours LEC

This course focuses on the principles of teaching and using music in nursery school, pre-school, elementary school and recreational programs. Methods and material used in singing, creating, moving, reading and listening are covered. The course is recommended for nursery school workers and Early Childhood credential candidates whose major is not music. It is suggested for recreational leaders and workers and others who use music with groups of children.

Area: Science and Engineering
 Dean: Dr. Rina Roy
 Phone: (916) 484-8107
 Counseling: (916) 484-8572

Degree: A.S. - Environmental Conservation
 A.S. - General Science
 Certificate: Environmental Conservation

DEGREES AND CERTIFICATES

Environmental Conservation A.S. Degree (formerly Natural Resources)

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.

Career Opportunities

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 unique hands-on training as well.

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

Requirements for Degree		31 - 32 Units
NATR 300	Introduction to Natural Resource Conservation and Policy	4
NATR 310	Natural Resource Measurements	4
NATR 320	Principles of Ecology.....	4
BIOL 300	The Foundations of Biology (3).....	3 - 4
or BIOL 310	General Biology (4)	
A minimum of 16 units from the following:		16 ¹
BIOL 305	Natural History (4)	
BIOL 332	Introduction to Ornithology (3)	
BIOL 352	Conservation Biology (3)	
BIOL 370	Introduction to Marine Environment (4)	
GEOG 330	Introduction to Geographic Information Systems (3)	
HORT 302	Soils , Soil Management, and Plant Nutrition (3)	
NATR 302	Introduction to Wildlife Biology (4)	
NATR 303	Energy and Sustainability (3)	
NATR 304	The Forest Environment (3)	
NATR 305	Fisheries Ecology and Management (4)	
NATR 306	Introduction to Rangeland Ecology and Management (3)	
NATR 307	Principles of Sustainability (4)	
NATR 322	Environmental Restoration (2)	
NATR 330	Native trees and shrubs of California (4)	
NATR 332	Wildflowers of California (3)	

¹At least 10 of the 16 units must come from NATR courses.

Associate Degree Requirements: 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.

Environmental Conservation Certificate (formerly Natural Resources)

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.

Career Opportunities

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 unique hands-on training as well.

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

<u>Requirements for Certificate</u>	<u>22 Units</u>
NATR 300	Introduction to Natural Resource Conservation and Policy4
NATR 310	Natural Resource Measurements4
NATR 320	Principles of Ecology4
A minimum of 10 units from the following: 10	
NATR 302	Introduction to Wildlife Biology (4)
NATR 303	Energy and Sustainability (3)
NATR 304	The Forest Environment (3)
NATR 305	Fisheries Ecology and Management (4)
NATR 306	Introduction to Rangeland Ecology and Management (3)
NATR 307	Principles of Sustainability (4)
NATR 322	Environmental Restoration (2)
NATR 330	Native trees and shrubs of California (4)
NATR 332	Wildflowers of California (3)

General Science Degree

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.

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.
- describe the basic definitions and fundamental theories of an introductory 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.
- recognize ethical components of scientific decision making and apply personal and social values within the process of decision making in scientific endeavors.

Requirements for Degree 18 Units

A minimum of 18 units from the following: 18
Transfer level science courses including one laboratory course in a physical science and one laboratory course in a biological science. Courses may be selected from anthropology (physical), astronomy, biology, biotechnology, chemistry, geography (physical), geology, natural resources, physical science, physics, and psychology (biological).

Associate Degree Requirements: 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.

Natural Resources

NATR 294 Topics in Natural Resources .5-5 Units

Hours: 72 hours LEC; 54 hours LAB

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. This course may be taken four times for credit on different topics.

NATR 300 Introduction to Natural Resource Conservation and Policy 4 Units

General Education: AA/AS Area IV

Course Transferable to UC/CSU

Hours: 72 hours LEC

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.

NATR 302 Introduction to Wildlife Biology 4 Units

General Education: AA/AS Area IV

Course Transferable to UC/CSU

Hours: 54 hours LEC; 54 hours LAB

This course is an introduction to wildlife biology and the basic principles and techniques related to the practice of wildlife management. It emphasizes ecological principles of populations and communities as they relate to the interdependence of wildlife and human populations. Topics include the social, political and biological implications of wildlife management. Game, non-game, threatened and endangered, and invasive species of wildlife are explored. Additionally, this course covers habitat and population sampling, radio telemetry, and the development of a wildlife management plan. Field trips are required.

NATR 303 Energy and Sustainability 3 Units

Same As: ENERGY 303 and ET 303

General Education: AA/AS Area IV

Course Transferable to CSU

Hours: 54 hours LEC

Fundamentals of energy and its impact on society and the environment are covered in this course. The mechanics, advantages and disadvantages of current and future renewable, green and nonrenewable energy sources are investigated. Residential energy audits are covered. Field trips are required. This course is not open to students who have completed ENERGY 303 or ET 303.

NATR 304 The Forest Environment 3 Units

General Education: AA/AS Area IV

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course covers basic biological and physical science concepts important to a general understanding of forest ecology and forestry. Forest history, forests of the United States, general tree taxonomy, forest ecology, soils, silvics, and insects and diseases of forest trees are investigated. Additional topics include the role of fire in forest management, forest measurements, multiple use management, and current forest issues and policies related to forest resource use. Field trips are required.

NATR 305 Fisheries Ecology and Management 4 Units

Course Transferable to CSU

Hours: 54 hours LEC; 54 hours LAB

This course covers the fundamentals of marine and freshwater fisheries and their impacts on society and the environment. Fisheries sustainability issues are investigated, including environmental, ecological, economic, and social aspects. Commercial and recreational fisheries management and aquaculture, including fish farming and fish ranching, are covered. Field trips are required.

NATR 306 Introduction to Rangeland Ecology and Management 3 Units

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course introduces the science of range ecology and management. Current issues and recent research in rangeland management are discussed, as well as the history of rangelands and their management. This course focuses on the effects of different grazing systems on rangeland ecosystems, ecophysiology of range plants, ruminant nutrition, multiple-use management, rangelands in developing countries, and future trends in range management. In addition, inventory, monitoring, and manipulation of range vegetation are explored. Field trips are required.

NATR 307 Principles of Sustainability 4 Units

General Education: AA/AS Area V(b); CSU Area D7; IGETC Area 4G

Course Transferable to UC/CSU

Hours: 54 hours LEC; 54 hours LAB

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.

NATR 310 Natural Resource Measurements 4 Units

Prerequisite: None

Course Transferable to CSU

Hours: 54 hours LEC; 54 hours LAB

This course provides basic natural resource measurement and survey skills. Included are elementary surveying, public land surveying, distance and direction measurement, topographic map reading, stream flow measurement, basic aquatic and water quality sampling. It focuses on forest and herbaceous vegetation sampling techniques such as transects and quadrates. Also included are the fundamentals of wildlife sampling techniques such as radio telemetry, population sampling techniques, Global Positioning Systems (GPS), Geographic Information Systems (GIS), and use of the internet as a research tool. Field trips are required.

NATR 320 Principles of Ecology 4 Units

General Education: AA/AS Area IV; CSU Area B2; CSU Area B3;
IGETC Area 5B; IGETC Area 5C
Course Transferable to UC/CSU
Hours: 54 hours LEC; 54 hours LAB

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.

NATR 322 Environmental Restoration 2 Units

Advisory: NATR 300, 302, 310, 320, and 330
Course Transferable to CSU
Hours: 27 hours LEC; 27 hours LAB

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.

NATR 325 Black Bear Ecology and Management in California 2 Units

Prerequisite: None
Course Transferable to CSU
Hours: 27 hours LEC; 27 hours LAB

This course explores the natural history, habitat, and management of the black bear. Topics include the distribution, abundance, physiology, reproduction, and behavior of black bears. A field trip into black bear country is required to allow observation of bear sign and appreciation of the natural habitat of this animal.

NATR 326 Analysis of a Predator – The Mountain Lion 1.5 Units

Prerequisite: None
Course Transferable to CSU
Hours: 27 hours LEC

This course explores the natural history and political history of the mountain lion. Topics include the distribution and abundance of mountain lions in California and throughout western North America; the important ecological role of these predators; problems associated with mountain lions, and the legal status of mountain lions in California. A field trip into mountain lion country is required to allow observation of lion sign and appreciation of the natural habitat of this predator.

NATR 330 Native trees and shrubs of California 4 Units

General Education: AA/AS Area IV
Course Transferable to UC/CSU
Hours: 54 hours LEC; 54 hours LAB

This dendrology course covers classification and ecology of major natural plant communities of California and their tree and shrub component species. It focuses on characterization of the dominant vegetation types and identification of native woody species using plant keys and sight identification. Topics include natural history and life cycle, physiology, evolution, and human uses of – and threats to – California plant communities and individual species. The course involves the creation of a plant collection including at least 60 representative native woody species. Field trips are required.

NATR 332 Wildflowers of California 3 Units

Advisory: NATR 330
General Education: AA/AS Area IV
Course Transferable to UC/CSU
Hours: 36 hours LEC; 54 hours LAB

This course investigates ecology and identification of the wildflowers of California. 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.

NATR 340 John Muir "Conservationist" 2 Units

Course Transferable to CSU
Hours: 36 hours LEC

This course covers the life, writings, and philosophy of John Muir, one of the founders of the American Conservation Movement. It focuses on his significant contributions to the formation of the National Park System. This course is recommended for elementary and secondary educators and those interested in natural resources, conservation, and California history. Field trips are required.

NATR 498 Work Experience in Natural Resources 1-4 Units

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.
Enrollment Limitation: Be in a paid or non-paid internship, volunteer opportunity or job related to natural resources. Students are advised to consult with the Natural Resources Department faculty to review specific certificate and degree work experience requirements.
General Education: AA/AS Area III(b)
Course Transferable to CSU
Hours: 300 hours LAB

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 required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to fulfill a weekly orientation and 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. The weekly orientation is required for first time participants, returning participants are not required to attend the orientation but are required to meet with the instructor as needed to complete all program forms and assignments. Work Experience may be taken for a total of 16 units when there are new or expanded learning objectives.

Area: Health & Education
 Dean: Dr. Steven Boyd
 Program Director:
 Victoria Maryatt
 Phone: (916) 484-8176 or (916) 484-8254
 Counseling: (916) 484-8572

Degree: A.S. - Registered Nursing
 A.S. - LVN to RN Career Mobility
 Certificates: Licensed Vocational Nurse (LVN) -
 30-unit option
 Certificates of Completion offered by the department:
 Certified Nurse Assistant
 Home Health Aide

http://www.arc.losrios.edu/Programs_of_Study/Health_and_Education/Nursing.htm

DEGREES AND CERTIFICATES

Registered Nursing Degree

Nursing is a health care profession that requires knowledge of biological, behavioral and physical sciences. The Nursing Program consists of a combination of general education and nursing courses with related laboratory experiences. Successful completion of the program qualifies the student to take the National Council Licensure Examination (NCLEX-RN) to become registered as a nurse and eligible for employment.

A grade of “C” or better is required in each nursing course for progression in the program and for an Associate Degree in Science - Nursing. There are required morning, afternoon, evening, and weekend clinical experiences that may change with limited notice. The student is responsible for providing uniforms, laboratory fees, malpractice insurance, necessary equipment, and transportation to off-campus laboratory locations.

Note: In accordance with Regulation 480 of the State Board of Registered Nursing, a person convicted of any offense other than a minor traffic violation, may not qualify to be licensed as a registered nurse.

Note: Enrollment eligibility and criteria will be changing from a computerized statistically-weighted random selection to a merit-based system of enrollment. This change will affect students applying in fall of 2011 for admission to the spring 2012 class.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- identify, apply, analyze, and synthesize Orem’s Self-Care Deficit Theory of Nursing to humans throughout the lifespan.
- synthesize, apply, and validate principles of the biological, physical, psychological and behavioral sciences to assist clients and families in maintaining their ability to perform self-care and dependent care.
- apply the principles of therapeutic/interpersonal communication throughout the nursing process.
- utilize nursing/managerial skills in providing direct and indirect client/family care.
- demonstrate professional, legal and ethical responsibilities while recognizing boundaries of professional nursing practice.
- utilize nursing/managerial skills in providing direct and indirect client/family care.

Career Opportunities

Employment in the field for registered nurses is excellent locally and nationally. The registered nurse enjoys a well compensated, rewarding, highly flexible career, which should continue in the future. This field is expanding; growth in the job market is projected.

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 Education Development (GED) or California High School Proficiency Exam (CHSPE). These requirements are defined by the current Nurse Practice Act, Title 16, California Code of Regulations, Section 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: ENGRD 300, NUTRI 300, and PSYC 300.
- Eligibility for ENGRD 310 or 312.
- In-progress grades will not be accepted for prerequisite courses.
- Transfer-In Policy: Students wishing to transfer into any semester of the Nursing program are asked to contact the department office at (916) 484-8254. The office can give you current information on availability of space.

Note: The 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:

- Pre-enrollment application and deadline information is available from the ARC website at www.arc.losrios.edu/edhealth/nursing.html.
- 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.

(continued on next page)

(Registered Nursing Degree continued)

- Acceptance of pre-nursing courses taken outside the Los Rios Community College District will be determined by the Nursing admissions committee.
- As part of the enrollment process students will complete the Test of Essential Academic Skills (TEAS) developed by Assessment Technologies Institute, LLC (ATI). Additional information is available on the ARC nursing website.
- The student accepted into the Nursing program is required to have a physical examination, inoculations, drug screen, background check, current CPR card and malpractice insurance prior to the start of the semester.

Requirements for Degree		71-72 units
ANTH 310	Cultural Anthropology (3)	3 ³
or SOC 300	Introductory Sociology (3)	
BIOL 430	Anatomy and Physiology.....	5 ¹
BIOL 431	Anatomy and Physiology.....	5
BIOL 440	General Microbiology (4)	4 - 5
or BIOL 442	General Bacteriology (5)	
ENGWR 300	College Composition	3
NURSE 400	Fundamentals of Medical-Surgical Nursing I	10.5
NURSE 410	Maternal/Child and Medical-Surgical Nursing II	10.5
NURSE 420	Psychiatric and Medical-Surgical Nursing III	10.5
NURSE 430	Management of Multiple Patients and Medical - Surgical Nursing IV.....	10.5
NUTRI 300	Nutrition	3
PSYC 300	General Principles.....	3
SPEECH 301	Public Speaking (3).....	3 ²
or SPEECH 331	Group Discussion (3)	

¹BIOL 430, 440, and 442 have a prerequisite of an introductory college chemistry course with a grade of "C" or better. Please check catalog course descriptions.

²SPEECH 301 or 331 must be taken either prior to or concurrently with NURSE 400.

³SOC 300 or ANTH 310 must be taken either prior to or concurrently with NURSE 410.

Associate Degree Requirements: 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.

LVN to RN Career Mobility Degree

The Career Mobility Program for the Licensed Vocational Nurse (LVN) consists of a combination of general education and nursing courses with related laboratory experiences. The LVN Career Mobility program is offered in conjunction with Sacramento City College (SCC). Successful completion of the program qualifies the student to take the National Licensing Examination (NCLEX-RN) to become registered as a nurse and eligible for employment.

A grade of "C" or better is required in each nursing course for progression in the program and for an Associate Degree in Science - Nursing. There are required morning, afternoon, evening, and weekend clinical experiences that may change with limited notice. The student is responsible for providing uniforms, laboratory fees, malpractice insurance, necessary equipment, and transportation to off-campus laboratory locations.

Note: In accordance with Regulation 480 of the State Board of Registered Nursing, a person convicted of any offense other than a minor traffic violation, may not qualify to be licensed as a registered nurse.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- identify, apply, analyze, and synthesize Orem's Self-Care Deficit Theory of Nursing to humans throughout the lifespan.
- synthesize, apply, and validate principles of the biological, physical, psychological and behavioral sciences to assist clients and families in maintaining their ability to perform self-care and dependent care.
- apply the principles of therapeutic/interpersonal communication throughout the nursing process.
- utilize nursing/managerial skills in providing direct and indirect client/family care.
- demonstrate professional, legal and ethical responsibilities while recognizing boundaries of professional nursing practice.

Career Opportunities

Employment in the field for registered nurses is excellent locally and nationally. The registered nurse enjoys a well compensated, rewarding, highly flexible career, which should continue in the future. This field is expanding; growth in the job market is projected.

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 Vocational Nurse (LVN) license at the time of application and throughout program completion.
- Completion of a minimum of six months of full-time equivalent LVN work experience within the past year, preferably in the medical-surgical area.
- A grade of "C" or better and a cumulative G.P.A. of 3.0 in the following science prerequisites (in progress work acceptable): BIOL 430, BIOL 431, and BIOL 440 or BIOL 442.
- A grade of "C" or better and a cumulative G.P.A. of 2.5 in the following prerequisite courses (in progress work acceptable): ENGWR 300, NUTRI 300, PSYC 300, SPEECH 301 or SPEECH 331, and SOC 300 or ANTH 310.
- Eligibility for ENGRD 310 or 312.
- Current curriculum planning summary sheet within the semester in which the pre-enrollment packet is being submitted.

Note: The 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:

- Pre-enrollment applications and deadlines for the LVN-to-RN Career Mobility Program are available from the Nursing Department at either ARC or SCC, or from the nursing programs' websites.

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(LVN to RN Career Mobility Degree continued)

- Selection is based on a computerized random selection process from among the qualified applicants and is subject to space availability.
- 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.
- Acceptance of pre-nursing courses taken outside the Los Rios Community College District will be determined by the Nursing admissions committee.
- All students accepted into the Nursing program will complete the Test of Essential Academic Skills (TEAS) developed by Assessment Technologies Institute, LLC (ATI). Additional information is available on the ARC nursing website.
- The student accepted into the Nursing program is required to have a physical examination, inoculations, drug screen, background check, current CPR card and malpractice insurance prior to the start of the semester.

Requirements for Degree		76-77 Units
BIOL 430	Anatomy and Physiology.....	5 ¹
BIOL 431	Anatomy and Physiology.....	5
BIOL 440	General Microbiology (4)	4 - 5
or BIOL 442	General Bacteriology (5)	
ENGWR 300	College Composition	3
NURSE 305	Transition to Associate Degree Nursing.....	5
NURSE 400	Fundamentals of Medical-Surgical Nursing I	10.5 ²
NURSE 410	Maternal/Child and Medical-Surgical Nursing II	10.5
NURSE 420	Psychiatric and Medical-Surgical Nursing III	10.5
NURSE 430	Management of Multiple Patients and Medical-Surgical Nursing IV	10.5
NUTRI 300	Nutrition	3
PSYC 300	General Principles	3
SOC 300	Introductory Sociology (3)	3
or ANTH 310	Cultural Anthropology (3)	
SPEECH 301	Public Speaking (3)	3
or SPEECH 331	Group Discussion (3)	

¹BIOL 430, 440, and 442 have a prerequisite of an introductory college chemistry course with a grade of "C" or better. Please check catalog course descriptions.

²Credit for NURSE 400 and 410 will be given after evaluation of LVN program transcripts.

Associate Degree Requirements: 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.

Licensed Vocational Nurse (LVN) 30-unit option Certificate

The 30-unit option provides the Licensed Vocational Nurse (LVN) the opportunity to prepare and sit for the National Council Licensure Examination (NCLEX-RN). This option is available to all LVNs entering the ARC Nursing Program. This option does not satisfy ARC's Nursing Program requirements or lead to an Associate Degree in nursing.

A grade of "C" or better is required in each nursing course for progression toward the 30-unit option certificate.

There are required morning, afternoon, evening, and weekend clinical experiences that may change with limited notice. The student is responsible for providing uniforms, laboratory fees, malpractice insurance, necessary equipment and transportation to off-campus laboratory locations.

Note: In accordance with Regulation 480 of the State Board of Registered Nursing, a person convicted of any offense other than a minor traffic violation, may not qualify to be licensed as a registered nurse.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- identify, apply, analyze, and synthesize Orem's Self-Care Deficit Theory of Nursing to humans throughout the lifespan.
- synthesize, apply, and validate principles of the biological, physical, psychological and behavioral sciences to assist clients and families in maintaining their ability to perform self-care and dependent care.
- apply the principles of therapeutic/interpersonal communication throughout the nursing process.
- utilize nursing/managerial skills in providing direct and indirect client/family care.
- demonstrate professional, legal and ethical responsibilities while recognizing boundaries of professional nursing practice.

Career Opportunities

The State of California provides the LVN with an option to sit for the National Council Licensure Examination (NCLEX-RN) after completing 30 college semester units. The LVN seeking this path to RN licensure may not receive reciprocal RN licensure in other states. 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.

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 Vocational Nurse (LVN) license at the time of application and throughout program completion.
- Completion of a minimum of six months recent LVN work experience, preferable in the medical-surgical area.
- Completion of BIOL 431 or equivalent 4-5 semester unit physiology course, and BIOL 440 or equivalent 4 semester unit microbiology course, with a grade of "B" or better prior to enrollment in the nursing courses.
- Current curriculum planning summary sheet with the semester in which the pre-enrollment packet is being submitted.

Note: The 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.

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(Licensed Vocational Nurse (LVN) 30-unit option Certificate continued)

- Provide official transcripts and course descriptions of physiology, microbiology, and previous LVN program prior to the appointment.
- Objective counseling of this option and individual evaluation of the applicant's academic deficiencies irrespective of time such courses were completed will occur at the appointment.
- Entry is subject to space availability.
- Transcripts of physiology, microbiology, and nursing course work completed will be provided to the Board of Registered Nursing upon completion of the 30-unit option.

Requirements for Certificate		30 Units
BIOL 431	Anatomy and Physiology.....	5
BIOL 440	General Microbiology	4
NURSE 420	Psychiatric and Medical-Surgical Nursing III.....	10.5
NURSE 430	Management of Multiple Patients and Medical-Surgical Nursing IV.....	10.5

CERTIFICATES OF COMPLETION (offered by the department)

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 from the instructor. The program prepares the student to take the State of California competency examination for certification as a nurse assistant.

Note: Successful completion of Nurse 100 requires theory and clinical attendance according to the Department of Health and Human Services minimum hour requirement.

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.
- recognize and discuss resident rights, appropriate interaction with residents, families and other members of the health care team.
- discuss and demonstrate rehabilitation and restorative care. Give examples of assistive devices.
- explain what constitutes an emergency and the basics of emergent care required of a certified nurse assistant.
- discuss and practice basic restraint use and associated safety measures. Discuss 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.
- demonstrate proper and safe body mechanics

Career Opportunities

Certified Nurse Assistants have a wide variety of work opportunities. The most common work placement is in long-term care facilities. Additionally, the work may be found in acute care settings, medical offices, walk-in medical clinics, assisted care facilities, and rehabilitation care centers.

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.
- No student can enter the Nurse 100 class who has not first attended the mandatory orientation. Mandatory orientation information is found at the ARC Nursing website in the Nurse 100 course packet.
- Students must go the ARC Nursing website to read and print the Nurse 100 information packet. Student must bring a printed copy of the Nurse 100 information packet to the mandatory orientation meeting.
- Student must submit a negative TB skin test completed within six months prior to class entrance or a negative chest x-ray completed within one year prior to class entrance.
- Student must submit a completed health history and physical exam completed within one year 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 have successfully completed the English pre-requisite. Required English classes: ESLW 50, ESLR 50, and ESLL 50; or ENGWR 51 and ENGRD 15; or ENGWR/ENGRD 56; or English assessment to the equivalent by ARC Assessment Center. Or, provide proof of AA degree or higher degree from an accredited college in the United States.
- Student must meet the Department of Health and Human Services 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.
- Student must be conviction free. The penal codes that lead to automatic program denial are listed in the Nurse 100 information packet. If a student has a written/signed certificate of rehabilitation, that documentation must be submitted with the course prerequisites.
- Student cannot apply and be admitted to NURSE 100 more than twice.

Enrollment Process

Eligible students are selected for the program according to the following steps:

- Attendance at the mandatory pre-class orientation meeting.
- Submission of English prerequisite and medical prerequisites [Tuberculin clearance, student health history and physical exam].
- Convicted of no penal code(s) that are listed on the Department of Health and Human Services automatic denial list.

Requirements for Certificate		6 Units
NURSE 100	Nurse Assistant	6

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: Successful completion of the NURSE 101 requires attendance at all class and clinical experiences to meet California Department of Health and Human Services minimum hour requirements.

Note: NURSE 101 course information packet is available online at the ARC Nursing Program website.

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.

Career Opportunities

The Home Health Aide may expand on the CNA work experiences and settings to include the homebound client.

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 Health and Human Services (DHHS) 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 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 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 meet the English prerequisite: (A.) A student who received a CA state CNA certificate prior to 2005 must complete and submit the NURSE 100 English prerequisite. The English prerequisite is ESLW 040, ESLR 040, and ESLL 040; OR ENGWR 051 and ENGRD 015; 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 Program 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 be felony conviction free. The California penal codes that determine automatic CNA program denial can be found at the ARC Nursing Program website in the NURSE 101 course information packet. If the student has a written/signed California state certificate of felony rehabilitation, a copy of that document must be submitted with the course prerequisites.

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 ARC Nursing Program website, NURSE 101 information packet, for complete information about course prerequisites and prerequisite submission deadline.

Requirements for Certificate	2 Units
NURSE 101 Home Health Aide	2

Nursing

NURSE 100 Nurse Assistant 6 Units

Prerequisite: ESLW 040, ESLR 040, and ESLL 040; OR ENGWR 051 and ENGRD 015; OR evaluation through assessment at ARC assessment center.

Enrollment Limitation: Prior to the first class the following requirements must be submitted to the ARC student health office: (1.) Proof of physical exam within one year prior to class. (2.) Proof of negative tuberculin (TB) skin test within six months prior to class. (3.) If TB skin test result is positive, proof of inactive TB chest x-ray within one year prior to class. (4.) No felony convictions from Department of Health Services (DHS) Aide and Technician Certification Section (ATCS) list of penal codes. ATCS 98-4 (4/02) (5.) Demonstrate the ability to read and write the English language at a minimum 6th grade level. (6.) Demonstrate the ability to listen, comprehend, and respond appropriately to the spoken English language at a minimum 6th grade level.

Hours: 63 hours LEC; 135 hours LAB

This course leads to the nurse assistant certification exam. Emphasis is on the gerontological nursing assistant's role and responsibilities as a health care team member. Other key components in this course are principles of sepsis, infection control, resident care skills, and emotional, social, and spiritual needs of the resident.

NURSE 101 Home Health Aide 2 Units

Prerequisite: Proof of having completed a CA approved nurse assistant course or proof of current California nurse assistant certification
Hours: 27 hours LEC; 27 hours LAB

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.

NURSE 110 Physical Assessment for Health Care Providers 2 Units

Prerequisite: NURSE 400 or higher (or equivalent); RN or LVN licensure; or CNA certification.
Hours: 36 hours LEC

This course is designed for health care professionals and Allied Health students desiring to expand their physical assessment skills. Advanced physical assessment of all major body systems will be included across the life span. Additional topics include nutritional, psychosocial, cognitive, and activity assessment. This course fulfills BRN continuing education requirements.

NURSE 111 Basic Electrocardiography (ECG) Interpretation 1 Unit

Prerequisite: None
Advisory: NURSE 420 with a grade of "C" or better, or RN or LVN licensure.
Hours: 18 hours LEC

This course covers basic electrocardiography (ECG) interpretation. Topics include atrial junctional and ventricular rhythm recognition. This course also fulfills Board of Registered Nursing (BRN) and Emergency Medical Services (EMS) requirements for continuing education.

NURSE 112 Bedside Cardiac Assessment 1 Unit

Advisory: Completion of NURSE 420 or Licensed Vocational Nurse or Registered Nurse licensure
Hours: 18 hours LEC

This course is designed for health care professionals and students who wish to improve their cardiac assessment skills. Topics include heart sounds, chest pain assessment, risk factor identification, physical assessment, and anatomy and physiology overview. This course satisfies the State Board of Registered Nursing continuing education requirements.

NURSE 113 Laboratory Value Interpretation and Diagnostic Studies 1 Unit

Advisory: Completion of NURSE 400 or LVN or RN Licensure or Nurse Assistant Certificate
Hours: 18 hours LEC

This course is designed for health care professionals who wish to update and improve their knowledge of laboratory values and diagnostic testing. This course satisfies the State Board of Registered Nursing continuing education requirements.

NURSE 122 Strategies for Clinical Success 1 Unit

Hours: 18 hours LEC

This course presents an overview of hospital based nursing. It covers the responsibilities of a nurse in a medical-surgical hospital unit. The focus is on the clinical setting. Topics include Registered Nurse (RN) responsibilities, medical terminology, shift work flow and organization, worksheet formulation and utilization, common laboratory and diagnostic tests, and required clinical paperwork.

NURSE 305 Transition to Associate Degree Nursing 5 Units

Enrollment Limitation: Acceptance into the Associate Degree Nursing Program.

Course Transferable to CSU

Hours: 54 hours LEC; 108 hours LAB

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. Critical thinking skills necessary for successful role transition are emphasized throughout the course. Topics include care of adult and geriatric clients with specific medical-surgical nursing disorders, assessment skills, pharmacology, nursing process, evidence-based nursing practice, legal/ethical issues, cultural and ethnic diversity, and the educator role of the Registered Nurse (RN). Concurrent acute care hospital laboratory experience emphasizes critical thinking, problem solving, decision making, and the implementation of nursing theory into practice.

NURSE 310 Pharmacology and Implications for Health Care Practitioners 3 Units

Course Transferable to CSU

Hours: 54 hours LEC

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 with an emphasis on 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, prevent and treat pain, treat infections, and malignant neoplasms is discussed. Drugs that alter psychogenic behavior and sleep patterns are also included.

NURSE 320 Medical Dosage Calculations 1.5 Units

Advisory: MATH 25 or higher

Course Transferable to CSU

Hours: 27 hours LEC

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.

NURSE 341 Introduction to the Childbirth Support Profession: A DONA-Approved Birth Doula Workshop 1.5 Units

Course Transferable to CSU

Hours: 27 hours LEC

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. The 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 teaches 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.

NURSE 370 Focused Learning in the Associate Degree Nursing Program 1.5 Units

Corequisite: This is a companion course to NURSE 400 (Fundamentals of Medical- Surgical Nursing), or NURSE 410 (Maternal/Child and Medical-Surgical Nursing II), or NURSE 420 (Psychiatric and Medical Surgical Nursing III), or NURSE 430 (Management of Multiple Patients and Medical-Surgical Nursing IV).
Enrollment Limitation: Acceptance into the Registered (Associate Degree) Nursing Program.

Course Transferable to CSU
Hours: 6 hours LEC; 63 hours LAB

This course offers strategies to enhance student success in each of the four semesters of the Associate Degree Nursing (ADN) program and in the National Licensure Examination for Nurses after graduation. This course offers 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. The course includes 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. Learning modules complement support, co-requisite course work during advancement through the nursing program. Course content addresses the specific needs of each nursing course pertaining to clinical, theory and evaluation methods required in the nursing classes. It includes evaluation of mastery of the concurrent ADN course objectives and promotes remediation before the final examination. This course utilizes Regional Health Occupations Resource Centers (RHORC) student success materials and Assessment Technologies Institute (ATI) teaching materials as a supplement and review of the Associate Degree content. This course may be repeated 4 times with different co-requisites. Pass/No Pass only.

NURSE 390 Fundamentals of Lactation Consultant Assisting 1.5 Units

Course Transferable to CSU
Hours: 18 hours LEC; 27 hours LAB

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. The 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.

NURSE 391 Supporting the Mother-Baby Connection: Evidence-Based Practices for Perinatal Care 1 Unit

Course Transferable to CSU
Hours: 18 hours LEC

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. The course 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 challenges the student to apply 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. 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.

NURSE 400 Fundamentals of Medical-Surgical Nursing I 10.5 Units

Prerequisite: None
Corequisite: SPEECH 301 or 331.
Enrollment Limitation: Acceptance into the Associate Degree Nursing program.
Course Transferable to CSU
Hours: 81 hours LEC; 324 hours LAB

This course provides an introduction to nursing utilizing Orem's model, theory and practice related to providing patient care with an emphasis on basic nursing skills and the nursing process. Life cycle concepts and their impact on self-care and health are included, with particular emphasis on the senior adult. Professional role development and ethical issues are introduced. Concurrent laboratory experience takes place in subacute and acute care settings.

NURSE 410 Maternal/Child and Medical-Surgical Nursing II 10.5 Units

Prerequisite: NURSE 400 with a grade of "C" or better
Corequisite: ANTH 310 or SOC 300.
Enrollment Limitation: SPEECH 301 or 331.
Course Transferable to CSU
Hours: 81 hours LEC; 324 hours LAB

This course applies the concepts of Orem's model of self-care that are applied to care of the newborn, child, middle and senior adult. Pathophysiological and pathopsychological factors creating health deviations are emphasized. Supervision is provided in the utilization of the nursing process. Legal issues relevant to health care and their implications are studied. Concurrent laboratory experience takes place in medical-surgical and maternal/child health settings. Field trips are required.

NURSE 420 Psychiatric and Medical-Surgical Nursing III 10.5 Units

Prerequisite: NURSE 410 with a grade of "C" or better
Course Transferable to CSU
Hours: 81 hours LEC; 324 hours LAB

In this course, concepts of Orem's nursing model of self-care theory are applied to the psychiatric and medical-surgical patient. Pathophysiological and pathopsychological factors creating health deviations are emphasized. Independence is encouraged and supported in the utilization of the nursing process. Introductory concepts of nursing leadership and management are explored. Community resources and experiences relevant to the course of study are included. Concurrent laboratory experiences take place in the psychiatric and medical-surgical settings. Field trips are required.

NURSE 430 Management of Multiple Patients and Medical-Surgical Nursing IV 10.5 Units

Prerequisite: NURSE 420 with a grade of "C" or better
Course Transferable to CSU
Hours: 81 hours LEC; 324 hours LAB

This course covers concepts of Orem's nursing model of self-care theory as applied to the care of the middle and senior adults. It focuses on the nursing management of a group of acutely ill patients and participation on the health care team. Pathophysiological and pathopsychological factors creating health deviations are emphasized. Priorities are given to the utilization of the nursing process in making and evaluating decisions. During the first ten weeks, laboratory experience takes place in the medical-surgical and the community health setting under the direct supervision of the faculty. The final six weeks involve completing a pre-licensure preceptorship with a registered nurse in a clinical setting of the student's choice. The transition from student to graduate nurse is explored through study of the Nurse Practice Act and discussion of the problems, responsibilities, and challenges confronting the registered nurse. Concurrent laboratory experiences take place in acute care and home health setting. Field trips may be required.

NURSE 1000 NCLEX-RN Review 1-3 Units

Prerequisite: NURSE 420 with a grade of "C" or better
Corequisite: NURSE 430
Enrollment Limitation: For students with English as a Second Language, the participant must take the Test for English Proficiency Level (TEPL) and score a minimum of 5 on the test, or have completed the equivalent to English Writing 300.
Hours: 27 hours LEC; 81 hours LAB

This course prepares the student to take the NCLEX-RN (National Council Licensure Examination-Registered Nurse). Coursework includes computer test-taking skills, barriers to success, identification of knowledge deficits via a standardized assessment test, and overview of NCLEX-RN content areas. In the classroom, students may earn .5 unit of credit for every 9 hours. In the lab, students implement an individualized study plan and may earn .5 unit of credit for every 27 hours of work. This course is designed to be taken during the last semester of an RN program or after completion of a nursing program. The course is designed for first-time and repeat test takers. Credit/No Credit only.

Allied Health**AH 110 Medical Language for Health-Care Providers 3 Units**

Hours: 54 hours LEC

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.

AH 112 Strategies for Student Success in Health Occupations 3 Units

Advisory: ENGWR 102, ENGWR 103, or ESLW 320; or placement through the assessment process.
Hours: 54 hours LEC

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.

Area: Health & Education
 Dean: Dr. Steven Boyd
 Coordinator: Dr. Susan Chou
 Phone: (916) 484-8188
 Counseling: (916) 484-8572

Certificate: Dietary Manager/Dietary Service Supervisor

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.

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.
- 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 orientation of new employees. Assist in the ongoing, planned development of seasoned employees to ensure that they are competent to carry out the functions of the dietary service and trained in approved policies.
- 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 Opportunities

The Dietary Manager/Dietary Service Supervisor certificate is designed to prepare the student for a position as Certified Dietary Manager in a Long Term Care Facility.

Requirements for Certificate	20 Units
HM 310	Sanitation, Safety and Equipment..... 3
HM 315	Food Theory and Preparation..... 4
NUTRI 130	Introduction to Dietary Management..... 2
NUTRI 132	Management of the Dietary Department in Health Care Facilities.....3
NUTRI 133	Clinical Experience in Health Care Facilities 2.5
NUTRI 134	Nutritional Care Management..... 3
NUTRI 135	Clinical Experience in Nutritional Care Management 2.5

Nutrition and Foods

NUTRI 107 Nutrition Basics for the Childcare Provider – Basic Nutritional Needs of Children 0-5 1 Unit

Same As: ECE 107
Advisory: ENGWR 102, ENGWR 103, or ESLW 320; or placement through the assessment process.
Hours: 18 hours LEC

This course examines scientific information on the basic nutritional needs of children 0-5 years of age. Topics include macronutrient and micronutrient functions, dietary requirements, and growth and activity patterns in infants, toddlers, and preschool age children. It is designed to satisfy continuing education requirements for childcare providers advancing toward a Master Teacher Certificate. This course is not open to students who have taken ECE 107.

NUTRI 108 Nutrition Basics for the Childcare Provider – Diet, Health, & Physical Activity 0-5 years 1 Unit

Same As: ECE 108
Prerequisite: ECE 107 or NUTRI 107 with a grade of "C" or better
Hours: 18 hours LEC

This course provides scientific information on the relationship between diet, physical activity, and health of children 0-5 years of age. Topics include health implications of dietary deficiencies and excesses, childhood obesity, and physical activity. It is designed to satisfy continuing education requirements for childcare providers advancing toward the Master Teacher Certificate. This course is not open to students who have taken ECE 108.

NUTRI 109 Nutrition Basics for the Childcare Provider – Healthy Foods and Meal Planning 1 Unit

Same As: ECE 109
Prerequisite: ECE 108 or NUTRI 108 with a grade of “C” or better
Hours: 18 hours LEC

This course provides practical information for planning healthy meals and diets for children 0-5 years of age. Its focus is on: creative ways to incorporate fruits and vegetables; how to address neophobia; teaching opportunities at meal and snack time; the importance of a balanced diet; meal and snack planning. It is designed to satisfy continuing education requirements for childcare providers advancing toward the Master Teacher Certificate. This course is not open to students who have taken ECE 109.

NUTRI 130 Introduction to Dietary Management 2 Units

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.
Hours: 36 hours LEC

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, individuals’ nutritional needs throughout the life cycle, health promotion, and disease prevention.

NUTRI 132 Management of the Dietary Department in Health Care Facilities 3 Units

Prerequisite: NUTRI 130 with a grade of “C” or better
Corequisite: NUTRI 133
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.
Enrollment Limitation: Current ServSafe Certification
Hours: 54 hours LEC

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. This course is designed to be taken concurrently with NUTRI 133.

NUTRI 133 Clinical Experience in Health Care Facilities 2.5 Units

Prerequisite: NUTRI 130 with a grade of “C” or better
Corequisite: NUTRI 132
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.
Enrollment Limitation: Current TB clearance and other immunizations required by clinical facility.
Hours: 18 hours LEC; 90 hours LAB

This course offers clinical experience in health care facilities. It includes 90 hours of clinical experience in the dietary departments of participating acute hospitals and long term care facilities. The clinical experience is performed under professional supervision. This course is designed to be taken concurrently with NUTRI 132.

NUTRI 134 Nutritional Care Management 3 Units

Prerequisite: NUTRI 130 with a grade of “C” or better
Corequisite: NUTRI 135
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.
Hours: 54 hours LEC

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. This course is designed to be taken concurrently with NUTRI 135.

NUTRI 135 Clinical Experience in Nutritional Care Management 2.5 Units

Prerequisite: NUTRI 130 with a grade of “C” or better
Corequisite: NUTRI 134
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.
Enrollment Limitation: Current TB clearance and other immunizations required by clinical facility.
Hours: 18 hours LEC; 90 hours LAB

This course provides clinical experience, under the supervision of a clinical professional, in the dietary departments of participating acute care hospitals and long term care facilities. Topics include disorders of the gastrointestinal tract, diabetes, wasting disorders, nutrition, and mental health. This course is designed to be taken concurrently with NUTRI 134.

NUTRI 294 Topics in Nutrition and Foods .5-4 Units

Prerequisite: None
Hours: 72 hours LEC

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. The course may be taken four times for a maximum of 6 units providing there is no duplication of topics.

NUTRI 300 Nutrition 3 Units

Advisory: ENGWR 102 or 103, and ENGRD 116, or ESLR 320, ESLL 320, and ESLW 320
General Education: AA/AS Area III(b); AA/AS Area IV; CSU Area EI
Course Transferable to UC/CSU
Hours: 54 hours LEC

This is an in-depth study of the essential nutrients and their functions, and the chemical compositions of foods and their utilization in the body. This course includes discussion of the nutritional values of foods, current topics in nutrition, and individuals’ nutrition needs throughout the life cycle.

NUTRI 302 Nutrition for Physical Performance 3 Units

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.
General Education: AA/AS Area III(b); AA/AS Area IV
Course Transferable to CSU
Hours: 54 hours LEC

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.

NUTRI 305 Nutrition for Health 2 Units

Advisory: ENGWR 102 or ENGWR 103 and ENGRD 116, or ESL 320, ESLR 320, and ESLW 320; or placement through the assessment process.

General Education: AA/AS Area III(b)

Course Transferable to CSU

Hours: 36 hours LEC

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.

NUTRI 307 Nutrition for Fitness 2 Units

Same As: KINES 402

Course Transferable to CSU

Hours: 36 hours LEC

This course covers the basic principles of nutrition and the ramifications of nutrition on fitness training. Topics in this course include dietary practices and nutrient intake modifications that impact physical performance, including intake of energy nutrients, vitamins, water, electrolytes, and dietary supplements. This course also includes the study of body weight and body composition, as well as factors that affect body weight and the impact of body weight on physical performance. This course is not open to students who have completed KINES 402, formerly known as PET 402.

NUTRI 310 Cultural Foods of the World 3 Units

Advisory: ENGWR 102 and ENGRD 116, OR ESLL 320, ESLR 320, and ESLW 320.

General Education: AA/AS Area VI; CSU Area D7

Course Transferable to UC/CSU

Hours: 54 hours LEC

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.

NUTRI 320 Children's Health, Safety and Nutrition 3 Units

Same As: ECE 415

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.

Course Transferable to CSU

Hours: 54 hours LEC

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. Course emphasis is placed on 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.

NUTRI 324 Nutrition for Healthy Aging 3 Units

Same As: GERON 340

Advisory: ENGWR 102 or 103, and ENGRD 116, or ESLR 320, ESLL 320, and ESLW 320.

Course Transferable to CSU

Hours: 54 hours LEC

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. Some additional topics include 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.

Area: Health & Education
 Dean: Dr. Steven Boyd
 Coordinator: Dr. Grant Goold
 Phone: (916) 484-8843 or (916) 484-8902
 Counseling: (916) 484-8572

Degree: A.S. - Paramedic
 Certificate: Paramedic

http://www.arc.losrios.edu/Programs_of_Study/Health_and_Education/Paramedic.htm

Paramedic Degree and 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 National Standard Paramedic Training Curriculum.

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 Opportunities

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.

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.
- Current curriculum planning summary sheet within the semester in which the pre-enrollment packet is being submitted.
- Current certification as an Emergency Medical Technician-Basic and one year verified EMS experience.

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 by 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, inoculations, drug screen, background check, and malpractice insurance prior to entering the second semester.

(continued on next page)

(Paramedic Degree and Certificate continued)

Requirements for Degree Major or Certificate 36.5-43.5 Units

BIOL 102	Essentials of Human Anatomy and Physiology (4)	4 - 10
or [BIOL 430	Anatomy and Physiology (5)	
and BIOL 431	Anatomy and Physiology (5)]	
PMED 105	Prehospital Calculations (0.5)	0.5 - 1.5
or NURSE 320	Medical Dosage Calculations (1.5)	
PMED 110	Introduction to Advanced Prehospital Care (12)	12
or [PMED 111	Advanced Prehospital Care: Preparatory and Airway Management (4.5)	
and PMED 112	Advanced Prehospital Care: General Medical Emergencies (2.5)	
and PMED 113	Advanced Prehospital Care: Trauma and Pediatric Care (5)]	
PMED 120	Clinical Internship	6
PMED 130	Prehospital Field Internship	14

Associate Degree Requirements: 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.

Paramedic

PMED 100 Emergency Medical Technician - Basic 5 Units

Same As: FT 200
Prerequisite: HEED 323 with a grade of "C" or better
Enrollment Limitation: Not open to students with a current EMT - Basic certificate.
Hours: 72 hours LEC; 72 hours LAB

This course is designed to provide instruction to the level of Emergency Medical Technician - Basic. Topics include skills necessary to provide emergency medical care at a basic life support level with a fire, ambulance, or other specialized service. This course is conducted in compliance with Title 22, Division 9, Chapter 2 of the California Code of Regulations and Emergency Medical Technician - Basic (EMT-I). A "C" or better is required for certification as Emergency Medical Technician - Basic. Field trips are required. This course may be taken four times for credit.

PMED 101 Pre-paramedic Emergency Medical Technician - Basic Skills .5 Units

Prerequisite: Current certification of Emergency Medical Technician - Basic (EMT-B).
Hours: 8 hours LEC; 16 hours LAB

This course is designed for the Emergency Medical Technician - Basic (EMT-B) to review a variety of emergency field skills in preparation to begin a field internship. It also includes a selected number of EMT-B skills used as part of the skills competency requirement by the National Registry of Emergency Medical Technicians. This course may be taken four times. Credit/No Credit Only.

PMED 102 Emergency Medical Technician - Basic, Pre-hospital Field Internship 5 Units

Prerequisite: PMED 101.
Corequisite: Biology 102.
Advisory: ENGWR 102 or ENGWR 103 and ENGRD 116, or ESLR 320, and ESLW 320; MATH 32.
Hours: 18 hours LEC; 216 hours LAB

This course is an internship that provides opportunities to refine hands-on basic life support skills in the pre-hospital setting. This internship is in preparation for application to the American River College, Paramedic Education Program.

PMED 103 EMT - Basic Introduction to Basic Life Support 3.5 Units

Prerequisite: HEED 323 with a grade of "C" or better
Enrollment Limitation: Background check, proof of current immunizations, and campus Health Center clearance.
Hours: 54 hours LEC; 27 hours LAB

This course provides preparation for Emergency Medical Technician - Basic (EMT-Basic) certification. It provides the skills necessary for emergency medical care at a basic life support level with an ambulance service, fire department or other specialized service. This course complies with Title 22, Division 9, Chapter 2 of the California Code of Regulations. The completion of PMED 103 and PMED 104 is equivalent to PMED 100. This course is not open to PMED 100 students. PMED 104 must be taken immediately after the successful completion of PMED 103 in consecutive semesters. This course is not open to students who are currently certified as an EMT-Basic.

PMED 104 EMT - Basic Application of Basic Life Support 1.5 Units

Prerequisite: PMED 103 (EMT-Basic Introduction to Basic Life Support) with a grade of "C" or better
Enrollment Limitation: A background check, proof of current immunizations and campus Health Center clearance are required.
Current CPR certification at one of the following levels: Healthcare Provider, Professional Rescuer or equivalent.
Hours: 27 hours LEC; 45 hours LAB

This course provides preparation for Emergency Medical Technician - Basic (EMT-Basic) certification. It provides the skills necessary for emergency medical care at a basic life support level with an ambulance service, fire department or other specialized service. This course complies with Title 22, Division 9, Chapter 2 of the California Code of Regulations. The completion of PMED 103 and PMED 104 is equivalent to PMED 100. PMED 104 must be taken immediately after the successful completion of PMED 103 in consecutive semesters. This course is not open to students who are currently certified as an EMT-Basic.

PMED 105 Prehospital Calculations .5 Units

Prerequisite: Current certification as an EMT-basic in the state of California, as required by Title 22.
Advisory: MATH 32.
Hours: 9 hours LEC

This course provides basic instruction in calculating medication dosages in the pre-hospital setting.

PMED 106 Emergency Medical Technician Pre-hospital Practices and Internship 6.5 Units

Prerequisite: Current California Emergency Medical Technician (EMT-I or EMT-B) certification.
Corequisite: BIOL 102
Advisory: ENGRD 116, ENGWR 103, and MATH 32; or placement through the assessment process.
Enrollment Limitation: A background check, proof of current immunizations and campus Health Center clearance are required.
Current CPR certification at one of the following levels: Healthcare Provider, Professional Rescuer or equivalent.
Hours: 36 hours LEC; 243 hours LAB

This course reviews and expands the Basic Life Support (BLS) knowledge and skills of the Emergency Medical Technician (EMT). It provides opportunities to practice the appropriate life support skills during a structured clinical and field internship. It serves as preparation for Advanced EMT coursework and application to the American River College Paramedic Education Program.

PMED 108 Emergency Medical Response 3 Units*Hours: 45 hours LEC; 13.5 hours LAB*

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.

PMED 110 Introduction to Advanced Prehospital Care 12 Units*Prerequisite: Acceptance into the Paramedic Program.**Hours: 144 hours LEC; 216 hours LAB*

This course contains the didactic material and the related skills necessary to establish a foundation for subsequent prehospital assessment and management. Topics include anatomy and physiology, pharmacology, intravenous therapy, basic and advanced life support, electrocardiography, medical/surgical, pediatric, obstetrics, and psychiatric/geriatric problems. Crisis intervention, strategies, and medical legal concepts are also discussed.

PMED 111 Advanced Prehospital Care: Preparatory and Airway Management 4.5 Units*Enrollment Limitation: Acceptance into the Paramedic Program**Hours: 54 hours LEC; 81 hours LAB*

This course contains the initial didactic material and related skills necessary to establish a foundation for subsequent prehospital assessments and management. Topics include anatomy and physiology, pharmacology, intravenous therapy, basic and advanced airway control techniques and respiratory emergency management. The completion of PMED 111, PMED 112 and PMED 113 is equivalent to PMED 110. This course is not available to those who have completed PMED 110.

PMED 112 Advanced Prehospital Care: General Medical Emergencies 2.5 Units*Prerequisite: PMED 111 (Advanced Prehospital Care-Preparatory and Airway Management) with a "B" or better.**Hours: 27 hours LEC; 54 hours LAB*

This course contains the didactic material and the related skills necessary to assess and properly manage prehospital patients with medical complaints. Topics include respiratory and cardiac pathologies. The completion of PMED 111, PMED 112 and PMED 113 is equivalent to PMED 110. This course is not available to those who have completed PMED 110.

PMED 113 Advanced Prehospital Care: Trauma and Pediatric Care 5 Units*Prerequisite: PMED 112 (Advanced Prehospital Care-General Medical Emergencies) with a "B" or better.**Hours: 63 hours LEC; 81 hours LAB*

This course contains the didactic materials and related skills necessary to assess and manage prehospital trauma and pediatric patients. Topics include pediatrics and obstetrics, kinematics of trauma, soft-tissue injuries, toxicology, substance abuse and advanced ambulance operations. The completion of PMED 111, PMED 112 and PMED 113 is equivalent to PMED 110. This course is not available to those who have completed PMED 110.

PMED 120 Clinical Internship 6 Units*Prerequisite: PMED 110, with a grade of "C" or better; current Emergency Medical Technician I certification.**Hours: 36 hours LEC; 216 hours LAB*

This course is designed to provide an opportunity to apply the cognitive knowledge and skills gained in the Paramedicine course to patient care in a hospital setting. This course provides for increasing assessment techniques and advanced skills.

PMED 130 Prehospital Field Internship 14 Units*Prerequisite: PMED 120 with a grade of "C" or better.**Enrollment Limitation: Current EMT-Basic(I) certification.**After enrollment, all students are required to successfully complete a background check prior to starting a field internship assignment.**Hours: 54 hours LEC; 600 hours LAB*

Under the direct supervision and evaluation of a licensed paramedic or a mobile intensive care nurse, the intern completes a prehospital field experience. This internship provides the paramedic student with hands-on prehospital experience and is the final course in the series preparing the for a California paramedic license.

PMED 140 Pediatric Advanced Life Support Certification (PALS) .5 Units*Prerequisite: Current Provider C Basic Cardiac Life Support card or county-approved equivalent certificate. Current licensure as a paramedic, nurse, physician, allied health professional or current enrollment in the last semester of an allied health program.**Hours: 6 hours LEC; 12 hours LAB*

This course provides education modules for health care professionals specific to pediatric emergencies. Certification in pediatric advanced life support is granted to students who successfully complete the course. This course may be taken four times.

PMED 142 Advanced Cardiac Life Support Certification .5 Units*Prerequisite: Current Provider C Basic Cardiac Life Support Card or equivalent licensure as a paramedic, nurse, physician, allied health professional or current enrollment in an Allied Health program.**Hours: 6 hours LEC; 12 hours LAB*

This course provides education modules for health care professionals specific to pediatric emergencies. Certification in advanced cardiac life support is granted to students who successfully complete the course. This course may be taken four times.

PMED 160 Introductory Wilderness Medicine 2 Units*Prerequisite: Current certification in provider level**Cardiopulmonary Resuscitation.**Advisory: Basic First Aid.**Hours: 27 hours LEC; 27 hours LAB*

This course provides the didactic material and related skills necessary to establish a foundation of medical care in the wilderness setting. Anatomy and physiology, care of traumatic injuries, patient assessment, environment injuries, medical emergencies, and common simple wilderness medical problems are included. Additionally, basic wilderness survival for the initial responder, and selecting and caring for wilderness medical equipment and supplies will be covered. This course emphasizes improvised care options, and long term care in field settings.

PMED 161 Advanced Wilderness Medicine 2 Units

Prerequisite: PMED 160 or EMT, or other health care provider such as nurse or doctor.

Hours: 27 hours LEC; 27 hours LAB

This course allows the student to gain an advanced level of medical care in the wilderness setting. Anatomy and physiology, improvised airway control, principles of musculoskeletal care, integration of field, synthesis of wilderness medicine and urban care, and common simple wilderness medical problems are included. Additionally, basic wilderness survival for the wilderness responder, and selecting and caring for wilderness medical equipment and supplies will be covered. This course emphasizes improvised care options, and long term care in remote field settings.

PMED 165 EMS Search and Technical Rescue 2 Units

Prerequisite: None

Hours: 27 hours LEC; 27 hours LAB

This course provides the student with 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 EMT/Paramedic, and selecting and caring for rescue equipment and supplies will be covered. This course emphasizes scenario-based learning in safely assessing, managing and pre-planning for the technical rescue environment.

PMED 240 Pediatric Advanced Life Support - Recertification .5 Units

Prerequisite: None

Enrollment Limitation: Current American Heart Association Pediatric Advanced Life Support Provider Card or county approved equivalent certificate.

Hours: 8 hours LEC; 3 hours LAB

This course provides specific pediatric modules for health care professionals. It provides recertification according to the American Heart Association's Pediatric Advanced Life Support standards and guidelines. This course may be taken four times.

PMED 242 Advanced Cardiac Life Support - Recertification .5 Units

Prerequisite: None

Enrollment Limitation: Current American Heart Association Advanced Cardiac Life Support Provider Card or county approved equivalent certificate.

Hours: 8 hours LEC; 3 hours LAB

This course provides education modules specific for adult cardiac emergencies for health care professionals. It provides recertification according to the American Heart Association's Advanced Cardiac Life Support standards and guidelines. This course may be taken four times.

PMED 1000 Emergency Medical Technician - Basic: Refresher 1.5 Units

Enrollment Limitation: Current certification as an Emergency Medical Technician - Basic

Hours: 23 hours LEC; 12 hours LAB

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. This course may be taken four times. Credit/No Credit only.

Area: Humanities
 Dean: Kate Jaques
 Phone: (916) 484-8653
 Counseling: (916) 484-8572

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.

Philosophy

PHIL 300 Introduction to Philosophy 3 Units

Advisory: ENGWR 102 and ENGRD 116; or ESLR 320 and ESLW 320 with a grade of "C" or better; or placement through the assessment process.

*General Education: AA/AS Area I; CSU Area C2; IGETC Area 3B
 Course Transferable to UC/CSU
 Hours: 54 hours LEC*

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.

PHIL 310 Introduction to Ethics 3 Units

Advisory: ENGWR 102 and ENGRD 116; or ESLR 320 and ESLW 320 with a grade of "C" or better; or placement through the assessment process.

*General Education: AA/AS Area I; CSU Area C2; IGETC Area 3B
 Course Transferable to UC/CSU
 Hours: 54 hours LEC*

This course is a survey of various approaches to understanding fundamental ethical ideas such as good, evil, right, and wrong. Deontological and consequentialist theories of ethics are presented. Subjectivist and objectivist views of ethics are considered.

PHIL 315 Contemporary Moral Issues 3 Units

Advisory: ENGWR 102 and ENGRD 116; or ESLR 320 and ESLW 320 with a grade of "C" or better; or placement through the assessment process.

*General Education: AA/AS Area I; CSU Area C2; IGETC Area 3B
 Course Transferable to UC/CSU
 Hours: 54 hours LEC*

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.

PHIL 320 Logic and Critical Reasoning 3 Units

Advisory: ENGWR 102 and ENGRD 116; or ESLR 320 and ESLW 320 with a grade of "C" or better; or placement through the assessment process.

*General Education: AA/AS Area II(b); CSU Area A3
 Course Transferable to UC/CSU
 Hours: 54 hours LEC*

This course is an introduction to 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.

PHIL 324 Symbolic Logic 3 Units

Same As: MATH 320

Prerequisite: MATH 120, 124, 125, or 129 with a grade of "C" or better; or placement through the assessment process.

*General Education: AA/AS Area II(b)
 Course Transferable to CSU
 Hours: 54 hours LEC*

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.

PHIL 330 History of Classical Philosophy 3 Units

Advisory: ENGWR 102 and ENGRD 116; or ESLR 320 and ESLW 320 with a grade of "C" or better; or placement through the assessment process.

*General Education: AA/AS Area I; CSU Area C2; IGETC Area 3B
 Course Transferable to UC/CSU
 Hours: 54 hours LEC*

This course is an overview of some of the important themes in Western Philosophical thought from the Pre-Socratic era to the Late Medieval era. These themes may include the fundamental nature of reality, knowledge, values, society, God, and human nature.

PHIL 331 History of Modern Philosophy 3 Units

Advisory: ENGWR 102 and ENGRD 116; or ESLR 320 and ESLW 320 with a grade of "C" or better; or placement through the assessment process.

General Education: AA/AS Area I; CSU Area C2; IGETC Area 3B

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course is an overview of important themes in Western Philosophical thought from the Early Modern era to the present. These themes may include the fundamental nature of reality, knowledge, values, society, God, and human nature.

PHIL 350 Philosophy of Religion 3 Units

Advisory: ENGWR 102 and ENGRD 116; or ESLR 320 and ESLW 320 with a grade of "C" or better; or placement through the assessment process.

General Education: AA/AS Area I; CSU Area C2; IGETC Area 3B

Course Transferable to UC/CSU

Hours: 54 hours LEC

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.

PHIL 353 Religions of the Far East 3 Units

Advisory: ENGWR 102 and ENGRD 116; or ESLR 320 and ESLW 320 with a grade of "C" or better; or placement through the assessment process.

General Education: AA/AS Area I; CSU Area C2; IGETC Area 3B

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course is an introduction to the major religions of the Far East, which may include Jainism, Hinduism, Buddhism, Taoism, Confucianism, and Shinto. The history, basic teachings, and practices of these are examined.

PHIL 354 Religions of the West 3 Units

Advisory: ENGWR 102 and ENGRD 116; or ESLR 320 and ESLW 320 with a grade of "C" or better; or placement through the assessment process.

General Education: AA/AS Area I; CSU Area C2; IGETC Area 3B

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course is an introduction to the three major "Western" religions: Judaism, Christianity, and Islam. Basic teachings, practices, and histories of these religions are examined.

PHIL 360 Social/Political Philosophy 3 Units

Advisory: [[ENGWR 102 or 103] and ENGRD 116] or [ESLR 320 and ESLW 320] with a grade of "C" or better, or placement through the assessment process.

General Education: AA/AS Area I; CSU Area C2; CSU Area D7; IGETC Area 4G

Course Transferable to UC/CSU

Hours: 54 hours LEC

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.

Area: Kinesiology and Athletics
 Dean: Jean Snuggs
 Phone: (916) 484-8201
 Counseling: (916) 484-8572

Degrees: A.S. Physical Education
 A.S. Sports Medicine
 Certificates: Fitness Specialist

Physical Education-Theory (PET) classes are now under the Kinesiology (KINES) heading. All KINES courses are formerly known as PET courses.

Physical Education –
see Kinesiology and Athletics, pg. 263

Area: Science and Engineering
 Dean: Dr. Rina Roy
 Phone: (916) 484-8107
 Counseling: (916) 484-8572

Degree: A.S. - Physical Science/Mathematics
 A.S. for Transfer Degree - Physics
 A.S. - General Science

Physical Science/Mathematics Degree

This program provides a broad study in fields of physical science and mathematics. It provides a good foundation for transfer to a four-year program in science.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- recognize and utilize correctly 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.

Career Opportunities

This program is intended to provide a broad foundation of skills and knowledge to help students succeed in the completion of a bachelor’s degree in a variety of science, math or engineering-related areas.

Requirements for Degree Major 18 units

A minimum of 18 units from the following: 18¹
 Transferable courses must be selected from the following areas: astronomy, chemistry, engineering, geology, mathematics, physical geography, physical science, physics, and statistics.

¹excludes GIS and cultural geography courses

Associate Degree Requirements: 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.

Physics A.S. for Transfer Degree

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.

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 Opportunities

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.

Requirements for Degree 28 Units

MATH 400	Calculus I.....	5
MATH 401	Calculus II.....	5
MATH 402	Calculus III.....	5
PHYS 410	Mechanics of Solids and Fluids.....	5
PHYS 421	Electricity and Magnetism.....	4
PHYS 431	Heat, Waves, Light and Modern Physics.....	4

Associate in Science for Transfer Degree Requirements: 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) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

General Science Degree

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.

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.
- describe the basic definitions and fundamental theories of an introductory 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.
- recognize ethical components of scientific decision making and apply personal and social values within the process of decision making in scientific endeavors.

Requirements for Degree 18 Units

A minimum of 18 units from the following: 18
 Transfer level science courses including one laboratory course in a physical science and one laboratory course in a biological science. Courses may be selected from anthropology (physical), astronomy, biology, biotechnology, chemistry, geography (physical), geology, natural resources, physical science, physics, and psychology (biological).

Associate Degree Requirements: 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.

Physical Science

PS 300 Introduction to Physical Science 3 Units

Advisory: MATH 100 with a grade of “C” or better, AND ENGWR 102 and ENGRD 116 with a grade of “C” or better OR ESLL 320 and ESLR 320 and ESLW 320 with a grade of “C” or better.

General Education: AAI/AS Area IV; CSU Area B1; IGETC Area 5A
Course Transferable to UC/CSU
Hours: 54 hours LEC

This course covers the fundamental concepts of astronomy, geology, physics, chemistry, and meteorology. It is designed for the student with little or no science background. It is not recommended for science, mathematics, or engineering majors.

PS 301 Physical Science Laboratory 1 Unit

Corequisite: PS 300

Advisory: MATH 100

General Education: CSU Area B1; CSU Area B3; IGETC Area 5C

Course Transferable to UC/CSU

Hours: 54 hours LAB

This laboratory course provides hands-on experiments in several disciplines in the physical sciences, including physics, chemistry, earth science, and astronomy.

Physics

PHYS 310 Conceptual Physics 3 Units

Advisory: MATH 100 with a grade of “C” or better, AND ENGWR 102 and ENGRD 116 with a grade of “C” or better OR ESLL 320 and ESLR 320 and ESLW 320 with a grade of “C” or better.

General Education: AAI/AS Area IV; CSU Area B1; IGETC Area 5A

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course covers selected topics in motion, gravity, heat, sound, electricity, magnetism, light, and atomic and nuclear physics. It is designed for liberal arts majors and students who have not taken a course in physics.

PHYS 311 Basic Physics 3 Units

Prerequisite: MATH 330 with a grade of “C” or better

Advisory: ENGWR 102 and ENGRD 116 with a grade of “C” or better OR ESLL 320 and ESLR 320 and ESLW 320 with a grade of “C” or better.

General Education: AAI/AS Area IV; CSU Area B1; IGETC Area 5A

Course Transferable to UC/CSU

Hours: 54 hours LEC

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 410 or 350.

PHYS 312 Conceptual Physics Laboratory 1 Unit

Corequisite: PHYS 310

General Education: AAI/AS Area IV; CSU Area B1; CSU Area B3;

IGETC Area 5C

Course Transferable to UC/CSU

Hours: 54 hours LAB

Together with PHYS 310, this course satisfies the UC and CSU general education science lab requirement. Emphasis is placed on scientific observation and measurement and their relationship to physical concepts. This course provides concrete, hands-on observation activities and interpretation of data in a variety of experimental situations.

PHYS 350 General Physics 4 Units

Prerequisite: MATH 330 with a grade of "C" or better
Advisory: PHYS 311; ENGWR 102 and ENGRD 116 with a grade of "C" or better OR ESLL 320 and ESLR 320 and ESLW 320 with a grade of "C" or better.

General Education: AA/AS Area IV; CSU Area B1; CSU Area B3;
 IGETC Area 5A; IGETC Area 5C
Course Transferable to UC/CSU
Hours: 54 hours LEC; 54 hours LAB

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.

PHYS 360 General Physics 4 Units

Prerequisite: PHYS 350 with a grade of "C" or better
Advisory: ENGWR 102 and ENGRD 116 with a grade of "C" or better OR ESLL 320 and ESLR 320 and ESLW 320 with a grade of "C" or better.

General Education: CSU Area B2; CSU Area B3
Course Transferable to UC/CSU
Hours: 54 hours LEC; 54 hours LAB

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.

PHYS 410 Mechanics of Solids and Fluids 5 Units

Prerequisite: MATH 400 with a grade of "C" or better
Corequisite: MATH 401
Advisory: PHYS 311; ENGWR 102 and ENGRD 116 with a grade of "C" or better OR ESLL 320 and ESLR 320 and ESLW 320 with a grade of "C" or better.

General Education: AA/AS Area IV; CSU Area B1; CSU Area B3;
 IGETC Area 5A; IGETC Area 5C
Course Transferable to UC/CSU
Hours: 72 hours LEC; 54 hours LAB

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.

PHYS 421 Electricity and Magnetism 4 Units

Prerequisite: MATH 401 and PHYS 410 with grades of "C" or better
Advisory: ENGWR 102 and ENGRD 116 with a grade of "C" or better OR ESLL 320 and ESLR 320 and ESLW 320 with a grade of "C" or better.

Course Transferable to UC/CSU
Hours: 54 hours LEC; 54 hours LAB

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.

PHYS 431 Heat, Waves, Light and Modern Physics 4 Units

Prerequisite: MATH 401 and PHYS 410 with grades of "C" or better
Advisory: ENGWR 102 and ENGRD 116 with a grade of "C" or better OR ESLL 320 and ESLR 320 and ESLW 320 with a grade of "C" or better.

Course Transferable to UC/CSU
Hours: 54 hours LEC; 54 hours LAB

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.

Area: Behavioral & Social Sciences
 Dean: Carol Pottorff
 Phone: (916) 484-8283
 Counseling: (916) 484-8572

Degree: A.A. - Political Science
 Certificate: International Studies

DEGREES AND CERTIFICATES

Political Science Degree

The Political Science degree provides a comprehensive introduction to the field of political science. The program 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.

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 Opportunities

This degree is designed to facilitate successful transfer to four-year programs. 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.

<u>Requirements for Degree</u>	<u>18 Units</u>
POLS 301 Introduction to Government: United States	3
POLS 302 Introduction to Government: Foreign	3
POLS 310 Introduction to International Relations	3
POLS 320 Introduction to Political Theory	3
And a minimum of 6 units from the following:	6
HIST 310 History of the United States (3)	
HIST 311 History of the United States (3)	
POLS 304 Introduction to Government: California (3)	
POLS 322 Political Ideologies (3)	
POLS 330 Constitutional Rights (3)	
POLS 332 Law and Society (3)	
SOCSC 310 International Studies - Peace and Conflict Studies (3)	
SOCSC 312 International Studies - Current International Development Issues (3)	

Associate Degree Requirements: The Political 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.

International Studies Certificate

The International Studies Certificate is designed to benefit students who are interested in international issues. Course work focuses on issues ranging from economy and trade to culture, politics, and environment from a transnational perspective.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- evaluate information presented in a comparative perspective.
- compare and contrast competing social scientific perspectives and describe the relative usefulness of each perspective to world issues.
- develop a scientific framework for the analysis of international issues.
- construct a culturally relativistic view of the world.
- define his/her place in history based on the knowledge acquired.
- recognize the complexity of the world as an interconnected and interdependent community

<u>Requirements for Certificate</u>	<u>29 Units</u>
ANTH 310 Cultural Anthropology	3
HIST 307 History of World Civilizations to 1500 (3)	3 ¹
or HIST 308 History of World Civilizations, 1500 to Present (3)	
POLS 302 Introduction to Government: Foreign	3
POLS 310 Introduction to International Relations	3
And a minimum of 8 units from the following:	8
Transfer level foreign language courses (numbered 300-499).	
And a minimum of 9 units from the following:	9
ANTH 330 Magic, Witchcraft, and Religion (3)	
ARTH 322 Art History of the Non-Western World (3)	
ECON 302 Principles of Macroeconomics (3)	
ECON 304 Principles of Microeconomics (3)	
ENGLT 340 World Literature (3)	
ENGLT 341 World Literature (3)	
ENGLT 345 Mythologies of the World (3)	
GEOG 310 Human Geography: Exploring Earth's Cultural Landscapes (3)	
GEOG 320 World Regional Geography (3)	
HIST 300 History of Western Civilization (3)	
HIST 302 History of Western Civilization (3)	
HIST 305 Women in Western Civilization (3)	
HIST 307 History of World Civilizations to 1500 (3)	
HIST 308 History of World Civilizations, 1500 to Present (3)	
HIST 364 Asian Civilization (3)	
HIST 365 Asian Civilization (3)	
HIST 373 History of Mexico (3)	
HIST 480 History of Western Civilization - Honors (3)	
HIST 481 History of Western Civilization - Honors (3)	

(continued on next page)

(International Studies Certificate continued)

HUM 300	Classical Humanities (3)
HUM 310	Modern Humanities (3)
HUM 320	Asian Humanities (3)
HUM 330	Humanities of the Americas (3)
MUFHL 330	World Music (3)
PHIL 353	Religions of the Far East (3)
PHIL 354	Religions of the West (3)
POLS 301	Introduction to Government: United States (3)
POLS 322	Political Ideologies (3)
SOC 300	Introductory Sociology (3)
SOCSC 310	International Studies - Peace and Conflict Studies (3)
SOCSC 312	International Studies - Current International Development Issues (3)

¹The history course used to meet this requirement may not be used towards the 9 unit elective requirement.

Political Science

POLS 301 Introduction to Government: United States **3 Units**

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.
General Education: AA/AS Area V(a); CSU Area D8; CSU Area F2; CSU Area F3; IGETC Area 4H
Course Transferable to UC/CSU
Hours: 54 hours LEC

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' constitutional base, structures and functions, political process, problems and issues.

POLS 302 Introduction to Government: Foreign **3 Units**

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.
General Education: AA/AS Area V(b); CSU Area D8; IGETC Area 4H
Course Transferable to UC/CSU
Hours: 54 hours LEC

This course is a comparative study and analysis of political systems, ideologies, institutions, policies, cultures, histories, and the development of selected foreign governments. Special emphasis is placed on the cultural and social dimensions of political behavior and attitudes in connection with governmental and political practices typical of particular geographical regions. Coverage includes an examination of selected developed and lesser developed nation-states from a global perspective.

POLS 304 Introduction to Government: California **3 Units**

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
General Education: CSU Area D8; CSU Area F3
Course Transferable to CSU
Hours: 54 hours LEC

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.

POLS 310 Introduction to International Relations **3 Units**

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.
General Education: AA/AS Area V(b); CSU Area D8; IGETC Area 4H
Course Transferable to UC/CSU
Hours: 54 hours LEC

This course is a survey of the international political system. The focus will be on global issues as they relate to the nation-state system, the role of non-state actors, Global North and Global South relations, globalization, the proliferation of weapons of mass destruction, armed conflict and its causes, regional and hemispheric relations, and international political economy.

POLS 320 Introduction to Political Theory **3 Units**

Advisory: ENGRD 116, ENGWR 102, ENGWR 103, ESLR 320, or ESLW 320; or placement through the assessment process.
General Education: AA/AS Area V(b); CSU Area D8; IGETC Area 4H
Course Transferable to UC/CSU
Hours: 54 hours LEC

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 covered may include theories of just and unjust societies, social contract theory, justifications for government authority, and the rights of citizens versus the responsibilities of citizenship.

POLS 322 Political Ideologies **3 Units**

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.
General Education: AA/AS Area V(b); CSU Area D8; IGETC Area 4H
Course Transferable to UC/CSU
Hours: 54 hours LEC

This course is a survey of competing ideological approaches to government and politics. It provides comparative and historical analyses of various ideologies. Emphasis is on the theories, values, and assumptions that make up various political ideologies and their effects on political systems.

POLS 330 Constitutional Rights **3 Units**

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.
General Education: AA/AS Area V(b); CSU Area D8
Course Transferable to UC/CSU
Hours: 54 hours LEC

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.

POLS 332 Law and Society**3 Units***Same As: BUS 345**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.**General Education: AA/AS Area V(b); CSU Area D8; IGETC Area 4H
Course Transferable to UC/CSU**Hours: 54 hours LEC*

This course is an introduction to the Anglo-American Common Law System with emphasis upon the nature and purpose of law. The evolution of legal concepts as a reflection of the social environment, and the basic organization and functioning of the American judicial system will be presented from a theoretical rather than a practical view point through analysis of selected cases and reading materials. This course is not open to students who have completed BUS 345.

**POLS 481 Introduction to Government:
United States - Honors****3 Units***Prerequisite: Placement into ENGWR 480 through the assessment process.**General Education: AA/AS Area V(a) (effective Summer 2012)**Course Transferable to UC/CSU**Hours: 54 hours LEC*

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' constitutional 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.

POLS 494 Topics in Political Science**.5-4 Units***Advisory: ENGRD 116, ENGWR 102, ENGWR 103, ESLR 320, and ESLW 320; or placement through the assessment process.; 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.**Course Transferable to CSU**Hours: 54 hours LEC*

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. Course may be taken for a maximum of 9 units.

Area: Behavioral & Social Sciences
 Dean: Carol Pottorff
 Phone: (916) 484-8283
 Counseling: (916) 484-8572

Degree: A.A. - Psychology
 A.A. for Transfer - Psychology

Psychology Degree

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.

Student Learning Outcomes

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 Opportunities

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.

Requirements for Degree	18 Units
PSYC 300 General Principles	3
or PSYC 480 Honors General Principles (3)	
PSYC 310 Biological Psychology	3
PSYC 330 Introductory Statistics for the Behavioral Sciences	3
PSYC 335 Research Methods in Psychology	3
And a minimum of 3 units from the following:	3
PSYC 320 Social Psychology (3)	
PSYC 370 Human Development: A Life Span (3)	
PSYC 373 Child Psychology (3)	
And a minimum of 3 units from the following:	3 ¹
PSYC 372 Child Development (3)	
or ECE 312 Child Development (3)	
PSYC 374 Psychology of Aging: Adult Development and Aging (3)	
or GERON 302 Psychology of Aging: Adult Development and Aging (3)	
PSYC 365 Issues of Diverse Populations (3)	
or HSER 330 Issues of Diverse Populations (3)	
PSYC 400 Introduction to Chemical Dependency (3)	
or HSER 340 Introduction to Chemical Dependency (3)	

PSYC 305	Personal Growth and Adjustment (3)
PSYC 320	Social Psychology (3)
PSYC 340	Abnormal Behavior (3)
or PSYC 481	Honors Abnormal Behavior (3)
PSYC 342	Introduction to Applied Behavior Analysis (3)
PSYC 354	The Psychology of Family Life and Intimate Relationships in a Diverse Society (3)
PSYC 356	Human Sexuality (3)
PSYC 358	Principles of Interpersonal Relations (3)
PSYC 359	Stress Management and Health (3)
PSYC 361	Psychology of Women in a Multicultural Society (3)
PSYC 370	Human Development: A Life Span (3)
PSYC 373	Child Psychology (3)
PSYC 383	Introduction to Organizational Psychology (3)
PSYC 390	Psychology of Death and Dying (3)

¹PSYC 320, PSYC 370, and PSYC 373 may be used for this requirement if not used previously.

Associate Degree Requirements: 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.

Psychology A.A. for Transfer Degree

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,

(continued on next page)

(Psychology A.A. for Transfer Degree continued)

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.

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 Opportunities

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.

Requirements for Degree	18 Units
PSYC 300 General Principles (3).....	3
or PSYC 480 Honors General Principles (3)	
PSYC 310 Biological Psychology	3
PSYC 330 Introductory Statistics for the Behavioral Sciences	3
PSYC 335 Research Methods in Psychology.....	3
A minimum of 3 units from the following:	3
PSYC 320 Social Psychology (3)	
PSYC 370 Human Development: A Life Span (3)	
PSYC 373 Child Psychology (3)	
A minimum of 3 units from the following:	3¹
PSYC 305 Personal Growth and Adjustment (3)	
PSYC 320 Social Psychology (3)	
PSYC 340 Abnormal Behavior (3)	
PSYC 342 Introduction to Applied Behavior Analysis (3)	
PSYC 354 The Psychology of Family Life and Intimate Relationships in a Diverse Society (3)	
PSYC 356 Human Sexuality (3)	
PSYC 370 Human Development: A Life Span (3)	
PSYC 373 Child Psychology (3)	
PSYC 390 Psychology of Death and Dying (3)	

¹Or any course not used previously

Associate in Arts for Transfer Degree Requirements: The Psychology Associate in Arts for Transfer (A.A.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.

Psychology

PSYC 300 General Principles 3 Units

General Education: AAIAS Area V(b); CSU Area D9; IGETC Area 4I
Course Transferable to UC/CSU
Hours: 54 hours LEC

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.

PSYC 305 Personal Growth and Adjustment 3 Units

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.
General Education: AAIAS Area V(b); CSU Area D9; IGETC Area 4I
Course Transferable to UC/CSU
Hours: 54 hours LEC

This course explores human behavior emphasizing the practical and adjustive aspects of psychology in everyday life. Topics include development, personal growth and adjustment over the life span, motivation, emotions, stress, adjustment, behavior disorder, personality, attitudes, values, and interpersonal relationships.

PSYC 310 Biological Psychology 3 Units

Prerequisite: PSYC 300 with a grade of "C" or better
General Education: AAIAS Area IV; CSU Area B2; IGETC Area 5B
Course Transferable to UC/CSU
Hours: 54 hours LEC

This course is an analysis and description of the physiological determinants of behavior. Content includes the brain, the nervous system, central nervous pathologies, endocrine function and the biochemistry of mental disease. This is a basic course for psychology, medical and biological science majors.

PSYC 311 Biological Psychology Laboratory 1 Unit

Corequisite: PSYC 310
General Education: CSU Area B2; CSU Area B3; IGETC Area 5C
Course Transferable to UC/CSU
Hours: 54 hours LAB

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. Brain dissection procedures, interactive computer simulations, and lab experiments with data collection and analysis are utilized.

PSYC 320 Social Psychology 3 Units

Prerequisite: PSYC 300 with a grade of "C" or better
General Education: AA/AS Area V(b); CSU Area D9; IGETC Area 4I
Course Transferable to UC/CSU
Hours: 54 hours LEC

This course analyzes human behavior in relation to the social environment, including the power of the situation, other individuals, and the social group. Emphasized topics include aggression, prejudice, attraction, altruism, attitude change, conformity, gender roles, cultural norms, person perception, and social cognition.

PSYC 330 Introductory Statistics for the Behavioral Sciences 3 Units

Prerequisite: MATH 120, MATH 124, MATH 125 or MATH 129 with a grade of "C" or better.
General Education: AA/AS Area II(b); CSU Area B4; IGETC Area 2
Course Transferable to UC/CSU
Hours: 54 hours LEC

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.

PSYC 331 Introduction to Statistics for the Behavioral Science - Lab 1 Unit

Prerequisite: None
Corequisite: PSYC 330.
Course Transferable to CSU
Hours: 54 hours LAB

This lab complements Introduction to Statistics for the Behavioral Sciences (PSYC 330) and/or Research Methods in Psychology (PSYC 335) by providing hands-on experience and facilitated instruction in the use of both the SPSS and Microsoft Excel computer software programs. Emphasis is on the techniques of software-assisted applied statistical analysis and data presentation using these software packages.

PSYC 335 Research Methods in Psychology 3 Units

Prerequisite: PSYC 300 and PSYC 330, STAT 300 or STAT 305 with a grade of "C" or better.
Advisory: ENGWR 300 or ESLW 340 with a grade of "C" or better.
Course Transferable to UC/CSU
Hours: 36 hours LEC; 54 hours LAB

This course covers the planning and execution of research studies in the behavioral sciences. Crucial topics include hypothesis formation, review of the professional literature, research design, collection of data, statistical analysis, and scientific report writing.

PSYC 340 Abnormal Behavior 3 Units

Prerequisite: PSYC 300 or 305 with a grade 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; OR placement through assessment process.
General Education: AA/AS Area III(b); CSU Area D9; CSU Area E1; IGETC Area 4I
Course Transferable to UC/CSU
Hours: 54 hours LEC

This course is an exploration of 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.

PSYC 342 Introduction to Applied Behavior Analysis 3 Units

Prerequisite: PSYC 300 or 305 with a grade of "C" or better
General Education: AA/AS Area III(b); CSU Area E1
Course Transferable to CSU
Hours: 54 hours LEC

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.

PSYC 354 The Psychology of Family Life and Intimate Relationships in a Diverse Society 3 Units

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.
General Education: AA/AS Area III(b); CSU Area E1
Course Transferable to CSU
Hours: 54 hours LEC

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.

PSYC 356 Human Sexuality 3 Units

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.
General Education: AA/AS Area III(b); CSU Areas D4, D9, and E1; IGETC Area 4D and Area 4I
Course Transferable to UC/CSU
Hours: 54 hours LEC

This course provides an overview of human sexual behavior from birth through adulthood. Sexuality is explored from historical, cultural, psychological, physiological, sociological and legal viewpoints.

PSYC 358 Principles of Interpersonal Relations 3 Units

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.
General Education: AA/AS Area III(b); CSU Area E1
Course Transferable to CSU
Hours: 54 hours LEC

This course is an introduction to the principles involved in effective interpersonal relationships. Topics will 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.

PSYC 359 Stress Management and Health 3 Units

Same As: HEED 352
General Education: AA/AS Area III(b); CSU Area E1
Course Transferable to CSU
Hours: 54 hours LEC

This course examines productive and nonproductive stress and the influence of various types of stress on health and wellness. Topics include the physiological aspects of stress and its effects on health, assessments of personal coping style, strategies for coping effectively with stress, relaxation techniques, and positive reinforcers. Emphasis is placed on practical application of stress management techniques in daily life. This course is not open to students who have completed HEED 352.

PSYC 361 Psychology of Women in a Multicultural Society 3 Units

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
Course Transferable to UC/CSU
Hours: 54 hours LEC

This course is a study of the psychological effects of society upon women. Emphasis is on the exploration of gender roles, sex roles, stereotypes, as well as the sociocultural, intrapersonal, and interpersonal factors in the development of women.

PSYC 365 Issues of Diverse Populations 3 Units

Same As: HSER 330
Prerequisite: 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; OR placement through assessment process.
General Education: AA/AS Area V(b); AA/AS Area VI; CSU Area E1
Course Transferable to CSU
Hours: 54 hours LEC

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.

PSYC 370 Human Development: A Life Span 3 Units

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.
General Education: AA/AS Area V(b); AA/AS Area III(b); CSU Area D9; CSU Area E1; IGETC Area 4I
Course Transferable to UC/CSU
Hours: 54 hours LEC

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. Emphasis is placed on 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.

PSYC 372 Child Development 3 Units

Same As: ECE 312
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.
General Education: AA/AS Area V(b); CSU Area D9; CSU Area E1; IGETC Area 4I
Course Transferable to UC/CSU
Hours: 54 hours LEC

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. Included are the influences of culture, family, and the environment. This material is designed as a foundation for early care and education, teaching, and parenting. This course is not open to students who have completed ECE 312.

PSYC 373 Child Psychology 3 Units

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.
General Education: AA/AS Area V(b); CSU Area D9; CSU Area E1; IGETC Area 4I
Course Transferable to UC/CSU
Hours: 54 hours LEC

This course introduces the science of child psychology through the analysis of developmental theories and research. Key developmental events across the main domains in developmental psychology (physical, cognitive, socio-emotional) are examined from conception through adolescence. Questions about development are investigated, with an emphasis on the role of the scientific method. 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. This course provides a scientific foundation for future studies in social sciences, including psychology.

PSYC 374 Psychology of Aging: Adult Development and Aging 3 Units

Same As: GERON 302

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.

General Education: AA/AS Area V(b); CSU Area E1

Course Transferable to UC/CSU

Hours: 54 hours LEC

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. Not open to students who have completed GERON 302.

PSYC 378 Communicating with and Validating Older Adults 3 Units

Same As: GERON 330

Prerequisite: GERON 302 or PSYC 374 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;

General Education: AA/AS Area III(b)

Course Transferable to CSU

Hours: 54 hours LEC

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. This class is held off campus in a long-term care setting. For online students, supervision by an activity professional in a long-term care setting is required. It is not open to students who have completed GERON 330.

PSYC 379 Reminiscence Therapy 3 Units

Same As: GERON 334

Prerequisite: GERON 302 or PSYC 374 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.

General Education: AA/AS Area III(b)

Course Transferable to CSU

Hours: 54 hours LEC

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. Off-campus supervision by an activity professional in long-term care setting is required for the internet modality. It is not open to students who have completed GERON 334.

PSYC 383 Introduction to Organizational Psychology 3 Units

Advisory: PSYC 300, 330, and 335

General Education: AA/AS Area V(b); CSU Area D9

Course Transferable to CSU

Hours: 54 hours LEC

This course provides an overview of the field of organizational psychology, focusing on motivation, leadership, organizational assessment, personnel selection, training, and the application of psychological research techniques in the work environment.

PSYC 390 Psychology of Death and Dying 3 Units

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.

General Education: AA/AS Area III(b); CSU Area E1

Course Transferable to CSU

Hours: 54 hours LEC

This course investigates beliefs, attitudes, anxieties, and behaviors associated with dying and death. Information about suicide, life-threatening illnesses, bereavement, and euthanasia are presented.

PSYC 400 Introduction to Chemical Dependency 3 Units

Same As: HSER 340

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.

General Education: AA/AS Area III(b); CSU Area E1

Course Transferable to CSU

Hours: 54 hours LEC

This course examines the physiological effects of chemical dependency on the individual. It includes an analysis of the effects of substance abuse on the family; the sociological, 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.

PSYC 401 Physiology and Pharmacology: Alcohol & Other Drugs 3 Units

Same As: HSER 341

Prerequisite: ENGWR 102 or ESLW 320 and HSER 340 or

PSYC 400 with a grade of "C" or better.

Course Transferable to CSU

Hours: 54 hours LEC

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.

PSYC 402 Alcoholism: Intervention, Treatment & Recovery 3 Units

Same As: HSER 342

Prerequisite: HSER 341 or PSYC 401 with a grade of "C" or better

Course Transferable to CSU

Hours: 54 hours LEC

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.

**PSYC 415 Studying in London:
Psychological Elements of
British Life and Culture 3 Units**

General Education: AAIAS Area III(b) (effective Summer 2012)

Course Transferable to CSU

Hours: 54 hours LEC

This course, offered in a London study abroad program, surveys elements in British history and culture that have influenced the science of psychology. Special emphasis is given to 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 psychology behind various elements of British life including the monarchy, popular society, counter culture, art, and history. Field trips are required.

PSYC 480 Honors General Principles 3 Units

Prerequisite: Cumulative GPA of 3.0 or above; ENGWR 300 or 480 with a grade of "C" or better. ENGRD 116 with "C" or better, or placement through assessment process.

General Education: AAIAS Area V(b); CSU Area D9; IGETC Area 4I

Course Transferable to UC/CSU

Hours: 54 hours LEC

This 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. Emphasizing critical thinking in a seminar style, the focus is on thorough analysis and evaluation of psychological theories and research studies as they relate to practical, everyday issues.

PSYC 481 Honors Abnormal Behavior 3 Units

Prerequisite: Cumulative GPA of 3.0 or above; PSYC 300 or PSYC 480 with a grade of "C" or better; ENGWR 300

OR ENGWR 480 with a grade of "C" or better.

General Education: AAIAS Area III(b); CSU Area D9; CSU Area E1; IGETC Area 4I

Course Transferable to UC/CSU

Hours: 54 hours LEC

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. Examination of the origins, symptoms and treatment of psychological disorders through first-person accounts, role of multicultural factors, and various theoretical stances. The focus is 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.

Area: Sacramento Regional Public Safety Training Center
5146 Arnold Avenue
McClellan, CA 95652

Dean: James Thompson

Phone: (916) 570-5000

Counseling: (916) 484-8572

Website: www.arc.losrios.edu/safety

Certificate: POST Basic Law Enforcement Academy - Modular Format

Certificates of Completion offered by the department:
Basic Law Enforcement Academy - Module I
Basic Law Enforcement Academy - Module II
Basic Law Enforcement Academy - Module II

Other Offerings:
Law Enforcement In-Service
POST and STC Certified Courses for Perishable Skills
POST and STC Certified Instructors Courses
STC Certified Core Courses
Traffic Accident Investigations Series

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 Officers 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.

Technical/Professional Development (In-Service) courses

Technical training and in-service courses are geared primarily for law enforcement officers, correctional officers, probation officers or other individuals within the criminal justice system. Individuals taking these courses generally are seeking technical knowledge and skills for professional enhancement or they are mandated by POST, STC, or the California State Fire Marshal's Office. Technical courses involving instructor certification may require a proficiency skills test prior to registration. California Statute or prerequisites may restrict student registration into some courses.

Program Costs and Registration

Additional information and course reservations are available by calling the center at (916) 570-5000 or visit our website at www.arc.losrios.edu/safety. Students are required to pay for the cost of the materials consumed during the training course and established community college enrollment fees.

Contract Partnerships

The Sacramento Regional Public Safety Training Center, Los Rios Community College District and select local and regional agencies have partnered to establish additional training options for the Public Safety Professional/Student. Courses offered through our Contract partnership meet all of the regulatory standards set by the Los Rios Community College District, American River College, POST, and/or STC. California Statute or prerequisites may restrict student registration into some courses.

County of Sacramento

- For information on the Basic Academy, contact the Sacramento Sheriff's Training Academy, 1000 River Walk Way, Carmichael, CA 95608, call (916) 874-1098, or visit the webpage at: www.sacsheriff.com/divisions/dtrf/acadinfo.cfm
- For information regarding in-service training course, contact the Sheriff's Department, Division of Training and Reserve Forces at (916) 874-1098 or visit the webpage at www.sacsheriff.com/divisions/dtrf/in-service.cfm
- For information regarding the P.C. 832 Modular Training, contact the Division of Training and Reserve Forces at (916) 875-0006, or visit the website: www.sacsheriff.com/divisions/dtrf/pc832.cfm

City of Sacramento

- For information on the Communications courses, call (916) 264-7248 or visit the Communications Training web page at: www.sacpd.org/Academy/CTO.htm
- For information about Community Service Officer training at the Academy, call (916) 264-8264 or visit the CSO Training webpage at www.sacpd.org/Academy/CSO.htm
- For information the Basic Police Academy, call (916) 566-2418 or visit the Academy website at: www.sacpd.org/Academy/default.htm
- For information on Regional Community Policing Institute courses call (916) 264-0190 or visit the webpage at: www.sacpd.org/RCPI/

USDA Forest Service

- For information on courses presented by USDA Forest Service, call (916) 643-2263.

(continued on next page)

(Contract Partnerships continued)

Regional Fire and Rescue Training Authority (JPA)

- For information on courses presented by Regional Fire and Rescue Training Authority call (916) 566-4400.

Sacramento Metropolitan Fire District

- For information on courses presented by the Sacramento Metropolitan Fire District, call (916) 566-4400 or visit the district’s training webpage at www.cityofsacramento.org/fire/training.html

Sacramento City Fire Department

- For information on courses presented by the Sacramento Fire Department call (916) 264-5266 or visit the Division of Training webpage at: www.cityofsacramento.org/fire/training.html

California Department of Forestry

- For information on courses presented by the California Department of Forestry, call (530) 647-5292 or e-mail: chris.anthony@fire.ca.gov

Sacramento Regional Chaplain’s Program

- For information on courses presented by the Sacramento Regional Chaplain’s Program, call (916) 857-1801 or visit their website at: www.sacchaplains.com

Folsom Police Department

- For information on courses presented by the Folsom Police Department, call (916) 355-7298.

Additional information regarding training programs offered by the Sacramento Regional Public Safety Training Center and any one of it’s Contract partners, is available by contacting any staff member at (916) 570-5000 or any staff member of the agency’s training division.

CERTIFICATES

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.

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 Opportunities

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.

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.

Requirements for Certificate		37.5 Units
PSTC 1502	Basic Law Enforcement Academy - Module III	9
PSTC 1503	Basic Law Enforcement Academy - Module II	11
PSTC 1504	Basic Law Enforcement Academy - Module I	17.5

CERTIFICATES OF COMPLETION (offered by the department)

Basic Law Enforcement Academy - Module I

This certificate meets or exceeds the California Commission on Peace Officer Standards and Training (POST) minimum standards for the Level I reserve officer and 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/Chemical Agents, Persons with Disabilities, Gang Awareness, Emergency management, Courtroom Testimony, and Emotional Survival for Law Enforcement.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- demonstrate proficiency in victimology and crisis intervention.
- perform the tasks of an officer conducting a preliminary homicide investigation.
- 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 proficiency in conducting 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 reacting to a simulated ambush.
- demonstrate proficiency in responding to and investigating a simulated incident involving one or more suspects concealed in a building.
- demonstrate proficiency in responding to and investigating simulated suspicious person(s)/circumstances.
- 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 contacting people with simulated disabilities.
- demonstrate the ability to deliver strikes with an impact weapon or facsimile, as directed.

Career Opportunities

With the Basic Law Enforcement Academy - Module I certificate the student will be eligible for employment as a Level I reserve peace officer or full-time regular peace officer in the state of California.

Enrollment Eligibility

To be eligible for enrollment in the program, the student must meet the following criteria:

- have completed the Basic Law Enforcement Academy - Module II.
- be free of felony convictions.
- possess a valid California Driver's License.
- undergo a fingerprint and criminal history check.
- complete a medical suitability examination.

Requirements for Certificate

17.5 Units

PSTC 1504 Basic Law Enforcement Academy - Module I 17.5

Basic Law Enforcement Academy - Module II

The certificate satisfies Level II training requirements of the California Commission on Peace Officer Standards and Training Module II. It Topics include: Policing in the Community, Property Crimes, Crimes against Persons, Crimes against the Justice System, Laws of Arrest, Search & Seizure, Presentation of Evidence, Patrol Techniques, Vehicle Pullovers, Crimes in Progress, Arrest Control/Baton, Firearms, Cultural Diversity and Discrimination, Lifetime Fitness and Law Enforcement Career Preparation.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- distinguish between problem oriented policing (POP) and community policing (COP).
- identify the actions which should be taken during a pre-liminary investigation.
- discuss 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.
- demonstrate appropriate peace officer responses while testifying as a witness.
- prepare an arrest report which minimally incorporates: 1) elements of a crime 2) probable cause to stop 3) probable cause to search/seize evidence 4) recovery of evidence 5) probable cause to arrest 6) admonishment of the suspect, if appropriate.
- 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.
- discuss 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.

Career Opportunities

With the Basic Law Enforcement Academy - Module II certificate the student will be eligible for employment as a part-time Level II Reserve Peace Officer in the state of California.

(continued on next page)

(Basic Law Enforcement Academy - Module II continued)

Enrollment Eligibility

To be eligible for enrollment in the program, the student must meet the following criteria:

- provide proof of completion of the Basic Law Enforcement Academy Module III.
- be free of felony convictions.
- possess a valid California Driver's License.
- undergo a fingerprint and criminal history check.
- complete a medical suitability examination.

Requirements for Certificate	11 Units
PSTC 1503 Basic Law Enforcement Academy - Module II	11

Basic Law Enforcement Academy - Module III

This certificate satisfies Level III training requirements of the California Commission on Peace Officer Standards and Training. Topics include: Study Skills, Leadership and Ethics, Introduction to Criminal Law, Investigative Report Writing, Use of Force, Traffic Enforcement, Crime Scenes and Forensics, Arrest Methods and Defensive Tactics, First Aid/CPR, Information Systems, and Cultural Diversity.

Student Learning Outcomes

Upon completion of this program, 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 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 their 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.

Career Opportunities

With the Basic Law Enforcement Academy - Module III certificate the student is eligible to apply for a part-time Level III Reserve Peace Officer position in the state of California.

Enrollment Eligibility

To be eligible for enrollment in the program, the student must meet the following criteria:

- be free of felony convictions.
- possess a valid California Driver's License.
- undergo a fingerprint and criminal history check.
- 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.
- complete a medical suitability examination.

Requirements for Certificate	9 Units
PSTC 1502 Basic Law Enforcement Academy - Module III	9

Area: Business & Computer Science
 Dean: Dr. Derrick Booth
 Phone: (916) 484-8361
 Counseling: (916) 484-8572

Degree: A.A. - Real Estate
 Certificate: Real Estate

Real Estate Degree

The associate degree program in real estate focuses on the practical application and concepts utilized in real estate markets and career fields. Course work includes real estate principles, legal aspects, practice, finance, economics and appraisal.

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 Opportunities

Real estate salesperson; real estate broker;
 real estate appraiser; small business owner

Requirements for Degree 34-35 Units

ACCT 101	Fundamentals of College Accounting (3)	3 - 4
or ACCT 301	Financial Accounting (4)	
BUS 300	Introduction to Business	3
BUS 310	Business Communications (3)	3
or MGMT 360	Management Communication (3)	
BUS 340	Business Law	3
MKT 300	Principles of Marketing	3
RE 300	California Real Estate Principles	3
RE 310	Real Estate Practice	3
RE 320	Real Estate Finance	3
RE 330	Legal Aspects of Real Estate	3
RE 342	Real Estate Appraisal	3
And a minimum of 1 unit from the following:		
BUS 210	The Business Plan (1)	
BUS 212	Marketing for Small Businesses (1)	
CISC 300	Computer Familiarization (1)	
CISC 305	Introduction to the Internet (1)	
And a minimum of 3 units from the following:		
BUS 320	Concepts in Personal Finance (3)	
MKT 310	Selling Professionally (3)	
MKT 314	Advertising (3)	
RE 360	Real Estate Economics (3)	
RE 390	Real Estate Investment Analysis (3)	

Associate Degree Requirements: 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.

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.

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.

Requirements for Certificate 24 Units

RE 300	California Real Estate Principles	3
RE 310	Real Estate Practice	3
RE 320	Real Estate Finance	3
RE 330	Legal Aspects of Real Estate	3
RE 342	Real Estate Appraisal	3
And a minimum of 3 units from the following:		
ACCT 101	Fundamentals of College Accounting (3)	
ACCT 301	Financial Accounting (4)	
BUS 110	Business Economics (3)	
ECON 302	Principles of Macroeconomics (3)	
ECON 304	Principles of Microeconomics (3)	
RE 360	Real Estate Economics (3)	
RE 390	Real Estate Investment Analysis (3)	
And a minimum of 6 units from the following:		
ACCT 101	Fundamentals of College Accounting (3)	
or ACCT 301	Financial Accounting (4)	
or ACCT 311	Managerial Accounting (4)	
BUS 105	Business Mathematics (3)	
BUS 300	Introduction to Business (3)	
BUS 310	Business Communications (3)	
or MGMT 360	Management Communication (3)	
BUS 340	Business Law (3)	
MKT 300	Principles of Marketing (3)	
MKT 310	Selling Professionally (3)	
MKT 314	Advertising (3)	

Note: The California Department of Real Estate gives the exams and issues the Real Estate Salesperson and Broker's Licenses. Students should contact DRE at the start of this program to verify individual requirements.

Real Estate

RE 300 California Real Estate Principles 3 Units

Course Transferable to CSU
Hours: 54 hours LEC

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.

RE 310 Real Estate Practice 3 Units

Advisory: ENGWR 102, or ENGWR 103, and ENGRD 116; or ESLR 320 and ESLW 320; and BUS 105 and RE 300
Course Transferable to CSU
Hours: 54 hours LEC

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. It also covers basic laws and practices of California real estate and provides background and terminology necessary for advanced study in more specialized courses. It applies towards the educational requirements for the broker's examination.

RE 320 Real Estate Finance 3 Units

Advisory: RE 300; RE 300; ENGWR 102 or 103 and ENGRD 116 or ESLR 320 and ESLW 320; BUS 105
Course Transferable to CSU
Hours: 54 hours LEC

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.

RE 330 Legal Aspects of Real Estate 3 Units

Advisory: RE 300; RE 300; ENGWR 102 or 103 and ENGRD 116 or ESLR 320 and ESLW 320; BUS 105
Course Transferable to CSU
Hours: 54 hours LEC

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.

RE 342 Real Estate Appraisal 3 Units

Course Transferable to CSU
Hours: 61 hours LEC

This course provides entry-level education in the real estate appraisal field. Concentrating on the appraisal of single-family residences, the course covers basic appraisal principles and procedures, and Uniform Standards of Professional Appraisal Practice (USPAP) pursuant to the federal Appraisal Qualification Board's (AQB) Real Property Appraiser Qualification Criteria. It meets the California Office of Real Estate Appraisers' (OREA) requirements for Basic Education and the National Uniform Standards of Professional Appraisal Practice (USPAP). The course also applies toward Department of Real Estate's (DRE) educational requirements (3 semester units) for the broker's examination. Field trips may be required.

RE 350 Real Property Management 3 Units

Course Transferable to CSU
Hours: 54 hours LEC

This course covers operation and management of real property marketing procedures, leases, maintenance, insurance, accounting, records, public and human relations, employer responsibilities, and selection of personnel and agreements. It applies towards the educational requirements for the broker's examination.

RE 360 Real Estate Economics 3 Units

Prerequisite: None
Advisory: RE 300.
Course Transferable to CSU
Hours: 54 hours LEC

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 Department of Real Estate broker's examination.

RE 390 Real Estate Investment Analysis 3 Units

Prerequisite: None
Advisory: RE 300 and 320.
Course Transferable to CSU
Hours: 54 hours LEC

This course is designed for brokers, salespersons and investors. It involves property and financial analysis of a wide range of real estate investment offerings, their risks and associated yields. The course emphasizes planning and the specific objectives of the investor.

Area: Kinesiology & Athletics
 Dean: Jean Snuggs
 Phone: (916) 484-8201
 Counseling: (916) 484-8572

Degree: A.A. - Recreation Management

Recreation Management Degree

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.

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 Opportunities

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 a part of the exploding recreation and leisure services market.

Requirements for Degree	25-29 Units
ECE 312 Child Development (3).....	3
or PSYC 372 Child Development (3)	
GERON 302 Psychology of Aging: Adult Development and Aging (3).....	3
or PSYC 374 Psychology of Aging: Adult Development and Aging (3)	
HEED 316 First Aid: Responding to Emergencies	2
KINES 312 Theory and Techniques of Adapted Physical Education.....	3
KINES 313 Laboratory in Adapted Physical Education.....	1 - 2
RECR 300 Introduction to Recreation and Leisure Services	3
RECR 310 Outdoor Recreation	3
RECR 320 Recreation Activity Leadership.....	3
RECR 498 Work Experience in Recreation.....	1 - 4
SPEECH 301 Public Speaking (3).....	3
or SPEECH 331 Group Discussion (3)	

Associate Degree Requirements: The Recreation 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.

Recreation

RECR 300 Introduction to Recreation and Leisure Services 3 Units

Course Transferable to CSU
 Hours: 54 hours LEC

This course is an overview of recreation, park, and leisure services. It describes and interprets recreation as a form of community service. It includes 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.

RECR 310 Outdoor Recreation 3 Units

Advisory: ENGWR 102 or ENGWR 103, and ENGRD 116 with a grade of "C" or better; OR ESLR 320 and ESLW 320 with a grade of "C" or better.

Course Transferable to CSU
 Hours: 54 hours LEC

This course is an orientation to job opportunities in the outdoor recreation field. Topics include 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 may be required.

RECR 320 Recreation Activity Leadership 3 Units

Prerequisite: None
 Advisory: ENGWR 102 or ENGWR 103, ENGRD 116 or ESLR 320, ESLW 320; or placement through assessment process..

Course Transferable to CSU
 Hours: 36 hours LEC; 54 hours LAB

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 will be placed on the role of the face-to-face leader in organizing recreational programs in a variety of settings. Required of all recreation majors. (CAN REC 4)

RECR 498 Work Experience in Recreation 1-4 Units

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.

Enrollment Limitation: Be in a paid or non-paid internship, volunteer opportunity, or job related to recreation. Students are advised to consult with the Physical Education Department faculty to review specific certificate and degree work experience requirements.
 General Education: AA/AS Area III(b)

Course Transferable to CSU
 Hours: 300 hours LAB

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 required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to fulfill a weekly orientation and 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. The weekly orientation is required for first time participants; returning participants are not required to attend the weekly orientation but are required to meet with the instructor as needed to complete all program forms and assignments. Work Experience may be taken for a total of 16 units when there are new or expanded learning objectives.

Area:	Health and Education	Degree:	A.S. - Respiratory Care
Dean:	Dr. Steven Boyd		
Coordinator:	Lisa Hunsaker Viduya		
Phone:	(916) 484-8670 or (916) 484-8902		
Counseling:	(916) 484-8572		

http://www.arc.losrios.edu/Programs_of_Study/Health_and_Education/Respiratory_Care.htm

Respiratory Care Degree

This degree is preparation for licensure as a Respiratory Care Practitioner in the state of California as a Respiratory Care Practitioner at the 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.

NOTE: All degree major courses require a grade of "C" or better.

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.

The program is accredited by the Commission on Accreditation for Respiratory Care (CoARC), 1248 Harwood Rd., Bedford, TX 76021; (817) 283-2835. Further information regarding the respiratory care profession is available at the respiratory care program website: <http://web.arc.losrios.edu/edhealth/respcare.html> You can also reach program coordinator Lisa Hunsaker by email at: hunsakl@arc.losrios.edu

Career Opportunities

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, medical equipment supply companies, to mention a few.

Successful completion of the respiratory care program qualifies the graduate for an Associate in Science degree and eligibility to apply for: (1) the examination for the respiratory care practitioner license issued by the California respiratory care Board, and (2) the national registry examination for advanced practitioner (registered respiratory therapist) which is administered by the National Board for respiratory care.

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.
- BIOL 430 and BIOL 431 with grades of "C" or better.
- BIOL 440 with a grade of "C" or better.
- PHYS 310 with a grade of "C" or better.
- AH 110 with a grade of "C" or better.
- A GPA of 2.5 in all prerequisite courses.
- Current college GPA of 2.0 or better.
- 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:

- Applications to the program may be obtained at the Health and Education Building, Room 770 or online at www.arc.losrios.edu/edhealth/respcare.html, and are due in the Health and Education office no later than 4:00 p.m. the second Friday in October .
- Selection is based on a computerized random selection process from among the qualified applicants.
- Only students who meet the pre-enrollment requirements and follow the pre-enrollment procedures will be considered for the program.
- The student accepted into the Respiratory Care program is required to have a physical examination, inoculations, clear drug screen, clear background check, and malpractice insurance.

(continued on next page)

(Respiratory Care Degree continued)

Requirements for Degree	66-67 Units
Pre-RC Semesters:	
AH 110 Medical Language for Health-Care Providers	3
BIOL 430 Anatomy and Physiology.....	5
BIOL 431 Anatomy and Physiology.....	5
BIOL 440 General Microbiology	4
ENGWR 300 College Composition (3)	3 - 4
or ESLW 340 Advanced Composition (4)	
PHYS 310 Conceptual Physics.....	3
PSYC 300 General Principles.....	3
1st Semester:	
RC 110 Cardiopulmonary Pathologies for Respiratory Care.....	3
RC 111 Applied Cardiopulmonary Anatomy & Physiology; Patient Assessment & Respiratory Care Equipment	5
RC 113 Respiratory Care Fundamentals Laboratory.....	1
RC 120 Orientation to Clinical Externships.....	1
2nd Semester:	
RC 112 Respiratory Care Pharmacology.....	3
RC 121 Concepts of Airway Care & Mechanical Ventilation	4
RC 122 Airway Care & Mechanical Ventilation Laboratory.....	1
RC 123 Clinical Externship I.....	3
3rd Semester:	
RC 130 Respiratory Care in Neonatal and Pediatric Populations & Diagnostic Studies.....	4
RC 131 Respiratory Care in Neonatal and Pediatric Populations & Diagnostic Studies Laboratory.....	1
RC 132 Clinical Externship II	6
4th Semester:	
RC 140 Professional Development in Respiratory Care	2
RC 142 Clinical Externship III	6

Associate Degree Requirements: 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.

Respiratory Care

RC 110 Cardiopulmonary Pathologies for Respiratory Care 3 Units

Corequisite: RC 111, 113, and 120
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.
Enrollment Limitation: Acceptance into the Respiratory Care Program.
Hours: 54 hours LEC

This course introduces the common pathologies affecting the cardiopulmonary system and related pharmacological treatment. Topics include obstructive and restrictive airway disease, early childhood respiratory diseases, infectious pulmonary diseases, and pulmonary vascular diseases.

RC 111 Applied Cardiopulmonary Anatomy & Physiology; Patient Assessment & Respiratory Care Equipment 5 Units

Corequisite: RC 110, 113, and 120
Advisory: ENGRD 116, ENGWR 102, ENGWR 103, ESLR 320, and ESLW 320; 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.
Enrollment Limitation: Acceptance into the Respiratory Care Program.
Hours: 90 hours LEC

This course introduces critical thinking skills necessary for 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 and patient assessment skills are introduced. Field trips may be required.

RC 112 Respiratory Care Pharmacology 3 Units

Prerequisite: RC 110, 111, and 113 with grades of "C" or better
Corequisite: RC 121, 122, and 123
Hours: 54 hours LEC

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.

RC 113 Respiratory Care Fundamentals Laboratory 1 Unit

Corequisite: RC 110, 111, and 120
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.
Enrollment Limitation: Acceptance into the Respiratory Care Program.
Hours: 54 hours LAB

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.

RC 120 Orientation to Clinical Externships 1 Unit

Prerequisite: RC 110, 111, and 113 with grades of "C" or better
Enrollment Limitation: Acceptance into the Respiratory Care Program.
Hours: 18 hours LEC

This course is designed to prepare students for entry into clinical practice. It serves as a foundation for the development of critical thinking skills necessary for the clinical practice of respiratory care. Focusing on safe practice, topics included are, the Health Insurance Portability and Accountability Act (HIPAA), human rights and privacy, personal health and hygiene, and hospital orientations. Field trips may be required.

RC 121 Concepts of Airway Care & Mechanical Ventilation 4 Units

Prerequisite: RC 110, 111, 113, and 120 with grades of "C" or better
Corequisite: RC 112, 122, and 123
Hours: 72 hours LEC

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.

RC 122 Airway Care & Mechanical Ventilation Laboratory 1 Unit

Prerequisite: RC 110, 111, 113, and 120 with grades of "C" or better
Corequisite: RC 112, 121, and 123
Hours: 54 hours LAB

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.

RC 123 Clinical Externship I 3 Units

Prerequisite: RC 110, 111, 113, and 120 with grades of "C" or better
Corequisite: RC 112, 121, and 122
Enrollment Limitation: 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.
Hours: 162 hours LAB

This is an introductory course in the clinical practice of respiratory care. The 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 the evaluation of the efficacy of medical gas, humidity, aerosol, hyperinflation therapies, and chest physiotherapy. Field trips are required.

RC 130 Respiratory Care in Neonatal and Pediatric Populations & Diagnostic Studies 4 Units

Prerequisite: RC 112, 121, 122, and 123 with grades of "C" or better
Corequisite: RC 131 and 132
Hours: 72 hours LEC

This is a preparation course for work in laboratories and special care areas of the hospital. Topics cover perinatal and pediatric diseases, labor and delivery, rehabilitation, and advanced diagnostic studies performed by respiratory therapist. Additional topics include bronchoscopy, advanced pulmonary function studies, bronchial provocation testing, polysonography, exercise stress tests, metabolic studies, hemodynamic measurements, and cardiovascular testing. Students must successfully complete the National Board for Respiratory Care Self Assessment Examination to receive a passing grade in this course. Students are responsible for fees associated with this examination.

RC 131 Respiratory Care in Neonatal and Pediatric Populations & Diagnostic Studies Laboratory 1 Unit

Prerequisite: RC 112, 121, 122, and 123 with grades of "C" or better
Corequisite: RC 130 and 132
Hours: 54 hours LAB

This course is preparation 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 Examination to receive a passing grade in this course. Students are responsible for fees associated with this examination.

RC 132 Clinical Externship II 6 Units

Prerequisite: RC 112, 121, 122, and 123 with grades of "C" or better
Corequisite: RC 130 and 131
Enrollment Limitation: Meet the health requirements of the Los Rios Community College District for Allied Health Programs and certification in Advanced Cardiac Life Support.
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. Field trips are required. Students must successfully complete the National Board for Respiratory Care Self Assessment Examination to receive a passing grade in this course. Students are responsible for fees associated with this examination.

RC 140 Professional Development in Respiratory Care 2 Units

Prerequisite: RC 130, 131, and 132 with grades of "C" or better
Corequisite: RC 142
Hours: 36 hours LEC

This course prepares for transition into professional practice. Topics include ethical behaviors, resume writing, professional attributes and dress for the respiratory care setting. Interviewing skills, professional test preparation for state and national licensing examinations, practice examinations for the National Board of Respiratory Care's Written Registry and Clinical Simulation Self Assessment Examinations are also covered.

RC 142 Clinical Externship III 6 Units

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.
Hours: 324 hours LAB

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.

Area: Science and Engineering
 Dean: Dr. Rina Roy
 Phone: (916) 484-8107
 Counseling: (916) 484-8572

Degree: A.S. - General Science

General Science Degree

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.

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.
- describe the basic definitions and fundamental theories of an introductory 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.
- recognize ethical components of scientific decision making and apply personal and social values within the process of decision making in scientific endeavors.

Requirements for Degree

18 Units

A minimum of 18 units from the following:18

Transfer level science courses including one laboratory course in a physical science and one laboratory course in a biological science. Courses may be selected from anthropology (physical), astronomy, biology, biotechnology, chemistry, geography (physical), geology, natural resources, physical science, physics, and psychology (biological).

Associate Degree Requirements: 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.

Area: Humanities
 Dean: Kate Jaques
 Phone: (916) 484-8653
 Counseling: (916) 484-8572

Degree: A.A. - Sign Language Studies: Business
 A.A. - Sign Language Studies: Human Services
 A.A. - Interpreter Preparation Program
 Certificates: Sign Language Studies: Business
 Sign Language Studies: Human Services
 Sign Language Studies: Interpreter
 Preparation Program

DEGREES AND CERTIFICATES

Sign Language Studies: Business Degree and Certificate

The program in Sign Language Studies: Business provides an introductory overview of American Sign Language, the Deaf community in a cultural context and the psychosocial dynamics of people who want to pursue training in business management while working in the Deaf community.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- demonstrate ability to carry on a sign language conversation consistent with the ability of a 4th semester second language learner with a Deaf individual or groups of Deaf people.
- categorize and describe characteristics that impact a Deaf person's life in the following areas: the world of work, education, family, language, and social development.
- organize a plan to utilize career development tools and resources for use in the Deaf community.
- appraise educational resources, processes, and practices that apply to Deaf people.
- evaluate criteria that relate to personal growth within the Deaf community.
- apply human relations techniques with individuals and groups within the Deaf community.
- assess the necessary processes for changes in organizational behavior to occur within the Deaf community.

Requirements for Degree or Certificate	40 Units
HSER 300 Introduction to Human Services.....	3
MGMT 372 Human Relations and Organizational Behavior	3
MGMT 300 Introduction to Leadership in Action (3).....	3
or MGMT 362 Techniques of Management (3)	3
MGMT 360 Management Communication	3
PSYC 300 General Principles (3).....	3
or PSYC 305 Personal Growth and Adjustment (3)	3
SILA 305 American Sign Language 1	4
SILA 306 American Sign Language 2	4
SILA 315 American Sign Language 3	4
SILA 316 American Sign Language 4	4
SILA 330 Impact of Deafness.....	3
SILA 332 Educating Deaf People.....	3
And a minimum of 3 units from the following:	3
SILA 498 Work Experience in Sign Language Studies (1 - 4)	

Associate Degree Requirements: The Sign Language Studies: 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.

Sign Language Studies: Human Services Degree and Certificate

The program in Sign Language Studies: Human Services provides an introductory overview of American Sign Language, the Deaf community in a cultural context and the psychosocial dynamics of people working in the Deaf community. The certificate also emphasizes development of skills related to paraprofessional services in an individual or group setting in an educational or social services agency which serves deaf clients.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- demonstrate ability to carry on a sign language conversation consistent with the ability of a 4th semester second language learner with a Deaf individual or groups of Deaf people.
- 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.
- utilize career development tools and resources for use in the Deaf community.
- appraise educational resources, processes, and practices that apply to Deaf people.
- apply characteristics related to personal growth and adjustment in various populations within and outside of the Deaf community.
- demonstrate skills in working with school age Deaf children in the educational setting.
- compare and differentiate the Deaf individual to individuals of diverse populations when comparing human development.

Requirements for Degree or Certificate	40 Units
HSER 300 Introduction to Human Services.....	3
PSYC 300 General Principles (3).....	3
or PSYC 305 Personal Growth and Adjustment (3)	
PSYC 370 Human Development: A Life Span	3
SILA 305 American Sign Language 1	4
SILA 306 American Sign Language 2	4
SILA 315 American Sign Language 3	4
SILA 316 American Sign Language 4	4
SILA 330 Impact of Deafness.....	3
SILA 332 Educating Deaf People.....	3
And a minimum of 3 units from the following:	3
SILA 498 Work Experience in Sign Language Studies (1 - 4)	
And a minimum of 6 units from the following:	6
ECE 312 Child Development (3)	
or PSYC 372 Child Development (3)	
ENGED 320 Service Learning: Tutoring Elementary Students in Reading (3)	
HSER 330 Issues of Diverse Populations (3)	
or PSYC 365 Issues of Diverse Populations (3)	
PSYC 340 Abnormal Behavior (3)	

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(Sign Language Studies: Human Services Degree and Certificate continued)

Associate Degree Requirements: The Sign Language Studies: Human 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.

Interpreter Preparation Program Degree

The Sign Language Studies Interpreting program provides an integrated series of coursework in American Sign Language (ASL) and ASL/English interpretation to prepare students for entry-level positions. A foundation in ASL discourse and interpretation is established through theoretical models. The emphasis is on the practical application of these models and knowledge in the areas of human relations, language skills, interpreting skills, and professionalism. The general education requirements complete the sequence of coursework to attain the A.A. degree.

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 speakers 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 practice.
- demonstrate interpersonal competencies that foster effective communication and productive collaboration with colleagues, consumers and employers in an interpreting context.
- formulate effective interpretations both consecutively and simultaneously.
- develop an on-going professional action plan integrating interactions with D/deaf related organizations, connections with interpreter employers, and the implications of certification on the provision of interpreting.

Career Opportunities

Employment in the field for American Sign Language/English interpreters is excellent locally, regionally, and nationally. The qualified American Sign Language/English interpreter enjoys a well compensated, rewarding, highly flexible career, which should continue in the future. This field is expanding; growth in the job market is projected.

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 Educational Development (GED) Test or California High School Proficiency Examination (CHSPE) prior to time of application: a) Students with a high school diploma from a school outside the United States must have transcripts evaluated by a National Association of Credential Evaluation Services (NACES) approved independent agency. Such cases will be evaluated on an individual basis. b) Students who possess an Associate of Arts/Associate of Science degree or higher from a regionally accredited college are exempt from the educational requirement stated above. c) Students who

have attended college outside the United States must have transcripts evaluated by a NACES approved independent agency, demonstrating AA/AS degree or higher. Such cases will be evaluated on an individual basis.

- SILA 316, ASL 4 or the equivalents, with a grade of “C” or better.
- Eligibility for ENGRD 310 or 312.
- 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 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.

Requirements for Degree	50 Units
SILA 316	American Sign Language 44
SILA 317	ASL Linguistics3
SILA 318	American Sign Language 54
SILA 320	American Sign Language Discourse3
SILA 330	Impact of Deafness3
SILA 332	Educating Deaf People3
INTRP 300	Ethics and Professional Standards of Interpreting3
INTRP 303	Orientation to the Interpreting Profession3
INTRP 305	ASL to English Interpreting3
INTRP 307	English to ASL Interpreting3
INTRP 310	Introduction to Deaf Blind Interpreting0.5
INTRP 312	Introduction to Oral Transmission0.5
INTRP 320	Simultaneous Interpreting4
INTRP 325	Transliteration4
INTRP 350	Observation Supervision0.5
INTRP 352	Mock Interpreting I1
INTRP 354	Mock Interpreting II1
INTRP 356	Fieldwork in Interpretation2.5
And a minimum of 4 units from the following:4	
INTRP 314	Introduction to Multicultural Communication (0.5)
INTRP 323	Interactive Interpreting (2)
INTRP 330	Introduction to Educational Interpreting, K-12 (1)
INTRP 332	Introduction to Educational Interpreting, Post Secondary (1)
INTRP 334	Introduction to Medical Interpreting (1)
INTRP 336	Introduction to Performing Arts Interpreting (1)
INTRP 338	Introduction to Social Services and Employment Interpreting (1)
INTRP 340	Introduction to Telephone, Television and Remote Relay Interpreting (0.5)
INTRP 342	Introduction to Religious Interpreting (0.5)
INTRP 344	Introduction to Working with a Certified Deaf Interpreter (0.5)
INTRP 349	Signing for Dependency Situations (0.5)

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(Interpreter Preparation Program Degree continued)

Associate Degree Requirements: The Sign Language Studies: Interpreter Preparation 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.

Interpreter Preparation Program Certificate

The Sign Language Studies Interpreting program provides an integrated series of coursework in American Sign Language (ASL) and ASL/English interpretation to prepare students for entry-level positions. A foundation in ASL discourse and interpretation is established through theoretical models. The emphasis is on the practical application of these models and knowledge in the areas of human relations, language skills, interpreting skills and professionalism.

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 speakers 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 practice.
- demonstrate interpersonal competencies that foster effective communication and productive collaboration with colleagues, consumers and employers in an interpreting context.
- formulate effective interpretations both consecutively and simultaneously.
- develop an on-going professional action plan integrating interactions with D/deaf related organizations, connections with interpreter employers, and the implications of certification on the provision of interpreting.

Career Opportunities

Employment in the field for qualified American Sign Language/English interpreters is excellent locally, regionally, and nationally. The qualified American Sign Language/English interpreter enjoys a well compensated, rewarding, highly flexible career, which should continue in the future. This field is expanding; growth in the job market is projected.

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 Educational Development (GED) Test or California High School Proficiency Examination (CHSPE) prior to time of application: a) Students with a high school diploma from a school outside the United States must have transcripts evaluated by a National Association of Credential Evaluation Services (NACES) approved independent agency. Such cases will be evaluated on an individual basis. b) Students who possess an Associate of Arts/Associate of Science degree or higher from a regionally accredited college are exempt from the educational requirement stated above. c) Students who have attended college outside the

United States must have transcripts evaluated by a NACES approved independent agency, demonstrating AA/AS degree or higher. Such cases will be evaluated on an individual basis.

- SILA 316, ASL 4 or the equivalents, with a grade of “C” or better.
- Eligibility for ENGRD 310 or 312.
- 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 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.

Requirements for Certificate		50 Units
SILA 316	American Sign Language 4	4
SILA 317	ASL Linguistics	3
SILA 318	American Sign Language 5	4
SILA 320	American Sign Language Discourse	3
SILA 330	Impact of Deafness	3
SILA 332	Educating Deaf People	3
INTRP 300	Ethics and Professional Standards of Interpreting	3
INTRP 303	Orientation to the Interpreting Profession	3
INTRP 305	ASL to English Interpreting	3
INTRP 307	English to ASL Interpreting	3
INTRP 310	Introduction to Deaf Blind Interpreting	0.5
INTRP 312	Introduction to Oral Transmission	0.5
INTRP 320	Simultaneous Interpreting	4
INTRP 325	Transliteration	4
INTRP 350	Observation Supervision	0.5
INTRP 352	Mock Interpreting I	1
INTRP 354	Mock Interpreting II	1
INTRP 356	Fieldwork in Interpretation	2.5
And a minimum of 4 units from the following:		4
INTRP 314	Introduction to Multicultural Communication (0.5)	
INTRP 323	Interactive Interpreting (2)	
INTRP 330	Introduction to Educational Interpreting, K-12 (1)	
INTRP 332	Introduction to Educational Interpreting, Post Secondary (1)	
INTRP 334	Introduction to Medical Interpreting (1)	
INTRP 336	Introduction to Performing Arts Interpreting (1)	
INTRP 338	Introduction to Social Services and Employment Interpreting (1)	
INTRP 340	Introduction to Telephone, Television and Remote Relay Interpreting (0.5)	
INTRP 342	Introduction to Religious Interpreting (0.5)	
INTRP 344	Introduction to Working with a Certified Deaf Interpreter (0.5)	
INTRP 349	Signing for Dependency Situations (0.5)	

Sign Language Interpreting

INTRP 300 Ethics and Professional Standards of Interpreting **3 Units**

Prerequisite: INTRP 303 with a grade of "C" or better
Course Transferable to CSU
Hours: 54 hours LEC

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.

INTRP 303 Orientation to the Interpreting Profession **3 Units**

Enrollment Limitation: Acceptance into the Interpreter Preparation Program.
Course Transferable to CSU
Hours: 54 hours LEC

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, and the employment environment. Career-long learning, self-awareness, and intrapersonal and interpersonal skills are explored during this course.

INTRP 305 ASL to English Interpreting **3 Units**

Prerequisite: INTRP 303 with a grade of "C" or better
Corequisite: INTRP 307
Course Transferable to CSU
Hours: 36 hours LEC; 54 hours LAB

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.

INTRP 307 English to ASL Interpreting **3 Units**

Prerequisite: INTRP 303 with a grade of "C" or better
Corequisite: INTRP 305
Course Transferable to CSU
Hours: 36 hours LEC; 54 hours LAB

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.

INTRP 310 Introduction to Deaf Blind Interpreting **.5 Units**

Prerequisite: INTRP 303 with a grade of "C" or better
Course Transferable to CSU
Hours: 9 hours LEC

This course provides an exposure to, background in, and techniques for working with members of the deaf blind community.

INTRP 312 Introduction to Oral Transmission **.5 Units**

Prerequisite: INTRP 303 with a grade of "C" or better
Course Transferable to CSU
Hours: 9 hours LEC

This course provides exposure to, background in, and techniques for oral transmission and interaction with oral deaf people.

INTRP 314 Introduction to Multicultural Communication **.5 Units**

Prerequisite: SILA 316 with a grade of "C" or better.
Advisory: INTRP 305.
Course Transferable to CSU
Hours: 9 hours LEC

This course is an introduction to the field of multicultural communication. The focus will be on cultural and linguistic diversity, personal life experiences, and on enhancing racial and ethnic diversity in the interpreting profession.

INTRP 320 Simultaneous Interpreting **4 Units**

Prerequisite: INTRP 305 and 307 with grades of "C" or better
Advisory: SILA 330 and 332
Course Transferable to CSU
Hours: 72 hours LEC

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, and incorporation of cultural considerations.

INTRP 323 Interactive Interpreting **2 Units**

Prerequisite: INTRP 307 with a grade of "C" or better
Course Transferable to CSU
Hours: 36 hours LEC

This course focuses on interactive interpreting skills from English to American Sign Language (ASL) and from ASL to English. Topics include information processing, features of interactive discourse, coping strategies, and effective interpersonal skills. This course uses a hands-on approach that emphasizes analysis of texts and contexts of naturally occurring dialogues.

INTRP 325 Transliteration **4 Units**

Prerequisite: INTRP 320 with a grade of "C" or better
Advisory: SILA 330 and 332
Course Transferable to CSU
Hours: 72 hours LEC

This course provides basic skills in transliteration. It incorporates both sign to voice and voice to sign transliterating skills. Topics include language and consumer assessment, contact signing forms, semantic appropriateness, syntactic considerations, prosodic features, lipshadowing, lipreading, and fingerspelling reception and production.

INTRP 330 Introduction to Educational Interpreting, K-12 **1 Unit**

Prerequisite: INTRP 305 with a grade of "C" or better.
Course Transferable to CSU
Hours: 18 hours LEC

This course is an introduction to interpreting in the educational setting with a focus on the elementary and secondary levels of education. Emphasis will be on vocabulary development and enrichment specific to educational interpreting, resource development, team building, roles and responsibilities, communicating with children, and ethics.

INTRP 332 Introduction to Educational Interpreting, Post Secondary 1 Unit

Prerequisite: INTRP 305 with a grade of "C" or better.
Course Transferable to CSU
Hours: 18 hours LEC

This course is an introduction to interpreting in the educational setting with a focus on the post secondary level of education. Emphasis will be on vocabulary development and enrichment specific to educational interpreting, resource development, team building, roles and responsibilities, and ethics.

INTRP 334 Introduction to Medical Interpreting 1 Unit

Prerequisite: INTRP 305 with a grade of "C" or better.
Course Transferable to CSU
Hours: 18 hours LEC

This course is an introduction to interpreting in the medical setting. Environmental considerations, vocabulary development, resource building, introductory knowledge, and ethics will be considered.

INTRP 336 Introduction to Performing Arts Interpreting 1 Unit

Prerequisite: INTRP 305 with a grade of "C" or better.
Course Transferable to CSU
Hours: 18 hours LEC

This course is an introduction to interpreting in the performing arts setting. Environmental considerations, vocabulary development, resource building, introductory knowledge, and ethics will be considered.

INTRP 338 Introduction to Social Services and Employment Interpreting 1 Unit

Prerequisite: INTRP 305 with a grade of "C" or better.
Course Transferable to CSU
Hours: 18 hours LEC

This course is an introduction to interpreting in the social services/employment setting. Environmental considerations, vocabulary development, resource building, introductory knowledge, and ethics will be considered.

INTRP 340 Introduction to Telephone, Television and Remote Relay Interpreting .5 Unit

Prerequisite: INTRP 305 with a grade of "C" or better.
Course Transferable to CSU
Hours: 9 hours LEC

This course is an introduction to interpreting using the telephone, via television and video and remote relay interpreting. Environmental considerations, vocabulary development, resource building, introductory knowledge, and ethics will be considered.

INTRP 342 Introduction to Religious Interpreting .5 Unit

Prerequisite: INTRP 305 with a grade of "C" or better.
Course Transferable to CSU
Hours: 9 hours LEC

This course is an introduction to interpreting in the religious setting. Environmental considerations, vocabulary development, resource building, introductory knowledge, and ethics will be considered.

INTRP 344 Introduction to Working with a Certified Deaf Interpreter .5 Unit

Prerequisite: INTRP 305 with a grade of "C" or better.
Course Transferable to CSU
Hours: 9 hours LEC

This course is an introduction to interpreting with a certified deaf interpreter (CDI). Definition of roles, resource building, introductory knowledge, team development, and ethics are considered.

INTRP 346 Specialized Vocabulary: Math and Computers .5 Unit

Prerequisite: SILA 316 with a grade of "C" or better.
Advisory: INTRP 305.
Course Transferable to CSU
Hours: 9 hours LEC

This course provides an opportunity to develop specialized discourse for use in future interpreting assignments. The focus of the class will include use of general resources in ASL and English and the development of vocabulary and resources related to mathematics and computers.

INTRP 349 Signing for Dependency Situations .5 Unit

Prerequisite: INTRP 300 with a grade of "C" or better
Course Transferable to CSU
Hours: 9 hours LEC

This course provides an introduction to the signs used by Deaf people related to sex, alcohol, and drug abuse. This course is offered credit/no credit only.

INTRP 350 Observation Supervision .5 Unit

Prerequisite: INTRP 303 with a grade of "C" or better
Course Transferable to CSU
Hours: 4.5 hours LEC; 13.5 hours LAB

This course provides an opportunity to examine a setting in which interpreting occurs and applies systematic analysis through the lens of the Demand-Control Schema. Students may be placed in a variety of educational and/or community settings. This course may be taken up to four times in different settings.

INTRP 352 Mock Interpreting I 1 Unit

Prerequisite: INTRP 305 and 307 with grades of "C" or better
Course Transferable to CSU
Hours: 18 hours LEC

This course provides an opportunity to interpret for live or taped presenters in class. Focus is on application of text analysis, assignment preparation, and information processing.

INTRP 354 Mock Interpreting II 1 Unit

Prerequisite: INTRP 300, 305, and 307 with grades of "C" or better
Course Transferable to CSU
Hours: 4.5 hours LEC; 40.5 hours LAB

This course provides an opportunity to interpret for an ongoing college class. Focus is on application of text analysis, assignment preparation, information processing, and giving and receiving feedback.

INTRP 356 Fieldwork in Interpretation 2.5 Units

Prerequisite: INTRP 300 and 320 with grades of "C" or better
Course Transferable to CSU
Hours: 18 hours LEC; 81 hours LAB

This course provides an opportunity to apply classroom learning to real-world practice in interpreting. Students participate in approved on-campus and off-campus settings.

INTRP 498 Work Experience in Sign Language Studies - Interpreting 1-3 Units

Prerequisite: SILA 330, 332, 498 with a grade of "C" or better.

Corequisite: INTRP 325.

General Education: AA/AS Area III(b)

Course Transferable to CSU

Hours: 9 hours LEC; 190 hours LAB

This course involves supervised work experience and career guidance in agencies which provide interpreting services to deaf clients. Students will be required to perform interpreting services to receive credit toward the completion of the interpreting certificate program. Students gain third party interpreter/transliterating experiences under supervision of an interpreting mentor. May be taken four times for a maximum of 8 units.

Sign Language Studies

SILA 305 American Sign Language 1 4 Units

Advisory: ENGRD 116 and ENGWR 103; or ESLR 320 and ESLW 320; or placement through assessment process.

General Education: AA/AS Area I; IGETC Area 6

Course Transferable to UC/CSU

Hours: 72 hours LEC

This is a beginning course in a series of four courses in the visual-gestural processes of American Sign Language (ASL). It provides instructional activities to become competent in communication with deaf people. The emphasis is on non-speech communication.

SILA 306 American Sign Language 2 4 Units

Prerequisite: SILA 305 with a grade of "C" or better

Advisory: ENGRD 116 and ENGWR 103; or ESLR 320 and ESLW 320; or placement through the assessment process.

General Education: AA/AS Area I; IGETC Area 6

Course Transferable to UC/CSU

Hours: 72 hours LEC

This is the second in a series of four courses in American Sign Language. 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.

SILA 315 American Sign Language 3 4 Units

Prerequisite: SILA 306 with a grade of "C" or better

Advisory: ENGRD 116 and ENGWR 103; ESLR 320 and ESLW 320; or placement through the assessment process.

General Education: AA/AS Area I; CSU Area C2; IGETC Area 6

Course Transferable to UC/CSU

Hours: 72 hours LEC

This course is the third in a series of four 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.

SILA 316 American Sign Language 4 4 Units

Prerequisite: SILA 315 with a grade of "C" or better

General Education: AA/AS Area I; CSU Area C2; IGETC Area 6

Course Transferable to UC/CSU

Hours: 72 hours LEC

This course is the fourth in a series of 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.

SILA 317 ASL Linguistics 3 Units

Prerequisite: SILA 315 with a grade of "C" or better

Course Transferable to CSU

Hours: 54 hours LEC

This course provides a foundation in American Sign Language (ASL) linguistics. Topics include theoretical knowledge and practical application of phonology, morphology, semantics, syntax, discourse, and language acquisition.

SILA 318 American Sign Language 5 4 Units

Prerequisite: SILA 316 with a grade of "C" or better

Course Transferable to CSU

Hours: 72 hours LEC

This course is an advanced course in American Sign Language (ASL) to help prepare students to communicate effectively. 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.

SILA 320 American Sign Language Discourse 3 Units

Prerequisite: SILA 316 with a grade of "C" or better.

Advisory: SILA 498.

Course Transferable to CSU

Hours: 54 hours LEC

This course introduces signing beyond the conversational level. Complex and diverse signed situations are presented to improve both expressive and receptive skills. The focus will be on the diversity of register, affect, and style in American Sign Language.

SILA 330 Impact of Deafness 3 Units

Advisory: ENGRD 116, ENGWR 103, ESLR 320, and ESLW 320; or placement through the assessment process.

General Education: AA/AS Area V(b); AA/AS Area VI

Course Transferable to CSU

Hours: 54 hours LEC

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.

SILA 332 Educating Deaf People 3 Units

Advisory: ENGRD 116, ENGWR 103, ESLR 320, and ESLW 320; or placement through the assessment process.

Course Transferable to CSU

Hours: 54 hours LEC

This is a survey course of topics related to educating deaf children, adults, and multi-handicapped individuals. It also covers teaching methods and philosophies, school placement issues, child development, and methods of addressing developmental and linguistic stages.

- SILA 344 ASL Numbers 1** **.5 Units**
Prerequisite: SILA 305 with a grade of "C" or better
Course Transferable to CSU
Hours: 9 hours LEC
 This course provides hand-on experiences using American Sign Language (ASL) cardinal, ordinal, and unique numbers. This course is offered credit/no credit only.
- SILA 346 Fingerspelling I** **.5 Units**
Prerequisite: SILA 305 with a grade of "C" or better
Course Transferable to CSU
Hours: 9 hours LEC
 This course provides hands-on experiences with fingerspelling. Topics include expressive and receptive fingerspelling techniques. Pass/No Pass only.
- SILA 348 Fingerspelling II** **.5 Units**
Prerequisite: SILA 346 with a grade of "C" or better
Course Transferable to CSU
Hours: 9 hours LEC
 This course expands upon the skills covered in SILA 346 and introduces more sophisticated fingerspelling usage used by members of the Deaf community. Pass/No Pass only.
- SILA 350 Classifiers** **.5 Units**
Corequisite: SILA 306, 315, or 316
Course Transferable to CSU
Hours: 9 hours LEC
 This course provides extensive hands-on experience in American Sign Language (ASL) using basic and complex classifiers. This course is offered credit/no credit only.
- SILA 354 Life Situations** **.5 Units**
Advisory: SILA 305
Course Transferable to CSU
Hours: 9 hours LEC
 This course provides hands-on experiences in American Sign Language (ASL) that relate to common household chores, life milestones, and holiday seasons. This course is offered credit/no credit only.
- SILA 356 Pronominals** **.5 Units**
Advisory: SILA 305
Course Transferable to CSU
Hours: 9 hours LEC
 This course focuses on advanced pronoun use with expressive and receptive skill through practice in American Sign Language (ASL). This course is offered credit/no credit only.
- SILA 360 Non-Verbal Communication** **.5 Units**
Advisory: SILA 305
Course Transferable to CSU
Hours: 9 hours LEC
 This course provides an introduction to gesture and mime processes that are fundamental to American Sign Language (ASL). This course is offered credit/no credit only.
- SILA 362 Introduction to the Interpreting Profession** **.5 Units**
Course Transferable to CSU
Hours: 9 hours LEC
 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. Credit/no credit only.
- SILA 364 Political and Legal Signs** **.5 Units**
Advisory: SILA 315
Course Transferable to CSU
Hours: 9 hours LEC
 This course introduces signs related to advocacy efforts, the political/legislative process, and the legal system as it relates to the Deaf Community. This course is offered credit/no-credit only.
- SILA 368 Signs for Sports** **.5 Units**
Advisory: SILA 315
Course Transferable to CSU
Hours: 9 hours LEC
 This course addresses signs related to sports, sporting events, and recreational activities enjoyed by members of the Deaf Community. This course is offered credit/no credit only.
- SILA 370 Non-Manual Signals in ASL** **.5 Units**
Advisory: SILA 305
Course Transferable to CSU
Hours: 9 hours LEC
 This course illustrates the importance of non-manual signals in ASL. Topics include the role of non-manual signals as adverbs, as grammatical distinctions in certain clauses, and as linked with a specific sign. This course is offered credit/no credit only.
- SILA 494 Topics in Sign Language Studies** **.5-3 Units**
Prerequisite: SILA 305.
Course Transferable to CSU
Hours: 54 hours LEC
 Each module is a study of a specific topic or a technique in the area of sign language or deafness. Credit/no credit only.
- SILA 498 Work Experience in Sign Language Studies** **1-4 Units**
Prerequisite: SILA 305 with a grade of "C" or better.
General Education: AA/AS Area III(b)
Course Transferable to CSU
Hours: 9 hours LEC; 190 hours LAB
 This course is supervised practical experience working with deaf clients. Under supervision of an agency mentor, the student provides entry-level paraprofessional services based on their skill level and other applicable experiences such as tutoring, note taking, communication aide, peer counselor, office assistant, administrative aide, instructional aide services. May be taken four times for credit for a maximum of 8 units.

Area: Behavioral & Social Sciences
 Dean: Carol Pottorff
 Phone: (916) 484-8283
 Counseling: (916) 484-8572

Degree: A.A. - Social Science
 A.A. - International Studies
 Certificate: International Studies

DEGREES AND CERTIFICATES

Social Science Degree

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.

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.

Requirements for Degree 18 Units

A minimum of 18 units from the following: 18
 Transferable courses must be selected from four of the following areas: anthropology, economics, geography, history, philosophy, political science, psychology (except PSYC 335), and sociology. Courses used for General Education purposes cannot be used for this degree.

Associate Degree Requirements: 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.

International Studies Degree

The International Studies degree is developed to serve the needs of a wide variety of students who are interested in international issues and the impact of globalization on developed and developing economies. Students will learn about various global issues including, trade, economic development, war and conflict and foreign relations and diplomacy.

Career Opportunities

The AA degree in International Studies provide career opportunities with local, state, and federal agencies as well as the private sector. The required core courses provides students with diverse knowledge to work in a variety of fields.

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.

Requirements for Degree 29 Units

ANTH 310	Cultural Anthropology	3
ECON 302	Principles of Macroeconomics	3
HIST 308	History of World Civilizations, 1500 to Present	3
POLS 310	Introduction to International Relations.....	3
SOC 300	Introductory Sociology.....	3
SOCS 310	International Studies - Peace and Conflict Studies.....	3
SOCS 312	International Studies - Current International Development Issues	3

A minimum of 8 units from the following: 8
 Transfer level foreign language courses (300 - 499)

Associate Degree Requirements: The International Studies AA Degree 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.

International Studies Certificate

The International Studies Certificate is designed to benefit students who are interested in international issues. Course work focuses on issues ranging from economy and trade to culture, politics, and environment from a transnational perspective.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- evaluate information presented in a comparative perspective.
- compare and contrast competing social scientific perspectives and describe the relative usefulness of each perspective to world issues.
- develop a scientific framework for the analysis of international issues.
- construct a culturally relativistic view of the world.
- define his/her place in history based on the knowledge acquired.
- recognize the complexity of the world as an interconnected and interdependent community

Requirements for Certificate 29 Units

ANTH 310	Cultural Anthropology.....	3
HIST 307	History of World Civilizations to 1500 (3)	3 ¹
or HIST 308	History of World Civilizations, 1500 to Present (3)	
POLS 302	Introduction to Government: Foreign	3
POLS 310	Introduction to International Relations	3
And a minimum of 8 units from the following:		8
Transfer level foreign language courses (numbered 300-499)		
And a minimum of 9 units from the following:		9
ANTH 330	Magic, Witchcraft, and Religion (3)	
ARTH 322	Art History of the Non-Western World (3)	
ECON 302	Principles of Macroeconomics (3)	
ECON 304	Principles of Microeconomics (3)	
ENGLT 340	World Literature (3)	
ENGLT 341	World Literature (3)	
ENGLT 345	Mythologies of the World (3)	
GEOG 310	Human Geography: Exploring Earth's Cultural Landscapes (3)	
GEOG 320	World Regional Geography (3)	
HIST 300	History of Western Civilization (3)	
HIST 302	History of Western Civilization (3)	
HIST 305	Women in Western Civilization (3)	
HIST 307	History of World Civilizations to 1500 (3)	
HIST 308	History of World Civilizations, 1500 to Present (3)	
HIST 364	Asian Civilization (3)	
HIST 365	Asian Civilization (3)	
HIST 373	History of Mexico (3)	
HIST 480	History of Western Civilization - Honors (3)	
HIST 481	History of Western Civilization - Honors (3)	
HUM 300	Classical Humanities (3)	
HUM 310	Modern Humanities (3)	
HUM 320	Asian Humanities (3)	
HUM 330	Humanities of the Americas (3)	
MUFHL 330	World Music (3)	
PHIL 353	Religions of the Far East (3)	
PHIL 354	Religions of the West (3)	
POLS 301	Introduction to Government: United States (3)	
POLS 322	Political Ideologies (3)	
SOC 300	Introductory Sociology (3)	
SOCSOC 310	International Studies - Peace and Conflict Studies (3)	
SOCSOC 312	International Studies - Current International Development Issues (3)	

¹The history course used to meet this requirement may not be used towards the 9 unit elective requirement.

Social Science

SOCSOC 310 International Studies – Peace and Conflict Studies 3 Units

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.
General Education: AA/AS Area V(b); CSU Area D7; IGETC Area 4G
Course Transferable to UC/CSU
Hours: 54 hours LEC

This course examines the political and socioeconomic causes of peace and conflict. It also includes an analysis of inter- and intra-state war, terrorism, ethnic conflict, gender issues and conflict, Just War Theory, post-conflict reconciliation and peace in international relations.

SOCSOC 312 International Studies – Current International Development Issues 3 Units

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.
General Education: AA/AS Area V(b); CSU Area D7; IGETC Area 4G
Course Transferable to UC/CSU
Hours: 54 hours LEC

This course deals with current socio-economic and political issues in developing countries. It presents alternative theories of development with a particular focus on the issues of globalization including political and social change.

Area: Behavioral & Social Sciences
 Dean: Carol Pottorff
 Phone: (916) 484-8283
 Counseling: (916) 484-8572

Degree: A.A. for Transfer - Sociology

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.

Sociology A.A. for Transfer Degree

This degree 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, academic, or vocational endeavors. In addition to transfer, this foundation would be appropriate for entry into a variety of related fields and careers.

The Associate in Arts degree 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 degree 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.

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 Opportunities

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.

Requirements for Degree	18 Units
SOC 300	Introductory Sociology3
SOC 301	Social Problems3
PSYC 330	Introductory Statistics for the Behavioral Sciences3
A minimum of 6 units from the following: 6	
PSYC 335	Research Methods in Psychology (3)
SOC 318	Introduction to Crime, Deviance, and Social Control (3)
SOC 320	Minorities in America (3)
SOC 342	Gender Relations in American Society (3)
A minimum of 3 units from the following: 3 ¹	
ANTH 310	Cultural Anthropology (3)
GEOG 310	Human Geography: Exploring Earth's Cultural Landscapes (3)
PSYC 300	General Principles (3)
PSYC 354	The Psychology of Family Life and Intimate Relationships in a Diverse Society (3)
SOC 350	Sociology of Popular Culture (3)

¹Or any course not used previously

Associate in Arts for Transfer Degree Requirements: The Sociology Associate in Arts for Transfer (A.A.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.

Sociology

SOC 300 Introductory Sociology 3 Units

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.
General Education: AA/AS Area V(b); CSU Area D0; IGETC Area 4J
Course Transferable to UC/CSU
Hours: 54 hours LEC

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.

SOC 301 Social Problems 3 Units

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.
General Education: AA/AS Area V(b); CSU Area D0; IGETC Area 4J
Course Transferable to UC/CSU
Hours: 54 hours LEC

This course surveys social problems of present day American society including a study of their causes, consequences, and 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, and problems in the economy and globalization.

SOC 318 Introduction to Crime, Deviance, and Social Control 3 Units

General Education: AA/AS Area V(b) (effective Summer 2012)
Course Transferable to UC/CSU
Hours: 54 hours LEC

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.

SOC 320 Minorities in America 3 Units

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.
General Education: AA/AS Area V(b); AA/AS Area VI; CSU Area D0; IGETC Area 4J
Course Transferable to UC/CSU
Hours: 54 hours LEC

This course examines patterns of racial and ethnic group relations in the United States of America. The course 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. The topics include prejudice, discrimination, racism, racial and ethnic stratification, assimilation patterns among groups, demographic shifts, civil rights and other related topics.

SOC 325 Chicano Culture 3 Units

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.
General Education: AA/AS Area V(b); CSU Area D0; IGETC Area 4J
Course Transferable to UC/CSU
Hours: 54 hours LEC

This course examines the individual Chicano(a) and their culture pattern within the United States; the acquisition of their culture, innovation, adaptation and direction of their cultural development.

SOC 335 Sociology of Aging 3 Units

Same As: GERON 300
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.
General Education: AA/AS Area III(b); CSU Area E1
Course Transferable to UC/CSU
Hours: 54 hours LEC

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.

SOC 342 Gender Relations in American Society 3 Units

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.
General Education: AA/AS Area V(b); AA/AS Area VI; CSU Area D0; IGETC Area 4J
Course Transferable to UC/CSU
Hours: 54 hours LEC

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. The goal of the course is to utilize sociological theories to explain gender experience as socially constructed rather than biologically determined. Specifically, the course examines the experience of people of diverse economic, racial, and ethnic origins within a historical and cross-cultural perspective. The focus of this course is an analysis and discussion of gender relations in the home, the work place, the mass media, the health care system, and politics.

SOC 350 Sociology of Popular Culture 3 Units

Prerequisite: None
General Education: AA/AS Area V(b); CSU Area D0; IGETC Area 4J
Course Transferable to UC/CSU
Hours: 54 hours LEC

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.

<p>Area: Humanities Dean: Kate Jaques Phone: (916) 484-8653 Counseling: (916) 484-8572</p>	<p>Degree: A.A. for Transfer - Communication Studies</p> <p>See: (Communication--Sacramento City College) (Communication Studies--Cosumnes River College and Folsom Lake College)</p>
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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.

Communication Studies A.A. for Transfer Degree

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.

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 Opportunities

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.

Requirements for Degree	18 Units
SPEECH 301 Public Speaking.....	3
A minimum of 6 units from the following:6	
SPEECH 311 Argumentation and Debate (3)	
SPEECH 321 Interpersonal Communication (3)	
SPEECH 331 Group Discussion (3)	
A minimum of 6 units from the following:6	
SPEECH 302 Persuasive Speech (3)	
SPEECH 325 Intercultural Communication (3)	
SPEECH 361 The Communication Experience (3)	
JOUR 310 Mass Media and Society (3)	
A minimum of 3 units from the following: 3 ¹	
ANTH 310 Cultural Anthropology (3)	
ENGWR 302 Advanced Composition and Critical Thinking (3)	
ENGWR 482 Honors Advanced Composition and Critical Thinking (3)	
JOUR 300 Newswriting and Reporting (3)	
PSYC 300 General Principles (3)	
SOC 300 Introductory Sociology (3)	

¹Or any course not used previously

Associate in Arts for Transfer Degree Requirements:

The Communication Studies Associate in Arts for Transfer (A.A.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.

Speech

SPEECH 301 Public Speaking 3 Units

Advisory: ENGWR 300 with a grade of "C" or better; OR ESLL 320 and ESLW 340 with a grade of "C" or better.
General Education: AA/AS Area II(b); CSU Area A1; IGETC Area 1C
Course Transferable to UC/CSU
Hours: 54 hours LEC

This course covers oral composition and delivery. It focuses on the organization, use of supporting materials, methods of securing interest, presentation of information, and persuasive appeals necessary to be effective in oral communication situations. Audio/video recording equipment may be used as an aid to self-analysis and improvement.

SPEECH 302 Persuasive Speech 3 Units

Prerequisite: SPEECH 301 with a grade of "C" or better
General Education: CSU Area A3
Course Transferable to UC/CSU
Hours: 54 hours LEC

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-taping equipment may be used as an aid to self-analysis and improvement.

SPEECH 311 Argumentation and Debate 3 Units

Advisory: ENGWR 300 or SPEECH 301
General Education: CSU Area A3
Course Transferable to UC/CSU
Hours: 54 hours LEC

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.

SPEECH 321 Interpersonal Communication 3 Units

Advisory: ENGWR 102, ENGWR 103, and ESLW 320; or placement through the assessment process.
General Education: AA/AS Area III(b); CSU Area E1
Course Transferable to UC/CSU
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 relationships. Effective communication strategies are discussed, practiced, and reflected upon both in and outside the classroom environment.

SPEECH 323 Listening 3 Units

Advisory: ENGWR 102, ENGWR 103, ESLL 320, and ESLW 320; or placement through the assessment process.
General Education: AA/AS Area II(b)
Course Transferable to CSU
Hours: 54 hours LEC

This course focuses on the listener in communication. It covers the process of listening as well as how to listen for a variety of purposes, such as listening for content, listening for critical evaluation, listening to build relationships, and listening for appreciation.

SPEECH 325 Intercultural Communication 3 Units

Advisory: ENGWR 102, ENGWR 103, ESLL 320, and ESLW 320; or placement through the assessment process.
General Education: AA/AS Area VI
Course Transferable to UC/CSU
Hours: 54 hours LEC

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.

SPEECH 331 Group Discussion 3 Units

Advisory: ENGWR 102, ENGWR 103, ESLL 320, and ESLW 320; or placement through the assessment process.
General Education: AA/AS Area II(b); CSU Area A1; IGETC Area 1C
Course Transferable to UC/CSU
Hours: 54 hours LEC

This course covers the dynamics of group communication and prepares individuals to function more effectively in groups. It focuses on communication in task and social groups. Topics include communication concepts and behaviors in problem-solving, decision-making, leadership, group roles, norms, and conformity.

SPEECH 361 The Communication Experience 3 Units

General Education: AA/AS Area II(b); CSU Area A1
Course Transferable to CSU
Hours: 54 hours LEC

This course provides students with 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, practical group experience, and speech making.

Area: Health & Education
 Dean: Dr. Steven Boyd
 Coordinator: Kristina Zajic
 Phone: (916) 484-8702 or (916) 484-8902
 Counseling: (916) 484-8572

Degree: A.S. - Speech - Language Pathology Assistant

Speech - Language Pathology Assistant Degree

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, professional issues and practices in speech-language pathology, clinical considerations in service delivery to clients with communication disorders, and fieldwork experience.

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 Opportunities

Upon completion of the Associate of Science degree, a student possesses the course work and field work experience to work as a Speech-Language Pathology Assistant 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 Board for registration as a Speech-Language Pathology Assistant.

Requirements for Degree

42 Units

CISC 308	Exploring Computer Environments and the Internet	1
ECE 312	Child Development (3).....	3
or PSYC 372	Child Development (3)	
ECE 325	Guidance and Discipline for Young Children.....	3
ECE 404	Children with Special Needs.....	3
GERON 302	Psychology of Aging: Adult Development and Aging.....	3
PSYC 370	Human Development: A Life Span.....	3
SILA 305	American Sign Language 1	4
SLPA 300	Introduction to Communication Disorders.....	3
SLPA 110	Professional Issues and Practices in Speech-Language Pathology.....	3
SLPA 120	Clinical Considerations in Service Delivery to Clients with Communication Disorders.....	3
SLPA 121	Fieldwork Experience in Speech-Language Pathology...	4
SPEECH 325	Intercultural Communication.....	3
SPEECH 331	Group Discussion.....	3
TA 375	Voice, Diction and Dialects.....	3

Associate Degree Requirements: 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.

Speech/Language Pathology

SLPA 110 Professional Issues and Practices in Speech-Language Pathology 3 Units

Prerequisite: SLPA 300 with a grade of "C" or better
Hours: 54 hours LEC

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 as well as the practicing speech-language pathologist. Requirements for employment in various work settings, including interdisciplinary and supervisory relationships, and scope of relationships are covered.

SLPA 120 Clinical Considerations in Service Delivery to Clients with Communication Disorders 3 Units

Prerequisite: SLPA 110 and TA 375 with grades of "C" or better
Hours: 54 hours LEC

This course explores in depth specific disorders of communication, 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 and the speech-language pathologist 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 speech-language pathology assistant (SLPA) in intervention and behavior management strategies are also reviewed.

SLPA 121 Fieldwork Experience in Speech-Language Pathology 4 Units

Prerequisite: SLPA 120 with a grade of "C" or better
Enrollment Limitation: Students are responsible for any costs incurred in meeting the current tuberculosis clearance, live scan fingerprint clearance, malpractice insurance, and basic CPR/First Aid certification.
Hours: 18 hours LEC; 162 hours LAB

This course provides supervised fieldwork experience assisting with the clinical management of persons with communicative disorders. It is specifically designed to train job related skills for the speech-language pathology assistant (SLPA). There are 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. The experience also includes opportunities for record keeping and managing client data, setting up/preparing for sessions as needed, and performing various clerical duties as needed. All fieldwork is done in specified off-campus locations.

SLPA 125 Strategies for Clinical Success 3 Units

Prerequisite: SLPA 110 with a grade of "C" or better
Advisory: MATH 24 or 25
Hours: 36 hours LEC; 54 hours LAB

This course explores specific materials and strategies regarding speech and language therapeutic service delivery with a focus on intervention. It covers remediation procedures, forms of augmentative and alternative communication (AAC), development of forms of AAC, the International Phonetic Alphabet, the collection and transcription of speech samples, and the collection and transcription of language samples. This course is designed as an additional opportunity to gain more experience for preparation for fieldwork as a speech-language pathology assistant.

SLPA 300 Introduction to Communication Disorders 3 Units

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.
Hours: 54 hours LEC

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. Observations of multimedia materials showing individuals who demonstrate speech and language disorders, as well as observations at various clinical sites in the area, are a part of the course.

Area: Student Services
 Dean: Manuel Perez
 Phone: (916) 484-8375
 Counseling: (916) 484-8572

Certificate: Leadership Development

Leadership Development Certificate

Requirements for Certificate 17 units

POLS 301	Introduction to Government: United States	3
SGVT 300	Introduction to Student Government	2
SGVT 310	Leadership Development	3
And a minimum of 9 units from the following:		9
ANTH 310	Cultural Anthropology (3)	
PHIL 310	Introduction to Ethics (3)	
or PHIL 320	Logic and Critical Reasoning (3)	
PSYC 300	General Principles (3)	
or PSYC 305	Personal Growth and Adjustment (3)	
SOC 301	Social Problems (3)	
or SOC 342	Gender Relations in American Society (3)	
SPEECH 331	Group Discussion (3)	
or SPEECH 301	Public Speaking (3)	
or SPEECH 302	Persuasive Speech (3)	

Student Government

SGVT 300 Introduction to Student Government 2 Units

Prerequisite: None

Course Transferable to CSU

Hours: 18 hours LEC; 54 hours LAB

This course is a study of the legal, educational and philosophical basis of student government. It is designed for students interested in or participating in student government. This course provides practical experience in student government, in the administration of student programs, and participation on faculty and administrative committees. May include field trips to other campuses, area conferences, and state conferences. May be taken three times for credit.

SGVT 310 Leadership Development 3 Units

Prerequisite: None

Course Transferable to CSU

Hours: 54 hours LEC

This course is designed to provide emerging and existing student leaders the opportunity to explore the concept of leadership and to develop and improve their leadership skills. The course integrates group exercises, films, and contemporary readings on leadership.

Area: Fine & Applied Arts
 Dean: Dr. Adam Karp
 Phone: (916) 484-8433
 Counseling: (916) 484-8572

Degree: A.A. - Theatre Arts: Acting
 A.A. - Theatre Arts: Technical
 Certificates: Acting
 Children's Theatre
 Costuming
 Film
 Certificates of Completion offered by the department:
 Musical Theatre
 Technical Theatre

DEGREES AND CERTIFICATES

Theatre Arts: Acting Degree

The Acting 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.

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

Career Opportunities

Students with an Acting A.A. degree may go into directing, acting, teaching, and film/television.

Requirements for Degree	27 Units
TA 300	Introduction to the Theatre3
TA 350	Theory and Techniques of Acting I (3)3
or TA 480	Honors Theory and Techniques of Acting (3)
TA 351	Theory and Techniques of Acting II3
TA 356	Acting for the Camera I (3)3
or TA 357	Acting for the Camera - II (3)
or TA 362	Styles of Acting: Classical (3)
or TA 366	Styles of Acting: Modern (3)
TA 420	Stagecraft3
TA 437	Stage Make-up I2
And a minimum of 2 units from the following:2	
TA 404	Techniques of Puppetry (3)
TA 422	Stage Lighting (3)
TA 424	Advanced Technical Theatre (3)
TA 430	Costume Construction (3)
TA 434	Vintage Costuming (0.5 - 2)
TA 435	History and Theory of Costuming (3)
TA 440	Arts Management (3)
And a minimum of 2 units from the following: 2¹	
TA 460	Rehearsal and Performance (0.5 - 3)
TA 461	Rehearsal and Performance - Drama (0.5 - 3)
TA 462	Rehearsal and Performance - Comedy (0.5 - 3)
TA 463	Rehearsal and Performance - Classical (0.5 - 3)
TA 464	Rehearsal and Performance - Children's Show (0.5 - 3)
TA 465	Rehearsal and Performance - Musical (0.5 - 3)
TA 475	Fundamentals of Repertory Production (0.5 - 6)
And a minimum of 2 units from the following:2	
TA 356	Acting for the Camera I (3)
TA 357	Acting for the Camera - II (3)
TA 362	Styles of Acting: Classical (3)
TA 366	Styles of Acting: Modern (3)
TA 370	Theatre Movement (2)
TA 375	Voice, Diction and Dialects (3)
TA 377	Musical Theatre Techniques (3)
TA 390	Directing and Play Production (3)
TA 397	Introduction to Readers' Theatre (3)
TA 400	Creative Drama for Children (3)
TA 406	Children's Theatre (3)
And a minimum of 4 units from the following:4	
Two TA courses not used to fulfill other requirements for the major.	

¹Earned by participation in two productions.

Associate Degree Requirements: 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.

Theatre Arts: Technical Degree

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.

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, playwrighting, 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.

Career Opportunities

Students with a Technical Theatre A.A. may work in theatre, film, TV or entertainment venues as technicians or designers in the areas of scenery, lighting, sound, properties, costumes, makeup, or stage management.

Requirements for Degree 28 Units

TA 300	Introduction to the Theatre	3
TA 350	Theory and Techniques of Acting I (3)	3
or TA 480	Honors Theory and Techniques of Acting (3)	
TA 420	Stagecraft	3
And a minimum of 2 units from the following:		2 ¹

TA 460	Rehearsal and Performance (0.5 - 3)	
TA 461	Rehearsal and Performance - Drama (0.5 - 3)	
TA 462	Rehearsal and Performance - Comedy (0.5 - 3)	
TA 463	Rehearsal and Performance - Classical (0.5 - 3)	
TA 464	Rehearsal and Performance - Children's Show (0.5 - 3)	
TA 465	Rehearsal and Performance - Musical (0.5 - 3)	
TA 475	Fundamentals of Repertory Production (0.5 - 6)	

And a minimum of 7 units from the following:

TA 404	Techniques of Puppetry (3)	
TA 422	Stage Lighting (3)	
TA 424	Advanced Technical Theatre (3)	
TA 430	Costume Construction (3)	
FASHN 334	Vintage Costuming (0.5 - 2)	
or TA 434	Vintage Costuming (0.5 - 2)	
TA 435	History and Theory of Costuming (3)	
TA 437	Stage Make-up I (2)	
TA 440	Arts Management (3)	

And a minimum of 4 units from the following:

TA 351	Theory and Techniques of Acting II (3)	
TA 356	Acting for the Camera I (3)	
TA 357	Acting for the Camera - II (3)	
TA 360	Styles of Acting (3)	
TA 362	Styles of Acting: Classical (3)	
TA 366	Styles of Acting: Modern (3)	
TA 370	Theatre Movement (2)	
TA 375	Voice, Diction and Dialects (3)	
TA 377	Musical Theatre Techniques (3)	

TA 390	Directing and Play Production (3)
TA 397	Introduction to Readers' Theatre (3)
TA 400	Creative Drama for Children (3)
TA 406	Children's Theatre (3)

And a minimum of 6 units from the following:6
Three TA courses not used to fulfill other requirements for the major

¹Earned by enrollment for a minimum of 0.5 units in each of two productions for a total of 2 units.

²Selected from three or more distinct courses on the list.

Associate Degree Requirements: The Theatre Arts: Technical 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.

Acting Certificate

The Acting 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. The curriculum is designed to introduce and develop the craft of acting through transferable courses.

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 Opportunities

Students with an acting certificate may go into acting, directing, film, teaching, and many other careers where oration and presentation are key components.

Requirements for Certificate 16 Units

TA 351	Theory and Techniques of Acting II	3
TA 370	Theatre Movement	2
TA 375	Voice, Diction and Dialects	3
TA 437	Stage Make-up I	2

And a minimum of 3 units from the following:

TA 356	Acting for the Camera I (3)	
TA 357	Acting for the Camera - II (3)	
TA 362	Styles of Acting: Classical (3)	
TA 366	Styles of Acting: Modern (3)	

And a minimum of 3 units from the following:

TA 406	Children's Theatre (3)	
TA 460	Rehearsal and Performance (0.5 - 3)	
TA 461	Rehearsal and Performance - Drama (0.5 - 3)	
TA 462	Rehearsal and Performance - Comedy (0.5 - 3)	
TA 463	Rehearsal and Performance - Classical (0.5 - 3)	
TA 464	Rehearsal and Performance - Children's Show (0.5 - 3)	
TA 465	Rehearsal and Performance - Musical (0.5 - 3)	
TA 466	Rehearsal and Performance - Musical Ensemble (0.5 - 3)	
TA 475	Fundamentals of Repertory Production (0.5 - 6)	

Children's Theatre Certificate

The Children's Theatre certificate provides the knowledge needed to create theatrical productions for children. Coursework includes acting, improvisation, voice, technical theatre, and theatre productions for children.

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 Opportunities

Students 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.

Requirements for Certificate 13-17 Units

TA 344	Improvisation and Theatre Games (2)	2 - 3
or TA 370	Theatre Movement (2)	
or TA 375	Voice, Diction and Dialects (3)	
TA 350	Theory and Techniques of Acting I	3
TA 400	Creative Drama for Children (3)	1 - 3
or TA 404	Techniques of Puppetry (3)	
or ENGLT 372	Children and Literature: Storytelling (1)	
TA 420	Stagecraft (3)	2 - 3
or TA 430	Costume Construction (3)	
or TA 437	Stage Make-up I (2)	
And a minimum of 3 units from the following:		3 ¹
TA 406	Children's Theatre (3)	
TA 475	Fundamentals of Repertory Production (0.5 - 6)	
And a minimum of 2 units from the following:		2
Any TA course not used to fulfill other requirements		

¹Connected with Children's Theatre Touring Performance.

Costuming Certificate

The Costuming certificate provides training in the skills needed to create theatrical costumes. Coursework includes costume construction, history of costume, patterning, and makeup.

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 Opportunities

The student with a costuming certificate may work creating and maintaining costumes for theatre, film, TV, advertising, and other entertainment fields.

Requirements for Certificate 17 Units

FASHN 320	Textiles (3)	3
or FASHN 342	Fashion Illustration (3)	
or FASHN 378	Advanced Pattern Making and Design (3)	
or TA 404	Techniques of Puppetry (3)	
or TA 420	Stagecraft (3)	
FASHN 374	Pattern Making and Design.....	3
TA 430	Costume Construction	3
TA 435	History and Theory of Costuming (3)	3
or FASHN 330	History of Western World Fashion (3)	
TA 437	Stage Make-up I.....	2
And a minimum of 1 unit from the following:		1
FASHN 334	Vintage Costuming (0.5 - 2)	
TA 434	Vintage Costuming (0.5 - 2)	
And a minimum of 1 unit from the following:		1
TA 433	Costume Production (0.5 - 3)	
And a minimum of 1 unit from the following:		1 ¹
TA 460	Rehearsal and Performance (0.5 - 3)	

¹TA 460 must include wardrobe crewing.

Film Certificate

The Film certificate concentrates on the critical study of film as an art form and societal influence. Coursework includes history of film, film genres, diversity in film, acting for the camera and filmmaking.

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.
- analyze the components of a film including acting, directing, screenwriting, cinematography, and production and technical elements.
- compare and contrast different film genres.
- analyze the historical development of film.
- evaluate films in terms of cultural diversity.

Career Opportunities

Students may go into the field of film or TV as actors, directors, producers, critics, and technicians.

Requirements for Certificate 15 Units

TA 310	Introduction to Film.....	3
TA 314	History of Film: 1880's through 1950's.....	3
TA 315	History of Film: 1950's to Present.....	3
TA 318	Diversity in American Film	3
And a minimum of 3 units from the following:		3
ART 420	Film Making (2)	
TA 320	Cinema Genres (3)	
TA 356	Acting for the Camera I (3)	

CERTIFICATES OF COMPLETION (offered by the department)

Musical Theatre Certificate

The Musical Theatre certificate synthesizes the performance skills of movement, acting, and singing with the musical theatre script/song. 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 through transferable courses.

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 Opportunities

Students 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.

Requirements for Certificate	15 Units
DANCE 377 Theatre Dance	1
MUIVI 310 Voice Class.....	2
TA 351 Theory and Techniques of Acting II	3
TA 370 Theatre Movement	2
TA 377 Musical Theatre Techniques.....	3
And a minimum of 3 units from the following:	3
TA 465 Rehearsal and Performance - Musical (0.5 - 3)	
And a minimum of 1 unit from the following:	1
DANCE 310 Jazz Dance (1)	
DANCE 320 Ballet (1)	
DANCE 360 Tap Dance (1)	
MUIVI 311 Voice Class (2)	
MUIVI 320 Voice Class, Intermediate (2)	
MUIVI 321 Voice Class, Intermediate (2)	
MUIVI 390 Beginning Jazz and Popular Vocal Styles (2)	
MUIVI 391 Intermediate Jazz and Popular Vocal Styles (2)	
TA 362 Styles of Acting: Classical (3)	
TA 366 Styles of Acting: Modern (3)	
TA 375 Voice, Diction and Dialects (3)	

Technical Theatre Certificate

The Technical Theatre 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.

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.

Career Opportunities

Students with a Technical Theatre certificate may become stagehands, set builders, lighting and sound technicians, makeup artists, properties artisans, or stage managers in theatre, film or TV.

Requirements for Certificate	16 Units
TA 420 Stagecraft	3
TA 422 Stage Lighting	3
And a minimum of 2 units from the following:	2 ¹
TA 460 Rehearsal and Performance (0.5 - 3)	
And a minimum of 3 units from the following:	3
TA 424 Advanced Technical Theatre (3)	
TA 460 Rehearsal and Performance (0.5 - 3)	
TA 498 Work Experience in Theatre Arts (1 - 4)	
And a minimum of 5 units from the following:	5
DESIGN 300 Introduction to Design Resources (3)	
MUSM 140 Concert Sound Reinforcement (2)	
MUSM 342 Recording Studio Techniques (3)	
TA 404 Techniques of Puppetry (3)	
TA 430 Costume Construction (3)	
TA 437 Stage Make-up I (2)	
WELD 300 Introduction to Welding (3)	

¹TA 460 must be taken twice; crew for a minimum of two shows

Theatre Arts

TA 290 PACE: Exploration of Theatre through Acting 1 Unit

Hours: 18 hours LEC

This course is an introduction to live theatre through brief explorations of the discipline of acting and its related disciplines, playwriting and directing. It covers each discipline through vocal, physical, and written exercises, culminating in two performed pieces. Individual style, interests and strengths are emphasized.

TA 294 Topics in Theatre Arts .5-4 Units

Hours: 54 hours LEC; 162 hours LAB

This course covers topics in theatre which are not included in current course offerings. This course may be taken four times with no duplication of topics.

TA 300 Introduction to the Theatre 3 Units

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.

General Education: AA/AS Area I; CSU Area C1; IGETC Area 3A

Course Transferable to UC/CSU

Hours: 54 hours LEC

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.

TA 302 History and Theory of the Theatre I 3 Units

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.

General Education: AA/AS Area I; CSU Area C1; IGETC Area 3A

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course is a survey of the history of theatre from the Greeks through the 17th century. The history and development of theatre and drama are studied in relationship to cultural, political and social conditions of the time. Plays are read for analysis of structure, plot, character, and historical relevance. Field trips may be required.

TA 303 History and Theory of the Theatre II 3 Units

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.

General Education: AA/AS Area I; CSU Area C1; IGETC Area 3A

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course is a survey of the history of theatre from the 17th century through modern theatre. The history and development of theatre and drama are studied in relationship to cultural, political, and social conditions of the time. Field trips may be required.

TA 306 Diversity in American Drama (1960 to Present) 3 Units

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.

General Education: AA/AS Area I; AA/AS Area VI; CSU Area C1; IGETC Area 3A

Course Transferable to UC/CSU

Hours: 54 hours LEC

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.

TA 310 Introduction to Film 3 Units

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.

General Education: AA/AS Area I; CSU Area C1; IGETC Area 3A

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course explores the artistic, business, and social elements of modern 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 films and the movie business on society. Field trips may be required.

TA 312 History of Film 3 Units

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.

General Education: AA/AS Area I; CSU Area C1; IGETC Area 3A

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course is a historical and critical survey of film as an art form. It emphasizes the evaluation of films which are landmarks in the art of movie making. Field trips may be required.

TA 314 History of Film: 1880's through 1950's 3 Units

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.

General Education: AA/AS Area I; CSU Area C1; IGETC Area 3A

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course is a historical and critical survey of film as an art form. It emphasizes the evolution of artistic and technical facets of production in features, documentary and experimental films, concentrating on films from the 1880's through 1950's. Field trips may be required.

TA 315 History of Film: 1950's to Present 3 Units

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.

General Education: AA/AS Area I; CSU Area C1; IGETC Area 3A

Course Transferable to UC/CSU

Hours: 54 hours LEC

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, documentary and experimental films, concentrating on films from 1950 to the present. Field trips may be required.

TA 318 Diversity in American Film 3 Units

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.

General Education: AA/AS Area I; AA/AS Area VI; CSU Area C1; IGETC Area 3A

*Course Transferable to UC/CSU
Hours: 54 hours LEC*

This course surveys the cinematic expression of artists often underrepresented in the mainstream media, such as women, Native-Americans, African-Americans, Latinos, Asian-Americans, and gays and lesbians. Media stereotypes and the social, political, and cultural climate that created them are covered. Field trips may be required.

TA 320 Cinema Genres 3 Units

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.

General Education: AA/AS Area I

*Course Transferable to UC/CSU
Hours: 54 hours LEC*

This course studies one or more film topics or genres. It explores specific types of film in depth, concentrating on historical and technical changes in a specific genre. Additional topics include the style of directing, acting, and design for that genre. It examines specific actors, directors, writers, cinematographers, producers, and/or studios for that genre. This course may be taken four times for credit on different genres. Field trips may be required.

TA 344 Improvisation and Theatre Games 2 Units

Course Transferable to UC/CSU

Hours: 18 hours LEC; 54 hours LAB

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.

TA 350 Theory and Techniques of Acting I 3 Units

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.

General Education: AA/AS Area I; CSU Area C1; IGETC Area 3A

*Course Transferable to UC/CSU
Hours: 54 hours LEC*

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.

TA 351 Theory and Techniques of Acting II 3 Units

Prerequisite: TA 350 or 480 with a grade of "C" or better

Course Transferable to UC/CSU

Hours: 54 hours LEC

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.

TA 356 Acting for the Camera I 3 Units

Prerequisite: TA 350 or 480 with a grade of "C" or better

Course Transferable to UC/CSU

Hours: 36 hours LEC; 54 hours LAB

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. Scenes and commercials are enacted and played back on videotape for class critiquing. Field trips may be required.

TA 357 Acting for the Camera - II 3 Units

Prerequisite: TA 356 with a grade of "C" or better

Course Transferable to UC/CSU

Hours: 36 hours LEC; 54 hours LAB

This course develops advanced skills of acting for film and television. Monologues, commercials, and scenes are enacted and played back on video for class critiquing. Field trips may be required.

TA 360 Styles of Acting 3 Units

Prerequisite: TA 350 or 480 with a grade of "C" or better.

Advisory: TA 300 and 351.

Course Transferable to UC/CSU

Hours: 36 hours LEC; 54 hours LAB

Investigation of styles of acting through lectures and prepared scenes from representative classic and modern plays and one-act plays.

TA 362 Styles of Acting: Classical 3 Units

Prerequisite: TA 350 or 480 with a grade of "C" or better

Course Transferable to UC/CSU

Hours: 36 hours LEC; 54 hours LAB

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.

TA 366 Styles of Acting: Modern 3 Units

Prerequisite: TA 350 or 480 with a grade of "C" or better

Advisory: TA 300 and 351

Course Transferable to UC/CSU

Hours: 36 hours LEC; 54 hours LAB

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.

TA 370 Theatre Movement 2 Units

Course Transferable to UC/CSU

Hours: 18 hours LEC; 54 hours LAB

This course is an active participation and performance experience designed to provide opportunities in discovery and to solve movement tasks of the actor. The course 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.

TA 375 Voice, Diction and Dialects 3 Units

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.

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course focuses on the overall improvement of vocal quality, explores monologue and dialog 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 mechanism, 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.

TA 377 Musical Theatre Techniques 3 Units

Course Transferable to UC/CSU

Hours: 36 hours LEC; 54 hours LAB

This is a performance-oriented course integrating acting and singing skills through the creation of a unified character. The course 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.

TA 390 Directing and Play Production 3 Units

Prerequisite: TA 351 with a grade 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 and ESLL 320 with a grade of "C" or better; OR placement through assessment process.

General Education: CSU Area C1

Course Transferable to UC/CSU

Hours: 36 hours LEC; 54 hours LAB

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, casting the show, blocking and rehearsing actors, and dealing with technical and promotion needs. It also includes directing scenes and preparing a prompt book.

TA 395 Playwriting 3 Units

Prerequisite: ENGWR 102 or 103 with a grade of "C" or better; or placement through the assessment process.

Advisory: ENGWR 300

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course is an introduction to the fundamentals of the craft of dramatic writing. Elements of plot construction and character development are emphasized through writing exercises, superior models of drama, and drafting and revision of an original play script. Attending an out-of-class live drama performance is required.

TA 397 Introduction to Readers' Theatre 3 Units

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.

Course Transferable to UC/CSU

Hours: 36 hours LEC; 54 hours LAB

This course introduces group oral performance of literature. It explores the analysis of poetry, prose, and drama with a goal of adapting literary materials for group performance. Students develop analytical and performance skills which culminate in Readers' Theatre presentations. Field trips may be required.

TA 400 Creative Drama for Children 3 Units

Course Transferable to CSU

Hours: 54 hours LEC

This course explores basic drama forms to help the drama leader guide children in developing their own dramatic skills. It includes how to infuse drama, pantomime, improvisation, 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.

TA 404 Techniques of Puppetry 3 Units

Advisory: ENGRD 15 and ENGWR 51; or placement through the assessment process.; or ESLR 310 and ESLW 310

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

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.

TA 406 Children's Theatre 3 Units

Enrollment Limitation: Audition/Interview

General Education: AA/AS Area I; CSU Area C1

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

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.

TA 420 Stagecraft 3 Units

Advisory: ENGRD 15 and ENGWR 51; OR ESLR 310 and ESLW 310; OR Placement through assessment process; AND MATH 25, and TA 300.

Course Transferable to UC/CSU

Hours: 36 hours LEC; 54 hours LAB

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.

TA 422 Stage Lighting 3 Units

Advisory: ENGRD 15 and ENGWR 51, OR ESLR 310 and ESLW 310, OR placement through assessment process; AND MATH 25, TA 300, and TA 420.

Course Transferable to UC/CSU

Hours: 36 hours LEC; 54 hours LAB

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.

TA 424 Advanced Technical Theatre 3 Units

Prerequisite: TA 420 and 422 with grades of "C" or better
Course Transferable to UC/CSU
Hours: 36 hours LEC; 54 hours LAB

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. It may be taken two times for credit working on different productions.

TA 430 Costume Construction 3 Units

Advisory: ENGWR 51 and ENGRD 15 or ESLW 310 and ESLR 310, or placement through assessment.
Course Transferable to UC/CSU
Hours: 36 hours LEC; 54 hours LAB

This course explores the basic areas of costume construction. Topics include fabrics, color, patterns, sewing techniques, costume pieces, and accessories. Period styles, costume analysis, and basic design are also covered. It offers experience in constructing costumes for theatrical productions. This course may be taken twice for credit using different techniques. Field trips may be required.

TA 433 Costume Production .5-3 Units

Prerequisite: FASHN 374 or TA 430 with a grade of "C" or better
Course Transferable to CSU
Hours: 162 hours LAB

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 may 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. This course is open to all skill levels. It may be taken four times for credit. Field trips may be required.

TA 434 Vintage Costuming .5-2 Units

Same As: FASHN 334
Advisory: ENGWR 51 and ENGRD 15, or ESLW 310 and ESLR 310 or placement through assessment process.
Course Transferable to UC/CSU
Hours: 18 hours LEC; 54 hours LAB

This course covers the factors that influence historical costume design and production. Principles and techniques involved in developing and constructing a period costume included. The course demonstrate these by fabricating their own costumes. The historical period will change each semester. May be taken four times for credit on different topics with a maximum of 8 units. Not open to those who have completed FASHN 334 on the same topic.

TA 435 History and Theory of Costuming 3 Units

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.
General Education: AA/AS Area I; CSU Area C1
Course Transferable to CSU
Hours: 54 hours LEC

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. It integrates design elements with historical styles to develop designs for theatrical costumes. Field trips may be required.

TA 437 Stage Make-up I 2 Units

Course Transferable to UC/CSU
Hours: 18 hours LEC; 54 hours LAB

This course covers the basic techniques of theatrical makeup. It explores makeup materials, color and light, and modeling techniques in the development of makeup designs for youth, middle and old age, historical persons, stylized faces, clowns, animals, and fantasy makeup.

TA 440 Arts Management 3 Units

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.
Course Transferable to CSU
Hours: 36 hours LEC; 54 hours LAB

This general survey course in arts management emphasizes organization, marketing/development, and financial management. It includes promotion and publicity, house management, box office operations and public relations. Field work includes projects with an existing arts organization.

TA 452 One-Act Play Workshop 3 Units

Prerequisite: TA 350 or 480, and TA 351 or 360 or 420 or 422.
Course Transferable to UC/CSU
Hours: 36 hours LEC; 54 hours LAB

This course explores the play production process. Class members collaborate in the analysis, preparation and production of one-act plays through participation as either directors, writers, actors, or technicians. The process culminates in public performances. May be taken four times for credit.

TA 460 Rehearsal and Performance .5-3 Units

Enrollment Limitation: Audition/Interview
Course Transferable to UC/CSU
Hours: 162 hours LAB

This course provides a workshop training experience in the preparation and performance of theatre productions. Students interested in acting audition with the director for acting, singing or dancing roles. Students interested in technical work interview for positions in stage management, crewing, set construction, costumes and makeup, lighting and sound, box office and publicity. Field trips may be required. This course may be taken four times for credit on different productions.

TA 461 Rehearsal and Performance – Drama .5-3 Units

Enrollment Limitation: Audition / Interview
Course Transferable to UC/CSU
Hours: 162 hours LAB

This course provides a workshop training experience in the preparation and performance of dramatic theatre productions. Students interested in acting audition with the director for acting roles. Students interested in technical work interview for backstage positions in stage management, crewing, set construction, costumes and makeup, lighting and sound, box office and publicity. Field trips may be required. This course may be taken four times for credit on different dramatic productions for a maximum of 12 units.

**TA 462 Rehearsal and Performance –
Comedy .5-3 Units**

Enrollment Limitation: Audition / Interview
Course Transferable to UC/CSU
Hours: 162 hours LAB

This course provides a workshop training experience in the preparation and performance of comedic theatre productions. Students interested in acting audition with the director for acting roles. Students interested in technical work interview for backstage positions in stage management, crewing, set construction, costumes and makeup, lighting and sound, box office and publicity. Field trips may be required. This course may be taken four times for credit on different comedic productions for a maximum of 12 units.

**TA 463 Rehearsal and Performance –
Classical .5-3 Units**

Enrollment Limitation: Audition / Interview
Course Transferable to UC/CSU
Hours: 162 hours LAB

This course provides a workshop training experience in the preparation and performance of classical theatre productions. Students interested in acting audition with the director for acting roles. Students interested in technical work interview for backstage positions in stage management, crewing, set construction, costumes and makeup, lighting and sound, box office and publicity. Field trips may be required. This course may be taken four times for credit on different classical productions for a maximum of 12 units.

**TA 464 Rehearsal and Performance –
Children's Show .5-3 Units**

Enrollment Limitation: Audition / Interview
Course Transferable to CSU
Hours: 162 hours LAB

This course provides a workshop training experience in the preparation and performance of children's theatre productions. Students interested in acting audition with the director for acting roles. Students interested in technical work interview for backstage positions in stage management crewing, set construction, costumes and makeup, lighting and sound, box office and publicity. Field trips may be required. This course may be taken four times for credit on different children's productions for a maximum of 12 units.

**TA 465 Rehearsal and Performance –
Musical .5-3 Units**

Enrollment Limitation: Audition / Interview
Course Transferable to UC/CSU
Hours: 162 hours LAB

This course provides a workshop training experience in the preparation and performance of musical theatre productions. Students interested in acting audition with the director for acting roles. Students interested in technical work interview for backstage positions in stage management, crewing, set construction, costumes and makeup, lighting and sound, box office and publicity. Field trips may be required. This course may be taken four times for credit on different musicals for a maximum of 12 units.

**TA 466 Rehearsal and Performance –
Musical Ensemble .5-3 Units**

Same As: MUP 370
Enrollment Limitation: Audition / Interview
Course Transferable to UC/CSU
Hours: 162 hours LAB

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. This course may be taken four times for credit on different musical ensemble productions for a maximum of 12 units. It is not open to students who are taking MUP 370 for the same production.

TA 470 Rehearsal and Performance II .5-3 Units

Prerequisite: TA 460, 461, 462, 463, 464, 465, or 466 with a grade of "C" or better
Enrollment Limitation: Audition / Interview
Course Transferable to UC/CSU
Hours: 162 hours LAB

This course provides intermediate level workshop training in the preparation and performance of dramatic theatre productions. Actors, directors, and stage managers explore more complex techniques of play production through practical rehearsal and performance opportunities. Technicians and designers develop the design and technical elements of a production through practical opportunities in advanced positions in set construction, costumes, makeup, lighting, sound, box office and publicity. Field trips may be required. This course may be taken four times for credit on different productions for a maximum of 12 units.

TA 472 Rehearsal and Performance III .5-3 Units

Prerequisite: TA 470 with a grade of "C" or better
Enrollment Limitation: Audition / Interview
Course Transferable to UC/CSU
Hours: 162 hours LAB

This course provides advanced level workshop training in the preparation and performance of dramatic theatre productions. Actors, directors, and stage managers explore advanced techniques of play production through practical rehearsal and performance opportunities. Technicians and designers develop advanced design and technical elements of a production through practical opportunities in set construction, costumes, makeup, lighting, sound, box office and publicity. Field trips may be required. This course may be taken four times for credit on different productions for a maximum of 12 units.

**TA 475 Fundamentals of
Repertory Production .5-6 Units**

Enrollment Limitation: Audition/Interview
Course Transferable to UC/CSU
Hours: 36 hours LEC; 216 hours LAB

This workshop explores the challenges involved in repertory theatre through participation in repertory productions in areas of theatre including acting, singing, dancing, crewing, stage management, scenery, lighting, costumes, makeup and promotions. It culminates in performances at the end of the session. Field trips may be required. This course may be taken four times for credit on different productions up to a maximum of 12 units.

Area: Technical Education
 Dean: Gabriel Meehan
 Phone: (916) 484-8354
 Counseling: (916) 484-8572
 www.arc.losrios.edu/~welding/



Degree: A.S. - Welding Technology
 Certificates: Shielded Metal Arc Plate and Pipe
 Welding Metallurgy and Inspection
 Certificates of Completion offered by the department:
 Gas Metal Arc, Flux Cored Arc Welding Plate
 Gas Tungsten Arc Plate & Pipe Welding
 Welding Equipment Maintenance
 and Blueprint Interpretation

The American Welding Society (AWS) nationally accredits American River College's welding program. ARC has met all the requirements of the AWS QC4 Standards for Accreditation of Test Facilities for their Certified Welder Program. AWS certification is recognized by the welding industry as an important step in professional development.

DEGREES AND CERTIFICATES

Welding Technology Degree

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.

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 Opportunities

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 welding positions in oil refineries, nuclear power plants, aerospace, structural buildings, bridge construction, auto industry, and small commercial fabricating shops.

Requirements for Degree		37 Units
WELD 140	Mathematics for Welding Technicians	3
WELD 300	Introduction to Welding	3
WELD 302	Introduction to Welding Metallurgy	3
WELD 316	Welding Inspection	2
WELD 320	Shielded Metal Arc Welding (Stick Electrode Welding)	3
WELD 321	Shielded Metal Arc Welding (Stick Electrode Welding)	3
WELD 322	Advanced Pipe Welding in Shielded Metal Arc	3
WELD 330	Gas Tungsten Arc Welding	3
WELD 332	Gas Tungsten Arc Welding (Pipe)	3
WELD 333	Gas Metal Arc Welding, Semi-Automatic Processes	3
WELD 334	Gas Metal Arc Welding: Ferrous and Non-Ferrous Metals	2
WELD 335	Flux Core Arc Welding	3
WELD 342	Symbol Reading, Layout and Fabrication	3

Associate Degree Requirements: 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.

Shielded Metal Arc Plate and Pipe (270 hours) Certificate

The Shielded Metal Arc Welding plate and pipe 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.

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

Requirements for Certificate	12 Units
WELD 300 Introduction to Welding	3
WELD 320 Shielded Metal Arc Welding (Stick Electrode Welding).....	3
WELD 321 Shielded Metal Arc Welding (Stick Electrode Welding).....	3
WELD 322 Advanced Pipe Welding in Shielded Metal Arc	3

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, mechanical and physical properties of metals and crystal structures of metals, rules and regulations of the welding construction industry, and principles, requirements and methods of inspection.

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

Requirements for Certificate	14 Units
WELD 117 Ultrasonic Testing Level One	3
WELD 118 Ultrasonic Testing Level Two	3
WELD 300 Introduction to Welding	3
WELD 302 Introduction to Welding Metallurgy	3
WELD 316 Welding Inspection	2

CERTIFICATES OF COMPLETION (offered by the department)

Gas Metal Arc, Flux Cored 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.

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

Requirements for Certificate	11 Units
WELD 300 Introduction to Welding	3
WELD 333 Gas Metal Arc Welding, Semi-Automatic Processes	3
WELD 334 Gas Metal Arc Welding: Ferrous and Non-Ferrous Metals	2
WELD 335 Flux Core Arc Welding.....	3

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.

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.

Requirements for Certificate	9 Units
WELD 300 Introduction to Welding	3
WELD 330 Gas Tungsten Arc Welding.....	3
WELD 332 Gas Tungsten Arc Welding (Pipe)	3

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.

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

Requirements for Certificate		12 Units
WELD 107	Welding Equipment Maintenance.....	3
WELD 140	Mathematics for Welding Technicians	3
WELD 300	Introduction to Welding	3
WELD 342	Symbol Reading, Layout and Fabrication.....	3

Welding Technology

WELD 101 Introduction to Welding and Cutting 1 Unit

Prerequisite: Acceptance into a registered apprenticeship program.
Hours: 9 hours LEC; 27 hours LAB

This course is an introduction to welding processes for apprentices. Shielded metal arc, oxyacetylene cutting on joint designs, and positions used in industry are taught. Safety in arc welding and oxyacetylene cutting is also covered.

WELD 103 Gas Metal Arc Welding of Sheet Steel 1.5 Units

Hours: 18 hours LEC; 27 hours LAB

This course covers technique application and joint design used in the auto body repair and sheet steel manufacturing industries. Sheet steel applications in the areas of steel decks, panels, storage racks, and joint framing members are presented using the Gas Metal Arc Welding with the short circuit transfer process. Proper safety techniques are also covered.

WELD 107 Welding Equipment Maintenance 3 Units

Prerequisite: None
Hours: 36 hours LEC; 54 hours LAB

This course covers the basics of welding equipment maintenance, trouble-shooting 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. A field trip is required.

WELD 115 Code Welding 2 Units

Prerequisite: WELD 300 with a grade of "C" or better.
Hours: 18 hours LEC; 54 hours LAB

This course provides individualized training for welder performance qualification. Welders select the code, metal, process, and position to be used. Code and test requirements are presented. This course may be taken four times for credit using a different code, metal, process, or position.

WELD 117 Ultrasonic Testing Level One 3 Units

Hours: 45 hours LEC; 27 hours LAB

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 ASNT TC1-A for UT level I are met.

WELD 118 Ultrasonic Testing Level Two 3 Units

Prerequisite: WELD 117 with a grade of "C" or better
Hours: 45 hours LEC; 27 hours LAB

This course covers advanced theory, technique application, and evaluation techniques used in the material processing, welding, and inspection industries. Advanced ultrasonic testing as applied to industry practices, such as, building construction, aeronautics, shipbuilding, and materials fabrication, is covered. Successful completion of this course certifies that the requirements of ASNT TC1-A for UT level II are met.

WELD 123 Welding Certification to D1.5 Bridge Code 1 Unit

Prerequisite: WELD 320 with a grade of "C" or better
Hours: 9 hours LEC; 27 hours LAB

This course covers the welding requirements of the American Association of State Highway and Transportation Officials (AASHTO) for welded highway bridges made from carbon and low-alloy constructional steels. It includes the general requirements for welder certification under this code. This course provides welding procedures for certification in accordance with ANSI/AASHTO/AWS D1.5 Bridge Welding Code, an American National Standard.

WELD 140 Mathematics for Welding Technicians 3 Units

General Education: AA/AS Area II(b)
Hours: 54 hours LEC

This course covers the application of mathematics in technical and trade work. It applies mathematic principles to the welding trade. Areas covered are common fractions, fraction/decimal conversion, percentages, practical algebra, rectangles, triangles, metric measurement, measuring instruments, strength of materials and essentials of trigonometry. Problems involving labor and cost of material are also covered.

WELD 150 Employability Skills for Technical Careers 2 Units

Same As: AT 107 and ET 250

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)

Hours: 36 hours LEC

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.

WELD 155 Industry Training 3 Units

Hours: 36 hours LEC; 54 hours LAB

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. This course may be taken four times for credit, when covering different industries.

WELD 290 Advanced Student Projects 2 Units

Prerequisite: WELD 300 with a grade of "C" or better.

Hours: 108 hours LAB

This course provides an opportunity to pursue advanced projects selected by the welding department. This course may be taken twice for credit.

WELD 294 Topics in Welding .5-5 Units

Hours: 9 hours LEC; 270 hours LAB

This course provides an opportunity to study current topics in welding technology that are not included in existing courses. It may be taken four times for a maximum of six units, providing there is no duplication of topics.

WELD 300 Introduction to Welding 3 Units

Prerequisite: None

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course is an introduction to welding processes: 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, oxyacetylene welding and cutting is also covered.

WELD 302 Introduction to Welding Metallurgy 3 Units

Corequisite: WELD 300

Hours: 36 hours LEC; 54 hours LAB

This course provides a general overview of basic metallurgy. Topics include identifying types of steels, the mechanical and physical properties of metals, and crystal structures of metals using the phase changes that iron and steel go through during heating using an iron equilibrium diagram. Additionally, it covers the periodic table of elements emphasizing those associated with metals, as well as metallurgical failure of welds, deformation, and heat treatment of steels. Field trips may be required.

WELD 316 Welding Inspection 2 Units

Prerequisite: WELD 300 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.

Hours: 36 hours LEC

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. The course 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.

WELD 320 Shielded Metal Arc Welding (Stick Electrode Welding) 3 Units

Prerequisite: WELD 300 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.

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course covers pre-employment training for welding technicians. Emphasis is on developing manipulative proficiency in the use of Shielded Metal Arc Welding (SMAW) in the flat (1F-1G), horizontal (2F-2G), vertical (3F-3G), and overhead (4F-4G) positions on ASTM A36 steel. This course also covers filler metal selection, both specifications and classifications, welding power supplies, and welding safety. Groove test plates on limited and unlimited thickness in accordance with the requirements to AWS D1.1 Structural Welding Code and American Association of State Highway and Transportation Officials/ AWS D1.5 Bridge Code, are also covered.

WELD 321 Shielded Metal Arc Welding (Stick Electrode Welding) 3 Units

Prerequisite: WELD 320 with a grade of "C" or better

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course provides training in shielded metal arc welding skills, using low, medium, and high carbon steels. Topics include all position welding on fillet and groove welds to code specifications. It also provides technical instruction on filler materials, base metals, and arc welding safety.

WELD 322 Advanced Pipe Welding in Shielded Metal Arc 3 Units

Prerequisite: WELD 321 with a grade of "C" or better.

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

The course covers the application of an electric welding process: shielded metal arc is used to join low-pressure piping systems that carry water, residential natural gas, non-corrosive and non-combustible piping systems. High pressure critical piping systems such as steam pipe, pipe lines, boilers, offshore oil-rigs and other critical heavy duty application of piping systems are covered.

WELD 330 Gas Tungsten Arc Welding 3 Units

Prerequisite: WELD 300 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.
Hours: 36 hours LEC; 54 hours LAB

This course covers Gas Tungsten Arc Welding (GTAW) of aluminum, stainless steel, low carbon steel, medium carbon steel, high 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), Structural welding Code D1.1 (AWS), and 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.

WELD 332 Gas Tungsten Arc Welding (Pipe) 3 Units

Prerequisite: WELD 330 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.
Course Transferable to CSU
Hours: 36 hours LEC; 54 hours LAB

This course covers the application of low-pressure and high-pressure critical piping systems used in oil, gas, nuclear, and chemical industries. This course covers Gas Tungsten Arc Welding (GTAW) of aluminum pipe, stainless steel pipe, and low carbon steel pipe. The content is relevant to 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). It also covers pipe welding positions horizontal rolled 1G, horizontal fixed 5G, vertical fixed 2G, inclined 45 degrees 6G, filler metal selection, both specifications and classifications, shielding gases, welding power supplies, and welding safety. Certification and procedure qualification to ASME Section 1X, AWS D1.1, API 1104 code specifications are also covered.

WELD 333 Gas Metal Arc Welding, Semi-Automatic Processes 3 Units

Prerequisite: WELD 300 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.
Hours: 36 hours LEC; 54 hours LAB

This course covers semi-automatic wire feed welding with micro wires on steel plate of varying thickness. Joint design, gas variations and all welding positions are also covered. The emphasis of this course is welding on low, medium, and high carbon steels. The course content is relevant to code welding in accordance to the American Welding Society (AWS), Structural welding Code D1.1 and Sheet Steel Code D1.3. Also covered are 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.

WELD 334 Gas Metal Arc Welding: Ferrous and Non-Ferrous Metals 2 Units

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.
Hours: 18 hours LEC; 54 hours LAB

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.

WELD 335 Flux Core Arc Welding 3 Units

Prerequisite: WELD 300 with a grade of "C" or better
Course Transferable to CSU
Hours: 36 hours LEC; 54 hours LAB

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.

WELD 342 Symbol Reading, Layout and Fabrication 3 Units

Corequisite: WELD 300
Course Transferable to CSU
Hours: 36 hours LEC; 54 hours LAB

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 specification, structural shapes, sections, detail, and assembly.

Area: Work Experience
 Coordinator: Connie Ayala
 Phone: (916) 484-8941
 Counseling: (916) 484-8572
<http://wexp.losrios.edu>

Upon completion of their Work Experience (WEXP) orientation course, students may earn 1-4 units of transferable credit with a letter grade. Work Experience serves: College interns, volunteers, and employees. Positions may be paid or unpaid.

Occupational Work Experience Education 298/498 is designed for students interested in associate/certificate degree level (298) or transfer degree level (498) work experiences, related to their major field of study. Students should check with their major program faculty to review specific certificate or degree work experience requirements. Up to four units of credit may be granted each semester with a maximum total of sixteen (16) units during the student's enrollment in a community college. These units may count as elective units, major units, or GE units, only 498 units are transferable to CSU.

General Work Experience Education 198 is designed for students interested in exploring various career options without a major. Up to three units of credit may be granted each semester with a maximum total of six (6) semester units during the student's enrollment in a community college. These units may count as elective units, major units or GE units, but are not transferable

Course Enrollment

Students must have a cooperating employer by the end of the third week of a full semester course or by the end of the first week of an eight week (or summer session) to remain in the weekly orientation (course). Positions should be located within the greater Sacramento area for instructor site visits. Students needing assistance in internship referrals may go to the program website at <http://wexp.losrios.edu/>, positions may be paid or unpaid. The weekly orientation is required for first time participants. Returning participants are not required to attend the weekly orientation but are required to meet with the instructor as needed. Units earned are determined by the amount of hours worked from the first week of instruction to the last week of instruction during an enrollment term, and success with completing required program forms and classroom assignments (hours exclude the weekly orientation course (class time). All registered students are required to attend the first course meeting.

For more information about Cooperative Work Experience, please see the Programs of Study section of the catalog.

Work Experience

WEXP 198 Work Experience - General 1-3 Units

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.
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position or job related to career goals.
General Education: AA/AS Area III(b)
Hours: 225 hours LAB

This course provides students with opportunities to develop marketable skills in preparation for employment or advancement within a career. It is designed for students interested in exploring various career options. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to attend a weekly orientation and 75 hours of related paid work experience, or 60 hours of unpaid work experience per one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. The weekly orientation is required for first time participants, returning participants are not required to attend the weekly orientation but are required to meet with the instructor as needed to complete all program forms and assignments. This course may be taken for a total of 6 units. Work Experience may be taken for a total of 16 units when there are new or expanded learning objectives.

WEXP 298 Work Experience in (Subject) 1-4 Units

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.
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position or job related to career goals.
General Education: AA/AS Area III(b)
Hours: 300 hours LAB

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 required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to attend a weekly orientation and 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. The weekly orientation is required for first time participants, returning participants are not required to attend the weekly orientation but are required to meet with the instructor as needed to complete all program forms and assignments. Work Experience may be taken for a total of 16 units when there are new or expanded learning objectives.

WEXP 498 Work Experience in (Subject) 1-4 Units

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.

Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position or job related to career goals.

General Education: AA/AS Area III(b)

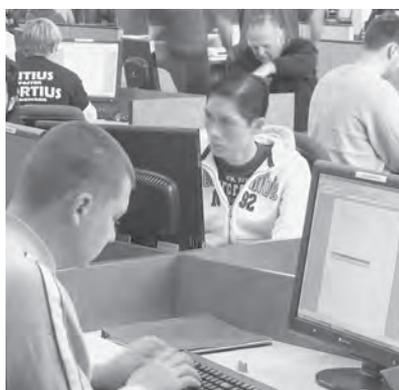
Course Transferable to CSU

Hours: 300 hours LAB

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 required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to attend a weekly orientation and 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. The weekly orientation is required for first time participants, returning participants are not required to attend the orientation but are required to meet with the instructor as needed to complete all program forms and assignments. Work Experience may be taken for a total of 16 units when there are new or expanded learning objectives.

In this section you will find:

- Transfer to four-year institutions, including the California State University and University of California systems
- California State University (CSU) General Education Patterns
- Intersegmental General Education Transfer Curriculum (IGETC)
- Transfer Center
- Transcripts



transfer to four-year institutions

Our transfer-level courses are equivalent to their university counterparts and can count toward your B.A. or B.S. degree in any major. ARC transfers more students to CSU Sacramento than any other community college and is one of UC Davis' top four feeder community colleges.

Transfer program

American River College courses numbered 300 to 499 are accepted by the California State Universities (CSU). Transferable courses can satisfy lower division major preparation, general education, and/or elective requirements. Students should meet with an ARC counselor regarding the transferability of courses to the University of California (UC) independent and out-of-state public colleges and universities.

Transfer information has been compiled to assist American River College students who intend to transfer to another college or university. Students are encouraged to work with their ARC counselor to ensure they are taking courses that meet lower division general education and major requirements. CSU and UC campuses will accept a maximum of 70 semester units from community colleges.

There are many independent colleges and universities to which ARC students transfer, as well. Each institution of higher learning has its own admission requirements for admission and for junior standing. Several of these schools accept the CSU General Education pattern or IGETC in lieu of their own general education requirements.

Articulation

Articulation agreements are formal agreements between two colleges, such as between American River College and Sacramento State University. They define how courses taken at one college or university campus can be used to satisfy a subject matter requirement at another college or university campus.

American River College has a cooperative articulation program with most California State University (CSU) and University of California (UC) campuses. In addition, the college, through the efforts of its counseling staff and articulation officer, maintains excellent relations with UC and CSU campuses, as well as private universities in and outside of California.

The articulation officer of the college, in conjunction with the articulation staff of the universities, has developed written agreements in many areas of the curriculum. These agreements assure ARC students accurate preparation for another university or college. Articulation agreements with CSU and UC campuses can be viewed online [www.assist.org]. Articulation agreements with private and out-of-state colleges and universities can be viewed

on the Transfer Center Web page <http://www.arc.losrios.edu/support/services/transfercenter.htm> under the heading *College - Specific Guidelines*. See a counselor for assistance.

Course Identification Numbering System (C-ID)

American River College is participating in the C-ID program. C-ID is a supranumbering system. Each C-ID descriptor and number identifies a lower-division course commonly articulated between California Community Colleges. Many CSU campuses accept C-ID approved community college courses in lieu of their own courses.

A listing of American River College courses approved for C-ID can be found at: http://www.c-id.net/course_compare.html

Five transfer options

Students must decide which college they will attend and learn the requirements of that institution in order to transfer to a CSU, UC, independent or out-of-state university. It is highly recommended that students avail themselves to the services offered by our Transfer Center, and meet with their ARC counselor regularly to ensure they are taking the appropriate coursework for transfer.

In general, however, students will work with one of the following paths:

1. If you are certain that you want to *transfer to any campus of the California State University (CSU)*, follow the guidelines in Section A, and choose either the CSU GE pattern or IGETC to fulfill your lower division General Education requirements.
2. If you are certain that you want to *transfer to any campus of the University of California (UC)*, follow the guidelines in Section B, and choose either the IGETC or individual UC campus GE/Breadth pattern to fulfill lower division General Education requirements.
3. *If you are uncertain* whether you wish to transfer to a CSU or UC campus, work closely with your counselor to ensure you are completing the admission requirements outlined in both Sections A and B, and follow the IGETC to complete lower division general education requirements. To help things go smoothly, choose your transfer college and major as early as possible.
4. If you want to *transfer to a specific campus* (UC, CSU or elsewhere), you may ask that campus for a copy of its specific admission and General Education/Breadth requirements.
5. If you want to transfer to a campus majoring in biological sciences, engineering, and computer science, you may be required to take major preparation courses with minimum courses for admission eligibility.

A. transfer to the california state university

Students intending to transfer to a California State University (CSU) should plan a program to meet the graduation requirements of the specific institution which they plan to attend. Transfer admission eligibility is based on transferable college units and/or high school record and test scores. Consult the catalog issued by the individual campus for a complete description of the curricula and regulations. Catalogs are available in the Transfer Center.

Students who were eligible for admission to a CSU upon graduation from high school, but who have attended American River College, may transfer with less than 60 transferable units, but must have earned a grade point average of C (2.0) or better in the total program attempted and be in good standing at American River College in order to be accepted for transfer. However, consult with an ARC counselor to ensure that the CSU campus you choose is accepting transfer students with less than 60 units.

Students who were ineligible for admission to a California State University on the basis of high school grade point average, test scores, or subject requirements, will be eligible only if they (1) have completed 60 transferable college units with a grade point average of 2.0 or better; (2) are in good standing at ARC; and (3) have satisfied the following CSU admission requirements. Some CSU campuses have additional admission requirements. Check with your counselor to ensure you are meeting the entrance requirements for your chosen CSU campus.

CSU Admission requirements

1. High School graduate prior to 1987.
 - a. Area A 1, 2, 3 (With grade of C or better).
 - b. Area B 4 (With grade of C or better).
2. High School graduate 1988 and later.
 - a. Area A 1, 2, 3 (With grade of C or better).
 - b. Area B 4 (With grade of C or better).
 - c. Thirty (30) semester units of General Education with C or better. This includes areas A and B.

*See the *CSU General Education Requirements* in the *Transfer* section of this catalog for listings of courses that meet Areas A 1, 2, 3 and B 4.

All students wishing to transfer to a CSU campus have the option of using the California State University General Education pattern, the Intersegmental General Education Transfer Curriculum (IGETC), or CSU campus-specific requirements to meet CSU general education requirements. Completion of the CSU General Education pattern or IGETC allows the student to transfer to a CSU campus without the need to take additional lower division, general education courses after transfer. Students are encouraged to complete as many lower division major requirements as possible for their chosen CSU campus while attending ARC. These requirements can be found online [www.assist.org].

Foreign visa students should consult with the international student counselor of the specific CSU campus.

CSU General Education and IGETC Certification

Students transferring to a CSU campus find it to their advantage to complete the required General Education requirements prior to transfer. This can be accomplished by completing either the California State University GE or IGETC certification pattern. These patterns are listed in Section C. Students must make an appointment with their ARC counselor to have these patterns certified prior to transfer.

Completion/transfer (Student Right to Know)

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 online [www.cpec.ca.gov/ or <http://srtk.cccco.edu/index.asp>]. Please refer to www.csumentor.edu for more information.

Transfer Degrees

The Student Transfer Achievement Reform Act (STAR Act) Associate Degrees for Transfer.

The STAR Act establishes Associate In Arts (AA-T) and Associate in Science (AS-T) degrees for transfer for California community college students. These degrees are designed to provide a clear pathway to CSU degrees. California community college students who earn an AA-T or AS-T degree are guaranteed admission with junior standing to select CSU campuses and are given priority admission consideration over other transfer students. Students who have completed an AA-T/AS-T in a major deemed similar to a CSU major are able to complete the remaining requirements at that CSU within 60 units after transfer. For more information, please see counselor.

CSU GE pattern

Final status of this information was unavailable at publication time. Contact the ARC Counseling Center at (916) 484-8572 for 2011-2012 requirements.

Check with your ARC counselor before choosing whether to complete the CSU General Education (GE) Pattern or the Intersegmental General Education Transfer Curriculum (IGETC) on the following pages.

Requirements for the Bachelor's Degree

The degree requirements at a California State University (CSU) consist, in general, of: (1) the general education requirements which are required of all degree candidates; (2) the major department requirements which are a part of the student's field of specialization; (3) individual campus graduation requirements, and (4) state law requirements. These requirements are classified in two levels: lower division and upper division. Students may transfer a maximum of 70 lower division semester units which may involve preparation for the major and all of the lower division in the general education pattern while attending American River College.

General education requirements 2011-2012

To be eligible for graduation with a Bachelor's Degree from a California State University, students must complete a minimum of 48 semester units of general education. At least 9 units must be upper division courses completed at the four year university. American River College will certify completion of 39 lower division general education units for students if they follow the pattern outlined below. It is important that students complete the required courses for their major, or courses that prepare them for their major, prior to transfer; 60 transferable semester units are needed for a student to transfer with junior standing.

Advanced Placement (AP) and International Baccalaureate Examinations are appropriate for inclusion in the General Education breadth list. See *AP (Advanced Placement) Test Scores* chart in *Getting Started* section of the ARC catalog.

Note: Students must meet with a counselor in order to have their CSU General Education certified prior to transfer.

2011-12 California State University (CSU) General Education Pattern

The following American River College courses meet CSU lower division:

A. English Language Communication and Critical Thinking (9 units minimum, 1 course from each area)

A1 (one course)	SPEECH 301, 331, 361
A2 (one course)	ENGWR 300, 480; ESLW 340
A3 (one course)	ENGWR 301, 302, 481, 482; ESL 350, PHIL 320; SPEECH 302, 311

B. Scientific Inquiry and Quantitative Reasoning (9 units minimum, 1 course from each area.)

One course from Section 1 or 2 must include a lab related to a lecture course. Related lecture course must be completed prior to or concurrently with lab.

B1 (one course)	ASTR 300, 310, 320, 330; CHEM +305, +309, +325, +400, +401, +423; GEOG 300, 305, 306, 307, 308; GEOL 300, 305, 310, 320, 325, 330, 342, 345; PHYS 310, 311, +350, +360, +410; PS 300
B2 (one course)	ANTH 300, 303, 480; BIOL 300, +303, +305, +310, 342, 350, 352, +370, +400, +410, +420, +430, +440, +442, +482; NATR +320; PSYC 310
B3 (one course)	ANTH 301, ASTR 400; BIOL +303, +305, +310, +370, +400, +410, +420, +430, +440, +442, +482; CHEM +305, +309, +325, +400, +401, +423; GEOG 301, 309; GEOL 301, 306, 311, 331; NATR +320; PHYS 312, +350, +360, +410; PS 301; PSYC 311
B4 (one course)	CISP 440; MATH 300, 310, 325, 330, 340, 342, 344, 350, 351, 370, 400, 401, 402, 410, 420; PSYC 330; STAT 300, 305

C. Arts and Humanities (9 units minimum with at least one from the Arts and one from Humanities **plus 1** from either Arts or Humanities)

The Arts 1-2 courses	ART 300, 320, 324, 370, 372, 390, 420, 430; ARTH 300, 302, 308, 310, 322, 333, 334; ARTNM 305, 310; ARTPH 300; FASHN 330; MUFHL 300, 310, 311, 315, 321, 330, 400, 401, 410, 411, 480; MUIVI 310, 340, 370, 385; MUP 310, 320, 330, 340, 350, 360, 400, 424; MUSM 342, 370; TA 300, 302, 303, 306, 310, 312, 314, 315, 318, 350, 390, 406, 435, 480, 481
Humanities 1-2 courses	ENGLT 300, 304, 310, 311, 320, 321, 327, 338, 340, 341, 345, 360, 370, 372, 374, 376, 378, 380, 382, 392, 403, 494; FREN 411, 412; GERM 411, 412; HIST *300, *302, *305, *307, *308, *340, *341, *364, *365, *367, *373, 399, *480, *481; HUM 300, 301, 302, 310, 320, 326, 330, 360, 365, 481, 482; ITAL 411; PHIL 300, 310, 315, 330, 331, 350, 353, 354, *360; SILA 315, 316; SPAN 411, 412

D. (0-9) Social Sciences (9 units minimum, 1 course from each area.)

1 course	HIST 310, 311, 318, 320, 321, 323, 325, 327, 330, 483, 484
1 course	POLS 301 (If met by AP must complete POLS 304 to meet American Institution Requirements)
1 course)	ADMJ 300, 302, 304, 320; ANTH 310, 315, 320, 330, 333, 334, 341; BUS 320, 330, 345; ECE *312, 314; ECON 302, 304, 320; GEOG 310, 320, 322; HIST *300, *302, *305, *307, *308, *340, *341, 343, *364, *365, *367, *373, *480, *481; JOUR 310, 320; NATR 307; NUTRI 301; PHIL *360; POLS 302, 304, 310, 320, 322, 330, 332; PSYC 300, 305, 320, *340, *356, 361, *370, *372, 373, 383, 480, *481; SOC 300, 301, 320, 325, 342, 350; SOCSC 310, 312

E. Lifelong Learning and Self Development (3 units minimum, one course from each area.)

E (one course)	ECE *312; GERON 300, 302; HCD 310; HEED 300, 352; HSER 330, 340; INDIS 325; NUTRI 300; PSYC *340, 342, 354, *356, 358, 359, 365, *370, *372, *373, 374, 390, 400, *481; SOC 335; SPEE 321
E (one course PE Activity)	Activity course with one of the following prefixes: ADAPT, DANCE, FITNS, PACT, TMACT, SPORT except FITNS 400 taken on line or any course numbered 495, 498 or 499

*Courses appearing in more than one category may be used to satisfy only one category.

Courses in the major field may or may not be counted for General Education. (For exceptions, see your counselor.)

(L) Lab only course

(WL) Lecture and Lab course

B: transfer to the university of california

Please refer to www.csumentor.edu for more information.

This section gives general information concerning requirements for transfer into the nine University of California campuses that offer undergraduate programs. Specific information regarding preparation for major and/or breadth requirements to the individual campuses is available in the ARC Counseling Center.

Students wishing to transfer to a University of California campus have the option of using the IGETC (listed in Section C) or a UC campus's individual breadth requirements to meet lower division breadth requirements. However, not all majors at UC campuses accept the IGETC. Students should check with their ARC counselor in order to choose the correct option. Transfer students are encouraged to complete as many lower division major requirements as possible at ARC. UC campuses often select students based on their major preparation. It is advised that students meet with their ARC counselor regularly to make sure they are meeting UC entrance requirements. Students can also find lower division major requirements for UC campuses online [www.assist.org].

UC Minimum Admission/Eligibility Requirements

There are three ways to meet the University's minimum admission requirements for transfer students. The path you use depends on the degree to which you satisfied UC's minimum eligibility requirements for freshmen when you graduated from high school.

At high school graduation, if you:

1. Met the Subject, Scholarship and Examination Requirements then to be eligible to transfer to UC you must:
 - Maintain a C average (2.00 GPA) in your transferable coursework.
2. Met the Scholarship Requirement, but did not satisfy the Subject Requirement then to be eligible to transfer to UC you must:
 - Take transferable college courses in the missing subjects, earning a C or better in each course, and
 - Maintain a C average (2.00 GPA) in your transferable coursework.
3. Were not eligible for admission to UC because you did not meet the Scholarship Requirement then to be eligible to transfer to UC you must:
 - a. Complete 60 semester (90 quarter units) of transferable credit with a 2.40 GPA, taking no more than 14 semester (21 quarter units) Pass/No Pass.

- b. Complete the following course pattern, earning a grade for leadership, such as significant community service or significant participation in student government; or other significant experiences or achievements that demonstrate the applicant's promise for contributing to the intellectual vitality of a campus.
 - Completion of special projects undertaken either in the context of the college/university curriculum or in conjunction with special school events, projects or programs cosponsored by the college/university, community organizations, post-secondary educational institutions, post-secondary educational institutions, other agencies or private firms, that offer significant evidence of an applicant's special effort and determination or that may indicate special suitability to an academic program on a specific campus.
 - Academic accomplishments in light of the applicant's life experiences and special circumstances. These experiences and circumstances may include, but are not limited to, disabilities, low family income, first generation to attend college, need to work, disadvantaged social or educational environment, difficult personal and family situations or circumstances, refugee status or veteran status.
 - Location of the applicant's college and residence. These factors shall be considered to provide for geographic diversity in the student population and also to account for the wide variety of education environments existing in California.

Advanced Standing (Transfer) Selection Guidelines

An advanced standing student is one who has been a registered student in another college or university or in college-level extension classes other than a summer session immediately following high school graduation. Advanced standing applicants may not disregard their college records and apply for admission as a freshman.

To be eligible for admission, applicants must meet the University's undergraduate admission requirements. The following guidelines provide the framework within which the campuses establish procedures for selecting applicants when the number of eligible applicants exceeds the places available.

Each campus develops enrollment targets that specify the number of new freshman and advanced standing students expected to enroll. Campuses that receive more applications than the number required to meet their enrollment target admit students using the criteria described below.

Primary emphasis in the selection will be given to the criteria related to academic performance (first four bulleted items). Consideration also will be given to other criteria to assess applicants' overall promise of success and to achieve strength and diversity in campuses' advanced standing student body (last four bullets).

Priority consideration for admission will be given to students eligible for transfer as juniors. Consideration may include the following:

- Completion of a specified pattern or number of courses that provide continuity with upper division courses in the major.
- Grade point average in all transferable courses.
- Participation in academically selective honors courses and/or programs.
- Special talents, achievements and awards in a particular field, such as in the visual and performing arts or in athletic endeavors; special skills, such as demonstrated written and oral proficiency in other languages; special interests, such as intensive study and exploration of other cultures; experiences that demonstrate unusual promise for leadership, such as significant community service or significant participation in student government; or other significant experiences or achievements that demonstrate the applicant's promise for contributing to the intellectual vitality of a campus.
- Completion of special projects undertaken either in the context of the college/university curriculum or in conjunction with special school events, projects or programs cosponsored by the college/university, community organizations, post-secondary educational institutions, post-secondary educational institutions, other agencies or private firms, that offer significant evidence of an applicant's special effort and determination or that may indicate special suitability to an academic program on a specific campus.
- Academic accomplishments in light of the applicant's life experiences and special circumstances. These experiences and circumstances may include, but are not limited to, disabilities, low family income, first generation to attend college, need to work, disadvantaged social or educational environment, difficult personal and family situations or circumstances, refugee status or veteran status.
- Location of the applicant's college and residence. These factors shall be considered to provide for geographic diversity in the student population and also to account for the wide variety of education environments existing in California.

High school proficiency examination

Transfer applicants who have passed a high school proficiency examination must also meet regular university entrance requirements.

Transfer Opportunity Program (TOP)

The Transfer Opportunity Program (TOP) exists at American River College to assist ARC transfer students in the transition to the University of California at Davis. A transfer advisor from UC Davis is available once a week in the Counseling Center at ARC to assist students in fulfilling admission requirements, lower division major requirements, breadth requirements, and screening requirements in selective majors.

If you are interested in meeting with the UC Davis transfer advisor, make an appointment in the Transfer Center.

See over for 2011-12 IGETC

2011-12 IGETC (for CSU and UC)

(Intersegmental General Education Transfer Curriculum for transfer to the University of California and California State University)

Final status of this information was unavailable at publication time. Contact the ARC Counseling Center at (916) 484-8572 for 2011-12 requirements.

Completion of all the requirements in the Intersegmental General Education Transfer Curriculum (IGETC) will permit a student to transfer from a community college to a campus in either the California State University or University of California system without the need, after transfer to take additional lower-division general education courses. The course requirements for all areas should be completed before transfer. All courses must be completed with grades of “C” or better.

NOTE: Student must see a counselor to have this pattern certified before transferring. Students who have selected a specific campus for transfer should consult with an ARC counselor before following the IGETC pattern.

CSU/UC will always accept completion of general education coursework at certifying institutions provided the course was on an approved IGETC requirement list at the time it was completed.

Advanced placement (AP) and International Baccalaureate Examinations are appropriate for inclusion in the IGETC. See AP/IB Test Scores Chart in the Getting Started section of the ARC catalog.

ARC Transfer Curriculum (IGETC) 2011-12

AREA 1: English Communication (6-9 units)

1 A (1 Course)	ENGWR 300, 480 Note: (UC Only) ENGWR 300 & 480 combined: maximum credit – 1 course.
1 B (1 Course)	ENGWR 301, 302, 481, 482 Note: (UC Only) ENGWR 301 & 481 combined: maximum credit – 1 course. ENGWR 302 & 482 combined: maximum credit – 1 course.
1 C (1 Course)	SPEECH 301, 331 (CSU requirement only)

AREA 2: Mathematical Concepts and Quantitative Reasoning (3 units)

2 A (1 Course)	MATH 340, 344, 350, 351, 370, 400, 401, 402, 410, 420; PSYC 330; STAT 300 Note: (UC Only) Math 400, 350 & 340 combined: Math 401 & 351 combined – maximum credit 1 course for each set. PSYC 330 & STAT 300, 301 combined: maximum credit – 1 course
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AREA 3: Arts and Humanities (9 units, at least 1 course from Arts and 1 course from Humanities)

3 A Arts (1 Course)	ARTH 300, 302, 308, 310, 322, 333, 334; MUFHL 300, 310, 311, 315, 321, 330, 400, 401, 410, 411, 480; TA 300, 302, 303, 306, 310, 312, 314, 315, 318, 350, 480 Note: (UC Only) No Credit for MUFHL 321 if taken after 400. MUFHL 300 & 480 combined: maximum credit – 1 course. TA 350 & 480 combined: maximum credit – 1 course. TA 312, 481 & 314, 315 combined: maximum credit – 6 units
3 B Humanities (1 Course)	ENGLT 300, 304, 310, 311, 320, 321, 327, 338, 340, 341, 345, 360, 378, 380, 382, 392, 403; FREN 411, 412; GERM 411, 412; HIST 300, 302, 305, 340, 341, 364, 365, 367, 373, 480, 481; HUM 300, 310, 320, 326, 330, 360, 365; ITAL 411; PHIL 300, 310, 315, 330, 331, 350, 353, 354; SPAN 411, 412 Note: (UC Only) HIST 300 & 480 combined: maximum credit – 1 course. HIST 302 & 481 combined: maximum credit – course.
Area 3A or 3B (1 Course)	

AREA 4: Social & Behavioral Sciences (9 units, at least 3 courses from at least 2 areas)

4 A-J (3 Courses)	ADMJ 300, 320; ANTH 310, 315, 320, 330, 333, 334, 341; BUS 345; ECE 312; ECON 302, 304; GEOG 310, 320, 322; HIST 307, 308, 310, 311, 318, 320, 321, 323, 325, 327, 330, 483, 484; JOUR 320; PHIL 360; POLS 301, 302, 310, 320, 322, 332; PSYC 300, 305, 320, 340, 356, 361, 370, 372, 373, 480, 481; SOC 300, 301, 320, 325, 342, 350; SOCSOC 310, 312 Note: (UC Only) PSYC 300, 305 & 480 combined: maximum credit – 1 course. PSYC 340 & 481 combined: maximum credit – 1 course. PSYC 372, 373 & ECE 312 combined: maximum credit – course. HIST 310, 320 & 483 combined: maximum credit – 1 course. HIST 311, 321, & 484 combined: maximum credit – 1 course
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AREA 5: Physical and Biological Sciences (7-9 units, must include a lab course related to a lecture course. Lecture must be completed prior to or concurrently with lab.)

5A Physical Science (1 Course)	ASTR 300, 310, 320, 330, 400 L; CHEM 305 WL, 325 WL, 400 WL, 401 WL, 423 WL; GEOG 300, 301 L, 305, 306, 307, 308, 309 L; GEOL 300, 301 L, 305, 306 L, 310, 311 L, 320, 325, 330, 331 L, 342, 345; PHYS 310, 311, 312 L, 350 WL, 410 WL; PS 300, 301L
5B Biological Science (1 Course)	ANTH 300, 301 L, 303, 480; BIOL 300, 303 WL, 305 WL, 310 WL, 342, 350, 352, 370 WL, 400 WL, 410 WL, 420 WL, 430 WL, 440 WL, 442 WL, 482 WL; NATR 320 WL; PSYC 310, 311 L Note: (UC Only) ANTH 300 & 480 combined: maximum credit – 1 course. ASTR 300, 310 & 320 combined: maximum credit – 2 courses. No credit for BIOL 303, if taken after BIOL 310 or 400. BIOL 370 & 482 combined: maximum credit – 1 course. BIOL 300, 303 & 310 combined: maximum credit – 2 courses. No credit for BIOL 300 or 310, if taken after BIOL 400. CHEM 305, 306, 400 & 401 combined: maximum credit – 1 series. CHEM 420 & 423 combined: maximum credit – 1 course. PHYS 350, 360 & 410, 412, 431 combined: maximum credit – 1 series. PHYS 310 & 311 combined: maximum credit – 1 course. No credit for PHYS 310 or 311, if taken after 410 or 350. No credit for GEOL 305, if taken after a college course in Astronomy, Geology, Meteorology or Oceanography. No credit for GEOL 306 if taken after GEOL 300 or 301. No credit for PS 300 if taken after a college level course in Astronomy, Chemistry, Geology, Meteorology or Physics.

UC Requirement Only

6A Language – Not English	Proficiency equivalent to two years of high school study in the same language. Or, the following courses at ARC also will fulfill this requirement: FREN 401, 402, 411, 412; GERM 401, 402, 411, 412; ITAL 401, 402, 411; JAPAN 401, 402; RUSS 401, 402 SILA 305, 306, 315, 316; SPAN 401, 402, 411, 412; Note: Please see a counselor for options for fulfilling this requirement.
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CSU Graduation Requirement Only

U.S. History, Constitution and American Ideals (6 semester units, one course from each group)	Group 1 – POLS 301 Group 2 – HIST 310, 311, 318, 320, 321, 323, 325, 327, 330, 483, 484 Note: If a student used these 2 courses to fulfill AREA 4, the student may need to complete two additional upper division courses in AREA 4 after transferring.
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transfer services and resources

Transfer Center

The Transfer Center provides to students and all staff the most current information to ensure a smooth transition to four-year colleges and universities. Applications, catalogs, and other resource materials, including Internet access, are available to students who are committed to transfer as well as to those exploring the possibility of transfer. Students may talk to community college counselors and meet with admissions advisors from several colleges and universities including, but not limited to, California State University, Sacramento; University of California, Davis; and University of the Pacific. Each of the four-year representatives can assist with other campuses within their system. A calendar listing the dates and times the Transfer Center is hosting college representatives can be found at: arc.losrios.edu/transfer.

Working with ARC counselors, students who meet certain criteria may enter into a Transfer Admissions Agreement (TAA) with Bethany University, Golden Gate University, Humboldt State University, Santa Clara University, UC Davis, UC Irvine, UC Merced, UC Riverside, UC San Diego, UC Santa Barbara, UC Santa Cruz, and the University of the Pacific. TAAs guarantee eligible students admission as juniors to the above campuses.

The mission of the Transfer Center is to help students learn of the many options available to them to continue their studies at four-year colleges and universities. ARC is committed to helping students become better informed so that they may plan for their future with as much knowledge and support as possible. The center is located in the Counseling Center, and also maintains a website [arc.losrios.edu/transfer]. Phone (916) 484-8685.

Transcripts

A transcript is an official record of work completed at American River College, and is required for admission to other colleges and universities.

Two ARC transcripts are furnished free, and others may be ordered for \$2 each, payable in advance. The student must initiate a written request to Enrollment Services or submit their request online through the college website [www.arc.losrios.edu]. A service charge of \$10 is assessed for any transcript requested to be processed within 24 hours. Students may also request transcripts by faxing (916) 484-8865. A credit card number is required for transcripts that are ordered through fax, and a \$10 charge per transcript is imposed.

In this section you will find:

- List of faculty and administrators
- Faculty statement of professional ethics
- Classified staff statement of professional ethics
- Administrator statement of professional ethics
- Campus map



ARC administration

PresidentDr. David Viar

Vice Presidents

Administrative ServicesRaymond Di Giulio
 InstructionColleen Owings
 Student ServicesDr. Pam Walker

Associate Vice Presidents

InstructionDr. Lisa Lawrenson
 Instruction & Learning ResourcesDr. David Redfield
 Workforce Development & Business.....Cris McCullough

Deans

Behavioral and Social Sciences.....Carol Pottorff
 Business & Computer ScienceDr. Derrick Booth
 Counseling and Student Services.....Jeffrey Stephenson
 EnglishDr. Tammy Montgomery
 Enrollment Services.....Dr. Robin Neal
 Fine & Applied ArtsDr. Adam Karp
 Health & Education.....Dr. Steven Boyd
 HumanitiesKathleen F. Jaques
 Kinesiology & AthleticsJean Snuggs
 MathematicsNancy Reitz
 Natomas Education Center.....Sheryl Gessford
 Off-Campus Centers & Extension ServicesJ.V. Thompson
 Planning, Research & DevelopmentDr. Jane de Leon
 Science and Engineering.....Dr. Rina Roy
 Student Development.....Manuel Perez
 Student Support Services.....Eddie Webb
 Technical EducationGabriel Meehan

Other Administrative Staff

Director, Administrative Services.....Laduan Smedley
 Manager, Bookstore.....Koue Vang
 Director, College Advancement.....Kirsten DuBray
 Public Information OfficerDr. Stephen Peithman

faculty and administrators

- ABDUL, ALISHER (1997)
Mathematics
M.S., Moscow St. University
B.S. National University
Ph.D., Moscow Institute of Technology & Physics
- ABRAHAM, LOIS ANN (2003)
English
B.A., M.A., CSU Chico
- AFONSO, PAULO (2010)
Astronomy
B.S., University of Lisbon, Portugal
M.S., University of Lisbon, Portugal, and UC Davis
Ph.D., Max Planck Institute for Extraterrestrial Physics, Munich
- AGBUNAG, RODERIC (2010)
Counselor
B.A., M.S., CSU Sacramento
- AGUILAR, GARY (1999)
Design Technology
B. Architecture., Cal Poly, San Luis Obispo
- AHMADI, AL (2008)
Electronics
B.S., University of Oklahoma
M.S., Golden Gate University
- ALEJANDRE, BECKY (1992)
Nutrition
B.A., UC Riverside
M.A., Loma Linda University
- ALLRED-POWLESS, JEANNETTE (2003)
Physical Education
B.S., CSU Northridge
M.S., University of West Florida, Pensacola
- ANDERSON, MELINDA W. (2001)
English as a Second Language/English
B.A., M.A., CSU Sacramento
- ANDERSON, RICK D. (2001)
Physical Education
B.S., M.S., CSU Sacramento
- ANDRE, PAUL (1996)
Mathematics
B.S., University of Minnesota
M.A., CSU Sacramento
- ANDRE, SUSAN (1999)
Counseling
B.S., CSU Fullerton
M.A., San Jose State University
- ANGELONE, MICHAEL (2008)
English
B.A., M.A., CSU Sacramento
- ANTOS, DAMON (2002)
Computer Information Science
B.S., Cal Poly, San Luis Obispo
M.S., Rutgers State University
- ARAMBEL, LEAH A. (2006)
Reading
B.A., UC Davis
M.A., San Francisco State University
- ARDANS, R. DIANE (1992)
Accounting
A.S., Solano Community College
B.S., UC Berkeley
M.B.A., Golden Gate University
- ARELLANES, PAUL (2006)
Physical Education
A.A., Cosumnes River College
B.S., CSU Sacramento
M.S., US Sports Academy, Daphne, AL
- ARRIETA, CORINNE (2006)
Spanish
B.A., Grove City College
M.A., CSU Sacramento
- ATWATER, KEITH (2002)
Humanities
B.A., Chapman College
M.A., College of Notre Dame
M.A., CSU Sacramento
- AUBERT, JOHN E. (1999)
Geography
B.A., CSU Stanislaus
M.A., UC Davis
- AUCOIN-RATCLIFF, DEBRA (2003)
Nursing
B.S.N., Point Loma Nazarene University
M.A. Nursing, University of Iowa
D.N.P., Case Western Reserve University
- AUYEUNG, TAK (2000)
Computer Information Science
M.S., Ph.D., U.C. Davis
- AYALA, CONNIE C. (2006)
Cooperative Work Experience and Internship
B.S., UC Davis
M.S., CSU Sacramento
- BADILLA, ARACELI (2008)
Beacon Program Coordinator
A.A., West Valley College
B.A., Santa Clara University
Ed.M., Harvard University
- BAKER, GREGORY (2000)
Business
B.A., M.S., Chapman University
B.S., University of Maryland
- BARCELLOS, ANTHONY (1987)
Mathematics
A.A., Porterville College
B.S., California Institute of Technology
M.S., CSU Fresno
Ph.D., UC Davis
- BATES, BRIAN (1998)
Humanities
B.A., Otterbein College; M.A., M.Ed., University of Arizona
- BATES, ROBERT G. (1969)
English
B.A., Wheaton College
M.A., CSU Long Beach
- BELL, HERBERT G. (1990)
Engineering
B.S., Northeastern University, Boston
B.S., University of Vermont, Burlington
M.S., UC Davis
Ph.D., University of San Francisco
- 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
- BETHEL, PAUL (2003)
History
B.A., San Francisco State University
M.A., CSU Long Beach
- BEVENS, MEGAN (2009)
Counseling
A.A., American River College
B.A., UC Santa Barbara
M.S., CSU, Sacramento
- BIRCHALL, JILL (2011)
Sign Language
B.S., Gallaudet University, Washington
M.S., McDaniel College
- BIRDSALL, LILL H. (2006)
Mathematics
B.S., M.A.T., UC Davis
- BLACK, BETHANI, A (2000)
Physical Education
A.S., Ventura College
B.S., CSU Fresno
M.S., US Sports Academy, Daphne, AL
CR/M.A., Chapman University
- BLACK, ERIC (2005)
Physical Education
B.S., San Jose State University, M.A., Saint Mary's College, Moraga

- BONHAM, JACQUELINE (2003)
Nursing
M.S.N., B.S.N., CSU Sacramento
- BOOTH, DERRICK (2007)
Dean, Business and Computer Science
B.S., CSU Chico
M.S., Ph.D., University of Washington
- BOVARD, VICTORIA (1997)
Psychology
B.A., University of Texas
M.A., UC Berkeley
- BOYD, STEVEN (2008)
Dean, Health and Education
B.S., Louisiana State University
M.B.A., CSU, Fresno
Ed.D. University of Southern California
- BOYLE, ROBERT (1980)
Automotive Technology
A.A., American River College
- BRACCO, PAUL (2000)
English as a Second Language
B.A., University of Rochester, New York
M.A., CSU Sacramento
- BRADSHAW, KATHRYN (2003)
Biology
B.A., UC, Santa Cruz, M.S.
CSU Sacramento
- BRECHER, JANET (2000)
Computer Information Science
A.A., Sacramento City College
B.S., M.B.A., CSU Sacramento
- BREDEK, CYNTHIA (2008)
Mathematics
B.S., University of South Florida
M.S., University of Central Florida
- BREITENBACH, NATASHA FRATELLO (2002)
Psychology
A.A., Ventura College
B.A., UC Santa Barbara
M.S., University of La Verne
- BRENCHLEY-JACKSON, JOAN (1995)
Biology
B.S., M.S., Ph.D., UC Davis
- BRITTINGHAM, DANA LYNN (1989)
Counseling
B.A., CSU Northridge
M.S., CSU Sacramento
- BRODERICK, SHAWN (2010)
Sign Language Studies
B.P.A., Seattle University
M.A., Gallaudet University
- BROWN, JAMES M. (1982)
Electronics
A.A., American River College
B.V.E., CSU Sacramento
- BROZOVICH, TOM J. (1965)
Art
M.A., UCLA
- BUI, THUAN T. (1981)
Counseling
B.A., M.A., CSU Sacramento
- BURCHETT, KAREN G. (2006)
English
B.A., CSU Bakersfield
M.A., CSU Fresno
Ph.D., UC Davis
- BURLESON, KATHRYN B. (1989)
Theatre Arts
B.A., CSU Sacramento
M.F.A., UC Davis
- CAMPBELL, DOLORES DELGADO (1977)
Social Science
B.S., University of Texas
M.A., M.S., CSU Sacramento
- CASALE, KRISTIN G. (1994)
Chemistry
B.A., U.C. Berkeley
Ph.D., U.C. Davis
- CASE, LYNDA (2001)
English
A.A., Sierra College
B.A., UC Davis
M.A., CSU Sacramento
- CASPER-DENMAN, KRISTINA (2002)
Anthropology
B.A., Boston College
M.A., Arizona State University
- CERVANTES, ALINA (2001)
Early Childhood Education
B.A., UC Davis
M.A., CSU Sacramento
- CHAMPION, KATHY L. (1982)
Library
B.A., CSU Chico
M.L.S., University of Oregon
- CHAO, PAMELA HUANG (1996)
Sociology
B.A., M.A., University of Chicago
- CHEN, CHUPING (1998)
Economics
B.A.S., UC Davis
M.A., CSU Sacramento
- CHOU, SUSAN (2005)
Nutrition
B.A., B.S., M.S., Ph.D., UC Davis
- CHOW, LORRAINE (1997)
Early Childhood Education
B.S., UC Davis
M.A., UC Santa Barbara
- CHRISTIANSEN, CHERYLE L. (1990)
Nursing
B.S., University of Wisconsin, Madison
M.S.N., University of Nebraska Medical Center, Omaha
- CHUN, ERIC (1988)
Music
B.A., California Lutheran University
- CHUNG, JULIE TZU C. (2005)
Mathematics
M.S. UC Irvine
B.A., UC Berkeley
- CLARK, CHRISTOPHER (2005)
Counseling
A.A. West Valley College
B.A., M.S., San Francisco State University
- CLARKE, ARLENE G. (1989)
English
B.A., M.A., San Francisco State University
Ph.D., UC Berkeley
- COLDIRON, JOHN L. (1979)
Respiratory Care
A.A., A.S., San Bernardino Valley College
B.A., CSU Stanislaus
- COLLIHAN, KATHLEEN (2001)
Political Science
B.S., Santa Clara University
M.A., San Jose State University
Ph.D., UC Santa Barbara
- COOLEY, MARIE K. (1998)
Interior Design
A.A., College of the Sequoias
B.A., M.A., CSU Sacramento
- COOPER, MICHAELA B. (2005)
English
B.A. equiv., Eberhardt-Karls-Universitaet, Tuebingen, Germany
B.A., CSU Sacramento
Ph.D., George Washington University
- COLLINS, LYNNE (1991)
English
B.A., M.A., San Francisco State University
- CONDOS, MARC (2002)
Computer Information Science
B.S., CSU Fresno
M.A., CSU, Sacramento
- CORBIN, KIRSTEN B. (2006)
English
B.S., M.A., San Francisco State University
- CORCORAN, AMANDA (2002)
English
B.A., M.A., Texas Tech University

- CREIGHTON, ANN (1999)
English as a Second Language
B.A., Arizona State University
M.A., CSU Los Angeles
M.A., University of Michigan
- CRONIN, KATHLEEN (2005)
Counseling
B.A., UC Santa Barbara
M.A., San Francisco State University
- CRUMP, DANIEL (1996)
Library
B.A., UC Irvine
M.S.L.S., University of Southern California
- CUDZILO, MILDRED (1988)
Counseling
B.A., Denison University, Ohio
M.A. Ed., Stanford University
M.A., University of Kansas
- CULLIVAN, KRISTIN (2003)
Speech
B.A., M.A. San Francisco State University
- DAVIS, ARON (2004)
Funeral Service Education
B.A., CSU Sacramento
- DAVIS, WILLIAM (2004)
MESA/C CCP
A.S., Santa Rosa Junior College
B.A., M.A., Sonoma State University
M.S., Ph.D., UC Davis
- DeCEW-JURACH, PAMELA K. (1994)
Speech
B.A., CSU Sacramento
M.A., Pennsylvania State University
- DECKERT, WALTER (2002)
Mathematics
B.S., University of Nebraska
M.S. Naval Post Grad School
Ph.D., Pennsylvania State University
- De LAPP, JAN (1999)
Early Childhood Education
B.A., M.A., CSU Sacramento
- DeLEON, JANE (1989)
Dean, Planning, Research, Technology and Professional Development
A.B., UC Davis
Ph.D., Stanford University
- DeLEON, LEONEL (1991)
Mathematics
B.A., M.A., CSU Fresno
- DELGADO, DIANE (2005)
EOP&S
A.A., Portland Community College; B.A., Marylhurst University
M.S., Portland State University
- DELGADO, LISA (2003)
Physical Education
A.A., College of the Siskiyous
B.A., M.A., CSU Chico
- DIAMOND, ROBERT V. (1999)
Accounting
B.S., M.B.A., CSU Sacramento
- DI GIULIO, RAYMOND (2011)
Vice President, Administrative Services
B.A., UC Davis
M.A., UC Berkeley
- DILLON, DONALD E. (1999)
Physical Education
B.A., CSU Sacramento
- DOWNS, PAMELA (2008)
Theatre Arts
B.F.A., Southwest Missouri State University
M.F.A., UC Davis
- DUAX, PAUL L. (2001)
Speech
B.A., Loras College, Iowa
M.A., UC Davis
- DUMAIS, LAURENCE (1999)
Computer Information Science
A.A. San Jose City College
B.A., San Jose State University
M.S., Golden Gate University
- ECKERMAN, PAMELA J. (1993)
Biology
A.A., American River College
B.S., M.S., UC Davis
- EIFERTSEN, DYNE CHANEN (2003)
Music
D.M.A., University of Washington M.M., University of Massachusetts
- EMERY, GARY R. (1985)
Mathematics
B.S., M.S., UC Davis
- ENGLER, DENISE (2008)
English
B.A., Santa Clara University
M.A., Arizona State University
- ENGLISH, JOANNE C. (1989)
Physical Education
B.S., CSU, Sacramento
M.S., Washington State University
- ENNENGA, LINDA (1997)
Counseling
B.A., M.S., CSU Sacramento
- ENSHAI, AZIN (1999)
Mathematics
B.A., University of Rhode Island
M.A., CSU Sacramento
- ETGEN, BENJAMIN (2004)
Mathematics
B.S., California State University, Sacramento
M.A.T., UC Davis
- EVANGELISTI, FRED (1998)
Electronics Technology
A.A., American River College
B.A., CSU Sacramento
M.A.V.E., Consortium of CSU
- FERRARA, CORNELIA W. (2001)
Library
B.A., Rutgers University-Douglass College
M.L.S., San Jose State University
- FERTEL, Kristine (2003)
English as a Second Language
B.A. UC Riverside
M.A., San Francisco State University
- FINNECY, TIMOTHY J. (2006)
Physical Education/Athletics
B.S., West Virginia University
M.Ed., Las Vegas University
- FISH, MELISSA (2002)
Office Administration
B.A., Boston College
M.B.A., CSU Sacramento
- FLOWER, DEBORAH (2008)
Horticulture
B.S., Rutgers University
M.S., UC Davis
- FORTMAN, ANITA (2005)
Counseling
B.S., CSU; M.S., University of Arizona
- FOUNTAIN, PAULINE (1997)
Reading
A.A., American River College
B.A., M.A., CSU Sacramento
- FOX, DAVID E. (1998)
Computer Information Science
A.A., Columbia College
B.S., CSU Stanislaus
M.S., UC Davis
- FOX, KATHLEEN A. (2005)
Nursing
M.S.N., Case Western Reserve University
G.N.M., Frontier School of Midwifery
B.S.N., University of Utah
- FRENCH, BENJAMIN R. (2005)
Technical Education
A.S., Sierra Community College
B.V.E., CSU Sacramento
- FULGHAM, ROIETTA G. (1976)
Business
B.S., M.S., Utah State University

- FULLER, HEIDI (2009)
Business
A.A., Cosumnes River College
B.B.A., National University, Sacramento
M.B.A.-M.I.S., National University, Sacramento
- GAMBER, JOHN (1997)
English as a Second Language
A.B., Rutgers University
M.A., UC Berkeley
M.A., UC Davis
- GARCIA, INES (2008)
Spanish
Baccalaureate Degree, Uni. of Salamanca and Uni. of Valladolid, Spain
M.A., CSU Sacramento
- GARDNER, DOUGLAS F. (1960)
Art
A.A., Sacramento City College
B.A., M.A., CSU Sacramento
- GARNER, CHERI (2008)
Nursing
A.D.N., American River College
B.S.N., M.S.N. Ed, University of Phoenix
- GARVEY, ANDREA P.P. (2003)
Psychology
B.A., Federal University of Pernambuco, Brazil
M.S., Ph.D., University of Utah
- GAUDARD, AMY L. (2006)
Mathematics
B.S., M.A., MAT, UC Davis
- GELFMAN, LINDA (2003)
Art
M.A. CSU Sacramento
B.F.A., University of Illinois, Urbana
- GEORGE, GARY T. (2002)
Electronics
A.A., Golden West College
A.S., American River College
B.S., Cal Poly, Pomona
- GESSFORD, SHERYL A. (1982)
Dean, ARC Natomas Education Center
B.S., Oregon State University
M.Ed., University of Portland
- GIBSON, PATRICE V. (1991)
Anthropology
B.A., M.A., Ph.D., UCLA
- GILLOGLY, BARBARA G. (1992)
Psychology
A.A., American River College
B.A., M.A., CSU Sacramento
Ph.D., UC Davis
- GILMAN, JOSEPH A. (1992)
Music
B.M., Indiana University
M.M., Eastman School of Music, NY
Ed.D., University of Sarasota
- GIORGI, MARK R. (1998)
Physical Education
A.A., Santa Rosa Junior College
B.S./B.A., University of Tulsa
M.A., Saint Mary's College
- GIUSTI, ANTHONY (2001)
Nutrition
B.S., M.S., UC Davis
- GOMEZ, MARTIN (2008)
Counseling
B.A., UC, Davis
M.A., CSU, Sacramento
- GONSALVES, JANA L. (2005)
Nutrition
B.S., Cal Poly
Ph.D., U.C.Davis
- GONZALES, ALLEN (2009)
Respiratory Care
A.A., East Los Angeles College
B.A., CSU Los Angeles
M.Ed., Jones International University
- GONZALEZ, ROBERT (2000)
Business
B.A.B.S., CSU Sacramento
M.B.A., Loyola Marymount University
J.D., Loyola Law School
- GOOLD, GRANT (1997)
Paramedic
B.A., CSU Sacramento
M.P.A./H.S.A., Ph.D., Education
University of San Francisco
- GOURDINE, TRACI, L (2000)
English
B.A., UC, Davis
M.A., San Francisco State University
- GRANT-TOSCANO, DIANE (2009)
Fashion
B.S., California Polytechnic State University
- GREEN, RENE (1976)
Automotive Technology
B.S., M.A., CSU Consortium, Sacramento
- GREEN, WESLEY, P. (2001)
Computer Information Science
A.A., Chabot College
B.S., CSU Chico
- GUNSAULS, DARLINE (2003)
Sign Language Studies
B.S., Gallaudet University,
Washington DC
- GUPTA, SHASHI (1991)
Mathematics
B.A., Miranda College, India
M.A., University of Delhi, India
- HAFlich, GERALD (2002)
Physical Education
A.A., Ventura Junior College
B.S., CSU Sacramento
M.S., US Sports Academy
- HAIN, ASHLIE (2009)
Physical Education
B.A., UC Irvine
M.S., Azusa Pacific University
- HALLE, JOEL (2003)
Accounting
B.S., M.B.A., CSU, Sacramento
- HALSETH, ANDREW (2002)
Mathematics
A.A., Solano College
B.A., M.A., San Diego State University
- HAMRE, SUSAN (2009)
Music
B.A., Augustana College
M.M., CSU Northridge
- HANSON, PAUL (1997)
Physical Education
B.A., Cal Poly, San Luis Obispo
M.S., CSU Sacramento
- HARPER, ERIC (2002)
Automotive Technology
A.S., Sierra College
- HARRIS-NEBLETT, CHARLOTTE (2007)
Nursing
B.A., Fisk University
B.S., M.A., CSU Sacramento
- HARRISON, WEI-JEN (1971)
Mathematics
B.S., CSU Los Angeles
M.A., Washington State University
- HARTIN, ROBERT (2002)
Counseling
B.A., UC Davis
M.A., CSU, Sacramento
- HARTMAN, CAROL M. (2001)
Journalism
B.A., University of Illinois
M.A., University of Madison, Wisconsin
- HASHIMA, EDWARD (1999)
History
M.A., Ph.D., UCLA
- HAYES, REBECCA W. (2001)
Computer Information Science
M.A., University of San Francisco
B.S., CSU Sacramento
- HEEREN, CHRISTOPHER (2011)
Mathematics
B.A., M.A., CSU, Sacramento
- HERLACHE, MARSHA (1999)
Business Education
B.S., University of Montana
M.A., University of San Francisco

- HERNANDEZ, CECILIA (1998)
Physics/Physical Science
B.S., M.S., University of Puerto Rico
- HERRELL, KIM (2002)
Counseling
B.A., UC Davis
M.S., University of LaVerne
- HERRLINGER, GARY D. (1985)
Design Technology
B.S., UC Davis
M.A., CSU Sacramento
- HESS, JOHN F. (2000)
English
B.A., CSU Humboldt
M.A., CSU Sonoma
- HESS, KRISTA (1998)
English as a Second Language
B.A., M.A., CSU Sacramento
- HICKS, DIANA L. (2001)
English
A.A., American River College
B.A., M.A., CSU Sacramento
- HIGGINS, KEVIN J. (1987)
Physical Education
B.S., CSU, Sacramento
M.S., South Dakota State University
- HIJAZI, NIDAL (2003)
Sociology
B.S. Santa Clara University
M.A., UC Davis
- HOGGAN PATRICK (2002)
English as a Second Language
B.A., Brigham Young University
M.A., UC Davis
- HOKERSON, LORI (2008)
Psychology
B.A., M.A., Saint Mary's College
- HOLDEN, DENNIS (1991)
Philosophy
B.A., UCLA
M.A., Ph.D., UC Irvine
- HONG, TAMILYN W. (1998)
Chemistry
B.S., University of Hawaii
M.S., UC Davis
- HOOKER, JODIE (2002)
Art
B.F.A., M.A., Alfred University
M.F.A., University of Buffalo
- HOWARD, HUGH H. (2005)
GIS/Geography/Earth Science
B.A., M.A., San Francisco State University
M.S., Stanford University
Ph.D., University of Kansas
- HOWE, SUSAN R. (1996)
English
B.S., M.A., CSU Sacramento
- HUETER, ROBYN (2010)
College Nurse
B.S.N., Southern Connecticut State University
Master of Public Health, University of Connecticut
- HUGHES, RALPH E (1991)
Music
B.A., M.A., CSU Sacramento,
D.M.A. (Conducting), University of South Carolina
- IANNONE, ALBERT J. (1994)
Fire Technology
A.A. American River College
E.F.O., National Fire Academy,
Emmitsbert, MD
M.P.A., B.V.E., CSU Sacramento
- IRVINE, ROBERT (1997)
Computer Information Science
B.A., M.B.A., Golden Gate University
- JABERY-MADISON, BOBAK (2009)
Physical Education
A.A., American River College
B.A., UC Davis
- JAECKS, GLENN (2007)
Geology
B.S., University of Wisconsin
M.S., University of Colorado
Ph.D., UC Davis
- JAMES, JON (1980)
DSP&S/Counseling
B.A., M.S., CSU Sacramento
- JAMES-HARDWICK, CHANIN (2008)
Counseling
B.A., UC Davis
M.A., University of Phoenix
- JAQUES, KATHLEEN F. (1994)
Dean of Humanities
B.A., University of Alaska
M.A. CSU Sacramento
- JAROSICK, CHARISSA (2007)
SRPSTC
B.A., California State University
M.A., National University
- JEYDEL, ALANA (2007)
Political Science
B.A., Trinity College
M.A., Ph.D., American University
- JOE, DONALD (2007)
Automotive Technology
B.S., CSU Sacramento
- JOHNSTON, DIANA LYNN (2003)
Nursing
BSN, M.S., CSU Sacramento
- JONES, MARIE (2010)
Early Childhood Education
A.A., American River College
B.S., CSU Chico
M.A., CSU Sacramento
- JORGENSEN, GREGORY, M. (2000)
Chemistry
B.S., Ph.D., UC Davis
- JOYE, ALLYSON, C. (2001)
English as a Second Language
B.A., UC Davis
M.A., Monterey Institute
- JUMELET, DOUG A. (2005)
Physical Education
A.A., American River College and
Sacramento City College
B.S., M.S., Cal Baptist University,
Riverside
- KARP, ADAM (1999)
Dean, Fine and Applied Arts
B.A., Ph.D., UC Davis
- KELLER, ROBERT (2000)
Computer Information Science
B.A., CSU Fullerton
- KIEFER, CHRISTIAN (2009)
English
B.A, USC
M.A., CSU Sacramento
Ph.D., UC Davis
- KIEFER, DIETER M. (2001)
Accounting
A.A., B.S., Metropolitan State College,
Denver
M.B.A., University of Denver
- KINOSHITA, RORY M. (2006)
Mathematics
B.S., Sonoma State University
M.S., UC Davis
- KINUTHIA, F. KAMAU (2001)
Economics
B.A., Principia College, Illinois
M.S., UC Davis
- KLEEMAN, JOANN (1988)
Nursing
A.S., Long Beach City College
B.S.N., Sonoma State University
M.S.N., University of San Francisco
- KLIER, JULIE ANN (2003)
Reading
M.Ed., National University, Sacramento
- KNIRK, BRIAN (1999)
Hospitality Management
B.S., Cal Poly, Pomona
M.B.A., University of Southern
California

- KOMURA, KEIKO (1999)
English as a Second Language
A.A. Sacramento City College
B.A., UC Davis
M.A., CSU Sacramento
- KRAFT, MARY ELLEN (2011)
Nursing
A.S., Solano College
B.S.N., Regents College
M.S., UC, San Francisco
- KRESS, MARIANNE (2002)
Early Childhood Education
B.A., M.A., CSU Sacramento
Ed.D., Nova University
- KRONICK, LOUISE (1980)
Counseling
B.A., UC Berkeley
M.S., CSU Sacramento
- KUBO, KENNETH M. (1998)
Biology
B.S., Stanford University
Ph.D., UC San Francisco
- LaPIERRE, ARTHUR (1997)
Music
A.A., Fullerton College
M.A., B.M., CSU Long Beach
D.A., University of Northern Colorado
- LARABEE, CHARLES (2002)
Computer Information Science
A.A., Shasta Community College
B.S., CSU Chico
- LAWRENSON, LISA AGUILERA (2006)
Associate Vice President, Instruction
B.A., University of Puget Sound
M.A., Western Washington University
Ph.D., Oregon State University
- LEE, DENNIS J. (2007)
English
B.A., Miami University
M.A., University of Akron
- LEEVEER, CAROL E. (2001)
Computer Information Science
B.A., M.A., CSU Sacramento
- LEHMANN, SARAH (2008)
Library
B.A., Occidental College
M.L.I.S., UCLA
- L'ESTRANGE, MICHAEL (2001)
Computer Information Science
A.A., Sacramento City College
B.A., CSU Sacramento
- LEVY, MELISSA H. (1999)
Earth Science
B.S., M.A., East Tennessee State University
- LIMMANEERASERT, ORANIT (2001)
English as a Second Language
B.A., Michigan State University
M.A., Ph.D., University of Hawaii
- LLORENS, JOHN B. (1992)
Spanish
B.A., San Diego State University
M.A., CSU Sacramento
- LOGAN, THOMAS E. (2000)
English
B.A., San Francisco State University
M.A., Ph.D., UC Davis
- LOPEZ, DAVID (2000)
Philosophy
A.A. Solano College
B.A., CSU Sacramento
M.A., Ph.D., UC Davis
- LOUCKS, STUART (2000)
Physics
B.S., M.S., UCLA
- LUDOVINA, CEYDY. B. (2002)
Spanish
B.S., Universidad de las Americas
M.A., UC San Diego
- LYMAN, ROBERT G. (2000)
English
A.A., American River College
B.A., M.A., CSU Sacramento
- MacGOWAN, PAUL (1997)
Horticulture
B.S., M.S., Cal Poly, San Luis Obispo
- MADDOCK, PAMELA D. (1992)
Art
B.F.A., Colorado University
M.F.A. Washington State University
- MADDOX, MICHAEL W. (2006)
Chemistry
B.Sc. Hons, Bath University, UK
Ph.D., Oxford University, UK
- MAERO, RAYE B. (1996)
Physical Education
B.A., UC Davis
M.A., CSU Long Beach
- MAGRI, KEN (1991)
Art
CA College of Arts and Crafts, Oakland
B.A., CSU Chico
M.A., CSU Sacramento
- MAGUIRE-FONG, MARY JANE (1989)
Early Childhood Education
B.A., M.S., UC Davis
- MANDUCA, JERRY A. (2005)
Sacramento Regional Public Safety Training Center
A.A., American River College
B.A., Union Institute and University, Sacramento
M.S., CSU Long Beach
- MAR, JAMES K. (1976)
Counseling
A.A., Sacramento City College
A.A., American River College
B.A., San Francisco State University
M.S., CSU Sacramento
- MARTIN, ERIC (1999)
Paramedic
B.A., CSU, Chico
M.A., University of Nevada
- MARTINELLI, ESTER (2007)
Foreign Languages
B.A., CSU Chico
M.A., CSU Sacramento
- MARTINEZ, CRAIG (2008)
Art New Media
B.S., UC Davis
- MARTINEZ, MARLENE (2004)
Biology
B.S., U.C. Davis
Ph.D., UC Berkeley
- MARYATT, VICTORIA (1998)
Nursing
B.S.N., M.S.N., University of San Francisco
- MATTSON, SARAH S. (2006)
Art
B.F.A., M.F.A., CSU Long Beach
- MATSUNAMI, JOLINE R. (1990)
Physical Education
A.A., Rio Hondo Community College
B.S., Cal Poly
M.A., Eastern Washington University
- MAYS, JUDY (2005)
Counseling
A.A., Bakersfield Community College
B.A., CSU Bakersfield
M.A., Cal Poly, San Luis Obispo
Ph.D., University of Texas
- McCAFFREY, EILEEN (2000)
Sign Language Studies
B.A., CSU Sacramento
Ed.M., Oregon State University
- McCARROLL, SHARLEEN (2003)
Mathematics
M.S., B.S., Cal Poly, San Luis Obispo
- McCORMAC, GREGORY (2000)
Biology
B.A., UC Irvine
M.S., CSU Sacramento
- McCORMACK, JOHN (2001)
Automotive Technology
A.A., Sierra College
B.V.E. CSU Sacramento
- McCORMICK, MARCIA (2004)
Psychology
B.S., UC Davis
M.A. UC Santa Barbara

- McCULLOUGH, CRIS S. (2006)
Associate Vice President, Workforce Education Development
B.A., UC Berkeley
M.A., CSU San Jose
Ed.D., University of the Pacific
- McCUSKER, DAVID N. (2005)
Library
B.A., Antioch College, Yellow Springs, Ohio
M.L.I.S., University of Pittsburgh
- McGARRY, AILEEN (2000)
Mathematics
B.A., CSU Sacramento
M.A.T., UC Davis
- McGINLEY, JEWELL (2007)
Counseling
A.A., De Anza College
B.S., Excelsior College
M.A., San Jose State University
- McKAIG, SANDRA L. (1982)
Mathematics
B.S., M.S., Cal Poly, San Luis Obispo
- MEADOR, DIANNE (2003)
Chemistry
B.S., University of Wisconsin
Ph.D., UC Davis
- MEADOWS, DALE (2009)
Chemistry
B.A., University of South Florida
Ph.D., UC Davis
- MEEHAN, GABRIEL (2000)
Dean, Technical Education
B.A., University College, Ireland
M.A., CSU Sacramento
- MENTINK, KATHLEEN (2004)
Nursing
F.N.P., UC Davis
M.S.N., B.S.N., CSU Sacramento
- MERKEL, SYDNEY ANN (2001)
Humanities
B.A., M.A., CSU Sacramento
- MERSON, DAVID N. (1998)
English
B.A., Westmont College
M.A., UC Davis
- MESSER, CARTER-RYAN (2001)
Mathematics
M.A., B.S., UCLA
- MICHAEL, MIRIAM G. (1992)
Management
B.S., Southern Illinois University
M.A., CSU San Bernardino
M.S., Golden Gate University;
Ph.D., La Salle University
- MILANO, ANGELA (2008)
Mathematics
B.A., Sonoma State University
M.S., Texas A&M University
- MILLER, BONNIE (1998)
Counseling
B.S., M.S., CSU Sacramento
- MILLER, DAVID W. (1996)
Psychology/Human Services
A.A., American River College
B.A., M.S., CSU Sacramento
- MILLER, JANET H. (2005)
Biology
B.A. Idaho State and Brigham Young Universities
M.S., CSU Sacramento.
- MITCHELL, EMILIE (2012)
Psychology
B.A., UC, Riverside
M.A., CSU, Long Beach
M.A., Ph.D., U.C. Davis
- MITCHELL, MATT (2003)
Mathematics
B.S., U.C. Davis
M.A., CSU, Sacramento
- MOKHTARZADA, SHAHLA (1992)
Sociology
B.A., M.S., M.A., Ph.D., UC Davis
- MOLINA-KANAE, MARTINA (2005)
Counseling
M.S., University of LaVerne
- MONAGHAN, KATHRYN R. (1985)
Mathematics
B.A., M.A., CSU Sacramento
- MONTGOMERY, TAMMY (2010)
Dean, English
A.A., Cosumnes River College
B.A. & M.A., CSU Sacramento
Ph.D., California Institute of Integral Studies
- MONTGOMERY, THOEUING (2007)
English as a Second Language
A.A., Modesto Junior College
B.A., UC Davis
M.A., CSU Sacramento
- MOORE, CHRISTOPHER (2012)
Automotive Technology
A.S., American River College
- MOORE, JUSTIN A. (2005)
Biology
B.S., CSU Fresno
M.S., UC Davis; M.A.
- MOORE, REYNA (2010)
Counseling
B.A. & M.S., CSU Fresno
- MORENO, MINERVA (1993)
Engineering
B.S., University of Morelos, Cuernavaca, Mexico
M.S., University of Waterloo, Ontario
- MORGAN, ROXANNE (2008)
Reading
B.A., University of Massachusetts
M.A., San Francisco State University
- MORRIS, RONALD R. (2002)
Business/Marketing
B.S., M.B.A., University of Colorado
- MURAKAMI, DEAN M. (1990)
Psychology
A.A., Harbor Junior College
B.A., CSU Long Beach
Ph.D., UC Riverside
- MURANAKA, BRANDON I. (2005)
Mathematics
B.S., M.A.T., UC Davis
M.A., University of Hawaii, Manoa
- MYKITA, SUSAN H. (2006)
College Nurse
N.A., Santa Monica City College
B.S.N., CSU Los Angeles
- NAGI-CONDOS, RACHNA K. (1992)
Marketing/Management
B.S., Cal Poly, Pomona
M.B.A., CSU Stanislaus
- NEAL, ROBIN (2000)
Dean, Enrollment Services
B.A., University of La Verne
M.A., Saint Mary's College
Ph.D., University of La Verne
- NEALE, JENNIFER C. (2006)
Natural Resources/Science
B.A., UC Santa Cruz
M.S., UC Berkeley
Ph.D., UC Davis
- NELSEN, BETTY (1988)
Art New Media
B.F.A., Minneapolis College of Art and Design
M.F.A., UC Davis
- NELSON, ELIZABETH L. (2005)
Psychology
B.A., Trinity University, San Antonio
M.A., UC Santa Barbara
Ph.D., Oklahoma State University, Stillwater
- NELSON, JESSICA (2008)
Counseling
B.S., CSU Chico
M.S., University of Oregon

- NEW, DONALD E. (2006)
Interior Design
B.F.A., Otis Art Institute of Parsons
School of Design
M.A., University of Central Florida
- NIEDZINSKI, EDMUND (2008)
Chemistry
B.S., University of Scranton
Ph.D., UC Davis
- NOBLES, GLORIA J. (1990)
Computer Information Science
B.S., Tennessee State University,
Nashville
M.S., National University, Sacramento
- NOLEN, LUTHER L. (1981)
Chemistry
B.S., M.S., Tuskegee Institute
M.B.A., Golden Gate University
Ed.D., University of San Francisco
- NORDELL, RANDALL (2005)
Business
B.S., CSU Stanislaus
M.A., Fresno Pacific University
Ed.D., Argosy University
- NOWICKI, LAZETTE (2008)
Nursing
B.A., Jamestown College
M.S.N., University of North Dakota
- NUGENT, MARY LOU (1999)
English
B.A., CSU Hayward
A.B. UC Berkeley
M.A., CSU Sacramento
- O'BRIEN, ROXANNE E. (2006)
Hospitality Management
A.A., Skyline College
- ONDRICKA, DEBORAH (2007)
Library
A.A., American River College
B.S., Excelsior College
M.L.S., Texas Woman's University
- O'NEAL, JEFFERY (1998)
Director, Applied Biotechnology
B.S., M.S., Southern Illinois University
- OWINGS, COLLEEN (1996)
Vice President, Instruction
B.A., Pacific Lutheran University
M.S., Western Oregon State
- OTT, 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
- PADGETT, CHRISTOPHER D. (1998)
History
B.A., University of Pacific
M.A., Ph.D., UC Davis
- PALMER, APRIL (2010)
Nursing
A.S., Solano Community College
B.S., M.S., CSU Chico
- PARKER, LAURA (1997)
Art/Computer Graphics
B.A., M.A., CSU Sacramento
- PARKS, JUDY (2008)
Culinary Arts
B.A., CSU Sacramento
- PARRINELLA, LISA M. (2006)
Nursing
A.D.N., Chabot College
B.S.N., University of Phoenix
M.S.N., CSU, Dominguez Hills
- PEARSON, RUDY N. (1995)
History
B.S., Fresno Pacific College
M.S., Ph.D., Washington State University
- PEITHMAN, STEPHEN (1988)
Public Information Officer
B.A., Humboldt State University
M.S.J., Northwestern University
Ph.D., UC Davis
- PEREZ, MANUEL (2009)
Dean, Student Development
B.A., Santa Clara University
M.A., San Diego State University
- PERRAULT, PRISCILLA (1988)
Counseling
B.A., M.A., CSU Sacramento
- PESIS, KAREN, H. (2000)
Chemistry
B.S., M.S., UC Davis
- PETERSON, PATRICIA A. (1984)
Mathematics
B.S., Portland State University
M.S., Stanford University
- PETERSON, SUSAN E. (2001)
Nursing
B.S.N., Statewide Nursing
M.S.N., UC San Francisco
- PEZONE, SUSAN (2008)
English as a Second Language
B.A., SUNY, Stony Brook
M.A., CSU, Sacramento
- PICO, GLENN (2010)
Mathematics
A.A., Diablo Valley College
B.A. & M.A., CSU Sacramento
M.S., University of Minnesota
- POLLARD, MARGARET P. (2001)
Accounting
B.A., UCLA
M.B.A., CSU Sacramento
- POND, BRIAN E. (1988)
Counseling
B.A., M.S., CSU Sacramento
- POTTORFF, CAROL J. (1983)
Dean, Behavioral Social Science
B.A., University of Arizona
M.A., CSU Sacramento
- PRIES, SHANNON S. (2006)
Reading
B.A., Pomona College
M.A., San Francisco State University
- PROAPS, ROBERT (1967)
Business
B.S., J.D., University of San Francisco
- QUINTERO, ROBERT A. (2000)
Counseling
B.A., M.S., San Francisco State University
- RAMIREZ, RICHARD A. (2000)
Counseling
B.A., CSU, Northridge
M.S., San Francisco State University
Ed.D., UC Davis
- RAMOS, FRANK S. (1979)
Welding
B.V.E., M.A.V.E., CSU Consortium,
Sacramento
- RASOR, LORI T. (2000)
Counseling
B.A., M.S., CSU Sacramento
- RAU, MARK, J. (2000)
English as a Second Language
B.A., University of Massachusetts
M.A., University of Wisconsin
- READ, KATHLEEN A. (1987)
Learning Resource Center Coordinator
B.A., M.A., CSU Sacramento
- REDFIELD, DAVID A. (2009)
*Associate Vice President, Instruction
& Learning Resources*
B.A., Pt. Loma Nazarene University
Ph.D., University of Nevada, Reno
- REESE, MARK ALAN (2003)
Welding
A.A., American River College
- REILLY, ROBIN (2008)
Accounting
B.S., CSU, Chico
- REISNER, CAROL (1987)
Counseling
B.A., University of Colorado
M.A., CSU Chico
- REITZ, NANCY (1981)
Dean, Mathematics
B.A., Kalamazoo College
M.S., UC Davis
- RESKE, MARSHA H. (2001)
Distance Education Coordinator
A.A., Santa Rose Junior College
B.S., State University of New York
M.A., University of London
M.S., Nova Southeastern University

- RICHEY-WARD, DIANE (2000)
Art
B.A., CSU Hayward
M.A., CSU Sacramento
- RIDGWAY, THEODORE A. (2000)
Math
B.A., Amherst College
M.A., University of Wisconsin
- RILEY, LONETTA (2008)
Sacramento Regional Public Safety Training Center
B.A., University of Nebraska
M.S., George Peabody College of Vanderbilt University
- RIVERA, RAFAEL (2005)
Counseling
B.A., UC Davis
M.S., CSU Sacramento
- ROADCAP, GORDON (2002)
English
B.A., Sonoma State University
M.A., San Francisco State University
- ROBERTS-LAW, LISA E. (1991)
Counseling
B.A., University of Illinois, Urbana-Champaign
M.S., Illinois State University
- RODGERS, KATHERINE G. (2005)
English
B.A., Smith College
Ph.D., Yale University
- ROLLER, JUDITH L. (1990)
Reading
B.A., UC Davis
M.S., CSU Fullerton
M.S., CSU Los Angeles
- ROONEY, SUE ANN (1989)
Reading
B.A., CSU Sacramento
M.A., St. Mary's College
- ROSARIO, BRIAN P.(2006)
Economics
B.S., University of the Philippines
M.A., Ph.D., UC Davis
- ROY, RINA B. (1991)
Dean, Science and Engineering
B.S.C., University of Calcutta, India
Ph.D., University of Florida
- ROY, DEBOLEENA (2001)
Chemistry
B.S., M.S., Jadavpur University, India
Ph.D., Texas Tech University
- RUEDAS, MANUEL (1988)
Counseling
A.A., Solano Community College
B.A., UC Davis
M.S., CSU Sacramento
- RUSSELL, GAIL (2002)
Theatre Arts
B.A., San Francisco State University
- RUTAGANIRA, THOMAS (2000)
Math
M.S., National University of Zaire
M.S., Ph.D., UC Davis
- RYTHER, CHRISTOPHER T. (2005)
Paramedic
A.A., Santa Barbara City College
B.S., Central Washington University, Ellensburg
M.S., St. Mary's College
- RYTHER, JANE E. (2006)
English as a Second Language
B.A., UC Berkeley
M.A., San Francisco State University
- SABZEVARY, IRAJ (1999)
Computer Information Science
B.A., National University
M.A., CSU Sacramento
- SACCO, TANJA L. (2005)
Math
B.S., Biola University, La Mirada
M.A., CSU Fullerton
- SACHAU, MICHAEL (2005)
Counseling
A.A., Sacramento City College
B.A., UC Davis
M.S., CSU Sacramento
- SAKAKIHARA, PAUL (1975)
EOP&S
B.A., UC Santa Barbara
M.S., University of Southern California
- SALLADARRE, RAYMOND (2003)
Hospitality Management
B.A., Lycee Hotelier des Pyrenees
- SANDER, ELMER J. (1962)
Mathematics
B.S., University of Arizona
- SCALZI, JENNIFER (2007)
Counseling
A.A., American River College
B.A., M.S., California State University
- SCHIRMER, MARIE (2007)
Nutrition
B.S., UC Berkeley
M.S., University of Wisconsin
Ph.D., UC Davis
- SCHNEIDER, HAROLD (1990)
English
B.A., University of Omaha
M.F.A., UC Irvine
- SCHUSTER, RANDY O. (2006)
Design Technology
B.S.M.E., UC Davis
- SCOTT, MARGARET L. (2007)
Psychology
A.S., West Valley College
B.S., San Jose State University
M.A., California State University
- SEGURA, STEVEN (2008)
Sacramento Regional Public Safety Training Center
A.A., Sacramento City College
B.A., Union Institute and University
M.S., California State Polytechnic
- SENNA, DEBORAH (1990)
Psychology/Human Services
B.A., M.S., CSU Sacramento
- SESSANO, NANCY (1988)
English
A.A., American River College
B.A., M.A., CSU Sacramento
- SHAHROK, RENEE (1997)
Biology
B.S., M.S., UC Davis
- SHELDON, MICHAEL (2003)
Art
B.A., University of Nevada, Reno
M.A., CSU Sacramento
M.F.A., UC Davis
- SHIMIZU, YUJIRO (2006)
Research/Psychology
B.A., Simon Fraser University
M.A., Washington University
- SHOEMAKE, LINDA (1996)
Library
A.A., American River College
B.A., CSU, Sacramento
M.L.S., San Jose State University
- SHUBB, ALISA M. (1998)
Speech
B.A., M.A., UC Davis
- SIEGFRIED, RODNEY D. (1982)
Dean, English
B.A., CSU, Hayward
M.A., San Francisco State University
- SILVA, NANCY (1988)
Theatre Arts
A.A. Orange Coast Junior College
B.A., CSU Sacramento
M.A., M.F.A., University of Minnesota
- SIMPSON, WILLIAM (2004)
Physics
B.S., Willamette University, Oregon
Ph.D., UC Riverside
- SINCLAIR, DAVID (1991)
Design Technology
A.A., American River College
B.S.M.E., M.S.M.E., CSU Sacramento
- SJOLUND, JOE (2002)
Counseling
B.A., M.S., CSU Sacramento

- SLUTSKY, DANIEL (2008)
Biology
B.S., Ph.D., UC, Davis
M.A., CSU, Sacramento
- SMITH, CRAIG (1999)
Art
B.F.A., Southwest Missouri State University;
M.F.A., University of Nebraska
- SMITH, LORI (2000)
Biology
B.S., Ph.D., UC Davis
- SMITH, PHILIP R. (1989)
Mathematics
B.S., Duke University
M.S., Vanderbilt University
Ph.D., UC Davis
- SMITH, SUNNY (1994)
Physical Education
A.A., Sacramento City College
B.A., M.A., CSU Sacramento
- SNOKE, JAMES (1999)
Computer Information Science
A.A., Vallejo Junior College
B.A., M.A., UC Davis
- SNUGGS, JEAN (1980)
Dean, Physical Education/Athletics
B.S., University of Illinois
M.S., Northern Illinois University
- SORENSEN, KATHRYN H. (2000)
Biology
B.S., Baylor University
M.S. University of Texas, Arlington
Ph.D., University of Texas, Austin
- SPECKER, ELIZABETH (2008)
English as a Second Language
B.A., SUNY, Plattsburgh
M.A., Ohio University
Ph.D., University of Arizona
- SPENCER, BONNIE S. (2001)
Fashion
B.S., Cal Poly, San Luis Obispo
M.A., CSU Sacramento
- SPURGEON, MICHAEL L. (2005)
English
B.A., Colby College, Waterville, Maine
M.F.A., University of Arizona, Tucson
- STEPHENSON, JEFFREY WAYNE (2003)
Funeral Service Education
M.S., Western Illinois University Macomb
B.M.S., Cincinnati Mortuary College
- STEWART, DANIEL (2008)
Chemistry
A.A., Santa Rosa Junior College
B.S., Ph.D., UC Davis
- STEWART, MARK A. (1992)
Psychology
B.S., Brigham, Young University
Ph.D. University of Norte Dame
- STOCKDALE, GEOFFREY P. (2002)
Speech
A.A., Sacramento City College
B.A., M.A., CSU Sacramento
- STOEHR, MATTHEW (2002)
Art New Media
B.F.A., State University of New York
M.F.A., Ohio University
- STOKES, CLARENCE C. (2001)
Computer Information Science
B.B.A., B.A., McKendree College
M.A., Southern Illinois University
M.B.A., Golden Gate University
- STURM, TIMOTHY (2002)
Library
B.A., Arizona State University
M.A., University of Arizona
- SUKKARY-STOLBA, SOHEIR (1976)
Anthropology
B.A., Cairo University, Egypt
M.A., CSU Sacramento
Ph.D., UC Davis
- SUNG, PETER (2004)
Mathematics
B.S., U.S. Air Force Academy
M.A., UCLA
- SWANSON, TIMOTHY (2010)
Journalism
B.A., Willamette University
M.A., UC Berkeley
- SWEET, MICHAEL (1999)
Biology
B.S., University of Iowa
M.A., UC Santa Cruz
- TABARES, TRESSA (2002)
Political Science
B.A., E. Connecticut State University
M.A., Ph.D., UC Davis
- THILTGEN, CHRISTINE (1997)
Legal Assisting
A.D.N., San Joaquin Delta
J.D., UOP McGeorge School of Law
- THOMAS, DIXIE (1997)
Early Childhood Education
B.A., CSU Chico
M.A., CSU Sacramento
- THOMPSON, JAMES V. (1983)
Dean, Off-Campus Centers and Extension Services
A.A., American River College
M.S., National University
B.A., CSU Chico
- THOMPSON, STEVEN (2000)
Music
B.M., Wichita State University
M.M., D.M.A., University of Southern California
- THOMSEN, CHARLES E. (1999)
Geography
B.A., UCLA
M.A., CSU Chico
- TOPINKA, JOHN (2008)
Biology
B.A., Carleton College
Ph.D., UC, Davis
- TORRANO, MARY E. (2001)
Biology
A.A., San Joaquin Delta
B.S., UC Davis
M.A., San Francisco State University
- TORREZ-SULLIVAN, KATHLEEN. (1997)
Physical Education
B.A., CSU Fresno
M.A., Azusa Pacific University
- TOWERS, ROBERT (1964)
Physical Education
A.A, Mesa Junior College
B.A, Colorado State College
M.S., Syracuse University
- TRUONG, BINH (2002)
Mathematics
B.S., University of Washington
M.S., New Mexico State University
Ph.D., UC Davis
- UNMACK, CYNTHIA (2004)
Political Science
B.A., CSU, Fullerton
M.A., CSU, Sacramento
Ph.D., UC, Davis
- URKOFESKY, TERESA (2000)
Hospitality Management
B.V.E., CSU
Graduate, California Culinary Academy
- VALLE, JESUS (2002)
English
A.A., Central Arizona College
B.A., M.A., Stanford University
- VAN REGENMORTER, MERLYN (1999)
Music
B.S., North Central University
M.A., CSU Dominguez Hills
Ed.D., Argosy University
- VIAR, DAVID (2005)
President
B.A., Western Illinois University
J.D., Drake University School of Law
- VIDUYA, LISA (2008)
Respiratory Care
A.S., Frederick Community College
B.S., Salisbury State University

- WALKER, JAMES E. (1987)
Mathematics
B.S., M.A., UC Davis
- WALKER, PAMELA D. (2001)
Vice President, Student Services
B.S., Eastern Oregon State College
M.A., CSU Sacramento
Ed.D., University of San Francisco
- WARD, SUE E. (1998)
Gerontology/Psychology
A.A. Golden West College
B.A., San Francisco State University
M.A., CSU Sacramento
- WATSON, CINDY J. (2007)
College Nurse
ADN, Evergreen Valley College
BSN, San Jose State University
MSN, Regis University
- WATSON, JANE S. (2001)
Reading
A.A., Fresno City College
B.S., CSU Fresno
M.A., CSU Sacramento
- WATSON, PHYLLIS (2008)
Reading
B.A., University of Washington
M.Ed., University of LaVerne
- WEBB, EDWINA (2008)
Dean, Student Support Services
A.A., Sacramento City College
B.S., University of San Francisco
M.S., CSU Sacramento
- WECKMAN, CRAIG (2008)
Diesel/Clean Diesel Technology
- WEINER, JOSHUA J. (2005)
History
B.A., UC Santa Cruz
M.A., Northeastern University
- WEISSBART, BRIAN (2005)
Chemistry
B.S., UC Riverside
Ph.D., UC Davis
- WHEATON, VERONICA (2008)
Chemistry
B.A., M.S., CSU Hayward
M.S. Ed., Widener University
- WILLIAMS, SAMUEL (2000)
Theatre Arts
B.A., Slippery Rock University,
Philadelphia
M.F.A., UC Davis
- WOOLSEY, MARCELLA J. (1998)
Biology/Anatomy/Physiology
B.A., Southern College, Tennessee
M.A., Loma Linda University
Ph.D., UC Davis
- WOLFE, DAVID E. (2006)
Biology
B.A., UC Santa Barbara
M.S., Arizona State University
- WOLOWNICK, DIERDRE W. (2000)
French/Spanish
B.A., M.A., Queens College, City
University of New York
- WON, DEAN K. (2005)
Biology
A.A., San Joaquin Delta College
B.S., UC Davis
M. Ed., University of the Pacific
Ph.D., UCLA
- WORLEY, KATRINA M. (2005)
Anthropology
B.A., M.A., CSU Sacramento
- WORSFOLD, BRANDY (2007)
Art
B.F.A., Southwest Missouri State
University
M.F.A., University of Florida
- WRIGHTSON, WILLIAM C. (1991)
History
M.A., UC, Santa Barbara
- YOUNG, JIAYI DIANA (2001)
Art New Media
B.A., Lawrence University
M.S., Kansas State University
M.F.A., Washington State University
- YOUNG, JUDY A. (2000)
Nursing
A.A., Sacramento City College
M.H.A., B.H.S., Chapman University
- YOUNG, SHIH-WEN MICHAEL (2003)
Physics/Physical Science
B.S., National Taiwan Normal University
Ph.D., Kansas State University
- YOUNGS, CYNTHIA A. (2001)
Reading
B.A., Winona State University;
M.A., Oakland University, Michigan
- ZADRA, JOANNA (1999)
English as a Second Language
B.A., Stanford University;
M.A., CSU Sacramento
- ZAJIC, KRISTINA (2009)
Speech/Language Pathology
B.S., M.S., CSU Sacramento
- ZARATE, VICTOR H. (2005)
Physics
M.S., B.S., UC Berkeley
- ZARZANA, LINDA (1989)
Chemistry
B.S., UC Davis
M.S., CSU Sacramento
- ZHANG, LINGLING (2009)
Accounting
B.A., Xiamen University
M.S., State University of New York
M.B.A., CSU Hayward
- ZHAO, YU (JOY) (2007)
Biology
B.S., Capital Normal University, Beijing
M.S., California State Polytechnic
University
Ph.D., Loma Linda University

faculty statement of professional ethics

1. Professors, guided by a deep conviction of the worth and dignity of the advancement of knowledge, recognize the special responsibilities placed upon them. Their primary responsibility to their subject is to seek and to state the truth as they see it. To this end professors devote their energies to developing and improving their scholarly competence. They accept the obligation to exercise critical self discipline and judgment in using, extending, and transmitting knowledge. They practice intellectual honesty. Although professors may follow subsidiary interests, these interests must never seriously hamper or compromise their freedom of inquiry.
2. As teachers, professors encourage the free pursuit of learning in their students. They hold before them the best scholarly and ethical standards of their discipline. Professors demonstrate respect for students as individuals and adhere to their proper roles as intellectual guides and counselors. Professors make every reasonable effort to foster honest academic conduct and to ensure that their evaluations of students reflect each student's true merit. They respect the confidential nature of the relationship between professor and student. They avoid any exploitation, harassment, or discriminatory treatment of students. They acknowledge significant academic or scholarly assistance from them. They protect their academic freedom.
3. As colleagues, professors have obligations that derive from common membership in the community of scholars. Professors do not discriminate against or harass colleagues. They respect and defend the free inquiry of associates. In the exchange of criticism and ideas professors show due respect for the opinions of others. Professors acknowledge academic debt and strive to be objective in their professional judgment of colleagues. Professors accept their share of faculty responsibilities for the governance of their institution.
4. As members of an academic institution, professors seek above all to be effective teachers and scholars. Although professors observe the stated regulations of the institution, provided the regulations do not contravene academic freedom, they maintain their right to criticize and seek revision. Professors give due regard to their paramount responsibilities within their institution in determining the amount and character of work done outside it. When considering the interruption or termination of their service, professors recognize the effect of their decision upon the program of the institution and give due notice of their intentions.
5. As members of their community, professors have the rights and obligations of other citizens. Professors measure the urgency of these obligations in the light of their responsibilities to their subject, to their students,

to their profession, and to their institution. When they speak or act as private persons, they avoid creating the impression of speaking or acting for their college or university. As citizens engaged in a profession that depends upon freedom for its health and integrity, professors have a particular obligation to promote conditions of free inquiry and to further public understanding of academic freedom.

ARC Academic Senate

classified staff statement of professional ethics

The quality of any institution is, to a large extent, based upon the quality of its employees. American River College has a tradition of excellence in education. This tradition is the result of the college's excellent employees and their service to students and the community. The classified staff embraces this philosophy through their professionalism, integrity, and excellence.

Professionalism is demonstrated through respecting one another; collaborating and communicating with each other, including:

- Mutual respect
- Innovative thinking
- Networking and collaboration
- Superior technical skills
- Open communication

Integrity of the classified staff is exemplified through ethical behavior. The classified staff upholds integrity through:

- Fiscal responsibility
- Embracing diversity
- Respectful behavior
- Trustworthiness
- Personal commitment

Excellence is exhibited through our support and reliance on each other. We strive to be an elite, premier, learning community through:

- Creative ideas
- Supportive actions
- Dedication
- Sound judgment
- Campus and community development

These are qualities that are fostered through the collaboration between classified staff, students, faculty and administrators. As the classified staff at American River College, we support the intellectual and vocational education of our student body. Through our students' achievements, we strive to feed the heart of our surrounding communities. In our pursuit to meet these goals, our ultimate objective is to ensure student success.

ARC Classified Senate

administrator statement of professional ethics

American River College administrators recognize that ethical behavior is a prerequisite to successful leadership and management. Ethical behavior, defined as behavior that meets commonly accepted rules of conduct, encompasses the principles of honesty and equity.

At American River College, administrators strive to exercise judgments that are dispassionate, fair, consistent, and equitable. They seek openness and reliability, do their utmost to address issues and people without prejudice, and consistently work to maintain a focus on the best interests of the college's students, employees and communities served.

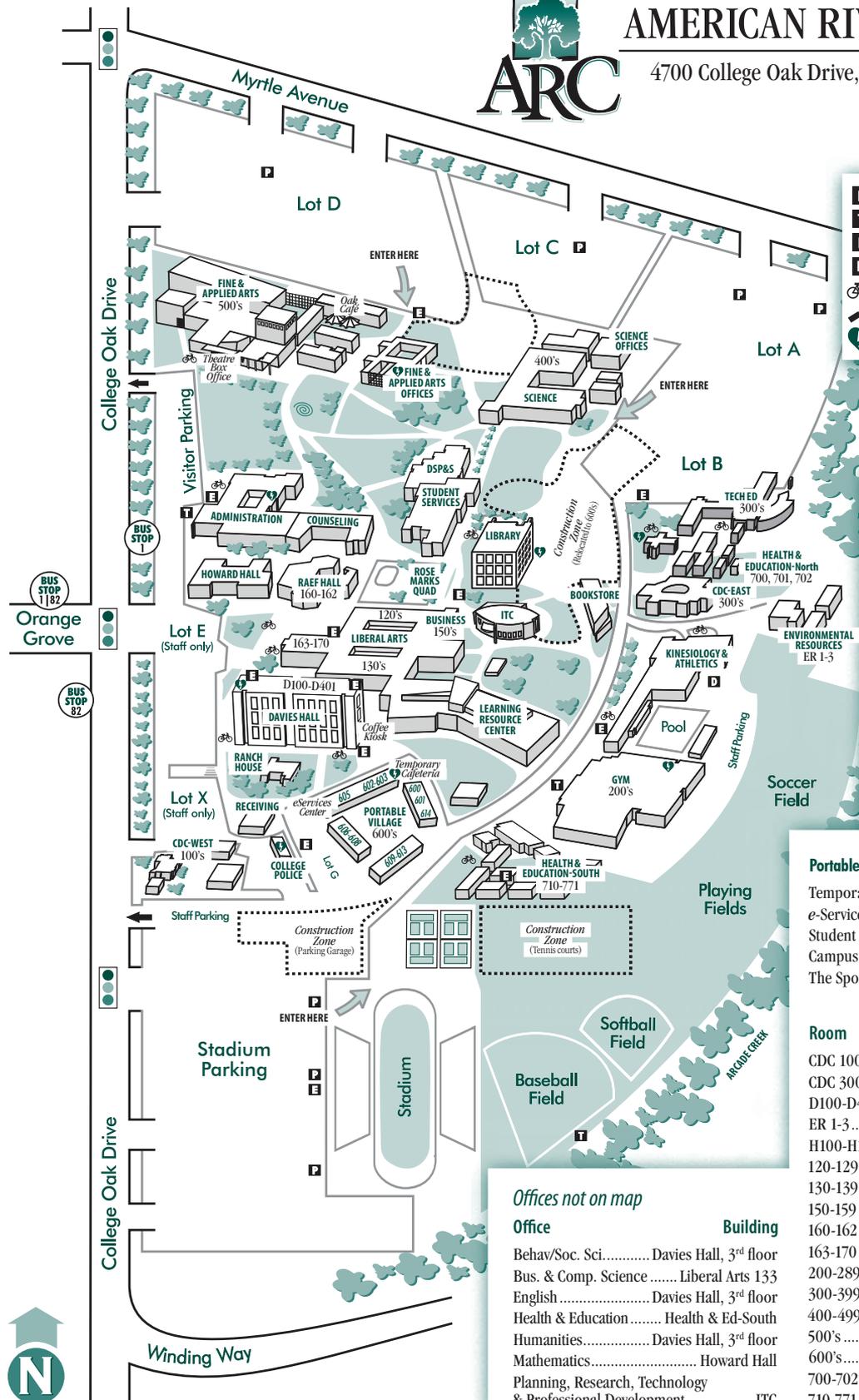
In fulfilling their responsibilities, American River College administrators adhere to the approved ARC Values (www.arc.losrios.edu/Documents/Vision_Mission_Values.pdf) related to access, benefit of education, excellence, leadership, student learning outcomes, diversity, community development, human resources, communication, innovation and risk taking, fiscal responsibility, and evaluation.

campus map



AMERICAN RIVER COLLEGE

4700 College Oak Drive, Sacramento, CA 95841



- P** = Daily parking permit machine
- T** = Public telephones
- E** = Emergency telephones
- D** = Paratransit loading zone
- = Bike rack and/or locker
- = Construction zone
- = Automated external defibrillator

Service	Building
Admissions & Records	Administration
Assessment	Student Services
Business Services	Administration
Counseling	Administration
Disabled Services	Student Services
Financial Aid	Student Services
Health Center	Administration
Oak Café	Fine & Applied Arts
Police	south of Davies Hall

Portable Village Key (600's)

Temporary Cafeteria	602-603 & 610
e-Services/Journey	605
Student Development Office	608
Campus Life Center	611-612
The Spot	613

Room Building

CDC 100's	Child Dev. Ctr. (west)
CDC 300's	Child Dev. Ctr. (east)
D100-D401	Davies Hall
ER 1-3	Environmental Resources
H100-H171	Howard Hall
120-129	Liberal Arts (CS&IT, Bus)
130-139	Liberal Arts (CS&IT, Math)
150-159	Liberal Arts (CS&IT, Bus)
160-162	Raef Hall
163-170	Liberal Arts (Mathematics)
200-289	KA (PE) & Athletics
300-399	Tech Ed
400-499	Science
500's	Fine & Applied Arts
600's	Portable Village
700-702	Health & Education (north)
710-771	Health & Education (south)

Offices not on map

Office	Building
Behav./Soc. Sci.	Davies Hall, 3 rd floor
Bus. & Comp. Science	Liberal Arts 133
English	Davies Hall, 3 rd floor
Health & Education	Health & Ed-South
Humanities	Davies Hall, 3 rd floor
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