



American River College

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Los Rios Community College District

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President's Welcome



Welcome to American River College

After over two decades of service in education, I can truly say one of my happiest moments is during a graduation ceremony, when I see the pride of accomplishment on the faces of graduates, their family, friends, and loved ones. I never grow tired of seeing such joy, hope, and promise.

Graduation is a journey that starts with the decision to pursue an educational goal. Since you're reading this, I know you are considering a journey of your own. I invite you to join American River College.

No two journeys are the same. Your goal – your dream – is completely different than all others. Since 1955, American River College has been honored to serve the diverse educational journeys of the people of the greater Sacramento region.

The ARC team of faculty, staff, and administrators stands ready to help you reach your goals – no matter what they may be. We will help you find your success.

This college catalog is a vital resource for you as an ARC student. You will find key information about:

- Academic programs, including our associate degrees and certificates
- Support services, all designed to help you succeed
- Your rights and responsibilities as a student

Please keep in mind that policies and regulations are subject to change. Many of these changes are dictated by the State of California or federal agencies. This catalog captures the latest information as of April 2015, but changes happen on a regular basis. For updated information, be sure to visit the college website at arc.losrios.edu.

If there are significant changes – such as new programs or important regulations – American River College will publish a catalog addendum. If addenda are published, they will typically appear in June and November. Please visit arc.losrios.edu/catalog.htm to see if an addendum has been published for this catalog.

I wish you nothing but success in your future journeys. Thank you!

Thomas G. Greene

President, American River College

ARC Administration

Vice Presidents

Administrative Services	Raymond Di Giulio
Instruction	Colleen Owings
Student Services	Dr. Jeffrey Stephenson (Interim)

Associate Vice Presidents

Instruction	Dr. David Redfield (Interim)
Instruction & Learning Resources	Dr. Tammy Montgomery
Workforce Education & Development.....	Jerome Countee

Deans

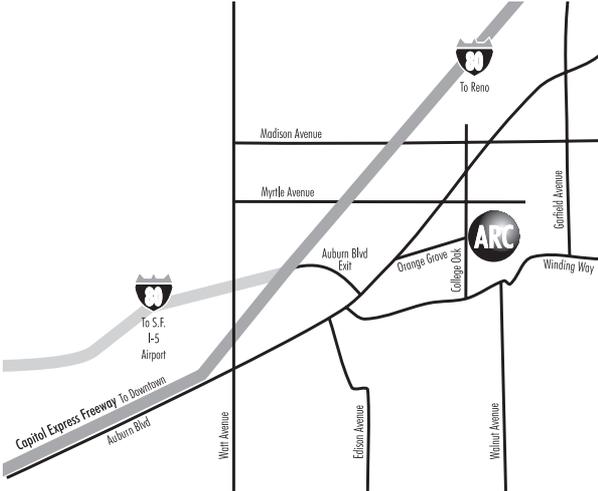
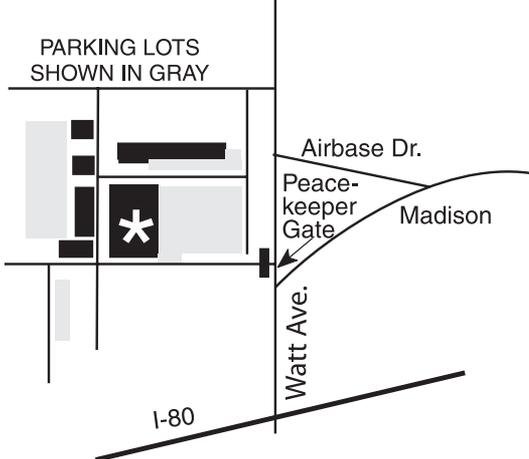
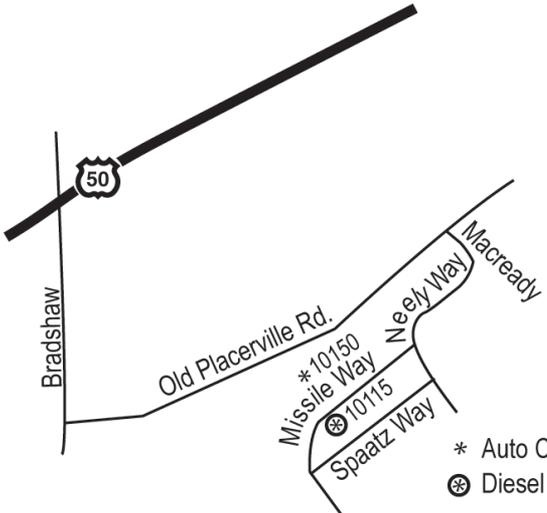
Behavioral and Social Sciences.....	Carlos Reyes
Business & Computer Science	Dr. Derrick Booth
Counseling and Student Services.....	Dr. Judy Mays (Interim)
English	Vicky Maryatt (Interim)
Enrollment Services.....	Dr. Robin Neal
Fine & Applied Arts	Dr. Adam Karp
Health & Education.....	Dr. Steven Boyd
Humanities	Kathleen F. Jaques
Kinesiology & Athletics	Greg Warzecka
Mathematics	Nancy Reitz (Interim)
Natomas Education Center.....	Dr. Frank Kobayashi
McClellan/Public Safety Center.....	Steven Segura
Planning, Research & Technology.....	Dr. Jane de Leon (Interim)
Science and Engineering.....	Dr. Rina Roy
Student Development.....	Manuel Perez
Student Support Services.....	Kolleen Ostgaard
Technical Education	Dr. Trish Caldwell

Other Administrative Staff

Director, Administrative Services.....	Dan McKechnie
Manager, Bookstore.....	Koue Vang
Director, College Advancement.....	Kirsten DuBray
Public Information Officer	Scott Crow

ARC 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 as well. Some centers also offer counseling, assessment, and other services. Updated maps can be found online at www.arc.losrios.edu

<p>Main Campus 4700 College Oak Drive Sacramento, CA 95841 (916) 484-8011</p> 	<p>McClellan Center & Sacramento Regional Public Safety Training Center 5146 Arnold Avenue, Building 8 McClellan, CA 95652 McClellan Center: (916) 570-5049 Public Safety Center: (916) 570-5000</p> 
<p>Natomas Education Center 2421 Del Paso Road Sacramento, CA 95835 (916) 485-6000</p> 	<p>Mather Center <i>(Automotive & Diesel Technology classes only)</i> 10150 Missile Way Mather, CA 95655 Auto Collision: (916) 255-0480 Diesel Technology: (916) 484-8354</p> 

2015-2016 Academic Calendar

Summer Session 2015

Instruction begins	June 8	Monday
Independence Day Holiday (College closed)	July 3	Friday
End of summer session	August 5	Wednesday
Grades available online	August 10	Monday

Fall Semester 2015

Instruction begins	August 22	Saturday
Saturday and Sunday classes begin	August 22, 23	Saturday, Sunday
Labor Day Holiday (College closed)	September 7	Monday
Veterans Day Holiday (College closed)	November 11	Wednesday
Last day to drop full semester classes	November 17	Tuesday
Thanksgiving recess (College closed)	November 26-29	Thursday-Sunday
End of fall semester	December 17	Thursday
Winter Recess	December 18 - January 1	Friday-Friday
Grades available online	January 4	Monday
Semester break	January 2-13	Saturday-Wednesday

Spring Semester 2016

Instruction begins	January 16	Saturday
Saturday and Sunday classes begin	January 16, 17	Saturday, Sunday
King's Birthday Holiday (College closed)	January 18	Monday
Lincoln's Birthday Holiday (College closed)	February 12	Friday
Washington's Birthday Holiday (College closed)	February 15	Monday
Spring Recess (Limited office hours)	March 21-27	Monday-Sunday
Last day to drop full semester classes	April 17	Sunday
End of spring semester (Graduation)	May 18	Wednesday
Memorial Day Holiday (College closed)	May 30	Monday
Grades available online	May 31	Tuesday

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 public community college that offers students the option of working toward a degree, certificate or transfer to a university or other institution. American River College is part of the Los Rios Community College District, one of the nation's most respected learning institutions and the second-largest community college district in California.

American River College is accredited by the Accrediting Commission for Community and Junior Colleges of the Western Association of Schools and Colleges [10 Commercial Boulevard, Suite 204, Novato, CA 94949, (415) 506-0234], 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 marked 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 new larger child care center, and new facilities for Disabled Student Programs & Services, and instructional technology. In 2002, voters approved a multimillion bond measure that funded new construction and renovation of classrooms and laboratories, the Learning Resource Center, Health & Education area, Kinesiology & Athletics area, Performing Arts, and the Natomas Educational Center. Another bond measure was passed in 2008, providing funds for the renovation and expansion of the Library and construction of a new Student Center (completed in 2013), as well as other projects in the near future.

With approximately 30,000 students, ARC is among the largest community colleges in the state. Looked upon as a leader in innovative programs and services, ARC transfers many students to UC Davis and CSU Sacramento. 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.

Vision, Mission and Values

Vision

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

Mission

American River College is a public community college granting certificates and associate degrees. The college primarily serves residents of the six-county Greater Sacramento region who are capable of benefiting from community college instruction. This service is provided through traditional classroom instruction, off-campus centers, and distance education.

ARC exists to 1) assure students identify their educational goals and needs and 2) successfully accomplish learning in the four educational areas, listed below in alphabetical order:

- Career and technical education to achieve employment or enhanced career skills for job advancement.
- 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.

- 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.

Values (*listed in alphabetical order*)

Access

Students are the reason we are here, and their education is our primary responsibility. We recognize that residents of the region should have an opportunity to enroll and be successful in college.

Benefit of Education

Individuals who have the opportunities to (1) develop their abilities, (2) engage in critical and creative thinking, (3) participate in lifelong learning, (4) succeed in a competitive global work environment, and (5) exhibit responsible citizenship benefit society as well as themselves.

Communication

Achieving the ARC mission and vision requires effective communication within the college and with the communities served by the college; civil and honest, this communication should promote mutual respect and trust.

Community Development

The college's curriculum in the arts, humanities, sciences, social sciences, mathematics and career and technical education and the college's co-curricular programs and support services benefit the community by promoting cognitive development, intellectual growth, physical well-being, student volunteerism, and economic progress.

Diversity

Because ARC is a community valuing the varied perspectives and experiences of students, faculty and staff, the college offers educational opportunities for enhancing cultural awareness, supporting diversity, and promoting the free exchange of ideas and the development of a culturally competent and inclusive college community.

Employees

As our most valued resource, faculty and staff members are entitled to a safe, secure and supportive work environment and a culture that recognizes excellence, encourages meaningful involvement in interest-based, decision-making process; and provides opportunities for professional development, service and leadership.

Excellence

Excellence is essential for accomplishing ARC's mission to help students identify their educational goals and achieve successful learning and for supporting the college's employees and serving ARC's community and region.

Fiscal Responsibility

Observing fiscally sound, efficient, transparent, and accountable practices is essential to achieving our mission.

Innovation and Risk Taking

Creativity, flexibility and responsible risk-taking support achievement of the college's mission.

Leadership

Responsible leadership and service by faculty, staff and students is actively cultivated so the college can achieve improvement in student learning and support positive contributions to the community.

Research and Evaluation

Ongoing, data-based research and evaluation contribute to achieving student learning outcomes and the assurance that all operations support the vision, mission and values of the college.

Student Learning Outcomes

Student success results from identifying, assessing and improving student learning outcomes and allocating resources that support effective, innovative, and flexible learning opportunities.

Sustainability

Recognizing its leadership role in the stewardship of natural resources, ARC is committed to reducing its negative impact on the environment.

Technology

Responsible and effective use of technology supports the college's mission and helps students develop the skills necessary for being successful in the contemporary environment.

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:

- Demonstrate and employ marketable skills and personal qualities for professional growth and career advancement.
- Demonstrate skills and behaviors which contribute to open and respectful communication of diverse ideas and beliefs.
- Utilize a variety of methods to communicate effectively.
- Employ strategies to work cooperatively and effectively with others.
- Locate and critically evaluate information from a variety of sources, including those accessed through technology, to create informed responses to issues, problems, and challenges.
- Recognize the responsibility to behave as an ethical citizen, contributing personal knowledge, resources, and skills for the benefit of the local and larger communities.
- For students earning degrees, demonstrate an understanding of the basic content and methodology for the major areas of knowledge, including the arts and humanities, quantitative reasoning, the natural sciences, and the social sciences.

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 (earning a "C" or better in these courses), complete either the CSU General Education Certification pattern or the Intersegmental General Education Transfer Curriculum (CSU option), and 60 CSU transferable units. All students 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.

As required by federal law, American River College provides gainful employment disclosure information for eligible certificate programs. Go to the specific certificate programs to find out how to access gainful employment disclosure information.

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: A.A. - Carpenter Apprenticeship
 A.A. - Drywall/Lathing Apprenticeship
 A.A. - Electrical Apprenticeship
 A.A. - Ironworker Apprenticeship
 A.A. - Sheet Metal Apprenticeship
 A.A. - 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 - Art History
 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
 3D Modeling and Texturing
 3D Rigging Technical Director
 3D Technical Director
 Web Design
 Technical Communications

ASL-English Interpreter Preparation

Degree: A.A. - ASL-English Interpreter Preparation Program
 Certificate: ASL-English Interpreter Preparation Program

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 and Green Vehicle Technology
 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.S. for Transfer - Business Administration
 A.A. - General Business
 A.A. - Small Business Management
 A.A. - Technical Communications
 Certificates: General Business
 Small Business Management
 Technical Communications

(continued on next page)

Degrees and Certificates

Business Technology

Degrees: A.A. - Administrative Professional
A.A. - Virtual Administrative Professional

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

Deaf Culture & ASL Studies

Degree: A.A. - Deaf Culture & American Sign Language Studies

Certificate: Deaf Culture & American Sign Language Studies

Design & Engineering Technology

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

Economics

Degree: A.A. for Transfer - Economics

Electronics Technology

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

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

Energy

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

English

Degrees: A.A. for Transfer - English
A.A. for Transfer - Elementary Teacher Education
A.A. - English Communication & Literature

Fashion

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

Certificates: Fashion Design
Fashion Merchandising

Fire Technology

Degree: A.A. - Fire Technology

Certificates: Fire Technology
Firefighter Recruit Academy

Foreign Languages

Degree: A.A. - Language Studies

Funeral Service Education

Degree: A.S. - Funeral Service Education

Geography/GIS

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

Certificate: Geographic Information Systems (GIS)

Geology

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

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

History

Degree: A.A. for Transfer - History

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

(continued on next page)

Degrees and Certificates

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
Honors Transfer
Intersegmental General Education Transfer (IGETC)

Interior Design

Degree: A.A. - Interior Planning & Design

Certificates: Interior Retail Merchandising
Para Professional Interior Planning and Design

Journalism

Degrees: A.A. - Journalism and Mass Communication
A.A. for Transfer - Journalism and Mass Communication

Kinesiology and Athletics

Degrees: A.A. for Transfer - Kinesiology
A.A. Dance
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

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. for Transfer Degree - 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. for Transfer - Physics
A.S. - General Science

Political Science

Degree: A.A. - Political Science
A.A. for Transfer - Political Science

Psychology

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

Public Safety

Certificates: 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

Respiratory Care

Degree: A.S. - Respiratory Care

Science - General

Degree: A.S. - General Science

Sign Language Studies
(see *Deaf Culture & ASL Studies*)
(see *ASL-English Interpreter Preparation*)

Social Science

Degrees: A.A. - Social Science
A.A. - 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

Teacher Education

Degree: A.A. for Transfer - Elementary Teacher Education

Theatre Arts

Degrees: A.A. - Theatre Arts: Acting
A.A. - Theatre Arts: Technical
A.A. for Transfer Degree - Theatre Arts

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

Department Certificates

Department Certificates 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 Department Certificate. The certificate requires completion of all courses listed in the required program of the student. Department Certificates 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
Accounting		English as a Second Language (ESL)		Management	
Tax Specialist I	3	Advanced Proficiency Certificate		Conflict Management	3
Tax Specialist II	3	in English as a Second Language	3	Leadership in Action: Organizational Learning	2
Apprenticeship		Advanced-High Proficiency Certificate		Leadership in Action: Organizational Systems	2
Pre-Apprenticeship	3	in English as a Second Language	3	Leadership in Action: Organizational Teams	2
Green Technology Pre-Apprenticeship	2	Intermediate Proficiency Certificate		Leadership in Action: Organizational Variation	2
Infrastructure Pre-Apprenticeship	2	in English as a Second Language	3	Project Management	3
Utilities Worker Pre-Apprenticeship	2	Fashion		Music	
Art		Apparel Construction	3	Digital Audio Production	3
Sculpture	3	Fashion Entrepreneur	3	Music Management and Promotion	3
Art New Media		Fashion Illustration	3	Studio Jazz/Pop Voice Instructor	3
Foundation	3	Fashion Retailing	3	Studio Voice Instructor	3
Automotive Collision Technology		Patternmaking and Draping	3	Natural Resources	
Automotive Claims Estimator	3	Runway Design	3	Environmental Conservation Technician:	
Automotive Collision Technology – Non-Structural	3	Fire Technology		Conservation/Restoration	3
Automotive Collision Technology – Refinish	3	Fire Investigation 1A	1	Fisheries	3
Automotive Collision Technology – Structural	3	Fire Investigation 1B	1	Forest/Rangeland	3
Business		Fire Investigation 2A	1	Sustainability	3
Computer Applications for Small Business	3	Fire Investigation 2B	1	Vegetation	3
Cross-Cultural Conflict Resolution	3	Fire Management 1	1	Water Resources	3
Business Technology		Training Instructor 1A	1	Wildlife	3
Office Assistant	1	Training Instructor 1B	1	Nursing	
Diesel/Clean Diesel Technology		Training Instructor 1C	1	Certified Nurse Assistant	1
Clean Diesel Hybrid Technology	3	USDA Basic Academy	2	Home Health Aide	1
Clean Diesel Management Systems	3	USDA Advanced Academy	2	Public Safety	
Preventive Maintenance	3	Gerontology		Basic Law Enforcement Academy - Module I	3
Early Childhood Education		Activity Coordinator Certification	2	Basic Law Enforcement Academy - Module II	2
Assistant Teacher	1	Dementia Care	1	Basic Law Enforcement Academy - Module III	2
Family Child Care	2	Elder Care	1	PSTC department certificates	
Electronics Technology		Ethnicity and Aging	1	see pg. 452, information available at:	
Basic Electronics and Telecommunications	2	Leadership in Assisted Living Communities	1	www.arc.losrios.edu/programs_of_study/safety/law_enforcement/course_offerings.htm	
Basic Mechatronics	3	Social Service Designee	1	Theatre Arts	
Emergency Medical Technician		Homeland Security		Musical Theatre	3
Emergency Medical Technician (EMT)	2	Homeland Security	2	Technical Theatre	3
English		Horticulture		Welding	
Literary Publishing	3	Floristry	2	Gas Metal Arc and Flux Core Arc	
		Horticulture Skills	3	Welding Plate	2
		Landscape Design	2	Gas Tungsten Arc Plate and Pipe Welding	2
		Plant Production	2	Pipe Welding	3
		Sustainable Landscape	3	Welding Equipment Maintenance and	
		Interior Design		Blueprint Interpretation	3
		Designed 4 Life	2		
		Green Building and Sustainable Design			
		for Interiors	2		

- Admission to College
- Steps to Success:
 1. Application
 2. Orientation
 3. Assessment
 4. Educational Plan
 5. Registration
- Transportation
(Parking and Regional Transit)
- Fees and Fee Refund Policy
- Financial Aid
- ARC Map

Admission to College

American River College is open to all high school graduates or those who are at least 18 years of age who are capable of benefiting from community college instruction. If you are a permanent resident of California, verification of your residency may be required.

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 18 years of age or older, who demonstrate to the satisfaction of college authorities that they are able to profit by the instruction, may also be admitted.

Every course, course section, or class offered by the Los Rios Community College District that receives state support is open to you if you have been admitted to the college and meet the course requirements (prerequisites), unless specifically exempted by law, and as may be established according to Chapter II, Division 2, Part VI, Title 5 of the California Administrative Code, commencing with Section 51006.

There are 4 main types of students who attend American River College:

- First-time college students - individuals who are a high school graduate OR at least age 18 and never before enrolled at any college.
- Continuing students - anyone who attended classes at any Los Rios college and is enrolling in the next term.
- Students returning to ARC or transferring from a non-Los Rios College. 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.
- High-school students - If you will be a high school junior or senior in grades 11-12, or at least 16 years of age as of Spring 2016, you may be eligible to enroll in a maximum of two ARC courses each semester on Advanced Education status.

Commitment to Success

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. As part of a commitment to success, the college agrees to provide the following services:

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

The student agrees to:

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

Steps to Success

1. Application

What: The application to attend American River College is available at the college website at www.arc.losrios.edu.

Who: All first-time, returning/transfer, and high-school students must fill out an application. Continuing students must fill out a supplemental enrollment form each term.

2. Orientation

What: Orientation provides new students with vital information about college programs and services. New student orientation may be completed online at any time at <http://success.losrios.edu/orientation.php>. We offer assistance with this step on the ARC main campus in the Center for Leadership & Development in the Student Center.

Who: All first-time, returning/transfer, and high-school students must complete the orientation.

3. Assessment

What: Skills assessment are offered 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 at www.arc.losrios.edu/assess

Who: All new to college and/or new to ARC students must complete assessment.

4. Educational Plan with a Counselor

What: You will meet with a counselor to develop an educational plan.

Who: All new to college and/or new to ARC students must complete a plan that includes courses for their first semester. Continuing students must meet with a counselor to create a comprehensive educational plan.

5. Enrollment/Registration

What: Registration is by priority assignment for students completing all of the matriculation steps by April 1 for summer/fall and November 1 for spring. 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. Please note that it is not 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. Check the Schedule of Classes to determine if a class is to be offered in a given term

Who: Students who are brand new to college may enroll in classes, also called registering for classes, based on when the steps to success are completed. Priority registration is available for veterans, disabled students, students on CalWORKs/EOP&S, and foster youth. Refer to the Student Resources” section of this catalog for more information.

Challenges to Matriculation Process

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

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.

High School Students/Advanced Education

If you will be a high school junior or senior in grades 11-12, or at least 16 years of age by the first day of instruction, you may be eligible to enroll in a maximum of two ARC courses each semester on Advanced Education status.

You must follow the following steps each semester you wish to enroll as an Advanced Education student.

1. Read the entire Advanced Education form and website by visiting arc.losrios.edu/counsel, which includes guidelines indicating which courses are appropriate for Advanced Education students and which are excluded.
2. New Advanced Education students: Complete the ARC application online indicating that you are an advanced education student and not a new or transfer student. Continuing Advanced Education students: Complete the supplemental information form.
3. Complete the Advanced Education application (available at your high school counseling office or online at arc.losrios.edu/counsel). Your high school counselor must recommend specific courses and the form must be signed by your high school counselor/administrator, your parent/guardian and you.
4. Complete the online orientation at success.losrios.edu/orientation.php and print out the completion page at the end of the orientation.
5. Take the English assessment test. You only need to take the Math assessment test when requesting to take a math class. It is strongly advised that you take this assessment before meeting with your high school counselor in order for them to better advise you. Bring these results with you to the group counseling session.
6. Register online through the Advanced Education website for one of the mandatory Advanced Education Group Counseling sessions. There will no longer be individual counseling appointments for Advanced Education students; no exceptions will be made.
7. Bring the following items with you to the Advanced Education Group Counseling session:
 - The completed Advanced Education form with the courses filled in by your high school counselor/administrator and signatures from you, your parent/guardians, and your high school counselor/administrator. Requested courses must be filled out by your high school counselor and will not be changed or amended by an ARC counselor.

- A typed statement indicating why you wish to take classes at ARC and how you qualify for the courses you want to take (this statement will be used in determining your approval).
- English assessment test. Take this assessment test before meeting with your high school counselor in order for them to better advise you. You only need to take the Math assessment test when requesting to take a math class.
- A copy of your high school transcript.
- A printed copy of your high school schedule for the semester you wish to take classes at ARC (not required for summer school).
- Documentation of proof of age (if age is not reflected on high school transcript).
- An unofficial copy of your college transcript (continuing Advanced Education students only).
- A copy of the completion page from the online orientation.
- A copy of the private school affidavit, if you are home schooled.

If you fail to complete any of the above steps you will be denied entrance to the Advanced Education Group Counseling session and will be required to reschedule for a later date when all steps have been completed.

Advanced Education requirements are:

1. Exemplary academic achievement, as demonstrated by multiple measures including, but not limited to grade in similar courses, GPA of 2.7 or above, analysis of transcripts, assessment results, other student achievements, and/or letters of support from high school counselors and teachers.
2. Must be at least 16 years old or have completed the sophomore year of high school by the first day of instruction for the semester.
3. The course you want to take is not available to you at your school during the semester you are enrolled at ARC.
4. The course is not remedial.
5. The course is not being repeated due to an unsatisfactory high school grade.
6. The course is for advanced study and you are able to demonstrate adequate preparation and have completed prerequisites for the course.

Special note: Although Advanced Education students who are California residents are not charged enrollment fees, you will be charged the mandatory UTP fee and will be entitled to receive the Student Access Card. Non-residents, including international and undocumented residents, must pay non-resident fees. For more information, please call (916) 484-8572.

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. It is highly recommended that you review the prerequisite course material to enhance your chance of success. The definitions for prerequisites, corequisites and advisories are:

Prerequisites are requirements that a student must complete prior to enrollment in a particular course.

Corequisites are courses that students are required to enroll in at the same time as (or, in some cases, prior to) a particular course.

Advisories signify that certain knowledge or skills will be of great advantage to students taking a particular course. However, enrollment in a course to acquire that knowledge or those skills is not required, just highly recommended.

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.

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.

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 at Business Services beginning 15 days prior to start of summer session and 30 days prior to start of fall and spring semester. You can also buy your semester decal online through eServices. Permits will be mailed. Allow adequate time for you to receive your decal before classes begin.

Automobiles: \$35 per semester; \$20 per summer session

Motorcycles: \$20 per semester; \$10 per summer session

The semester parking permit can be used at all campuses throughout the Los Rios Community College District. It's important to note that:

- students who qualify for a BOG Waiver may purchase one parking permit per semester at the reduced price of \$25
- a parking permit does not guarantee a parking space
- fees are subject to change

Instead of a semester permit, students may purchase a daily parking permit for \$2 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 permits.

Parking by semester decal or daily parking permit 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. Permits are not required during non-school days and weekends. Vehicles not having a valid parking decal or daily parking permit 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 online at <http://police.losrios.edu/>.

Disabled Parking

Spaces for disabled students are available in all student parking lots. Students with disabilities, and persons providing transportation services to students with disabilities, must pay either semester or daily parking fees. A placard issued by Department of Motor Vehicles for persons with disabilities, or a distinguishing license plate for persons with disabilities, and a valid semester permit or daily parking pass must be properly displayed on the vehicle.

Temporarily Disabled Students

Students with a temporary disability may obtain a special parking permit from the ARC Health Center that allows parking in spaces designated for disabled persons. Students who are issued the special college permit must still pay the established parking fee. The special parking permit, due to the temporary disability, and either the semester permit or daily parking pass must be properly displayed on the vehicle. Failure to display the appropriate license plate, placard or special permit as described above will result in a parking citation.

Where to Display Your Permit

Display parking decals on the lower passenger side of the front windshield or hang it from the rearview mirror so that it is visible through the windshield. An optional plastic decal holder is available at Business Services in the Administration Building. The daily parking permit is to be displayed face up on the dashboard, on the passenger's side. Remove all other expired permits from the dashboard.

If a parking decal is lost or stolen, a new permit must be purchased. If your vehicle is sold, or if the windshield is damaged, you must show proof of sale or repairs and bring in the old decal (decal number must be intact) before another will be issued by Business Services. There is a \$2 charge for replacement of decals.

Off-campus students:

Parking fees are charged at the college's off-campus Natomas Center. However, no parking fees are charged at McClellan, and any other sites where ARC classes are scheduled.

Regional Transit

Sacramento Regional Transit currently serves American River College via different bus routes. Information is available online on the Regional Transit website at www.sacrt.com. 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.

Pay Your 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 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 website www.arc.losrios.edu.

Enrollment Fee Payment Deadlines

- Payment is due upon registration. If you register prior to the start of the semester, your payment must be processed within fourteen (14) days of registration, or you will be dropped. After the term has started, payment is due immediately upon registration, or you will be dropped.
- It is your responsibility to drop any unwanted classes by the deadline identified for the term. Failure to drop by the deadline may result in any of the following: 1) debt to the college; 2) a notation on your record.

Fees when on a Wait List

You do not have to pay fees for a class for which you are on the wait list. However, once you are automatically moved from the wait list into the class, you are responsible for paying fees for that class within the timeline stated above. You are responsible for checking your wait list status each day and/or removing yourself from a wait list. Payment for fees can be made online using Visa or MasterCard.

Surprised by a fee?

- You will be automatically enrolled from the Wait List and payment of fees are due within fourteen (14) days of registration or you will be dropped. Check your wait list status daily.
- If you are automatically enrolled from the Wait List and decide not to attend the class, you are responsible for dropping by the deadline identified for the term. Failure to drop by the deadline may result in a debt to the college and/or a notation on your record.

How to pay enrollment fees

- Payment by VISA or MasterCard may be made by students who enroll online, at ARC eServices Registration Lab, in Business Services in the Administration Building and at the Natomas Center.
- Payment by check may be mailed using the payment coupon.
- Cash payments may be made only at the ARC eServices Registration Lab, at Business Services in the Administration building, or at the Natomas center. Do not mail cash.
- If you are paying by mail or in person, your payment must be received by the Business Services office no later than ten (10) days following registration to allow time for manual processing. Do not mail cash.

Paying Other Fees

Non-resident tuition

Students who have not established legal residence in California are required to pay tuition and fees for a total of \$264 per unit for spring. At the time of this publication, fees were set at the level shown here, but are subject to change pending legislative action. Students will be billed for and are required to pay any increased fees. Please contact Enrollment Services for details regarding residency requirements. Payment for non-resident tuition must be paid at the time payment for the enrollment fee is made.

California non-resident tuition waiver

Any student, other than a non-immigrant alien, who meets the following requirements, may be exempt from paying nonresident tuition at the California Community Colleges, the California State University and the University of California (all public colleges and universities in California).

Requirements:

- The student must have attended a high school (public or private) in California for three or more years.
- The student must have graduated from a California high school or attained the equivalent prior to the start of the term (for example, passing the GED or California High School Proficiency exam.)

Additional information and California Non-resident Tuition Exemption request forms available at ARC Enrollment Services, Administration Building.

Military personnel residency status

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 enrollment.

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

Students who are both a resident and citizen of a foreign country and are in the United States on a F, B, or J visa must pay tuition and fees for a total of \$264 per unit for spring. International students attending on a student visa (F-1) issued by American River College must enroll in a minimum of 12 units and maintain good academic standing.

Payment of all fees must be made in full at the time of registration.

(Note: Some visa types restrict or limit school attendance. Visit the Enrollment Services office for details.)

Credit by examination

A per-unit fee equivalent to the general enrollment fee and non-resident/international student tuition fee (if applicable) will be required for any units awarded by means of examination. Contact Enrollment Services in the administration building for the form that must be completed prior to paying the fees for credit by exam.

Materials fees

You may be required to provide instructional and other materials for a particular course. Instructional material fees are to be paid at Business Services in the Administration building.

Student representation fee

Under provisions of California Education code section 76060.5 and California Code of Regulations, Title 5, sections 54801-54805, the students of this college have established a student representation fee of one dollar (\$1.00) per semester.

The money collected shall be expended to provide for students or representatives who may be stating their positions and viewpoints before city, county and district government, and before offices and agencies of the state and/or federal government.

This fee is mandatory; however, a student has the right to refuse to pay for the following reasons: religious, political, moral and financial. This refusal must be in writing and submitted to the college Business Services office on form #GS55A which is available in your college Business Services office. The waiver is also available online through the student's e-Services account.

Student's Universal Transit Pass Fee

LRCCD Students approved a Universal Transit Pass fee to provide students with a special unlimited pass to use on all public transit systems in Sacramento, Elk Grove, Yolo, Folsom and El Dorado County. The pass is valid seven days a week from August 1- December 31 for the Fall semester and January 1 - May 31 for the Spring semester. There is no summer session pass. The semester fee is \$5.54 for less than six units; \$11.08 for 6 to 11.9 units; and \$16.62 for 12 units or more (students receiving a BOG Waiver pay half the unit rate).

The fee is waived for students enrolled in the Criminal Justice Training Consortium, Apprenticeship programs, UC Davis students taking classes on the UC Davis main campus, and students studying abroad. Students enrolled only in online courses may request a refund on Form #BS23.

Student Access Card

The Student Access Card serves as the ARC student all-in-one card.

- College Student Photo ID card – for all campus services and activities.
- Regional Transit card – for all transit / transportation services provided in accordance with the Los Rios Community College District partnership agreement supporting student rider patronage privileges (fall and spring terms only) of each academic year. There are no summer RT transit pass privileges.
- College Library Card – accessing all Los Rios library and other instructional and support services offices that are open during fall, spring, and summer terms.
- Go-Print Copy Card – pay-for-print copier systems on campus.
- Student Discount Card – at participating stores and merchants.

Students can get their Student Access cards and RT validation stickers beginning January 1st for spring semester. To obtain the card, students need to bring a photo ID to one of the campus Access Card Stations. The Access Card Station is located in the Center for Leadership & Development (Student Center Building). For your card to be valid for RT use, it must have the current fall or spring semester sticker attached (not valid for summer RT-user). For more information regarding access cards, contact Center for Leadership & Development at (916) 484-8471.

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.

Some courses may require students to participate in field trips as a component of the curriculum. If students need assistance in order to participate in a field trip or a field studies activity, they should contact the course instructor or the division dean.

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.

How to Get Refunds

Enrollment Fee Refund Policy

- The enrollment fee, non-resident tuition fee, international tuition fee or Universal Transit Pass fee (if a sticker has not been picked up) is refundable for program changes made by Friday of the 2nd week of instruction for full term courses or by Friday of the first week of instruction for short-term courses (short term = any course less than full term).
- Refund eligibility is determined by the date the course is officially dropped, either in person or by using eServices. There are no refunds for courses dropped after the deadlines identified for the term. Requests for refunds must be filed by the last day of instruction in the semester for which the fee was paid or they will be disallowed. Credit balances will be forfeited and do not carry over to the next semester/term. Application and installment payment fees are non-refundable.

Obtain a Fee Refund Application at the Business Services office. A Fee Refund Application may also be submitted online at <https://www.losrios.edu/refundapp.htm>.

Fee refunds will be processed within six to eight weeks, whether a student applies for a refund online or at Business Services. If you add classes and pay fees after the refund deadline for the term in which you are adding, the fees are non-refundable.

Note: For those classes not scheduled during the standard class sessions, all add and drop activity must happen the day before the first class in order to avoid fees and penalties.

For sessions not listed, all identified as "OT" (Other Term), use the day before the class begins as the last day to drop for a refund and/or to drop without a "W" grade.

Parking Fee Refunds Policy

Parking fees are fully refundable during the first ten (10) days of the semester (fifth day of the summer session). To receive a refund, a student must attach the decal to the refund application form being submitted. **Requests for parking refunds may not be submitted online.**

RT sticker refund and replacement policy

The fee is refundable only if you drop classes by the deadlines indicated. A fee of \$5.54 will be retained if you have already been issued an RT (Regional Transit) sticker. Students enrolled only in online courses may request a refund. If your Student Access Card is lost, stolen or damaged during the academic year in which it was issued, there will be a \$5 fee for replacement. There will be a \$21.62 fee to replace lost or stolen Student Access cards which have a UTP sticker attached.

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, state and institutional regulations. Funds are distributed to students who have documented financial need, as determined by the federal and state analysis, and based upon the resources available to the household. See the Financial Aid Web page for more information.

Parents have the primary responsibility to assist their dependent student to pay for educational expenses. Financial Aid is available to qualifying students to help supplement household financial support for the student and cover unmet need after all household resources have been reported and taken into account.

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 required for campus-based aid, the Pell Grant, and 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.ed.gov.

In approximately 48 hours after submitting the FAFSA online, the student may view and print a copy of his or her Student Aid Report (SAR) at the FAFSA Web site. The College's financial aid office will notify the student by email when the student's FAFSA has been received. The email will include instructions about the My ARC Aid Web portal where students are notified of any required documentation to complete the financial aid file. Documentation requested from students is kept confidential, as established by FERPA standards, and must be furnished if the student is to receive aid. Students who are awarded financial aid are notified by email.

A student or parent may not foresee all of the expenses involved in attending college and may encounter financial difficulties if careful planning is not exercised. While students and parents must determine their own budget consisting of needs and resources, the following is the average cost of education for financial aid students attending American River College (fees are based on the average units for a full time student of 12 x \$46/unit):

COST OF ATTENDANCE AT ARC

2015-2016	At Home	Away from Home
Fees (\$46/unit)*	\$ 1,104	\$ 1,104
Books/Supplies	1,746	1,746
Transportation	1,268	1,268
Personal/Misc.	3,158	2,898
Room/Board	4,770	11,970
Totals	\$12,046	\$18,986

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

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

Failure to meet the financial aid satisfactory academic progress standards will result in the denial of aid.

Appeal

All students who are denied aid for lack of satisfactory progress may appeal the denial (except students with an earned unit total that equals or exceeds 120 units from all institutions of higher education). 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, then the student is ineligible to reappeal for financial aid until the next financial aid award year. If a student resolves the deficiency and cumulatively meets satisfactory academic progress standards within the award year, then the student may request reinstatement with the financial office. 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 dismissed from financial aid may have his/her eligibility reinstated by raising the cumulative completion percentage to above 67% and raising the cumulative GPA to the 2.0 standard to resolve the deficiency that resulted in the financial aid dismissal. 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 six (6) units throughout the loan period. Failure to successfully remain in half-time status will result in cancellation of subsequent disbursements during the following semester. Note that first-time borrowers are subject to a 30-day disbursement hold on all federal loan checks.

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 2012, 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 at <https://scholarship.losrios.edu>.

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

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.

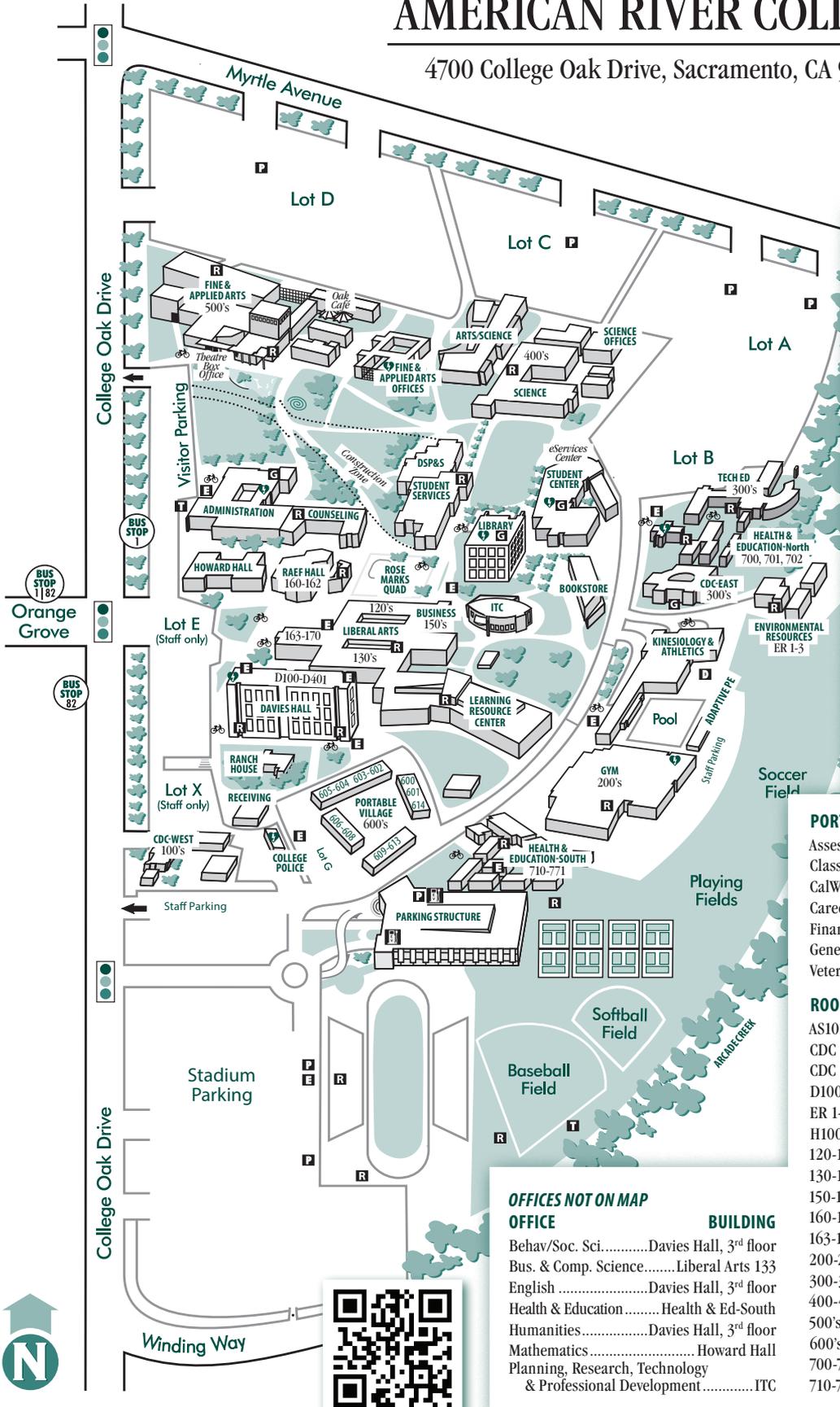
** A federal supplemental grant which does not have to be repaid. Grants may range from \$150 to \$600 depending on high financial need and availability of funds. FAFSA application required.

*** 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.

AMERICAN RIVER COLLEGE

4700 College Oak Drive, Sacramento, CA 95841



- CAMPUS POLICE/Shuttle (916) 558-2221**
- P** = Daily parking permit
 - T** = Public telephones
 - E** = Emergency telephones
 - R** = Public restrooms
 - G** = Gender neutral restrooms
 - D** = Paratransit loading zone
 - = Bike rack and/or locker
 - = Auto/external defibrillator
 - = eVehicle Charging Station

SERVICE	BUILDING
Business Services	Admin Center for Leadership & Development
Counseling	Student Center
DSPS	Student Services
eServices	Student Center
Enrollment Services	Admin
Financial Aid	Student Services
Health Center	Administration
Oak Café	Fine & Applied Arts
Police	south of Davies Hall

PORTABLE VILLAGE KEY (600'S)

Assessment Lab	603B
Classrooms	600/601/603A/606/609-613
CalWORKS	614
Career Center	605B
Financial Aid Lab	605A
General Offices	607-608
Veterans Resource Center	602

ROOM	BUILDING
AS101-AS112	Arts & Science
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	Kinesiology & Athletics (PE)
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 |
| Mathematics | Howard Hall |
| Planning, Research, Technology & Professional Development | ITC |



MAP REVISED: FEBRUARY 2, 2015

- Support Services and Programs

Support Services and Programs

ACE - Accelerated College Education (916) 484-6000

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

Advantages 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
- 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

Assessment Center (916) 484-8423

Basic skills tests/assessments is required for all first-time college students and those who plan to register/enroll in reading, writing, ESL (English as a Second Language), or math courses. Test results, along with other criteria, are used by academic counselors to determine readiness for specific courses and programs. There are no fees for testing. Most test results are available immediately after the test. Students must complete the online college application process and have a Los Rios student ID number prior to testing/assessment. A valid photo ID (school or government issued) is required for testing. After you have completed the Online Orientation and Assessments, counselors are available to help you create your student educational plan (iSEP). The Assessment Center also provides testing for reading and mathematics competency which may satisfy the requirement for graduating with an Associate degree. Office hours and the testing schedule are available on the Assessment Center website at www.arc.losrios.edu/assess and at many student services offices.

Beacon Program (916) 484-8918

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 to help the tutor 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.

Beaver Bookstore (916) 484-8111

The college-operated bookstore is conveniently located adjacent to the Student Center. 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. 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.

CalWORKs Support Services (California Work Opportunity and Responsibility to Kids) (916) 484-8059

The CalWORKs office assists students who are currently receiving TANF (Temporary Assistance to Needy Families) cash aid from the county. The college offers a wide variety of county approved academic programs that prepare students for a competitive workforce. In collaboration with our college and community partners, CalWORKs helps students move towards economic self-sufficiency through the attainment of higher education by offering educational planning, work study opportunities, career preparation and a variety of other support services.

Career Center (916) 484-8492

The Career Center offers a wide variety of career resources and services at no cost to ARC students and alumni. These resources assist students in planning for college, identifying career options, and researching current job openings. Services include:

- Interactive career assessments
- Employment workshops
- Special career-related events
- Resume evaluations and interview preparation
- Career Counseling

Center for Leadership and Development (CL&D) (916) 484-8471

The Center for Leadership and Development coordinates student activities and leadership opportunities for the campus and fosters an inclusive campus community by providing support services and information about:

- Club activities and student involvement opportunities
- Houses the Access Card (student ID card) and Sacramento Regional Transit (light-rail and bus pass) station
- Distribution of materials/poster approval
- Bike locker rental
- Student Rights & Responsibilities
- Off-campus housing - ARC does not provide residence housing. However, the CL&D provides information on roommates, shared housing, and available rentals. The college does not screen, approve, or endorse student housing options.

A major responsibility of the Center for Leadership and Development is to provide guidance and support services to:

Student Government

The Associated Student Body (ASB), 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 Los Rios Board of Trustees. Participation in student government is a valuable educational experience available to students.

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. Being a part of a club is a great way to build friendships and create a sense of belonging.

Child Development Center (916) 484-8651

American River College operates child care programs that are licensed by the Department of Social Services and accredited by the National Association for the Education of Young Children. The center is for student parents who are continuing their education. Program options include part-time, full-time, mornings and afternoons. There are multiple classrooms which serve toddlers and preschool children. School-age childcare is only available during the summer session. Student-parents must meet eligibility requirements regarding income and need as established by the State Department of Education/Office of Child Development. Space is limited therefore, we are unable to guarantee child care, we recommend that you have alternative child care plans.

The ARC Child Care Center also 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.

Counseling Center (916) 484-8572

The Counseling Center provides a wide range of academic, career and short-term personal counseling to help students successfully reach their goals. In the Counseling Center, counselors are available to provide:

- Educational planning and academic advising
- Transfer planning and information about guaranteed transfer programs
- Information about majors and instructional programs available at ARC
- Information about and/or referral to student support services and programs
- Information about and/or referral to community resources
- Career counseling and career planning

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.

(continued on next page)

(Counseling Center continued)

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.

Website: 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.

Disabled Students Programs & Services (DSP&S)**(916) 484-8382****Deaf and Hard of Hearing (916) 484-8559**

The goal of Disabled Students Programs & Services is to promote equal access to programs, services and facilities at American River College, thereby ensuring that students with documented disabilities experience the opportunity to participate fully in campus activities. The philosophy of DSP&S is to encourage maximum independence and personal empowerment through a successful educational experience. DSP&S provides a variety of support services, including specialized counseling, adaptive equipment, interpreters for the deaf, Braille, tutors, note takers, proctors, testing accommodations, and registration assistance. These services are provided at no cost to qualified students.

Dusty Baker Student Athlete Resource Center**(916) 484-8041**

The support team in the Dusty Baker Center assists student-athletes in achieving their academic and athletic goals by providing them with the following services:

- Academic Counseling and Assistance
- Athletic eligibility check and advising
- Time management support
- Connections to academic support services
- Graduation and Transfer Guidance

English as a Second Language (ESL) Center (916) 484-8919

The ESL Center courses enable English as a Second Language student to develop, expand and reinforce multiple English language skills. Students work independently on a variety of skill areas that they choose and get help from our instructors and tutors. Study materials are available for beginning, intermediate and advanced levels. The ESL Center also offers computer-based modules, small group conversation practice, and multi-media courses if students want to practice all of their English language skills together. Attendance times and days are flexible.

Enrollment Services (Admissions & Records) (916) 484-8261

Enrollment Services offers a full spectrum of Admissions and Records services. Services include enrollment verification, admissions and records forms, official transcripts, residency reclassification and graduation.

eServices Registration Lab (916) 484-8152

Students needing assistance with enrollment (including application and registration) are encouraged to visit the eServices Registration Lab in the Student Center building.

Extended Opportunity Programs and Services (EOP&S) / CARE Program (916) 484-8128

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.

CARE (Cooperative Agencies Resources in Education) Program

EOP&S-eligible students, who are single parents, head of household, currently receiving TANF and have a child/children 13 year old or younger, may also be eligible to participate in the CARE program.

Former Foster Youth

Former foster youth between the ages of 18-23 may be eligible for services through ARC's EOP&S program. Support services include enrollment assistance, educational planning, and tutoring. For more information visit the EOP&S website.

Financial Aid (916) 484-8437

Funds are provided to eligible students who have documented financial need in accordance with state and federal regulations. You may be eligible for various forms of financial aid including Board of Governors (BOG) waiver, grants and loans. For further information, please stop by the Financial Aid Office.

Foreign Language Laboratory (916) 484-8112

The Foreign Language Lab is open to all students taking a Foreign Language course. The lab is designed to provide students with state-of-the-art instructional resources and activities to support and enhance language learning. Students may use the computers to work on class related material or to use the foreign language software to independently learn any of the several languages offered. During drop-in hours, students have access to all the resources available for several languages including tutoring and conversation groups to practice their oral skills with other students and a facilitator.

Health Center (916) 484-8383

The ARC Health Center provides health care and education to ARC students and staff to support their academic and life goals. Health care is provided directly by Registered Nurses and/or indirectly through educational materials and referrals to community resources. Positive living is fostered by promoting wellness, both physical and emotional. There are no on-site physician services. The nursing staff may assess problems and make referrals to physicians, health agencies, etc. as needed. They cannot, however, make medical diagnoses or prescribe treatment. All services except for TB testing, immunizations, and titers are free.

International Students (916) 484-8774

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.

If you are both a resident and a citizen of any foreign country and cannot establish California residency under your current visa, you will receive specialized information on application, enrollment, documents and fees as an international student.

- Applicants for the F-1 visa must submit an application for an I-20 available from the International Students office.
- Those currently holding a B, F, or J, visa must contact International Students at (916) 484-8774 prior to applying for admission and enrolling in classes.

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. Students who earn acceptable scores on the International Baccalaureate (IB) exams will be awarded credit towards an A.A. or A.S. degree, but grades are not awarded. See IB (International Baccalaureate) charts in the catalog to determine credit given and ARC course equivalencies. Students must have official copies of their IB test scores submitted to Enrollment Services for Evaluations.

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.

Journey (916) 484-8489

Journey is a federally-funded Student Support Services program designed to help first generation, economically disadvantaged students, including students with disabilities, who have a goal to transfer to a four-year college or university. Journey provides students with a rich variety of services designed to provide academic, personal, and social support to achieve their dreams.

Learning Disabilities (LD) Program – DSP&S (916) 484-8938

The Learning Disabilities Program is part of the Disabled Students Programs & Services (DSP&S). The goal of these programs is to promote equal access to programs, services and facilities at American River College, thereby ensuring that students with documented disabilities experience the opportunity to participate fully in campus activities. Our philosophy is to encourage maximum independence and personal empowerment through a successful educational experience.

These programs provide a variety of support services, including specialized counseling, adaptive equipment, interpreters for the deaf, Braille, tutors, note takers, proctors, testing accommodations, and registration assistance. These services are provided at no cost to qualified students.

Learning Resource Center (LRC) (916) 484-8693

The Learning Resource Center (LRC) is a professionally staffed instructional facility. The LRC provides supplemental instruction and academic support through individualized tutoring and other alternative modes of instruction to ARC students. The LRC offers a fully equipped open computer lab designed to support the software needs of instruction and enhance student success in technology-based course assignments.

Programs within the LRC include: Beacon Program, English as a Second Language (ESL) Center, Foreign Language Lab, Reading Center, Reading Across the Disciplines (RAD), Tutoring Center, Writing Center, and Writing Across the Curriculum (WAC).

For detailed information on these services and programs see these specific services in this section of the catalog.

Library (916) 484-8455

The Kenneth Boettcher Library offers a welcoming learning environment that supports study, research, exploration, and academic growth. The library provides a full spectrum of library services and resources to students, including materials and instruction designed to help students find high-quality information and learn the research skills necessary to succeed in college and beyond. Also available are library courses that cover introduction to library resources and advanced research skills. The library is a popular study spot on campus, offering both individual and group study spaces, a large computer lab, and wi-fi access throughout the building.

Math Multimedia Learning Center (MMLC) (916) 484-8632

The MMLC provides students the opportunity to complete their basic math and/or algebra requirements using a mastery-based, independent study approach under the direction of their instructor. Computer-based instruction via the internet is an integral part of the course. Students may also visit the MMLC during other hours of operation to receive tutoring, complete assignments, and take exams. Each course may be completed as quickly as possible but no later than the end of the semester. Students who complete one course during the first half of the semester may sign up immediately for the next course.

MESA (Mathematics, Engineering, and Science Achievement) Program (916) 484- 8662

MESA is a learning community, statewide program, for students pursuing four-year degrees in the fields of mathematics, science or engineering. The MESA program provides tutoring, study groups, academic advising, and enrichment activities available to program participants needing academic support to ensure success. 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.

Puente Project (916) 484-8220

The Puente Project's mission is to increase the number of educationally underrepresented students who enroll in four-year colleges and universities, earn degrees, and return to their communities as leaders and mentors to future generations. 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.

Reading Across the Disciplines (RAD) Center (916) 484-8053

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. During the one hour class meetings, students will work in small groups or one-on-one with a RAD instructor or Instructional Assistant on applying reading and study strategies to the class of the student's choice.

Reading Center **(916) 484-8249**

The Reading Center offers individualized instruction to college students who want to improve their 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. Students who are enrolled in reading courses may also enroll in the Reading Center for supplemental instruction.

Science Skills Center **(916) 484-8204**

The Science Skills Center offers individualized instruction in reading and study skills geared to support students' efforts in their science courses. Instructors, instructional assistants, and tutors meet with students weekly to discuss different learning strategies and assist students with individualized instructional modules. The selection of modules may vary depending on student need and skill level.

Transfer Center **(916) 484-8685**

The mission of the Transfer Center is to help students and staff become aware of the many transfer options available and provides the most current information to ensure a smooth transition to four-year institutions. See the Transfer section of this catalog for detailed information.

Tutoring Center **(916) 484-8808**

The Tutoring Center offers individual and drop-in tutoring for students who need academic assistance outside the classroom. Tutoring is conducted by instructor-approved student tutors. Students who demonstrate proficiency in a specific subject are encouraged to apply to become a tutor. Tutors are salaried and must complete a tutor training course to comply with the state guidelines for tutoring in the community college. All tutoring is provided in the supervised setting of the Tutorial Center. This service is free to any ARC student.

Writing Across the Curriculum (WAC) Center **(916) 484-8802**

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 **(916) 484-8696**

The Writing Center currently offers one lecture course: ENGWR 50 Developmental Writing, this course focuses on developmental writing skills, emphasizing the connection between writing and reading with the goal of building fluency. Individualized instruction is provided by instructors, instructional assistants, and student tutors.

Veterans Resource Center (VRC) **(916) 484-8135**

The Veterans Resource Center assist Veteran students and their families with their ARC educational and VA related needs. The center provides an array of specialized support services and opportunities to assist Veterans in achieving their goals. Our peer mentors offer personalized services to Veterans and their dependents, including assistance with registration, campus tours, and Veteran-specific information. We provide academic, personal, and career counseling, weekly support groups, campus and community service referrals, student success workshops, a computer lab, and opportunities to network with other Veterans through the Veterans Club. In addition, a full time vocational rehabilitation counselor with the U.S. Department of Veterans Affairs is on staff in the VRC and is dedicated to provide guidance, information, and resource referrals.

Students may apply for evaluation of military service for college credit. A copy of the DD form 214 must be submitted 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.

VA certifying officials located in the VRC assist students by appointment to verify enrollment to the Department of Veterans Affairs. Students who are applying for VA education benefits must contact the VRC and provide required documents and transcripts from other colleges for evaluation. Continuing students are required to submit their schedules each term for which they wish to receive payment. It is advisable to submit all paperwork and class schedules immediately after enrolling in courses.

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.

Student Publications

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

- Educational Progress
- Admissions Information
- Attendance Requirements
- Academic Standards
- Grades and Credit
- Regulations on Course Repetition and Repeatability
- Academic Probation
- Progress Dismissal
- Academic Honors
- Student Petitions

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.

Admissions Information

Auditing

Auditing (sitting in a class without enrolling for credit) is not permitted at any Los Rios Community College. All students must be enrolled and fees paid for all classes by the last day to add.

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.

Students who have completed 3 years at a California high school, and graduated, may be eligible for an exemption from non-resident tuition.

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.

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. Please contact the Enrollment Services office if you qualify for this classification.

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 advised to mail official transcripts of all other previous college work to the Enrollment Services Office.

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.

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.

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.

Grades and Credit

Academic Load

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

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

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

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 but affects progress probation and dismissal
- *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, has not completed all the work for the class and instructor has agreed to allow student to complete work at a later date, at which time a final grade will be assigned. An Incomplete is not computed in GPA, but affects progress probation and dismissal. Student has one year in which to complete the coursework.
- IP In-progress, the course is longer than a semester and a student must re-enroll in the course the subsequent semester. When you have finished the course, the grade will be changed to A-F and units earned.
- W Withdrawal, The student has been officially dropped from the class by the deadline shown in the calendar elsewhere in this schedule. A "W" is not computed in your 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 on the permanent academic record/transcript prior to the point in which 20% of a class has occurred. These important dates are available at www.arc.losrios.edu/schedule.htm.

(Click on Registration Guide of the corresponding term 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.

A “W” notation 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.

Leave of Absence

Per LRCCD Policy P-7243, students may petition for leaves of absence from a college of the Los Rios Community College District in order to maintain catalog rights to a specified degree requirement option (See: Catalog Rights Policy P-7242).

Leaves of absence may be granted for verified medical and military situations that prevent the student from attending classes in any college session in a calendar year. Such leaves shall be limited to two (2) successive calendar years. In extenuating circumstances, a leave of absence may be extended beyond the two-year limit.

As stated in LRCCD Regulation R-7243, a petition for leave of absence should be filed in advance whenever possible. Students requesting a leave of absence during a semester must follow campus withdrawal procedures. Students applying for medical leave of absence must furnish a statement from the attending medical physician explaining the necessity for the student to interrupt enrollment. Students applying for military leave of absence must furnish a copy of the military orders inducting service.

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

Withholding Student Records

The college reserves the right to withhold student transcripts and records and to deny future enrollment for any outstanding student obligation, such as: nonpayment of fees; outstanding debt or missed payments on Federal student aid, Cal Grant, Federal student loan; or fines for overdue books within the Los Rios district. 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. You are advised to clear all debts and other holds on your record prior to enrolling in classes.

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.

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.

Regulations on Course Repetition and Repeatability

Repetition of courses must be conducted by all California community colleges in compliance with California Title V Regulations, Sections 55040 through 55046.

Course Repetition to Clear a Sub-Standard Grade

A course may be taken once and 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.

Repeatable Courses

Courses taken, earning a grade of C or better cannot be repeated. There are, however, certain specialized courses that are designated as “repeatable” and are listed as such in the course description. These include:

- Transfer level courses that may be taken more than once to meet the major requirement for transfer to a California State University (CSU) campus or to other universities with a similar transfer requirement.
- Variable unit courses that are open entry/exit such as math, reading and writing laboratory courses; these courses may be repeated up to the total maximum units allowed.
- Work Experience courses, which can be taken again when there is new or expanded learning on the job for a maximum of sixteen units.
- Interscholastic sports and their related conditioning courses may be repeated to meet requirements for CCCCAA eligibility.
- Intercollegiate academic or vocational competition courses with the primary purpose to prepare students for competition.

Non-repeatable Courses – Petitioning for an Exception

There are a few special circumstances that allow students to complete the petition process to repeat a course that does not meet any of the criteria listed in the section above. These include:

- Courses where students need to meet a legally mandated or licensure training requirement as a condition of continued paid or volunteer employment. These repetitions are not limited and are granted based on the college’s verification of established legal mandates.
- A student may repeat a course because there has been a significant lapse of time (defined as at least three years) since the student previously took the course and when another institution of higher education to which the student seeks to transfer has established a recency requirement. In cases where a transfer university requires a community college course to be taken as a university prerequisite more recently than three years ago, a college may alter the three-year rule with documentation provided by the student. 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.
- 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 special course that can be repeatable by petition so that a particular student can be approved to repeat it as a disability-related accommodation.

Limitations on Active Participatory Courses (course families)

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

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

In addition, if a student gets a sub-standard grade (a notation of D, F, NC (No Credit), NP (No Pass), or W (Withdrawal)) in any course within a family, the sub-standard grade counts as one of the four course limitations in the family. The list of families of courses is available in the Admissions and Records Office at each college. Please consult with a counselor for more information.

Beginning in summer 2013, new state regulations have eliminated community college students' ability to take certain active participatory courses more than one time. Active participatory courses are those courses where individual study or group assignments are the basic means by which learning objectives are obtained and include courses in physical education (Kinesiology/Athletics), and visual and performing arts (theatre arts, music, and art). Therefore, if students attempt to enroll in a course that they have already completed at any college in Los Rios with a grade notation of A, B, C, CR (credit) or P (pass), the students will be sent a notice that they have been removed from the course and cannot re-enroll in the same course at any Los Rios college.

Some active participatory courses have been put into groups based on similar content. For a list of these courses go to www.losrios.edu/familycrse.php. For example a group could consist of the following courses: Tennis I, Tennis II, Tennis III, Tennis IV, and Doubles Tennis. Students may take a total of 4 courses in a group at any Los Rios college. Once students have completed 4 courses in a group, they will not be allowed to take any other courses in that same group at any Los Rios college. Note: Although groups may have more than 4 courses, students may only take a total of 4 courses from the same group. Students who completed 1 or more courses in the same group prior to summer 2014 will have those courses count toward the total 4 allowable courses. For purposes of the 4 course limit within a group, each A, B, C, D, F, CR, P, NC (no credit), NP (no pass), or W (withdrawal) grade notation counts toward the 4 course limit.

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)

Students 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 *Transfer* section for specific information.

Advanced Placement (AP)

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 *Transfer* section for credit given and ARC course equivalencies. 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 *Educational Progress* 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.

Transcripts

A transcript is an official record of work completed at American River College, and is required for admission to other colleges and universities. The Los Rios Community College District has partnered with Credentials, Inc., to provide a secure and easy-to-use service for ordering transcripts online. This online request service is provided to students and alumni for any of the Los Rios colleges. Transcript information is available at www.arc.losrios.edu/admissions/transcripts.htm

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 Counseling and 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.

Purpose of the ARC Student Petitions

The student petitions provides students an opportunity to request action that is normally not permitted by state law, district policy or college practices and procedures. The petition is limited in scope to issues related to a student's admission, enrollment, and academic standing.

Use the student petition form to request:

- Enrollment in classes with time conflicts
- Approval of an unauthorized repeat of a course.
- Exceed maximum allowable unit load (18 per semester; 8 per summer session)
- Add or Drop of a class after deadline
- Course substitutions
- Withdraw from college on medical or military leave and retain catalog rights

Where to get the petition forms

Obtain the forms at Enrollment Services, eServices Registration Lab, the Counseling Center or online. Outcomes of student petitions will be sent to students via LRCCD Gmail accounts.

- Campus Security
- Education and Prevention
- Crime Statistics
- Reporting Crimes or Other Emergencies

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.

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 (916) 558-2221.

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.

The Jeanne Clery Disclosure (2000-2002) of Campus Security Policy and Crime Statistics Act

This information is updated annually and is available to all students, employees, and applicants. Additional information is available from District Police personnel. Any serious crime involving potential bodily harm will be reported promptly to staff and students. In 1998, the federal government passed "The Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act," formerly "The Student Right to Know Act" of 1990.

For direct online access to the annual Clery Report, go to <http://police.losrios.edu/pdf/annualcleryreport.pdf>. All statistics are also available in the Campus Police office.

Reporting Crimes or Other Emergencies

Community members, students, faculty, staff, and guests are encouraged to immediately report all crimes, suspicious activity, emergencies, and any other public safety related incidents to the Los Rios Police Department at (916) 558-2221 or ext. 2221 from a standard on-campus phone.

Crimes or Emergencies On-campus

Contact the Los Rios Police Department at (916) 558-2221. From a standard on-campus phone, dial ext. 2221. You may also dial 911 for community-based emergency assistance. From a standard on-campus phone, dial 911. Use these numbers for reporting on-campus fire, police and medical emergencies. Communications Center personnel are trained to respond appropriately to emergencies of any nature.

There are many “blue light” emergency telephones located throughout the campuses which ring directly into the Communications Center of the Los Rios Police Department. These auto-dialing phones may be used to summon emergency police, fire or medical assistance.

Crimes or Emergencies Off Campus

The Los Rios Community College District does not have off-campus student housing or student organization facilities. The off-campus emergency telephone number is 911. Use this number from pay phones and all off campus locations for community-based fire, police and medical services. Refer to your local telephone directory for further information.

Non-emergencies On-campus

Contact the Los Rios Police Department at (916) 558-2221 or from a standard on-campus phone, ext. 2221. You may also use the “blue” phones on campus for non-emergency services.

Confidential Reporting Procedures

All reports to the Los Rios Police Department can be made confidentially and anonymously in accordance with the reporting person’s wishes.

Weapons Possession

State law prohibits the possession of weapons, all firearms, fireworks, explosives or any dangerous weapons on-campus. Refer to Penal Code sections 12020, 626.9 and 626.10. Violators are subject to criminal prosecution and/or district discipline.

The Los Rios Community College District supports the federal guideline (37.007.1Ed Code) that prohibits handguns on campus. The possession of a firearm on district property is prohibited and strictly enforced. Persons in violation of this regulation will be subject to criminal and/or disciplinary action. This is formalized in District Regulation 2441.

If you observe a firearm or other weapon on campus, contact the campus police immediately at (916) 558-2221, or from a standard on-campus phone, ext. 2221. If you believe the weapon is about to be used, contact 911 immediately, or from a standard on-campus phone, 911.

Workplace Violence

The district is committed to creating and maintaining a working, learning and social environment for all employees, free from violence. The campus has zero tolerance for violence against any member of the workforce, other persons in the workplace, or property.

- Non-Discrimination Policy
- Access to Student Records
- Student Rights and Responsibilities
- Reporting Sexual Assault
- Drugs, Alcohol & Smoking Policies
- Illegal Downloads & File Sharing
- Children on Campus
- Statements of Professional Ethics

Non-discrimination Policy

American River College, as part of the Los Rios Community College District, supports established policies 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 at:

www.losrios.edu/legal/GCpolreg.htm

(web link is case sensitive)

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

College Equity Officer

Dr. David Redfield

(Interim) Associate Vice President, Instruction.....(916) 484-8540

Disciplinary Officer

Manuel Perez

Dean, Student Development.....(916) 484-8924

Student Grievance Officer

Dr. Judy Mays

(Interim) Dean, Counseling & Student Services....(916) 484-8375

Sexual Harassment Officer

Dr. David Redfield

(Interim) Associate Vice President, Instruction....(916) 484-8540

Title IX Coordinator

Dr. David Redfield

(Interim) Associate Vice President, Instruction....(916) 484-8540

504 Coordinator

Dr. Robin Neal

Dean, Enrollment Services.....(916) 484-8171

Americans with Disabilities Act (ADA) Coordinator

Dr. Robin Neal

Dean, Enrollment Services.....(916) 484-8171

Most complaints, grievances or disciplinary matters should be resolved at the campus level. This is the quickest and most successful way of resolving issues involving the college. You are encouraged to work through the campus complaint process first. Issues that are not resolved at the college or Los Rios District level may be presented via resources provided by the California Community Colleges Chancellor's

Office. Complainants are encouraged to use the official form provided by the Chancellor's office, however, that form is not required and complaints will not be considered defective or rejected if you do not use the form.

In addition to complaints being filed by students or employees, complaints may be initiated by other individuals or entities, such as a family member, representative, organization, or other third party wishing to file on behalf of an individual or group alleged to have suffered unlawful discrimination or harassment. For more information, please refer to Los Rios regulation 2423 at:

www.losrios.edu/legal/Regulations/R-2000/R-2000.htm

(web link is case sensitive)

Title IX

This college supports and complies with Title IX of the Education Amendments of 1972, which prohibit sex discrimination in admission to, or employment in, all its educational programs and activities. Inquiries concerning Title IX may be directed to the college Title IX Coordinator, Associated Vice President of Instruction, 4700 College Oak Drive, Sacramento, CA 95841, Telephone (916) 484-8540 or to the Director of the Office of Civil Rights, U.S. Department of Education, Washington D.C. Students Rights & Responsibilities.

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 of Student Services.

District Regulation 2265 provides for the release, without student consent, of specific students directory information (student name, student identification number, 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 purposed. 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.

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 Counseling and Student Services. Students who wish to exercise a grievance can receive policy and procedural steps from the Dean of Counseling and Student Services or online at:

www.arc.losrios.edu/Support_Services/Center_for_Leadership_and_Development/Student_Rights_and_Responsibilities.htm

(web link is case sensitive)

The College Student Grievance Officer may assist the student in the procedural steps of a student grievance. *(Revised by Los Rios CCD Board of Trustees, July 8, 1992)*

The California Community Colleges Chancellor’s Office has provided this disclosure in compliance with the requirement of the Higher Education Act of 1965, as amended, as regulated in CFR 34, Sections 600.9 (b) (3) and 688.43(b). Effective July 1, 2011, eligible institutions must have and disclose a state administered complaint process. The California Community Colleges Chancellor’s Office complaint process and form are available at **californiacommunitycolleges.cccco.edu/ComplaintsForm.aspx**.

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.

Sexual Violence

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

Sexual Assault

"Sexual assault" is broader than sexual violence and includes, but is not limited to, rape, forced sodomy, forced oral copulation, rape by a foreign object, sexual battery, domestic violence, dating violence, stalking, or threat of sexual assault. Sexual assault is a form of sexual harassment and should be reported under the District's Discrimination and Harassment Procedures Policy and Administrative Regulation (P/R-2423). It should also be reported to the District Police Department or other appropriate law enforcement.

Consent

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

- Consent must be voluntary, and given without coercion, force, threats, or intimidation. Consent requires positive cooperation in a particular sexual act, or expression of intent to engage in that sexual act through the exercise of free will.
- Consent can be withdrawn or revoked. Consent to one form of sexual activity (or one sexual act) does not constitute consent to other forms of sexual activity (or other sexual acts). Consent to sexual activity given on one occasion does not constitute consent to sexual activity on another occasion. The fact that two people are or were in a dating or sexual relationship does not constitute consent to engage in sexual activity. There must always be mutual and affirmative consent to engage in

sexual activity. Consent to a sexual act may be withdrawn or revoked at any time, including after penetration. The victim's request for the perpetrator to use a condom or birth control does not, in and of itself, constitute consent. Once consent is withdrawn or revoked, the sexual activity must stop immediately.

- Consent cannot be given by a person who is incapacitated. For example, a person cannot give consent if s/he is unconscious or coming in and out of consciousness. A person is incapacitated if s/he lacks the physical and/or mental ability to make informed, rational judgments. Examples of incapacitation include unconsciousness, sleep and blackouts. Whether an intoxicated person (as a result of using alcohol or other drugs) is incapacitated depends on the extent to which the alcohol or other drugs impact the person's decision-making capacity, awareness of consequences, and ability to make fully informed judgments. A person with a medical or mental disability may also lack the capacity to give consent.
- Being intoxicated by drugs or alcohol does not diminish a person's responsibility to obtain consent from the other party before engaging in sexual activity. Factors to be considered include whether the person knew, or whether a reasonable person in the accused's position should have known, that the victim did not give, or revoked, consent; was incapacitated; or was otherwise incapable of giving consent.
- Sexual intercourse with a minor is never consensual when the victim is under 18 years old, because the victim is considered incapable of giving legal consent due to age.

Domestic Violence

Domestic Violence is a form of Sexual Violence and is abuse committed against someone who is a current or former spouse, current or former cohabitant, someone with whom the abuser has a child, someone with whom the abuser has or had a dating or engagement relationship, or a person similarly situated under California domestic or family violence law. Cohabitant means two unrelated persons living together for a substantial period of time, resulting in some permanency of relationship. Factors that may determine whether persons are cohabiting include, but are not limited to (1) sexual relations between the parties while sharing the same living quarters, (2) sharing of income or expenses, (3) joint use or ownership of property, (4) whether the parties hold themselves out as husband and wife, (5) the continuity of the relationship, and (6) the length of the relationship.

Dating Violence

Dating Violence is a form of Sexual Violence, and is abuse committed by a person who is or has been in a social or dating relationship of a romantic or intimate nature with the victim. This may include someone the victim just met; i.e., at a party, introduced through a friend, or on a social networking website.

Stalking

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

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 confidentially 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, procedures 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 Policies

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: www.losrios.edu/legal/Policies/P-2000/P-2443.pdf (*web link is case sensitive*)

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

- Possession or use of alcohol: year in jail and/or fine
- Possession of marijuana (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.

Alcohol Policy

The Los Rios Community College District complies with the Drug Free Workplace Act of 1990 and the Higher Education Act Section 120a.

The district commits itself in creating a campus environment which reinforces healthy lifestyles; provides support services for students who are experiencing problems with substances; and educates students about the impact of both alcohol and other drug abuse.

Excessive use of alcohol and other drugs is a serious health problem in itself, but alcohol and drug abuse can also contribute to a host of other physical and mental health problems such as unwanted pregnancy, violent behavior, HIV infection and other sexually transmitted diseases and psychological depression.

Students found in violation of the district's alcohol, drug and weapons policies may be subject to academic probation suspension or expulsion. Parents or guardians may be notified about any disciplinary violation involving alcohol or a controlled substance which has been committed by a student who is under the age of 21.

The possession, consumption or transportation of alcoholic beverages on Los Rios Community College campuses or in district owned facilities is generally prohibited as a matter of institutional policy. It is important to note that the Los Rios Police Department will investigate and prosecute, to the fullest extent of the law, any violation of local, state, or federal laws pertaining to the use, possession, or sale of alcohol. Successful prosecution can lead to fines, incarceration in county jail, or incarceration in state prison, depending on the violation that was committed.

The use of alcoholic beverages must be in compliance with state law and is strictly limited to those persons 21 years of age or older. The possession, transportation, and/or consumption of alcohol by individuals less than 21 years of age is strictly prohibited and enforced. Alcoholic beverages may not be transported or consumed on district property. *This is formalized in District Policy 2443*

Controlled Substances Policy

The Los Rios Community College District complies with the Drug Free Workplace Act of 1990 and the Higher Education Act Section 120a. The Los Rios Police Department strictly enforces state and federal laws, as well as the district’s zero-tolerance policy, for the unlawful manufacture, distribution, dispensing, possession or use of illegal drugs on district property or at any district-sponsored event off campus. Violators are subject to criminal prosecution and/or disciplinary action. This is formalized in District Policies 2441 and 2443.

Alcohol and Controlled Substances Assistance and Education

For information, confidential assistance and referral for substance abuse issues, contact the following:

On Campus

Counseling Services	(916) 484-8572
Health Office	(916) 484-8383

Community

Alcoholics Anonymous	(916) 454-1100
Narcotics Anonymous	(800) 600-4674
Detox Center Pick Up (SPD)	(916) 264-5471

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.

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 college 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 college 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 at: www.losrios.edu/legal/Policies/P-7000/P-7831.pdf *(web link is case sensitive)*

Children on Campus

- Children on campus must be under the direct supervision of a parent or adult
- Unattended or disruptive children will be reported to the proper authorities.
- It is not appropriate for children to attend classes with their parents or to use labs or the library.

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 included in this catalog and available online at www.arc.losrios.edu/About_ARC/Vision_Mission_and_Values.htm 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.

- Graduation
- Course Numbering
- ARC Graduation Requirements
- ARC General Education Requirements
- General Education Areas and Alignment with Institutional Student Learning Outcomes

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 official academic calendar. 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 Graduation 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) in a calendar year 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.

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). |

ARC Graduation Requirements 2015-2016

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 F 89 – Sp 03, 1 – 99 numbered courses & courses numbered 1,000 or higher taken after Sp 03,) 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. 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 units minimum) **(These requirements are listed on the back of this document.)** 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 established at the time they begin college as long as they maintain their catalog rights. Refer to ARC catalog for definition of catalog rights.

A. WRITTEN EXPRESSION COMPETENCY is satisfied by the following:

1. Complete with a 'C' or better in one of the following courses: BUS 310; ENGWR 300, 480; ESLW 340.
2. Complete an equivalent college writing course at a *regionally accredited college in the U.S. with a grade of 'C' or better.
3. Possess a BA/BS or higher from a *regionally accredited college in the U.S.

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

1. Complete with a 'C' or better in one of the following courses: ENGRD 310, 312; ENGWR 303; ESLR 340.
2. Completion of a reading course in the Los Rios District at the 200 or 300 level that has been approved for competency by the Board of Trustees with a grade of 'C' or better.
3. Complete with a 'C' or better of an equivalent college level reading course at a *regionally accredited college in the U.S.
4. Possess an AA/AS or higher from a *regionally accredited college in the U.S.
5. Satisfactory completion of one of the following General Education patterns: CSU GE breadth or IGETC.
6. Achieve a qualifying score on a reading competency examination administered by a Los Rios Assessment Center. Only 2 attempts are permitted district-wide on this test.
7. Achieve a satisfactory reading competency score the first time taking a standardized reading test for placement. The competency score is determined by collaboration between the assessment and reading department.
8. Tests taken outside the Los Rios District will not be accepted.

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

1. Complete one of the following with a 'C' or better: MATH 110, 120, 124, 125, 129, 133, 300, 310, 320, 325, 330, 336, 340, 342, 350, 351, 355, 356, 370, 400, 401, 402, 410, 420; PHIL 324; PSYC 330; STAT 300, 305.
2. Complete an equivalent course with a 'C' or better at a *regionally accredited college in the U.S.
3. Obtain a satisfactory score on a Los Rios Math Competency Test.
4. Possess a BA/BS or higher from a *regionally accredited college in the U.S.

GENERAL EDUCATION REQUIREMENTS LISTED ON BACK.

* See District Policy and Regulations P7241/R7241

ARC General Education Requirements 2015-2016

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, 322, 331; **ARTPH** 300, 305, 340; **DEAF** 310, 312, 314, 316, 318, 380#; **ECE** 361, 363; **ENGLT** 300, 304, 308#, 310, 311, 320, 321, 327#, 338#, 340, 341, 345, 360, 370, 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#, 355#, 360, 365; **IDES** 310, 312; **ITAL** 401, 402, 411, 412; **JAPAN** 401, 402; **MUFHL** 300, 308, 310, 311, 315#, 321, 330#, 400; **PHIL** 300, 310, 315, 330, 331, 350, 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 from the following (3 units must be completed from each area):

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

BUS 310; **ENGWR** 300, 480; **ESLW** 340

b) Communication & Analytical Thinking: One additional course from the following: (3 units minimum)

ANTH 341*#; **AT** 105; **BUS** 105; **CISA** 305, 315, 320; **CISC** 300*; **CISP** 300, 315, 350, 360, 400, 440, 480; **DEAF** 370; **ENGCW** 400, 430; **ENGED** 305; **ENGRD** 310, 312; **ENGWR** 301, 302, 303, 481, 482; **ESL** 350; **GEOG** 330, 375; **JOUR** 300; **MGMT** 360; **MATH** 120, 124, 125, 129, 133, 300, 310, 320, 325, 330, 336, 340, 342, 350, 355, 356, 370, 400; **PHIL** 320, 324; **PSYC** 330; **SPEECH** 301, 323, 331, 361; **STAT** 300, 305; **WELD** 140

III. LIVING SKILLS: Two courses from the following – One course must be completed in each area (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** 312, 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; **KINES** 300; **LIBR** 310, 318, 325; **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 SCIENCES: One course from the following (3 units minimum):

ANTH 300, 303, 480; **ASTR** 300, 310, 320, 330, 481; **BIOL** 102, 103, 115, 116, 300, 301, 303, 305, 310, 352, 370, 400, 430, 431, 482; **CHEM** 305, 309, 310, 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, 310, 320, 330, 332, 346; **NUTRI** 300*, 302*; **PHYS** 310, 311, 312, 350, 410; **PS** 300; **PSYC** 310

V. SOCIAL & BEHAVIORAL SCIENCES: Two courses – 3 units must be completed in each area:

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, 304, 481

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

ADMJ 300, 302#, 304, 320; **ANTH** 310#, 319, 320, 321, 330#, 333#, 334#, 336#, 341*#, 481#; **BUS** 110, 300, 320*, 330#, 345; **DEAF** 351#, 352, 355#; **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#; **IS** 305#, 310#, 312#; **JOUR** 310, 320#; **MGMT** 374; **NATR** 307; **NUTR** 310#, 481#; **POLS** 302, 310, 320, 330, 332, 342; **PSYC** 300, 305, 320, 361#, 365#, 370*, 372, 373, 374, 383, 415, 480; **SILA** 330#; **SOC** 300, 301, 309, 318, 320#, 325#, 342#, 350, 480; **SOCSC** 310, 312

VI. ETHNIC / MULTICULTURAL STUDIES: (3 units minimum):

ADMJ 302#; **ANTH** 310#, 330#, 333#, 334#, 336#, 341#, 481#; **ARTH** 322#; **BIOL** 322; **BUS** 330#; **DANCE** 300#; **DEAF** 351#, 355#, 380#; **ECE** 430#; **ENGLT** 308#, 327#, 338#; **GEOG** 310#, 320#, 322#; **HIST** 307*#, 308*#, 320#, 321#, 323#, 325#, 330#; **HUM** 302#, 320#, 330#, 355#; **HSER** 330#; **IS** 305#, 310#, 312#; **JOUR** 320#; **MUFHL** 315#, 330#; **NUTRI** 310#, 481#; **PSYC** 356#, 361#, 365#; **SILA** 330#; **SOC** 320#, 325#, 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.

General Education

Philosophy

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.

Description of General Education Areas and Alignment with Institutional Student Learning Outcomes*

Humanities

(3 units minimum)

Courses in the humanities are those which study the cultural activities and artistic expressions of human beings. To satisfy the general education requirement in the humanities, a course should help the student develop an awareness of the ways in which people throughout the ages and in different cultures have responded to themselves and the world around them in artistic and cultural creation and help the student develop an aesthetic understanding and an ability to make value judgments. This category includes introductory or integrative courses in the arts, foreign languages, literature, philosophy, religion, and related disciplines.

Institutional Student Learning Outcomes aligned with Humanities

- Demonstrate skills and behaviors which contribute to open and respectful communication of diverse ideas and beliefs.
- For students earning degrees, demonstrate an understanding of the basic content and methodology for the major areas of knowledge, including the arts and humanities, quantitative reasoning, the natural sciences, and the social sciences.

Languages and Rationality

(6 units: 3 units each from (a) and (b))

Courses in language and rationality are those which use and examine principles and guidelines of clear and logical thinking and communication. Courses in this category should build upon rather than remediate verbal and quantitative skills.

- English Composition: Courses fulfilling the written composition requirement should include both expository and argumentative writing.
- Communication and Analytical Thinking: Courses fulfilling the communication and analytical thinking requirement include oral and written communication, mathematics, logic, statistics, computer language and programming, and related disciplines.

Institutional Student Learning Outcomes aligned with Languages and Rationality

English Composition component of the Language and Rationality general education requirement:

- Utilize a variety of methods to communicate effectively.
- Locate and critically evaluate information from a variety of sources, including those accessed through technology, to create informed responses to issues, problems, and challenges.

Communication and Analytical Thinking component of the Language and Rationality general education requirement:

- Utilize a variety of methods to communicate effectively.
- Locate and critically evaluate information from a variety of sources, including those accessed through technology, to create informed responses to issues, problems, and challenges.
- For students earning degrees, demonstrate an understanding of the basic content and methodology for the major areas of knowledge, including the arts and humanities, quantitative reasoning, the natural sciences, and the social sciences.

Living Skills

(3 units minimum)

One physical education activity course (with ADAPT, DANCE, FITNS, PACT, SPORT, or TMACT designators) must be taken in this area and a minimum of 2 units from the other courses included in this category. Adapted physical education courses are available for students with documented physical disabilities. These Adapted courses will fulfill the graduation requirement.

Courses in this area may be selected from a number of different disciplines that help students to acquire skills and knowledge to understand themselves as whole persons (integral to their environment). This category includes the study of courses that develop and maintain personal, social, physical and emotional well-being. It is the intent that this area includes such courses as health education, human sexuality, marriage and family, nutrition, and personal adjustment.

Institutional Student Learning Outcomes aligned with Living Skills

- Demonstrate and employ marketable skills and personal qualities for professional growth and career advancement.
- Demonstrate skills and behaviors which contribute to open and respectful communication of diverse ideas and beliefs.
- Utilize a variety of methods to communicate effectively.
- Employ strategies to work cooperatively and effectively with others.
- Locate and critically evaluate information from a variety of sources, including those accessed through technology, to create informed responses to issues, problems, and challenges.

Natural Sciences

(3 units minimum)

Courses in the natural sciences are those which examine the physical universe, its life forms and its natural phenomena. To satisfy the general education requirement in natural sciences, a course should help the student develop an appreciation and understanding of the scientific method, and encourage an understanding of the relationships between science and other human activities. This category includes introductory or integrative courses in astronomy, biology, chemistry, general physical science, geology, physical geography, physical anthropology, physics and other scientific disciplines.

Institutional Student Learning Outcomes aligned with Natural Sciences

- Locate and critically evaluate information from a variety of sources, including those accessed through technology, to create informed responses to issues, problems, and challenges.
- For students earning degrees, demonstrate an understanding of the basic content and methodology for the major areas of knowledge, including the arts and humanities, quantitative reasoning, the natural sciences, and the social sciences.

Social and Behavioral Sciences

(3 units minimum)

Courses in the social and behavioral sciences are those which focus on people as members of society. To satisfy the general education requirement in social and behavioral sciences, a course should help the student develop an awareness of the method of inquiry used by the social and behavioral sciences. It should stimulate critical thinking about the ways people act and have acted in response to their societies and should promote appreciation of how societies and social subgroups operate. This category includes introductory or integrative survey courses in anthropology, economics, history, political science, psychology, sociology and related disciplines, exclusive of those which fulfill the American Institutions requirement.

Institutional Student Learning Outcomes aligned with Social and Behavioral Sciences

- Demonstrate skills and behaviors which contribute to open and respectful communication of diverse ideas and beliefs.
- Utilize a variety of methods to communicate effectively.
- Employ strategies to work cooperatively and effectively with others.
- Locate and critically evaluate information from a variety of sources, including those accessed through technology, to create informed responses to issues, problems, and challenges.
- For students earning degrees, demonstrate an understanding of the basic content and methodology for the major areas of knowledge, including the arts and humanities, quantitative reasoning, the natural sciences, and the social sciences.

American Institutions Requirement

(3 units minimum)

Courses in American Institutions are those which focus on the historical development of American institutions and ideals, the operation of representative democratic government under the Constitution of the United States, and the principles of state and local government established under the Constitution of this State. To satisfy the general education requirement in American Institutions, a course should help the student develop an appreciation and understanding of the basic institutions, ideals, knowledge, and skills necessary for intelligent and loyal citizenship. It should stimulate critical thinking, problem solving, and literacy skills in regard to American historical, political, governmental, economic, social, and intellectual issues as they relate to both domestic and foreign affairs. This category includes introductory or integrative survey courses in history and political science which qualify under the guidelines of either “a” or “b” below.

- a) Any course which addresses the historical development of American Institutions and ideals, inclusive of the following:
- 1) Significant events occurring in the entire area now included in the United States of America, including the relationships of regions within that area and with external regions and powers as appropriate to the understanding of those events within the United States during the period under study.
 - 2) The role of major ethnic and social groups in such events and the contexts in which the events have occurred.
 - 3) The events presented within a framework which illustrates the continuity of the American experience and its derivation from other cultures including consideration of three or more of the following: politics, economics, social movements, and geography.

- b) Any course which addresses the U.S. Constitution, representative democratic government operation, and the process of California State and local government, inclusive of the following:
- 1) The political philosophies of the framers of the Constitution and the nature and operation of United States political institutions and processes under that Constitution as amended and interpreted.
 - 2) The rights and obligations of citizens in the political system established under the Constitution.
 - 3) The Constitution of the State of California within the framework of evolution of Federal-State relations and the nature and processes of State and local government under that Constitution.
 - 4) Contemporary relationships of State and local government with the Federal government, the resolution of conflicts and the establishment of cooperative processes under the constitutions of both the State and nation, and the political processes involved.

Institutional Student Learning Outcomes aligned with American Institutions

- Utilize a variety of methods to communicate effectively.
- Employ strategies to work cooperatively and effectively with others.
- Locate and critically evaluate information from a variety of sources, including those accessed through technology, to create informed responses to issues, problems, and challenges.
- Recognize the responsibility to behave as an ethical citizen, contributing personal knowledge, resources, and skills for the benefit of the local and larger communities.
- For students earning degrees, demonstrate an understanding of the basic content and methodology for the major areas of knowledge, including the arts and humanities, quantitative reasoning, the natural sciences, and the social sciences.

Ethnic / Multicultural Studies

Ethnic studies will be offered in at least one of the required general education areas.

Students may fulfill the District's Ethnic/Multicultural Studies course requirement through completion of one 3 unit course. Significant and substantial elements of the course must examine multicultural matters as specified by the criteria below.

- The course examines significant aspects of culture, contributions, and social experiences of under-represented ethnic/racial minority groups in the United States such as: African American, Asian American, Chicano, Latino, Hispanic Americans, and Native Americans; Non-western, Non-Eurocentric cultures.
- The course examines multiple groups, one of which may include European Americans and is comparative in nature.
- The course should include analysis of ethnicity, ethnocentrism, and/or racism, and how they shape and explain ethnic experience.

Institutional Student Learning Outcomes aligned with Ethnic/Multicultural Studies

- Demonstrate skills and behaviors which contribute to open and respectful communication of diverse ideas and beliefs.
- For students earning degrees, demonstrate an understanding of the basic content and methodology for the major areas of knowledge, including the arts and humanities, quantitative reasoning, the natural sciences, and the social sciences.

Note:

- * In November 2013, American River College approved revisions to the college's Institutional Student Learning Outcomes. These revisions included Institutional Student Learning Outcomes subsuming General Education Student Learning Outcomes.

- Transfer to Four-year Institutions
- Transfer to the California State University (CSU)
- CSU GE Pattern
- Transfer to the University of California (UC)
- Intersegmental General Education Transfer Curriculum (IGETC)
- Transfer Center
- AP (Advanced Placement) Test Scores
- IB (International Baccalaureate) Test Scores
- CLEP (College Level Examination Program) Test Scores

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 accredit (apply) a maximum of 70 semester units from community colleges toward the Bachelor's degree.

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 at www.assist.org. Articulation agreements with private and out-of-state colleges and universities can be viewed on the Transfer Center web page at: arc.losrios.edu/transfer 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: www.assist.org (Under "Explore Transfer Information" choose American River College. C-ID information is located at the bottom of the page.)

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. It is also important to choose your transfer major early to ensure you are taking the appropriate transfer courses.

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 an impacted campus or into an impacted major at a CSU or UC, you will need to meet specific entrance requirements for that program or college. Meet with your ARC counselor to ensure you are meeting these requirements.

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 at www.assist.org.

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 at:

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 Degrees for Transfer (ADT) for California community college students. These degrees are designed to provide a clear pathway to CSU degrees. California community college students who earn an ADT 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 ADT 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.

See next page for CSU GE Pattern

CSU GE Pattern

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; (2) the major requirements; (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 2014-2015

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), College Level Examination Program (CLEP), and International Baccalaureate (IB) examinations are appropriate for inclusion on the CSU GE certification pattern. Charts denoting how these tests meet CSU GE requirements can be viewed at: www.arc.losrios.edu/Support_Services/Articulation/APIBCLEP.htm

NOTE: Students must meet with a counselor in order to have their CSU General Education certified prior to transfer.

The 2015-2016 California State University General Education Pattern was not available for ARC's catalog publishing deadline. Check with an ARC counselor for the 2015-2016 CSU GE pattern.

[Continued on page 65]

2014-2015 California State University (CSU) General Education Pattern

The following American River College courses meet CSU lower division general education requirements:

A. English Language Communication and Critical Thinking: 9 units minimum, one course from each area.

A1 (one course)	SPEECH 301, 331, 361
A2 (one course)	ENGWR 300, 480; ESLW 340
A3 (one course)	ENGRD 310, ENGWR 301, 302, 303, 481, 482; ESL 350; PHIL 320; SPEECH 302, 311

B. Scientific Inquiry and Quantitative Reasoning: 9 units minimum, one course from each area. Courses in area B3 may also be used in areas B1 or B2 where appropriate. Related lecture course must be completed prior to or concurrently with lab.

B1 (one course)	ASTR 300, 310, 320, 330; CHEM +305, +309, +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, 301, +303, +305, +310, 342, 352, +370, +400, +410, +420, +430, +440, +442, +482; NATR +310, +320; PSYC 310
B3 (one course) Lab	ANTH 301; ASTR 400; BIOL +303, +305, +310, +370, +400, +410, +420, +430, +440, +442, +482; CHEM +305, +309, +400, +401, +423; GEOG 301, 309; GEOL 301, 306, 311, 331; NATR +310, +320; PHYS 312, +350, +360, +410; PS 301; PSYC 311
B4 (one course)	CISP 440; MATH 300, 310, 325, 330, 336, 340, 342, 350, 351, 355, 356, 370, 400, 401, 402, 410, 420; PSYC 330; STAT 300, 305

C. Arts and Humanities: 9 units minimum including one course from Arts and one from Humanities plus one course from either Arts or Humanities

C1 Arts (one course)	ART 300, 320, 324, 370, 372, 390, 420, 430; ARTH 300, 302, 308, 310, 322, 333, 334; ARTNM 305, 310; ARTPH 300; DANCE 403; 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; MUSM 342; TA 300, 302, 303, 306, 310, 312, 314, 315, 318, 350, 390, 406, 435, 480
C2 Humanities (one course)	ENGLT 300, 304, 308, 310, 311, 320, 321, 327, 338, 340, 341, 345, 360, 370, 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, 355, 360, 365; ITAL 411, 412; PHIL 300, 310, 315, 330, 331, 350, *360; SILA 315, 316; SPAN 411, 412
C1 or C2	

D. (0-9) Social Sciences: 9 units minimum, three courses from at least two different subject areas

D (three courses)	ADMJ 300, 302, 304, 320; ANTH 310, 315, 319, 320, 330, 333, 334, 336, 341, 481; BUS 320, 330, 345; ECE *312, 314; ECON 302, 304, 320; GEOG 310, 320, 322; HIST *300, *302, *305, *307, *308, 310, 311, 318, 320, 321, 323, 325, 327, 330, *340, *341, 343, *364, *365, *367, *373, *480, *481, 483, 484; JOUR 310, 320; NATR 307; NUTRI 310; PHIL *360; POLS 301, 302, 304, 310, 320, 322, 330, 332, 342, 481; PSYC 300, 305, 320, *340, *356, 361, *370, *372, *373, 383, *390, 415, 480, *481; SOC 300, 301, 309, 318, 320, 325, 342, 350, 480; SOCS 310, 312
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E. Lifelong Learning & Self Development: 3 units minimum

E (one course)	ECE *312; GERON 300, 302; HCD 310; HEED 300, 352; HSER 330, 340; NUTRI 300; PSYC *340, 342, 354, *356, 358, 359, 365, *370, *372, *373, 374, *390, 400, *481; SOC 335; SPEECH 321, One unit maximum from most courses with the following prefixes: ADAPT, DANCE, FITNS, PACT, TMACT, SPORT: Check with ARC counselor or www.assist.org to see if a specific physical education activity course is appropriate for CSU GE area E
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F. U.S. History, Constitution and American Ideals: This is a CSU Graduation requirement and not part of CSU Certification

F (2 courses)	POLS 301 or 481 and one of the following: HIST 310, 311, 318, 320, 321, 323, 325, 327, 330, 483, 484 <i>These courses can also be used in area D of the CSU GE Certification pattern.</i>
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*Courses appearing in more than one category may be used to satisfy only one category.

+Courses may be counted in 2 areas

Courses in the major field may or may not be counted for General Education. (For exceptions, see your counselor.)

Transfer to the University of California

Please refer to <http://admission.universityofcalifornia.edu/transfer/index.html> 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 any 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 recommend 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 at 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.(2.8 for non-residents)
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.(2.8 for non-residents)
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 requirements, earning a grade of 'C' or better in each course:
 - Two UC transferable college courses (3 semester or 4-5 quarter units each) in English composition (Courses from IGETC Areas 1A and 1B fulfill this requirement);
 - One UC transferable college course (3 semester or 4-5 quarter units) in mathematical concepts and quantitative reasoning (Courses from IGETC Area 2 fulfill this requirement);
 - Four UC transferable college courses (3 semester or 4-5 quarter units each) chosen from at least two of the following subject areas (Courses from IGETC Areas 3, 4 & 5 and other transferable courses fulfill this requirement):
 - arts and humanities
 - social and behavioral sciences
 - physical and biological sciences

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 next page for IGETC

2014-2015 University of California and California State University Intersegmental General Education Transfer Curriculum (IGETC)

The 2015-2016 University of California and California State University Intersegmental General Education Transfer Curriculum (IGETC) was not available for ARC's catalog publishing deadline. Check with an ARC counselor for 2015-2016 IGETC pattern.

Completion of all the requirements in the Intersegmental General Education Transfer Curriculum (IGETC) meet lower division general education requirements at either a California State University (CSU) or University of California (UC) without the need, after transfer to take additional lower division general education courses. All courses must be completed with grades of "C" or better. For information regarding admission requirements to attend a CSU or UC, please visit the Transfer Center website or meet with an ARC counselor. Students should also visit the www.assist.org website in order to view the courses that will complete lower division major preparation requirements.

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 (IB) examinations are appropriate for inclusion on the IGETC pattern.

Charts denoting how these tests meet IGETC requirements can be viewed at:

www.arc.losrios.edu/Support_Services/Articulation/APIBCLEP.htm

ARC Transfer Curriculum (IGETC) 2014-2015

Area 1: English Communication (6-9 units, one course from each area)

1A (one course)	ENGWR 300, 480 <i>Note: (UC Only) ENGWR 300 & 480 combined: maximum credit – 1 course.</i>
1B (one course)	ENGWR 301, 302, 303, 481, 482 <i>Note: (UC Only) ENGWR 301 & 481 combined: maximum credit – 1 course. ENGWR 302 & 482 combined: maximum credit – 1 course.</i>
1C (one course)	SPEECH 301, 331, 361 (CSU requirement only)

Area 2: Mathematical Concepts and Quantitative Reasoning (3 units, one course)

2A (one course)	MATH 336, 340, 350, 351, 370, 400, 401, 402, 410, 420; PSYC 330; STAT 300 <i>Note: (UC Only) MATH 340, 350 & 400 combined: maximum credit – 1 course. MATH 351 & 401 combined: maximum credit – 1 course. STAT 300 & PSYC 330 combined: maximum credit – 1 course.</i>
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Area 3: Arts and Humanities (9 units, one course from each area)

3A Arts (one 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 <i>Note: (UC Only) No credit for MUFHL 321 if taken after MUFHL 400. MUFHL 300 and 480 combined: maximum credit – 1 course. TA 350 & 480 combined: maximum credit – 1 course. TA 312, 314, 315 & 481 combined: maximum credit – 6 units.</i>
3B Humanities (one course)	ENGLT 300, 304, 308, 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, *307, *308, *340, *341, *364, *365, *367, *373, *480, *481; HUM 300, 301, 302, 310, 320, 326, 330, 360, 365; ITAL 411, 412; PHIL 300, 310, 315, 330, 331, 350; SPAN 411, 412 <i>Note: (UC Only) HIST 300 & 480 combined: maximum credit – 1 course. HIST 302 & 481 combined: maximum credit – 1 course.</i>
Area 3A or 3B (one course)	Chosen from 3A or 3B – that has not already been used to complete 3A or 3B.

[Continued on page 69]

[ARC Transfer Curriculum (IGETC) 2014-2015 continued]

Area 4: Social & Behavioral Sciences (9 units, three courses from at least two different areas)

4 A-J (three courses)	<p>ADMJ 300, 320; ANTH 310, 315, 320, 330, 333, 334, 341, 481; BUS 345; ECE 312, 314; ECON 302, 304; GEOG 310, 320, 322; HIST *300, *302, *305, *307, *308, 310, 311, 318, 320, 321, 323, 325, 327, 330, *340, *341, *364, *365, *367, *373, *480, *481, 483, 484; JOUR 320; NATR 307; NUTRI 310; PHIL 360; POLS 301, 302, 304, 310, 320, 322, 332, 342, 481; PSYC 300, 305, 320, 340, 356, 361, 370, 372, 373, 390, 480, 481; SOC 300, 301, 309, 318, 320, 325, 342, 350, 480; SOCS 310, 312</p> <p><i>Note: (UC Only) HIST 310, 320 & 483 combined: maximum credit – 1 course. HIST 311, 312 & 484 combined: maximum credit – 1 course. ECE 312, PSYC 372 & PSYC 373 combined: maximum credit – 1 course. POLS 301 & 481 combined: maximum credit – 1 course. PSYC 300, 305 & 480 combined: maximum credit – 1 course. PSYC 340 & 481 combined: maximum credit – 1 course. SOC 300 & 480 combined: maximum credit – 1 course.</i></p>
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Area 5: Physical and Biological Sciences (7-9 units, one course from each area. Lecture course must be completed prior to or concurrently with lab. Courses used in 5C may also be used in 5A or 5B if listed in these areas)

5A Physical Science (one course)	<p>ASTR 300, 310, 320, 330; CHEM +305, +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</p>
5B Biological Science (one course)	<p>ANTH 300, 303, 480; BIOL 300, 301, +303, +305, +310, 342, 352, +370, +400, +410, +420, +430, +440, +442, +482; NATR +320; PSYC 310</p>
5C Lab (one course)	<p>ANTH 301; ASTR 400; BIOL +303, +305, +310, +370, +400, +410, +420, +430, +440, +442, +482; CHEM +305, +400, +401, +423; GEOG 301, 309; GEOL 301, 306, 311, 331; NATR +320; PHYS 312, +350, +360, +410; PS 301; PSYC 311</p> <p><i>Note: (UC Only) ASTR 300, 310 & 320 combined: maximum credit – 2 courses. CHEM 305, 306 and 400, 401 combined: maximum credit – 1 series. CHEM 420 & 423 combined: maximum credit – 1 course. No credit for GEOL 305 if taken after a college level course in Astronomy, Geology, Oceanography or Meteorology. No credit for GEOL 306 if taken after GEOL 300 or 301. PHYS 310 & 311 combined: maximum credit – 1 course.</i></p> <p><i>No credit for PHYS 310 or 311 if taken after PHYS 350 or 410. PHYS 350, 360 and 410, 421, 431 combined: maximum credit – 1 series. ANTH 300 & 480 combined: maximum credit – 1 course. BIOL 370 & 482 combined: maximum credit 1 course. BIOL 300, 303 & 310 combined: maximum credit – 2 courses. No credit for BIOL 303 if taken after BIOL 310 or 400. No credit for BIOL 300 or 310 if taken after BIOL 400.</i></p> <p><i>No credit for PS 300 if taken after a college level course in Astronomy, Chemistry, Geology, Meteorology or Physics.</i></p>

UC Requirement Only

6A Language – Not English	<p>Proficiency equivalent to two years of high school study in the same language. Or, the following courses at ARC also will fulfill this requirement (<i>Note: Please see a counselor for options for fulfilling this requirement.</i>):</p> <p>FREN 401, 402, 411, 412; GERM 401, 402, 411, 412; ITAL 401, 402, 411, 412; RUSS 401, 402; SILA 305, 306, 315, 316, 318; SPAN 401, 402, 411, 412</p>
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U.S. History, Constitution & American Ideals: CSU Graduation Requirement Only – not part of IGETC certification

One course from each group	<p>Group 1 – POLS 301, 481</p> <p>Group 2 – HIST 310, 311, 318, 320, 321, 323, 325, 327, 330, 483, 484</p>
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*Courses appearing in more than one category may be used to satisfy only one category
+Courses may be counted in 2 areas

Transfer Center

(916) 484-8685

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 and University of California, Davis; Each four-year admissions representative 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 Guarantee Program (tag) with selected four year universities. Visit the Transfer Center website for an updated listing.

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 Transfer Center is located in the Counseling Center.

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					
AP TEST	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
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	3	3,4,5	5B & 5C	4	3,4,5	B2 & B3 (lab)	4	6
Biology	4,5	BIOL 310*	4	IV	4	3,4,5	5B & 5C	4	3,4,5	B2 & B3 (lab)	4	6
Biology	5	BIOL 400*	5	IV	5	3,4,5	5B & 5C	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 & 5C	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 & 5C	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 & 5C%	3	3,4,5	B1 & B3 or B2 & B3	4	4
Environmental Science - test taken Fall 09 or later				IV	3	3,4,5	5A & 5C%	3	3,4,5	B1 & B3	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 Language (taken Fall 09 or later)	3,4,5	GERM	4	I	4	3,4,5	3B & 6A	3	3,4,5	C2	3	6
Human Geography	3,4,5	GEOG 310	3	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 test scores continued on next page

TRANSFER

AP (Advanced Placement) Test Scores

AMERICAN RIVER COLLEGE				IGETC CERTIFICATION				CSU GE CERTIFICATION				
AP TEST	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 09)				1	3	3,4,5	3B & 6A	3	3,4,5	C2	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 & 5C	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 & 5C	4	3,4,5	B1 & B3	4+	6+
Physics B (taken after Fall 09)	5	PHYS 350 or 410*	4	IV	4	3,4,5	5A & 5C	4	3,4,5	B1 & B3	4+	6+
Physics C (electricity & magnetism)				IV	3	3,4,5	5A & 5C %	3	3,4,5	B1 & B3	4+	4+
Physics C (mechanics)				IV	3	3,4,5	5A (with Lab) & 5C %	3	3,4,5	B1 & B3 (lab)	4+	4+
Psychology	3,4,5	PSYC 300	3	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	4	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 2D, 3D or Drawing									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	3,4,5	HIST 308	3	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.

% test meets IGETC science course & lab requirement but only grants 3 units towards the IGETC. Student will need to insure he/she earns at least 7 units in IGETC area 5

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	CSU GE Area	Sem Units
Biology HL	5,6,7			IV	3	5,6,7	5B	3	5,6,7	B2	3	5,6,7	B2	6
Chemistry HL	5,6,7	CHEM 305* or 400*	5	IV	5	5,6,7	5A	3	5,6,7	B1	3	5,6,7	B1	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	D	6
Geography HL	5,6,7			Vb	3	5,6,7	4	3	5,6,7	D	3	5,6,7	D	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	C2 or D	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	C2	6
Language A2 (any language) HL	5,6,7			I	3	5,6,7	3B	3	4	C2	3	4	C2	6
Language B*** (any language) HL	5,6,7					5,6,7	6A	3	4	NA	NA	4	NA	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	B4	6
Physics HL	5,6,7			IV	3	5,6,7	5A	3	5	B1	3	5	B1	6
Psychology HL	5,6,7			Vb	3	5,6,7	4	3	5,6,7	D	3	5,6,7	D	3
Theatre HL	5,6,7			I	3	5,6,7	3A	3	4	C1	3	4	C1	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	D	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

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	3
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.

- List of Administrators
- List of Faculty

Administration

BOOTH, DERRICK (2007)
Dean, Business and Computer Science
 B.S., CSU Chico
 M.S., Ph.D., University of Washington

BOYD, STEVEN (2008)
Dean, Health and Education
 B.S., Louisiana State University
 M.B.A., CSU Fresno
 Ed.D. University of Southern California

CALDWELL, TRISH (2013)
Dean, Technical Education
 B.A., University of Washington
 Ph.D., M.A., University of California, Los Angeles

COUNTEE, JEROME (2013)
Associate Vice President, Workforce Education and Development
 B.A., University of Maryland Baltimore County
 M.P.A., Western Kentucky University

DE LEON, JANE (1989)
Interim Dean, Planning, Research & Technology
 A.B. UC Davis
 Ph.D. Stanford University

DI GUILIO, RAYMOND (2011)
Vice President, Administrative Services
 B.A., UC Davis
 M.A., UC Berkeley

GREENE, THOMAS (2014)
College President
 B.S., Northern Illinois University
 M.S., Northern Illinois University
 Ph.D., University of Texas at Austin

JAKUES, KATHLEEN F. (1994)
Dean of Humanities
 B.A., University of Alaska
 M.A. CSU Sacramento

KARP, ADAM (1999)
Dean, Fine and Applied Arts
 B.A., Ph.D., UC Davis

KOBAYASHI, HIRONOBU (FRANK) (2013)
Dean, Natomas Education Center
 A.S., A.A., Santa Rosa Junior College
 M.A., Stanford University
 Ed.D., B.S., UC Davis

MARYATT, VICTORIA (1998)
Interim Dean, English
 B.S.N., M.S.N., University of San Francisco

MAYS, JUDY (2005)
Interim Dean, Counseling & Student Services
 A.A., Bakersfield Community College
 B.A., CSU Bakersfield
 M.A., Cal Poly, San Luis Obispo
 Ph.D., University of Texas

MONTGOMERY, TAMMY (2010)
Associate Vice President, Instruction & Learning Resources
 A.A., Cosumnes River College
 B.A. & M.A., CSU Sacramento
 Ph.D., California Institute of Integral Studies

NEAL, ROBIN (2000)
Dean, Enrollment Services
 B.A., University of La Verne
 M.A., Saint Mary's College
 Ph.D., University of La Verne

OSTGAARD, KOLLEEN (2011)
Dean, Student Support Services
 B.A., M.A., CSU Sacramento

OWINGS, COLLEEN (1996)
Vice President, Instruction
 B.A., Pacific Lutheran University
 M.S., Western Oregon State

PEREZ, MANUEL (2009)
Dean, Student Development
 B.A., Santa Clara University
 M.A., San Diego State University

REDFIELD, DAVID A. (2009)
Interim Associate Vice President, Instruction
 B.A., Pt. Loma Nazarene University
 Ph.D., University of Nevada, Reno

REITZ, NANCY (1981)
Interim Dean, Mathematics
 B.A., Kalamazoo College
 M.S., UC Davis

REYES, CARLOS (2013)
Dean, Behavioral and Social Sciences
 B.A., Florida International University
 M.A., Pennsylvania State University

ROY, RINA B. (1991)
Dean, Science and Engineering
 B.S.C., University of Calcutta, India
 Ph.D., University of Florida

SEGURA, STEVEN (2013)
Dean, McClellan / Sacramento Regional Public Safety Training Center
 A.A., Sacramento City College
 B.A., Union Institute and University
 M.S., California State Polytechnic

STEPHENSON, JEFFREY WAYNE (2003)
Interim Vice President, Student Services
 M.S., Western Illinois University Macomb
 B.M.S., Cincinnati Mortuary College
 Ph.D., Capella University

WARZECKA, GREG (2013)
Dean, Kinesiology/Athletics
 B.A., UC Berkeley
 M.S., CSU Hayward

Behavioral & Social Sciences

BETHEL, PAUL (2003)
History
 B.A., San Francisco State University
 M.A., CSU Long Beach

BOVARD, VICTORIA (1997)
Psychology
 B.A., University of Texas
 M.A., UC Berkeley

CAMPBELL, DOLORES DELGADO (1977)
Social Science
 B.S., University of Texas
 M.A., M.S., CSU Sacramento

- CASPER-DENMAN, KRISTINA (2002)
Anthropology
B.A., Boston College
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- CHAO, PAMELA HUANG (1996)
Sociology
B.A., M.A., University of Chicago
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Economics
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Political Science
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Psychology
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Psychology
B.A., Federal University of Pernambuco, Brazil
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History
M.A., Ph.D., UCLA
- HIJAZI, NIDAL (2003)
Sociology
B.S. Santa Clara University
M.A., UC Davis
- HOKERSON, LORI (2008)
Psychology
B.A., M.A., Saint Mary's College
- JEYDEL, ALANA (2007)
Political Science
B.A., Trinity College
M.A., Ph.D., American University
- KINUTHIA, F. KAMAU (2001)
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B.A., Principia College, Illinois
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- LEONHARDT, CAMILLE (2009)
History
B.A., UC Davis
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- McCORMICK, MARCIA (2004)
Psychology
B.S., UC Davis
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Psychology
B.A., UC Riverside
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M.A., Ph.D., UC Davis
- MOKHTARZADA, SHAHLA (1992)
Sociology
B.A., M.S., M.A., Ph.D., UC Davis
- MURAKAMI, DEAN M. (1990)
Psychology
A.A., Harbor Junior College
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- NELSON, ELIZABETH L. (2005)
Psychology
B.A., Trinity University, San Antonio
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Ph.D., Oklahoma State University, Stillwater
- PADGETT, CHRISTOPHER D. (1998)
History
B.A., University of Pacific
M.A., Ph.D., UC Davis
- PEARSON, RUDY N. (1995)
History
B.S., Fresno Pacific College
M.S., Ph.D., Washington State University
- ROSARIO, BRIAN P.(2006)
Economics
B.S., University of the Philippines
M.A., Ph.D., UC Davis
- SCOTT, MARGARET L. (2007)
Psychology
A.S., West Valley College
B.S., San Jose State University
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- SENNA, DEBORAH (1990)
Psychology/Human Services
B.A., M.S., CSU Sacramento
- SHIMIZU, YUJIRO (2006)
Research/Psychology
B.A., Simon Fraser University
M.A., Washington University
- STEWART, MARK A. (1992)
Psychology
B.S., Brigham, Young University
Ph.D. University of Norte Dame
- SUKKARY-STOLBA, SOHEIR (1976)
Anthropology
B.A., Cairo University, Egypt
M.A., CSU Sacramento
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- TABARES, TRESSA (2002)
Political Science
B.A., E. Connecticut State University
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Political Science
B.A., CSU Fullerton
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- WARD, SUE E. (1998)
Gerontology/Psychology
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- WEINER, JOSHUA J. (2005)
History
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Anthropology
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History
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**Business &
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- ANTOS, DAMON (2002)
Computer Information Science
B.S., Cal Poly, San Luis Obispo
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- ARDANS, R. DIANE (1992)
Accounting
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Counseling & Student Services

- AGBUNAG, RODERIC (2010)
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M.S., Portland State University
- DELGADO, LYDIA (2014)
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M.S., CSU Long Beach
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B.A., M.S., CSU Sacramento
- FORTMAN, ANITA (2005)
Counseling
B.S., University of Arizona; M.S.,
CSU Sacramento
- GOMEZ, MARTIN (2008)
Counseling
B.A., UC Davis
M.A., CSU Sacramento
- HARDWICK, CHANIN (2008)
Counseling
B.A., UC Davis
M.A., University of Phoenix
- HARTIN, ROBERT (2002)
Counseling
B.A., UC Davis
M.A., CSU Sacramento
- HERRELL, KIM (2002)
Counseling
B.A., UC Davis
M.S., University of LaVerne
- KRONICK, LOUISE (1980)
Counseling
B.A., UC Berkeley
M.S., CSU Sacramento
- MILLER, BONNIE (1998)
Counseling
B.S., M.S., CSU Sacramento
- MOLINA-KANAE, MARTINA (2005)
Counseling
M.S., University of LaVerne
- MOORE, REYNA (2010)
Counseling
B.A. & M.S., CSU Fresno
- NELSON, JESSICA (2008)
Counseling
B.S., CSU Chico
M.S., University of Oregon
- 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
- RASOR, LORI T. (2000)
Counseling
B.A., M.S., CSU Sacramento
- RIVERA, RAFAEL (2005)
Counseling
B.A., UC Davis
M.S., CSU Sacramento
- ROBERTS-LAW, LISA E. (1991)
Counseling
B.A., University of Illinois,
Urbana-Champaign
M.S., Illinois State University
- RUEDAS, MANUEL (1988)
Counseling
A.A., Solano Community College
B.A., UC Davis
M.S., CSU Sacramento
- RUST, JOE (2006)
Counseling
B.A., M.S., CSU Sacramento
- SACHAU, MICHAEL (2005)
Counseling
A.A., Sacramento City College
B.A., UC Davis
M.S., CSU Sacramento
- SCALZI, JENNIFER (2007)
Counseling
A.A., American River College
B.A., M.S., CSU Sacramento
- SJOLUND, JOE (2002)
Counseling
B.A., M.S., CSU Sacramento
- WHIPPLE, PAMELA (2014)
College Nurse
B.S.N., Michigan State University
M.S.N., CSU Sacramento

English

- ABRAHAM, LOIS ANN (2003)
English
B.A., M.A., CSU Chico
- ANGELONE, MICHAEL (2008)
English
B.A., M.A., CSU Sacramento
- ARAMBEL, LEAH A. (2006)
Reading
B.A., UC Davis
M.A., San Francisco State University
- ARELLANO, CATHERINE (2014)
English
A.A., Interdisciplinary Studies,
Chabot College
B.A., English and History, UC
Berkeley
M.F.A., English, University of Iowa
M.A. Education, UC Berkeley
- 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
- BURCHETT, KAREN G. (2006)
English
B.A., CSU Bakersfield
M.A., CSU Fresno
Ph.D., UC Davis
- CASE, LYNDA (2001)
English
A.A., Sierra College
B.A., UC Davis
M.A., CSU Sacramento
- CLARKE, ARLENE G. (1989)
English
B.A., M.A., San Francisco State
University
Ph.D., UC Berkeley
- COLLINS, LYNNE (1991)
English
B.A., M.A., San Francisco State
University
- COOPER, MICHAELA B. (2005)
English
B.A. equiv., Eberhardt-Karls-
Universitaet, Tuebingen, Germany
B.A., CSU Sacramento
Ph.D., George Washington University
- CORBIN, KIRSTEN B. (2006)
English
B.S., M.A., San Francisco State
University
- CORCORAN, AMANDA (2002)
English
B.A., M.A., Texas Tech University
- ENGLER, DENISE (2008)
English
B.A., Santa Clara University
M.A., Arizona State University
- GOURDINE, TRACI, L (2000)
English
B.A., UC Davis
M.A., San Francisco State University
- HESS, JOHN F. (2000)
English
B.A., CSU Humboldt
M.A., CSU Sonoma
- HICKS, DIANA L. (2001)
English
A.A., American River College
B.A., M.A., CSU Sacramento
- HOWE, SUSAN R. (1996)
English
B.S., M.A., CSU Sacramento
- KIEFER, CHRISTIAN (2009)
English
B.A, USC
M.A., CSU Sacramento
Ph.D., UC Davis
- KLIER, JULIE ANN (2003)
Reading
M.Ed., National University,
Sacramento
- LAFLAM, JENNIFER (2014)
English
B.A., UC Santa Cruz
M.A., CSU Sacramento
- LEE, DENNIS J. (2007)
English
B.A., Miami University
M.A., University of Akron
- LOGAN, THOMAS E. (2000)
English
B.A., San Francisco State University
M.A., Ph.D., UC Davis
- LOVERING, JANAY (2013)
English
B.A., M.A., CSU SACRAMENTO
- LYMAN, ROBERT G. (2000)
English
A.A., American River College
B.A., M.A., CSU Sacramento
- MERSON, DAVID N. (1998)
English
B.A., Westmont College
M.A., UC Davis
- MORGAN, ROXANNE (2008)
Reading
B.A., University of Massachusetts
M.A., San Francisco State University
- O'BRIEN, KATHLEEN (2012)
English
B.A., M.A., CSU Sacramento
Ph.D., University of Oregon
- PRIES, SHANNON S. (2006)
Reading
B.A., Pomona College
M.A., San Francisco State University
- ROADCAP, GORDON (2002)
English
B.A., Sonoma State University
M.A., San Francisco State University
- RODGERS, KATHERINE G. (2005)
English
B.A., Smith College
Ph.D., Yale University
- ROONEY, SUE ANN (1989)
Reading
B.A., CSU Sacramento
M.A., St. Mary's College
- SCHNEIDER, HAROLD (1990)
English
B.A., University of Omaha
M.F.A., UC Irvine

- SPURGEON, MICHAEL L. (2005)
English
B.A., Colby College, Waterville,
Maine M.F.A., University of Arizona,
Tucson
- VALLE, JESUS (2002)
English
A.A., Central Arizona College
B.A., M.A., Stanford 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
- YOUNGS, CYNTHIA A. (2001)
Reading
B.A., Winona State University
M.A., Oakland University, Michigan
-
- Fine & Applied Arts**
- BROZOVICH, TOM J. (1965)
Art
M.A., UCLA
- BURLESON, KATHRYN B. (1989)
Theatre Arts
B.A., CSU Sacramento
M.F.A., UC Davis
- CHUN, ERIC (1988)
Music
B.A., California Lutheran University
- COOLEY, MARIE K. (1998)
Interior Design
A.A., College of the Sequoias
B.A., M.A., CSU Sacramento
- DOWNS, PAMELA (2008)
Theatre Arts
B.F.A., Southwest Missouri State
University
M.F.A., UC Davis
- EIFERTSEN, DYNE CHANEN (2003)
Music
D.M.A., University of Washington
M.M., University of Massachusetts
- GARDNER, DOUGLAS F. (1960)
Art
A.A., Sacramento City College
B.A., M.A., CSU Sacramento
- GELFMAN, LINDA (2003)
Art
M.A. CSU Sacramento
B.F.A., University of Illinois, Urbana
- GILMAN, JOSEPH A. (1992)
Music
B.M., Indiana University
M.M., Eastman School of Music, NY
Ed.D., University of Sarasota
- GRANT-TOSCANO, DIANE (2009)
Fashion
B.S., California Polytechnic State
University
- HAMRE, SUSAN (2009)
Music
B.A., Augustana College
M.M., CSU Northridge
- HOOVER, JODIE (2002)
Art
B.F.A., M.A., Alfred University
M.F.A., University of Buffalo
- HUGHES, RALPH E (1991)
Music
B.A., M.A., CSU Sacramento
D.M.A. (Conducting), University of
South Carolina
- KNIRK, BRIAN (1999)
Hospitality Management
B.S., Cal Poly, Pomona
M.B.A., University of Southern
California
Ed.D., Drexel University
- LaPIERRE, ARTHUR (1997)
Music
A.A., Fullerton College
M.A., B.M., CSU Long Beach
D.A., University of Northern
Colorado
- MAGRI, KEN (1991)
Art
CA College of Arts and Crafts,
Oakland
B.A., CSU Chico
M.A., CSU Sacramento
- MARTINEZ, CRAIG (2008)
Art New Media
B.S., UC Davis
- MATTSON, SARAH S. (2006)
Art
B.F.A., M.F.A., CSU Long Beach
- NEW, DONALD E. (2006)
Interior Design
B.F.A., Otis Art Institute of Parsons
School of Design
M.A., University of Central Florida
- O'BRIEN, ROXANNE E. (2006)
Hospitality Management
A.A., Skyline College
- PARKER, LAURA (1997)
Art/Computer Graphics
B.A., M.A., CSU Sacramento
- PARKS, JUDY (2008)
Culinary Arts
B.A., CSU Sacramento
- RUSSELL, GAIL (2002)
Theatre Arts
B.A., San Francisco State University
- SALLADARRE, RAYMOND (2003)
Hospitality Management
B.A., Lycee Hotelier des Pyrenees
- SHELDON, MICHAEL (2003)
Art
B.A., University of Nevada, Reno
M.A., CSU Sacramento
M.F.A., UC Davis
- SILVA, NANCY (1988)
Theatre Arts
A.A. Orange Coast Junior College
B.A., CSU Sacramento
M.A., M.F.A., University of
Minnesota
- SMITH, CRAIG (1999)
Art
B.F.A., Southwest Missouri State
University
M.F.A., University of Nebraska
- SPENCER, BONNIE S. (2001)
Fashion
B.S., Cal Poly, San Luis Obispo
M.A., CSU Sacramento

- STOEHR, MATTHEW (2002)
Art New Media
B.F.A., State University of New York
M.F.A., Ohio University
- THOMPSON, STEVEN (2000)
Music
B.M., Wichita State University
M.M., D.M.A., University of Southern California
- URKOFISKY, TERESA (2000)
Hospitality Management
B.V.E., CSU
Graduate, California Culinary Academy
- VAN REGENMORTER, MERLYN (1999)
Music
B.S., North Central University
M.A., CSU Dominguez Hills
Ed.D., Argosy University
- WILLIAMS, SAMUEL (2000)
Theatre Arts
B.A., Slippery Rock University, Philadelphia
M.F.A., UC Davis
- WORSFOLD, BRANDY (2007)
Art
B.F.A., Southwest Missouri State University
M.F.A., University of Florida
- YOUNG, JIAYI DIANA (2001)
Art New Media
B.A., Lawrence University
M.S., Kansas State University
M.F.A., Washington State University
-
- Health & Education**
- 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
- BONHAM, JACQUELINE (2003)
Nursing
M.S.N., B.S.N., CSU Sacramento
- BROWN-WOOD, JANAY (2013)
Early Childhood Education
B.A., UCLA
M.A., CSU Sacramento
- CERVANTES, ALINA (2001)
Early Childhood Education
B.A., 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
- COLDIRON, JOHN L. (1979)
Respiratory Care
A.A., A.S., San Bernardino Valley College
B.A., CSU Stanislaus
- De La CRUZ, DAMON (2013)
Funeral Services
A.A., Los Angeles Valley College
B.S., CSU Northridge
Ph.D., USC
- De LAPP, JAN (1999)
Early Childhood Education
B.A., M.A., CSU Sacramento
- 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
- GARNER, CHERI (2008)
Nursing
A.D.N., American River College
B.S.N., M.S.N. Ed, University of Phoenix
- GIUSTI, ANTHONY (2001)
Nutrition
B.S., M.S., UC Davis
- 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
- GOOLD, GRANT (1997)
Paramedic
B.A., CSU Sacramento
M.P.A./H.S.A., Ph.D., Education University of San Francisco
- HARRIS-NEBLETT, CHARLOTTE (2007)
Nursing
BA., Fisk University
B.S., M.A., CSU Sacramento
- ILAGA, LISA (2008)
Respiratory Care
A.S., Frederick Community College
B.S., Salisbury State University
- 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
- KLEEMAN, JOANN (1988)
Nursing
A.S., Long Beach City College
B.S.N., Sonoma State University
M.S.N., University of San Francisco
- KRAFT, MARY ELLEN (2011)
Nursing
A.S., Solano College
B.S.N., Regents College
M.S., UC San Francisco
- MARTIN, ERIC (1999)
Paramedic
B.A., CSU Chico
M.A., University of Nevada
- MENTINK, KATHLEEN (2004)
Nursing
F.N.P., UC Davis
M.S.N., B.S.N., CSU Sacramento

- NOWICKI, LAZETTE (2008)
Nursing
B.A., Jamestown College
M.S.N., University of North Dakota
- PARRINELLA, LISA M. (2006)
Nursing
A.D.N., Chabot College
B.S.N., University of Phoenix
M.S.N., CSU Dominguez Hills
- PETERSON, SUSAN E. (2001)
Interim Assistant Dean, Nursing
B.S.N., Statewide Nursing
M.S.N., UC San Francisco
- RYTHER, CHRISTOPHER T. (2005)
Paramedic
A.A., Santa Barbara City College
B.S., Central Washington University,
Ellensburg
M.S., St. Mary's College
- SCHIRMER, MARIE (2007)
Nutrition
B.S., UC Berkeley
M.S., University of Wisconsin
Ph.D., UC Davis
- YOUNG, JUDY A. (2000)
Nursing
A.A., Sacramento City College
M.H.A., B.H.S., Chapman University
- ZAJIC, KRISTINA (2009)
Speech/Language Pathology
B.S., M.S., CCC-SLP, CSU
Sacramento
-
- Humanities**
- 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
- AUSTIN, DAVID (2015)
Speech
B.A., CSU Los Angeles
M.A., CSU Los Angeles
- BATES, BRIAN (1998)
Humanities
B.A., Otterbein College; M.A.,
M.Ed., University of Arizona
- BIRCHALL, JILL (2011)
Sign Language
B.S., Gallaudet University,
Washington
M.S., McDaniel College
- BRACCO, PAUL (2000)
English as a Second Language
B.A., University of Rochester,
New York M.A., CSU Sacramento
- CREIGHTON, ANN (1999)
English as a Second Language
B.A., Arizona State University
M.A., CSU Los Angeles
M.A., University of Michigan
- DeCEW-JURACH, PAMELA K. (1994)
Speech
B.A., CSU Sacramento
M.A., Pennsylvania State University
- DUAX, PAUL L. (2001)
Speech
B.A., Loras College, Iowa
M.A., UC Davis
- FERTEL, KRISTINE (2003)
English as a Second Language
B.A. UC Riverside
M.A., San Francisco State University
- 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
- HAMMERWOLD, WALTER (2013)
Journalism
B.A., Loyola Marymount University
Master's, CSU Northridge
- HESS, KRISTA (1998)
English as a Second Language
B.A., M.A., CSU Sacramento
- HOGGAN, PATRICK (2002)
English as a Second Language
B.A., Brigham Young University
M.A., UC Davis
- HOLDEN, DENNIS (1991)
Philosophy
B.A., UCLA
M.A., Ph.D., UC Irvine
- JOYE, ALLYSON, C. (2001)
English as a Second Language
B.A., UC Davis
M.A., Monterey Institute
- KOMURA, KEIKO (1999)
English as a Second Language
A.A. Sacramento City College
B.A., UC Davis
M.A., CSU Sacramento
- LIMMANEERASERT, ORANIT
(2001)
English as a Second Language
B.A., Michigan State University
M.A., Ph.D., University of Hawaii
- LOPEZ, DAVID (2000)
Philosophy
A.A. Solano College
B.A., CSU Sacramento
M.A., Ph.D., UC Davis
- LUDOVINA, CEYDY. B. (2002)
Spanish
B.S., Universidad de las Americas
M.A., UC San Diego
- MARTINELLI, ESTER (2007)
Foreign Languages
B.A., CSU Chico
M.A., CSU Sacramento
- McCAFFREY, EILEEN (2000)
Sign Language Studies
B.A., CSU Sacramento
Ed.M., Oregon State University
- MONTGOMERY, THOEUNG (2007)
English as a Second Language
A.A., Modesto Junior College
B.A., UC Davis
M.A., CSU Sacramento
- PEZONE, SUSAN (2008)
English as a Second Language
B.A., SUNY Stony Brook
M.A., CSU Sacramento

RAU, MARK, J. (2000)
English as a Second Language
B.A., University of Massachusetts
M.A., University of Wisconsin

RYTHER, JANE E. (2006)
English as a Second Language
B.A., UC Berkeley
M.A., San Francisco State University

SHUBB, ALISA M. (1998)
Speech
B.A., M.A., UC Davis

SPECKER, ELIZABETH (2008)
English as a Second Language
B.A., SUNY, Plattsburgh
M.A., Ohio University
Ph.D., University of Arizona

STOCKDALE, GEOFFREY P. (2002)
Speech
A.A., Sacramento City College
B.A., M.A., CSU Sacramento

**Instruction
& Learning Resources**

AYALA, CONNIE C. (2006)
Learning Resources Center Coordinator
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

CRUMP, DANIEL (1996)
Library
B.A., UC Irvine
M.S.L.S., University of Southern California

DIELI, ALICE (2014)
Instructional Development Coordinator
B.A., SUNY Oswego
M.S. Ed., SUNY Potsdam

LEHMANN, SARAH (2008)
Library
B.A., Occidental College
M.L.I.S., UCLA

McCUSKER, DAVID N. (2005)
Library
B.A., Antioch College, Yellow Springs, Ohio
M.L.I.S., University of Pittsburgh

ONDRICKA, DEBORAH (2007)
Library
A.A., American River College
B.S., Excelsior College
M.L.S., Texas Woman's University

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

Kinesiology & Athletics

ALLRED-POWLESS, JEANNETTE (2003)
Physical Education
B.S., CSU Northridge
M.S., University of West Florida, Pensacola

ANDERSON, RICK D. (2001)
Physical Education
B.S., M.S., CSU Sacramento

ARELLANES, PAUL (2006)
Physical Education
A.A., Cosumnes River College
B.S., CSU Sacramento
M.S., US Sports Academy, Daphne, AL

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

DELGADO, LISA (2003)
Physical Education
A.A., College of the Siskiyous
B.A., M.A., CSU Chico

DILLON, DONALD E. (1999)
Physical Education
B.A., CSU Sacramento

ENGLISH, JOANNE C. (1989)
Physical Education
B.S., CSU Sacramento
M.S., Washington State University

FINNECY, TIMOTHY J. (2006)
Physical Education/Athletics
B.S., West Virginia University
M.Ed., Las Vegas University

FRAME, ASHLIE (2009)
Physical Education
B.A., UC Irvine
M.S., Azusa Pacific University

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

HAFLICH, GERALD (2002)
Physical Education
A.A., Ventura Junior College
B.S., CSU Sacramento
M.S., US Sports Academy

HANSEN, PAUL (1997)
Physical Education
B.A., Cal Poly, San Luis Obispo
M.S., CSU Sacramento

HIGGINS, KEVIN J. (1987)
Physical Education
B.S., CSU Sacramento
M.S., South Dakota State University

JABERY-MADISON, BOBAK (2009)
Physical Education
A.A., American River College
B.A., UC Davis

JUMELET, DOUG A. (2005)
Physical Education
A.A., American River College and Sacramento City College
B.S., M.S., Cal Baptist University, Riverside

MAERO, RAYE B. (1996)
Physical Education
B.A., UC Davis
M.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
- SMITH, SUNNY (1994)
Physical Education
A.A., Sacramento City College
B.A., M.A., CSU Sacramento
- 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
-
- Mathematics**
- ABDUL, ALISHER (1997)
Mathematics
M.S., Moscow St. University
B.S. National University
Ph.D., Moscow Institute of Technology & Physics
- ANDRE, PAUL (1996)
Mathematics
B.S., University of Minnesota
M.A., CSU Sacramento
- BARCELLOS, ANTHONY (1987)
Mathematics
A.A., Porterville College
B.S., California Institute of Technology M.S., CSU Fresno
Ph.D., UC Davis
- BIRDSALL, LILL H. (2006)
Mathematics
B.S., M.A.T., UC Davis
- BREDEK, CYNTHIA (2008)
Mathematics
B.S., University of South Florida
M.S., University of Central Florida
- BROCK, MICHELLE (2012)
Mathematics
B.A., CSU Sacramento
M.A., University of San Francisco
- CHUNG, JULIE TZU C. (2005)
Mathematics
M.S. UC Irvine
B.A., UC Berkeley
- DAVIS, WILLIAM (2004)
MESA/CCCP
A.S., Santa Rosa Junior College
B.A., M.A., Sonoma State University
M.S., Ph.D., UC Davis
- DeLEON, LEONEL (1991)
Mathematics
B.A., M.A., CSU Fresno
- ETGEN, BENJAMIN (2004)
Mathematics
B.S., California State University, Sacramento
M.A.T., UC Davis
- GAUDARD, AMY L. (2006)
Mathematics
B.S., M.A., MAT, UC Davis
- GOTT, SHARON (2014)
Mathematics
B.S., M.A.T., Virginia Commonwealth University
- GUPTA, SHASHI (1991)
Mathematics
B.A., Miranda College, India
M.A., University of Delhi, India
- HALSETH, AILEEN (2000)
Mathematics
B.A., CSU Sacramento
M.A.T., UC Davis
- HALSETH, ANDREW (2002)
Mathematics
A.A., Solano College
B.A., M.A., San Diego State University
- HEEREN, CHRISTOPHER (2011)
Mathematics
B.A., M.A., CSU Sacramento
- JONES, VINCENT (2012)
Mathematics
B.S., UC Davis
M.S., Texas A & M, College Station
- KINOSHITA, RORY M. (2006)
Mathematics
B.S., Sonoma State University
M.S., UC Davis
- McCARROLL, SHARLEEN (2003)
Mathematics
M.S., B.S., Cal Poly, San Luis Obispo
- McKAIG, SANDRA L. (1982)
Mathematics
B.S., M.S., Cal Poly, San Luis Obispo
- MESSER, CARTER-RYAN (2001)
Mathematics
M.A., B.S., UCLA
- MILANO, ANGELA (2008)
Mathematics
B.A., Sonoma State University
M.S., Texas A&M University
- MITCHELL, MATT (2003)
Mathematics
B.S., UC Davis
M.A., CSU Sacramento
- OWENS, ROCIO (2013)
Mathematics
B.A., M.A., CSU Sacramento
- PETERSON, PATRICIA A. (1984)
Mathematics
B.S., Portland State University
M.S., Stanford University
- PICO, GLENN (2010)
Mathematics
A.A., Diablo Valley College
B.A. & M.A., CSU Sacramento
M.S., University of Minnesota
- RIDGWAY, THEODORE A. (2000)
Mathematics
B.A., Amherst College
M.A., University of Wisconsin
- RUTAGANIRA, THOMAS (2000)
Mathematics
M.S., National University of Zaire
M.S., Ph.D., UC Davis
- SACCO, TANJA L. (2005)
Mathematics
B.S., Biola University, La Mirada
M.A., CSU Fullerton
- SMITH, PHILIP R. (1989)
Mathematics
B.S., Duke University
M.S., Vanderbilt University
Ph.D., UC Davis

TRUONG, BINH (2002)
Mathematics
B.S., University of Washington
M.S., New Mexico State University
Ph.D., UC Davis

WALKER, JAMES E. (1987)
Mathematics
B.S., M.A., UC Davis

**McClellan / Sacramento
Regional Public Safety
Training Center (SRPSTC)**

GORRE, CHARISSA (2007)
*Sacramento Regional Public Safety
Training Center*
B.A., California State University
M.A., National University

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

RILEY, LONETTA (2008)
*Sacramento Regional Public Safety
Training Center*
B.A., University of Nebraska
M.S., George Peabody College of
Vanderbilt University

Science & Engineering

AFONSO, PAULO (2010)
Astronomy
B.S., University of Lisbon, Portugal
M.S., University of Lisbon, Portugal,
and UC Davis

AUBERT, JOHN E. (1999)
Geography
B.A., CSU Stanislaus
M.A., UC Davis

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

BRADSHAW, KATHRYN (2003)
Biology
B.A., UC Santa Cruz, M.S.
CSU Sacramento

BRENCHLEY-JACKSON, JOAN
(1995)
Biology
B.S., M.S., Ph.D., UC Davis

CASALE, KRISTIN G. (1994)
Chemistry
B.A., U.C. Berkeley
Ph.D., U.C. Davis

ECKERMAN, PAMELA J. (1993)
Biology
A.A., American River College
B.S., M.S., UC Davis

HAAG, BROOKE (2013)
Physics/Astronomy
A.A., Hartnell College
B.S., Sonoma State University
M.S., Ph.D., UC Davis

HERNANDEZ, CECILIA (1998)
Physics/Physical Science
B.S., M.S., University of Puerto Rico

HONG, TAMILYN W. (1998)
Chemistry
B.S., University of Hawaii
M.S., UC Davis

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

JAECKS, GLENN (2007)
Geology
B.S., University of Wisconsin
M.S., University of Colorado
Ph.D., UC Davis

JORGENSEN, GREGORY, M. (2000)
Chemistry
B.S., Ph.D., UC Davis

KUBO, KENNETH M. (1998)
Biology
B.S., Stanford University
Ph.D., UC San Francisco

LEVY, MELISSA H. (1999)
Earth Science
B.S., M.A., East Tennessee State
University

LOUCKS, STUART (2000)
Physics
B.S., M.S., UCLA

MADDOX, MICHAEL W. (2006)
Chemistry
B.S., Hons, Bath University, UK
Ph.D., Oxford University, UK

MARTINEZ, MARLENE (2004)
Biology
B.S., U.C. Davis
Ph.D., UC Berkeley

McCORMAC, GREGORY (2000)
Biology
B.A., UC Irvine
M.S., CSU Sacramento

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

MILLER, JANET H. (2005)
Biology
B.A. Idaho State and Brigham Young
Universities
M.S., CSU Sacramento

MOORE, JUSTIN A. (2005)
Biology
B.S., CSU Fresno
M.S., UC Davis; M.A.

MORENO, MINERVA (1993)
Engineering
B.S., University of Morelos,
Cuernavaca, Mexico
M.S., University of Waterloo, Ontario

NEALE, JENNIFER C. (2006)
Natural Resources/Science
B.A., UC Santa Cruz
M.S., UC Berkeley
Ph.D., UC Davis

- NIEDZINSKI, EDMUND (2008)
Chemistry
B.S., University of Scranton
Ph.D., UC Davis
- PAYNE, MICHAEL (2014)
Chemistry
B.A., CSU Sacramento
M.S., CSU Sacramento
- PESIS, KAREN, H. (2000)
Chemistry
B.S., M.S., UC Davis
- RAMONES, SUSAN (2013)
Biology
B.S., UC Davis
M.S., CSU Sacramento
- RIVERS 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
- ROY, DEBOLEENA (2001)
Chemistry
B.S., M.S., Jadavpur University, India
Ph.D., Texas Tech University
- SHAHROK, RENEE (1997)
Biology
B.S., M.S., UC Davis
- SIMPSON, WILLIAM (2004)
Physics
B.S., Willamette University, Oregon
Ph.D., UC Riverside
- SLUTSKY, DANIEL (2008)
Biology
B.S., Ph.D., UC Davis
M.A., CSU Sacramento
- SMITH, LORI (2000)
Biology
B.S., Ph.D., UC Davis
- STEWART, DANIEL (2008)
Chemistry
A.A., Santa Rosa Junior College
B.S., Ph.D., UC Davis
- SWEET, MICHAEL (1999)
Biology
B.S., University of Iowa
M.A., UC Santa Cruz
- 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
- 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
- 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
- WON, DEAN K. (2005)
Biology
A.A., San Joaquin Delta College
B.S., UC Davis
M. Ed., University of the Pacific
Ph.D., UCLA
- YOUNG, SHIH-WEN MICHAEL (2003)
Physics/Physical Science
B.S., National Taiwan Normal University
Ph.D., Kansas State University
- ZARATE, VICTOR H. (2005)
Physics
M.S., B.S., UC Berkeley
- ZARZANA, LINDA (1989)
Chemistry
B.S., UC Davis
M.S., CSU Sacramento
- ZHAO, YU (JOY) (2007)
Biology
B.S., Capital Normal University, Beijing
M.S., California State Polytechnic University
Ph.D., Loma Linda University

Technical Education

- AGUILAR, GARY (1999)
Design Technology
B. Architecture., Cal Poly,
San Luis Obispo
- AHMADI, AL (2008)
Electronics Technology
B.S., University of Oklahoma
M.S., Golden Gate University
- ANDRONAS, JENNIFER, (2014)
Automotive Technology
A.S., Sierra College
- EVANGELISTI, FRED (1998)
Electronics Technology
A.A., American River College
B.A., CSU Sacramento
M.A.V.E., Consortium of CSU
- FLOWER, DEBORAH (2008)
Horticulture
B.S., Rutgers University
M.S., UC Davis
- FRENCH, BENJAMIN R. (2005)
Automotive Technology
A.S., Sierra Community College
B.V.E., CSU Sacramento
- GEORGE, GARY T. (2002)
Electronics Technology
A.A., Golden West College
A.S., American River College
B.S., Cal Poly, Pomona
- HARPER, ERIC (2002)
Automotive Technology
A.S., Sierra College

HERRLINGER, GARY D. (1985)

Design Technology

B.S., UC Davis

M.A., CSU Sacramento

JOE, DONALD (2007)

Automotive Collision Technology

B.S., CSU Sacramento

McCORMACK, JOHN (2001)

Automotive Technology

A.A., Sierra College

B.V.E. CSU Sacramento

MOORE, CHRISTOPHER (2012)

Automotive Technology

A.S., American River College

REESE, MARK ALAN (2003)

Welding Technology

A.A., American River College

SCHUSTER, RANDY O. (2006)

Design Technology

B.S.M.E., UC Davis

STOKER, RICK (2013)

Pre-Apprenticeship

Journeyman

WECKMAN, CRAIG (2008)

Diesel/Clean Diesel Technology

B.V.E., CSU Sacramento

- Special Academic Programs
- Detailed Information on all Programs, Degrees and Certificates

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 at www.arc.losrios.edu and on the home page left-hand menu, click on "College Catalog."

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 (WEXP) is an experiential, academic program which allows students in paid or unpaid positions to apply what they have learned in the classroom to a work environment. Upon completion of their Work Experience weekly orientation course, students may earn 1-4 units of credit with a letter grade. The Work Experience Program serves interns, volunteers, and employed students.



NOTE: See the Work Experience program pages for area specific Work Experience courses.

How the Program Works

Work Experience Program Requirements:

1. Be at least a second-semester (or more) student.
2. Be in good academic standing.
3. Be working in a paid or unpaid internship or job related to career goals. Students not currently in an internship who would like assistance should contact the Work Experience & Internship Program office or go to the website at <http://wexp.losrios.edu/>.
NOTE: Students must have a cooperating employer by the end of the second week of the full semester or first week of an eight week (or summer session) to remain in the weekly course.
4. Be enrolled and attend a weekly course or qualify for the "Returning Student" status (see "Returning Student Requirements" below). Please note that attendance is required for everyone for the first class meeting.
5. Be goal oriented, motivated to learn, and have good time management skills.
6. Establish new or expanded on-the-job learning objectives with employer's assistance that will be documented and evaluated. Note: this will be accomplished through the weekly course.

NOTE: To assist in a successful experience and learning opportunity, ESL students are recommended to be at a minimum intermediate level in ALL areas (ESL 50) to benefit from participation in the program.

Internships & Volunteer Opportunities

Internships and volunteer experiences provide an opportunity for students to obtain work experience related to their academic or career goals. These opportunities assist students with developing technical skills, exploring possible career choices, building confidence, networking with people in the field, and transitioning for entry or re-entry into the world of work.

Interested students are recommended to apply for an internship at least 2-3 weeks or more prior to the start of the enrollment term and are required to enroll in a Work Experience course. Students who would like assistance should contact the Work Experience & Internship Program office at (916) 484-8182 or go to the program website for more information at <http://wexp.losrios.edu> and follow the student information path. Students must have a cooperating employer by the end of the second week of the full 16-week semester (end of the first week of an 8-week or summer session) to remain enrolled. 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 course (class time).

Opportunities for Employees

Work experience (WEXP) also assists our employed students who are interested in advancing within their existing work environment. Through WEXP and approval from 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.

Work Experience Courses Offered

There are two types of work experience options:

1. Occupational Work Experience
2. 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 Area III, Living Skills of ARC General Education requirements and possible elective units or major units.

Please note that only Work Experience courses numbered 498 are guaranteed transferable to CSU (California State University).

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 course (class time). Students may take up to 16 units total across all Work Experience course offerings.

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

General Work Experience (198)

General Work Experience 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 Area III, Living Skills of ARC General Education requirements 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 course (class time). A total of 3 units may be earned in General Work Experience 198. WEXP 198 is not repeatable.

Types of Work Experience Students

New Student Requirements:

- 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 Requirements:

- 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 course meeting, a mid-semester meeting, and a final meeting. Students may also meet individually with the instructor as needed. You must establish new or expanded 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. Units taken in Independent 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.

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 an existing American River College (ARC) catalog course. One unit of independent study equals 54 hours of lab. Independent study may be taken for 1-3 units. Independent study cannot be used to repeat or to substitute for an existing ARC course.

To be eligible for independent study, students must 1) have successfully completed the basic regular catalog course at American River College; 2) be enrolled in a regular catalog course; 3) be in good standing.

Application

To apply for Independent Study, the student first discusses his/her educational plan and the transferability of the independent studies course with a counselor. The student then discusses the option of an independent studies course with an instructor in the discipline. If the instructor agrees to supervise this course, the student and the instructor will then complete the Independent Studies Petition. The instructor will route the petition for the necessary approval.

If the Independent Studies Petition receives final approval, Admissions and Records will add the class to your schedule and contact you by way of email to pay the enrollment fees. The student then receives a grade as in any regularly scheduled course. The completed petition must be filed by the deadline published in the class schedule in the semester in which the study is to be completed. If the study is not completed by the end of the semester, a new petition must be approved in the subsequent semester, if units are to be granted.

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
 Department Certificates:
 Tax Specialist I
 Tax Specialist II

DEGREES AND CERTIFICATES

Accounting Degree

This 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

This 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 Bachelors 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
ACCT 311 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)	3
And a minimum of 8 units from the following:	8
ACCT 101 Fundamentals of College Accounting (3)	
ACCT 121 Payroll Accounting (3)	
ACCT 125 Federal and State Taxation (4)	
ACCT 128 Taxation of Corporations, Partnerships, Estates, and Trusts (4)	
ACCT 131 Fundamental Payroll Administration (1.5)	
ACCT 132 Intermediate Payroll Administration (1.5)	
ACCT 133 Advanced Payroll Administration (1.5)	

ACCT 134	California Payroll Administration (1.5)
ACCT 153	Governmental Accounting (3)
ACCT 160	Volunteer Income Tax Assistance (2)
ACCT 341	Computerized Accounting (2)
ACCT 343 or CISA 316	Computer Spreadsheet Applications for Accounting (2) Intermediate Electronic Spreadsheets (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.

See losrios.edu/gainful-emp-info/gedt.php?major=011593C01 for Gainful Employment Disclosure.

(continued on next page)

(Accounting Certificate continued)

<u>Requirements for Certificate</u>	<u>36 Units</u>
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
ACCT 311	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 121	Payroll Accounting (3)
ACCT 125	Federal and State Taxation (4)
ACCT 128	Taxation of Corporations, Partnerships, Estates, and Trusts (4)
ACCT 131	Fundamental Payroll Administration (1.5)
ACCT 132	Intermediate Payroll Administration (1.5)
ACCT 133	Advanced Payroll Administration (1.5)
ACCT 134	California Payroll Administration (1.5)
ACCT 153	Governmental Accounting (3)
ACCT 160	Volunteer Income Tax Assistance (2)
ACCT 341	Computerized Accounting (2)
ACCT 343	Computer Spreadsheet Applications for Accounting (2)
or CISA 316	Intermediate Electronic Spreadsheets (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

See losrios.edu/gainful-emp-info/gedt.php?major=011419C01 for Gainful Employment Disclosure.

<u>Requirements for Certificate</u>	<u>18 Units</u>
ACCT 101	Fundamentals of College Accounting.....3
ACCT 121	Payroll Accounting (3).....3
or [ACCT 131	Fundamental Payroll Administration (1.5)
and ACCT 132	Intermediate Payroll Administration (1.5)]
ACCT 341	Computerized Accounting.....2
BUS 105	Business Mathematics.....3
BUS 310	Business Communications.....3
CISA 315	Introduction to Electronic Spreadsheets.....2
A minimum of 2 units from the following:.....2	
ACCT 133	Advanced Payroll Administration (1.5)
ACCT 134	California Payroll Administration (1.5)
ACCT 343	Computer Spreadsheet Applications for Accounting (2)
or CISA 316	Intermediate Electronic Spreadsheets (2)
ACCT 498	Work Experience in Accounting (1 - 4)
BUSTEC 310	Introduction to Word/Information Processing (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 or other work experience in tax return preparation.

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.
- prepare 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.

<u>Requirements for Certificate</u>	<u>14 Units</u>
ACCT 125	Federal and State Taxation.....4
ACCT 128	Taxation of Corporations, Partnerships, Estates, and Trusts.....4
ACCT 301	Financial Accounting.....4
A minimum of 2 unit from the following: 2 ¹	
ACCT 160	Volunteer Income Tax Assistance (2)
ACCT 498	Work Experience in Accounting (1-4)
BUS 498	Work Experience in Business (1-4)
WEXP 498	Work Experience in (Subject) (1-4)

¹Two hours of work experience (ACCT 498, BUS 498, or WEXP 498) must be in taxation.

Tax Specialist I Certificate

This certificate provides occupational training and education in small business accounting, computerized accounting and spreadsheet applications used in small business accounting, and basic federal payroll tax administration. It also includes federal and California individual income tax law, regulations, and tax return preparation.

Student Learning Outcomes

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

- compile and maintain accounting records for a small business through the use of accounting software.
- construct computerized spreadsheets to accumulate, summarize, and analyze accounting and tax information.
- build payroll information from small business accounting records and file federal payroll tax returns.
- generate an income statement, statement of owner's equity, and balance sheet for a small business.
- prepare federal and California income tax returns.
- assist taxpayers in preparing and electronically filing federal and California income tax returns.
- apply professional ethical behavior in accounting, taxation, and business.

Career Opportunities

Accounting firms need employees who can assist in the preparation of accounting information for businesses and individuals for accurate and complete federal and California

(continued on next page)

(Tax Specialist I Certificate continued)

income and payroll tax returns. Employment outlook for the 2010-2020 period shows that the number of job openings for bookkeeping, accounting, and accounting clerk positions are in the top 25 of all occupations.

Requirements for Certificate		13.5 - 17.5 Units
ACCT 101	Fundamentals of College Accounting (3)	3 - 4
or ACCT 301	Financial Accounting (4)	
ACCT 125	Federal and State Individual Taxation	4
ACCT 131	Fundamental Payroll Administration	1.5
ACCT 160	Volunteer Income Tax Assistance (2)	1 - 4 ¹
or WEXP 498	Work Experience in (Subject) (1 -4)	
ACCT 341	Computerized Accounting	2
CISA 315	Introduction to Electronic Spreadsheets	2

¹Two hours of work experience (WEXP 498) must be in taxation.

Tax Specialist II Certificate

This certificate is intended for students who have completed the Tax Specialist I Certificate and need to obtain a higher level of competency in the field. It builds on the knowledge, skills, and abilities of the Tax Specialist I certificate by adding courses in corporate financial accounting, taxation of partnerships, corporations, estates, and trusts, payroll accounting, property taxation in California, and assisting individual taxpayers in the preparation of more complex federal and California income tax returns, as well as reviewing the income tax returns completed by other tax preparers.

Student Learning Outcomes

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

- collect employee earnings information needed to file federal and California payroll tax returns.
- explain the requirements on businesses for reporting personal property assets and assist in their valuation for taxing entities.
- build accounting income, expense, and ownership information needed to prepare entity income tax returns.
- explain income tax requirements of entities including partnerships, corporations, estates, and trusts.
- assist individual income tax payers in preparing and filing more complex tax returns, including self-employment income, retirement income, itemized deductions, foreign tax credits and other credits.
- review the tax returns completed by other preparers.

Career Opportunities

Accounting firms and businesses require employees who can assist in or prepare entity (business, non-profit, estate, and trust) and individual income tax returns, payroll, and personal property tax returns.

Requirements for Certificate		13 - 16 Units
ACCT 122	Sales and Use Taxes	1
ACCT 128	Taxation of Corporations, Partnerships, Estates, and Trusts	4
ACCT 134	California Payroll Administration	1.5
ACCT 161	Volunteer Income Tax Assistance II (2)	1 - 4 ¹
or WEXP 498	Work Experience in (Subject) (1 -4)	
ACCT 301	Financial Accounting	4
PROPTX 311	Appraisal of Machinery & Equipment	1.5

¹Two hours of work experience (WEXP 498) must be in taxation in addition to the taxation work experience completed in the Tax Specialist I Certificate.

Accounting

ACCT 101 Fundamentals of College Accounting 3 Units

Advisory: BUS 105, MATH 100, MATH 104, or MATH 132; AND eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300, OR ESLR 340 AND ESLW 340.

Hours: 54 hours LEC

This introductory course in small business accounting covers the accounting cycle for service and merchandising businesses. Topics include the general journal, the general and subsidiary ledgers, and adjusting, correcting, and closing journal entries. Income statements, statements of owner equity, balance sheets for service and merchandising businesses are prepared and analyzed. Additional topics include cash management and bank reconciliations, accounting for sales and purchase discounts, sales taxes, merchandise inventory, and payroll.

ACCT 103 Intermediate Accounting - Part I 4 Units

Prerequisite: ACCT 301 or 481 with a grade of "C" or better

Hours: 72 hours LEC

This course continues the study and application of accounting principles and techniques used in preparing and reporting the financial results of business corporations. Areas of study include cash and receivables, inventory, long-term assets, and analysis of time value of money.

ACCT 104 Intermediate Accounting - Part II 4 Units

Prerequisite: ACCT 301 or 481 with a grade of "C" or better

Advisory: ACCT 103

Hours: 72 hours LEC

This course continues the study and application of accounting principles and techniques used in preparing and reporting the financial results of business corporations. Areas of study include liabilities and contingencies, stockholders' equity and earnings per share, investments, revenue recognition, income taxes, pensions, leases, accounting changes and error analysis, and cash flows.

ACCT 107 Auditing 3 Units

Prerequisite: ACCT 301 with a grade of "C" or better

Advisory: ACCT 103; ACCT 104; BUS 105 or MATH 100, 104 or 132; AND eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300, OR ESLR 340 AND ESLW 340.

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 111 Cost Accounting 3 Units

Prerequisite: ACCT 311 with a grade of "C" or better

Hours: 54 hours LEC

This course covers advanced managerial accounting. Topics include recording, classifying, reporting, and analyzing costs as well as examining different costing systems. The course focuses on understanding costs, appropriate accounting for them, and using them to analyze, plan, operate, and evaluate manufacturing, merchandising, and service businesses. It utilizes the industry-standard software, Excel, to do so.

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 122 Sales and Use Taxes 1 Unit

Hours: 18 hours LEC

This course covers the requirements for businesses to collect, report, and submit sales and use taxes in California. It also presents information on the exemption from sales and use tax requirements for non-profit organizations.

ACCT 125 Federal and State Individual Taxation 4 Units

Advisory: ACCT 101 or 301 ; AND eligible for ENGRD 116 AND ENGWR 102; OR ESLR 320 AND ESLW 320.
Hours: 72 hours LEC

This course covers basic Federal and State Income Tax regulations with an emphasis on the skills necessary for the preparation of individual income tax returns. Topics include filing requirements, determination of taxable income, allowable deductions, tax computation, tax credits, other taxes, payment methods, and audit procedures. The course is a California Tax Education Council (CTEC) qualifying education course, and is offered to members of the community to enable them to become a California Registered Tax Return Preparer (CRTP).

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.

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 income tax compliance with an emphasis on the taxation of business entities including corporations, partnerships, limited liability companies, S-corporations, estates, and trusts. Topics include tax and non-tax characteristics of business entities, income tax filing requirements, differences in book and taxable income, selection of accounting methods and periods, tax computation, and available credits.

ACCT 131 Fundamental Payroll Administration 1.5 Units

Advisory: ACCT 101; BUS 105 or MATH 100, 104 or 132; AND eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340
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 and ENGRD 116 OR ESLR 320 and ESLW 320; ESLL 320; MATH 100, 104 or 132 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 121 or 132 with a grade of "C" or better
Advisory: MATH 100 or BUS 105; AND eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340
Hours: 27 hours LEC

This course addresses the application skills and knowledge necessary for advanced-level work in the payroll field. Topics include 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 121 or 131 with a grade of "C" or better
Advisory: MATH 100 or BUS 105; AND eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340
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 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, 104 132 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 160 Volunteer Income Tax Assistance 2 Units

Prerequisite: ACCT 125 with a grade of "C" or better
Hours: 24 hours LEC; 36 hours LAB

This course prepares students to qualify as basic level tax preparers and assist taxpayer-clients in the preparation and filing of both federal and California income tax returns. The course meets Internal Revenue Service requirements and is recognized as a Volunteer Income Tax Assistance (VITA) program. This course is not open to students who have completed ACCT 127.

ACCT 161 Volunteer Income Tax Assistance II 2 Units

Prerequisite: ACCT 160 with a grade of "C" or better

Hours: 24 hours LEC; 36 hours LAB

This course provides students an opportunity to prepare higher-level tax returns including returns with itemized deductions, and self employment income, review and approve the returns prepared by other students, and to manage a Volunteer Income Tax Assistance (VITA) program recognized by the Internal Revenue Service (IRS).

ACCT 295 Independent Studies in Accounting 1-3 Units

Hours: 54-162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

ACCT 301 Financial Accounting 4 Units

Advisory: ACCT 101; AND BUS 105 or MATH 100, 104, or 132; AND eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300, OR ESLR 340 AND ESLW 340.

Course Transferable to UC/CSU

Hours: 72 hours LEC

This is the study of accounting as an information system, examining why it is important and how it is used by investors, creditors, and others to make decisions. The course covers the accounting information system, including recording and reporting of business transactions with a focus on the accounting cycle, the application of generally accepted accounting principles, the financial statements, and statement analysis. It includes issues relating to asset, liability, and equity valuation, revenue and expense recognition, cash flow, internal controls, and ethics. (C-ID ACCT 110)

ACCT 311 Managerial Accounting 4 Units

Prerequisite: ACCT 301 with a grade of "C" or better

Course Transferable to UC/CSU

Hours: 72 hours LEC

This course covers how managers use accounting information in decision-making, planning, directing operations, and controlling. It focuses on cost terms and concepts, cost behavior, cost structure, and cost-volume-profit analysis. Topics include issues relating to cost systems, cost control, profit planning, and performance analysis in manufacturing and service environments. (C-ID ACCT 120)

ACCT 341 Computerized Accounting 2 Units

Prerequisite: ACCT 101 or 301 with a grade of "C" or better

Advisory: CISC 100 or 300

Course Transferable to CSU

Hours: 27 hours LEC; 27 hours LAB

This course emphasizes the major areas of a computerized accounting system: general ledger, accounts receivable and revenues, accounts payable and expenses and purchases, fixed assets and depreciation, cash receipts and cash disbursements, bank reconciliations, job order costing, adjusting and closing entries, and financial statements. This course 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, Sage 50, or other industry standard software 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, 104, 132 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 495 Independent Studies in Accounting 1-3 Units

Course Transferable to CSU

Hours: 54-162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

ACCT 498 Work Experience in Accounting 1-4 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position, or job related to accounting with a cooperating site supervisor. Students are advised to consult with the Accounting Department faculty to review specific certificate and degree work experience requirements.

General Education: AA/AS Area III(b)

Course Transferable to CSU

Hours: 60-300 hours LAB

This course provides students with opportunities to develop marketable skills in preparation for employment or advancement within the field of accounting. It is designed for students interested in work experience and/or internships in transfer-level degree occupational programs. Course content includes understanding the application of education to the workforce, completion of Title 5 required forms which document the student's progress and hours spent at the work site, and developing workplace skills and competencies. During the semester, the student is required to 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. First-time participants are required to attend a weekly orientation and a final meeting. Returning participants are required to attend the first class meeting, a mid-semester meeting, and a final meeting and may meet individually with the instructor as needed to complete a work site observation and all program forms, receive updates, and assignments. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

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: Steven Segura
 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
 Department Certificate: Homeland Security

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

To maximize the successful completion of this program it is suggested the student first enroll in ADMJ 300. Other ADMJ courses may be taken concurrently.

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 301	Investigative Report Writing (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.

(continued on next page)

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

- evaluate the legal aspects of criminal investigations, constitutional law, and case law.
- identify various controlled substances and interpret their impact on society and law enforcement.
- apply laws and procedures for the collection and use of evidence.
- identify ethical standards placed on law enforcement professionals.
- communicate effectively in written and oral formats.

Career 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 302 Community Relations: Multicultural Issues (3)	
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)	
PSYC 480 Honors General Principles (3)	
SOC 300 Introductory Sociology (3)	
SOC 480 Introductory Sociology - Honors (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.

DEPARTMENT CERTIFICATE

Homeland Security

This certificate examines the roots of terrorism, weapons of mass destruction, intelligence analysis, response methods, natural disaster incidents, threat mitigation, crisis negotiation, and conflict resolution. It explores topics directly associated with border security and security for transportation infrastructure, including: seaports, ships, aircraft, trains, train stations, highways, bridges, rail lines, pipelines, and bus systems.

Student Learning Outcomes

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

- construct a historical time-line reflecting significant terrorist threats and events in the United States and globally.
- classify the roles, functions of, and interdependency among local, federal and international law enforcement and military agencies to counter and combat terrorism.
- differentiate between ethical and unethical attitudes and actions regarding the execution of homeland security practices.
- identify the characteristics, ideologies, motives and behaviors of various extremist and terrorist groups that foster and support terrorist, criminal activities.
- explain operational knowledge of intelligence gathering and analysis processes pertinent to homeland security.
- identify and describe threats to national and international security.
- outline the primary federal, state, and local agencies in the United States that are affiliated with border and transportation security and the ethical parameters in which they operate.
- discuss differences in dealing with security threats for passengers versus freight/cargo transportation systems and border security.
- describe the impact of technology on countering threats to transportation systems and border security.

Requirements for Certificate	9 Units
HLS 300 Introduction to Homeland Security	3
HLS 302 Intelligence Analysis and Security Management	3
HLS 304 Transportation and Border Security.....	3

Administration of Justice

ADMJ 300 Introduction to Administration of Justice 3 Units

Advisory: ENGRD 116, ENGWR 102, ESLR 320, and ESLW 320; ENGRD 116 (Proficient Reading) and ENGWR 102 (Proficient Writing) 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 introduces the characteristics of the American criminal justice system, U.S. Constitutional rights, criminal activity, crime causation, domestic and international criminal threats, law enforcement response to criminal activity, and future law enforcement trends. Emphasis is placed on the components of the American justice system, due process, courts and correctional services, ethics, and leadership. (C-ID AJ 110)

ADMJ 301 Investigative Report Writing 3 Units

Advisory: ENGRD 116 (Proficient Reading) and ENGWR 102 (Proficient Writing) 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 techniques of writing facts, information, and ideas effectively in a simple, clear, and logical manner in the various types of criminal justice system reports. Emphasis is placed on criminal justice terminology, organization of information, investigative note taking, and thorough documentation of witness statements and evidence.

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. (C-ID AJ 160)

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. (C-ID AJ 220)

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. (C-ID AJ 120)

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: ENGRD 116, ENGWR 102, ESLR 320, and ESLW 320; ENGRD 116 (Proficient Reading) and ENGWR 102 (Proficient Writing) 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 the origins, development, philosophy, and constitutional foundations of the rules of evidence as applied in United States law. Emphasis is placed on the types of evidence and the laws governing admissibility of evidence into criminal procedures. Topics include search and seizure, hearsay evidence, witness competency, and direct and circumstantial evidence. (C-ID AJ 124)

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. (C-ID AJ 140)

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. (C-ID AJ 200)

Area: Behavioral & Social Sciences
 Dean: Carlos Reyes
 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 degree provides students with a solid foundation in anthropology as well as the standard prerequisites for upper division coursework leading to the baccalaureate degree. Anthropologists with graduate degrees work in occupations ranging from archaeological excavation, exploration, and museum management to the analysis of cultures, linguistics, forensics, primatology, teaching, and consulting with governmental and educational institutions.

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
or ANTH 481 Honors Cultural Anthropology (3)	
ANTH 320 Introduction to Archaeology and World Prehistory.....	3
And a minimum of 8 units from the following:	8
ANTH 303 Introduction to Forensic Anthropology (3)	
ANTH 319 Visual Anthropology: Introduction to Ethnographic Film (3)	
ANTH 321 Ancient Technology (3)	
ANTH 330 Magic, Witchcraft, and Religion (3)	
ANTH 333 American Indians of California (3)	
ANTH 334 Native Peoples of North America (3)	
ANTH 335 Research Methods in Anthropology (3)	
ANTH 336 Anthropology of Sex, Sexuality and Gender (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: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340
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. This course is not open to students who have completed ANTH 480.

ANTH 301 Physical Anthropology Laboratory 1 Unit

Corequisite: ANTH 300
General Education: 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: BIOL 102, BIOL 115, BIOL 430, OR ANTH 300 and 301; AND eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
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, 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: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340
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 explores the various customs, traditions, and forms of social organizations from a global perspective. Topics include 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. Gender, race, and ethnic identity are examined as well as the role of society in defining these terms. Using ethnographic case studies, this course examines how anthropological ethics, method and theory are applied to the study of human culture. This course is not open to students who have already completed ANTH 481.

ANTH 319 Visual Anthropology: Introduction to Ethnographic Film 3 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340
General Education: AA/AS Area V(b) (effective Summer 2014); CSU Area D1
Course Transferable to CSU
Hours: 54 hours LEC

This course provides an introduction to the use of film by anthropologists as a research and educational tool. A series of films depicting different cultures from around the world are viewed and evaluated. Various attributes of ethnographic film and their treatment by a number of anthropological filmmakers are examined.

ANTH 320 Introduction to Archaeology and World Prehistory 3 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340
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 are emphasized. The challenges and achievements of non-literate and traditional cultures, diverse communities, and social classes over time are also explored. (C-ID ANTH 150)

ANTH 321 Ancient Technology 3 Units

Advisory: ANTH 320; Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340
General Education: AA/AS Area V(b)
Course Transferable to UC/CSU
Hours: 54 hours LEC

This course examines technological capabilities of pre-industrial societies using ethnographic and archaeological examples and an experimental approach. Topics include construction techniques of temporary and permanent structures, pottery construction, glassmaking, metallurgy, textile production, as well as bone, stone, wood, and other technologies crucial to human survival. Field trips may be required.

ANTH 330 Magic, Witchcraft, and Religion 3 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340
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 a cross-cultural study of supernatural beliefs and associated rituals in traditional societies. Emphasis is on understanding the role of beliefs within the broader social context. In addition, this course examines the general functions of ritual and mythology in reinforcing cultural ideals and ethics. Similarities and differences between traditional beliefs and world religions are also explored.

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 336 Anthropology of Sex, Sexuality and Gender 3 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
General Education: AA/AS Area V(b) (effective Summer 2014); AA/AS Area VI (effective Summer 2014); CSU Area D1
Course Transferable to CSU
Hours: 54 hours LEC

This course is an introductory overview from a global anthropological perspective of the relationship between sexual behavior and sexuality as well as gender and other socially ascribed statuses. Diverse modern and past human and non-human primate communities are compared bio-culturally. Integrating the basic branches of anthropology -- cultural, biological, linguistic and archaeological anthropology -- the course examines the role, function, and evolution of sex in the human primate. It examines the relationship between sex, sexuality, gender to adaptation as well as to social behavior and to cultural variation. The implications of research methodologies and theory in investigating sex, sexuality, culture and biology are evaluated.

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

Advisory: ANTH 300 and 480 ; AND eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
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 trips to the Sacramento Zoo are required.

ANTH 480 Honors Physical Anthropology 3 Units

Prerequisite: Placement into ENGWR 480 through the 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 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 481 Honors Cultural Anthropology 3 Units

Prerequisite: Placement into ENGWR 480 through the 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. This seminar-style honors course approaches the topical material through class discussion which encourages problem-solving techniques focusing on current anthropological issues. This course is not open to students who have completed ANTH 310.

ANTH 495 Independent Studies in Anthropology 1-3 Units

Course Transferable to CSU
Hours: 54-162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

Area: Apprenticeship
 Information: Staci Teegarden
 Phone: (916) 484-8521
 Counseling: (916) 484-8572

Area: Pre-Apprenticeship
 Dean: Dr. Trish Caldwell
 Phone: (916) 484-8354

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

Department Certificates:
 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
 800 Chadbourne Rd, Suite A
 Fairfield, CA 95485
 (707) 399-2880

See losrios.edu/gainful-emp-info/gedt.php?major=011247C01 for Gainful Employment Disclosure.

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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

See losrios.edu/gainful-emp-info/gedt.php?major=011512C01 for Gainful Employment Disclosure.

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.

(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

See losrios.edu/gainful-emp-info/gedt.php?major=011582C01 for Gainful Employment Disclosure

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

See losrios.edu/gainful-emp-info/gedt.php?major=011580C01 for Gainful Employment Disclosure

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

(continued on next page)

(Ironworker Apprenticeship continued)

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)	

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

See losrios.edu/gainful-emp-info/gedt.php?major=011249C01 for Gainful Employment Disclosure

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.

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.

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. See losrios.edu/gainful-emp-info/gedt.php?major=011390C01 for Gainful Employment Disclosure.

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.

Student Learning Outcomes

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

- demonstrate safe working practices in a field construction environment.
- demonstrate proper selection, use, care, preparation, and handling of the sheet metal worker's tools of the trade.
- analyze, interpret, and apply national building codes relating to sheet metal and mechanical construction.
- analyze and interpret residential and commercial construction blueprints.

- demonstrate the proper start-up and balancing of different HVAC systems.
- demonstrate troubleshooting techniques on various HVAC systems.

Career 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.

See losrios.edu/gainful-emp-info/gedt.php?major=01X0318C01 for Gainful Employment Disclosure.

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.

DEPARTMENT CERTIFICATES

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 basic skills required for the construction of roads, bridges, levees, and rail.
- describe the Leadership in Energy and Environmental Design (LEED) rating process.
- identify green alternatives to conventional building practices and describe the pros and cons of those alternatives.
- apply proper lifting/movement techniques applicable to green technology workforce occupations.
- determine the validity of fitness and health information using the scientific method and the relationship between scientific research and established knowledge.

(continued on next page)

(Pre-Apprenticeship Certificate continued)

- implement a personal fitness plan using proper strength and cardiovascular training.

See losrios.edu/gainful-emp-info/gedt.php?major=011246C01 for Gainful Employment Disclosure.

Requirements for Certificate		16 Units
PREAP 111	Infrastructure Pre-Apprenticeship	7
PREAP 141	Green Technology Pre-Apprenticeship	7
FITNS 101	Green Technology Workforce Wellness.....	1
FITNS 102	Infrastructure 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 101	Green Technology 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 102	Infrastructure 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, utility pole climbing, and apprenticeship preparation.

Student Learning Outcomes

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

- explain electrical fundamentals such as Ohm's and Watt's Law.
- define terms and vocabulary used in the utility industry.
- explain electrical and gas distribution for the utility industry.
- identify safety laws, regulations, and safe working conditions for apprenticeship.
- describe effective conflict resolution methods.
- describe the functions of transformers, electrical generators, and electrical equipment.

Career Opportunities

This program provides opportunities for entry into the utility industry where there is high demand for trained entry level workers.

Requirements for Certificate		10.5 Units
FITNS 100	Utility Workforce Wellness.....	1
PREAP 122	Pre-Apprenticeship for Utility Workers	8
MATH 145	Mathematics for the Trades.....	1.5

Carpenters Apprenticeship

CARP 102 Worker Safety and Tool Skills 1.4 Units

*Enrollment Limitation: Registered Carpenter Apprentice.
Hours: 18 hours LEC; 18 hours LAB*

This course focuses on safety considerations for the carpenter apprentice. Topics include general on-the-job safety, hand and power tool safety, and accident prevention. Instruction leading to certification in scaffold operation is included.

CARP 104 The Apprentice and the Trade 2 Units

*Enrollment Limitation: Registered Carpenter Apprentice.
Hours: 36 hours LEC*

This course covers the history of carpenter apprenticeship and the trade. Topics include wages and benefits, workers' compensation, job placement, collective bargaining, working conditions, and labor-management relations as they pertain to unions, contractors, and cooperatives.

CARP 106 Introduction to Apprenticeship 1.5 Units

*Enrollment Limitation: Registered Carpenter Apprentice
Hours: 22 hours LEC; 15 hours LAB*

This course is an introduction to apprenticeship, tools, safety, and construction job sites in the commercial and industrial building sectors.

CARP 107 Rigging 1.5 Units

*Enrollment Limitation: Registered Carpenter Apprentice
Hours: 21 hours LEC; 18 hours LAB*

This course familiarizes apprentices with the equipment and the procedures to safely rig and hoist various loads on the job-site. Topics include tying knots, splicing rope, calculating loads, hand signals for cranes, and inspecting rigging hardware.

CARPT 110 Foundations and Floors 1 Unit

*Enrollment Limitation: Must be a registered Carpenter Apprentice.
Hours: 9 hours LEC; 27 hours LAB*

This course covers layout, forming, framing, joist, sub-flooring, and foundation construction.

CARPT 112 Structural Framing 1 Unit

*Enrollment Limitation: Must be a registered Carpenter Apprentice.
Hours: 9 hours LEC; 27 hours LAB*

This course covers basic framing systems and layout of walls, ceilings, and stairwells with wood as well as metal and alternative “green” materials such as manufactured panels.

CARPT 114 Form Detailing, Construction & Erection 1 Unit

*Enrollment Limitation: Must be a registered Carpenter Apprentice.
Hours: 9 hours LEC; 27 hours LAB*

This course covers planning and building of form work, construction and erection of various concrete forms, and construction materials and methods. New building materials such as recycled and alternative materials are explored.

CARPT 120 Exterior Finish 1 Unit

*Enrollment Limitation: Must be a registered Carpenter Apprentice.
Hours: 9 hours LEC; 27 hours LAB*

This course covers exterior design, materials, finishes, and methods of application in exterior building construction. Topics include an overview of the hazards of Volatile Organic Compounds (VOCs) and pathogens.

CARPT 122 Interior Finish 1 Unit

*Enrollment Limitation: Must be a registered Carpenter Apprentice.
Hours: 9 hours LEC; 27 hours LAB*

This course covers interior designs, materials, and methods of application in building construction. Topics include techniques of indoor air quality practices in order to reduce Volatile Organic Compounds (VOCs) and pathogens.

CARPT 124 Commercial Door Hardware 1.5 Units

*Enrollment Limitation: Registered Carpenter Apprentice
Hours: 21 hours LEC; 18 hours LAB*

This course covers the basic skills necessary to successfully install commercial door hardware. Topics include selecting hardware, hanging and adjusting a door and installing locks, closers, rim devices, door holders, and various accessories. Codes that govern doors and hardware in commercial buildings are also covered.

CARPT 130 Layout/Leveling Construction Site Practice 1 Unit

*Enrollment Limitation: Must be a registered Carpenter Apprentice.
Hours: 9 hours LEC; 27 hours LAB*

This course covers the use of leveling devices. It includes reading and interpreting an engineer’s rod, horizontal and vertical setting circles, and vernier scaling. Additional topics include construction layout of horizontal and vertical angles, and Leadership in Energy and Environmental Design (LEED) practices for erosion control.

CARPT 140 Interior Systems 1.3 Units

*Enrollment Limitation: Must be a registered Carpenter Apprentice.
Hours: 18 hours LEC; 16 hours LAB*

This course is a comprehensive study of materials, work processes, and the proper use of tools necessary to install gypsum wallboard and interior metal studs. Topics include green practices used in construction.

CARPT 142 Engineered Structural Systems 1 Unit

*Enrollment Limitation: Must be a registered Carpenter Apprentice.
Hours: 9 hours LEC; 27 hours LAB*

This course covers heavy timber construction in dams, bridges, and trusses. Topics include lamination and the proper disposal and recycling of materials.

CARPT 150 Concrete – Precast and Prestressed 1 Unit

*Enrollment Limitation: Must be a registered Carpenter Apprentice.
Hours: 9 hours LEC; 27 hours LAB*

This course covers the use and placement of concrete in residential and commercial construction. Topics include mixing, testing, aggregate, curing, and construction designs, as well as precast and prestressed concrete, materials, forms, molds, handling, lifting devices, and the proper disposal and recycling of materials.

CARPT 160 Blueprint Reading-Residential 1.3 Units

*Enrollment Limitation: Must be a registered Carpenter Apprentice.
Hours: 18 hours LEC; 16 hours LAB*

This course covers residential blueprints. Topics include “green” practices, conventions, lines, symbols, measurements, and specifications used for residential construction.

CARPT 162 Blueprint Reading-Commercial 1.3 Units

*Enrollment Limitation: Must be a registered Carpenter Apprentice.
Hours: 18 hours LEC; 16 hours LAB*

This course covers commercial and industrial blueprints. Topics include conventions, lines, symbols, measurements, and specifications used for commercial and industrial construction. CalGreen codes are also covered.

CARPT 170 Roof Framing 1 Unit

*Enrollment Limitation: Must be a registered Carpenter Apprentice.
Hours: 9 hours LEC; 27 hours LAB*

This course covers roof framing, layout, and construction. Topics include industry terminology, technical information, and construction materials and methods, all which are used in planning and building several types of roofs. Industry standards and codes are also covered.

CARPT 180 Stair Building 1 Unit

*Enrollment Limitation: Must be a registered Carpenter Apprentice.
Hours: 9 hours LEC; 27 hours LAB*

This course covers types, designs, nomenclature, and Uniform Building Code (UBC) requirements for building stairs. Topics include mathematical calculations and layout procedures for constructing stairs, landings, newels, and handrails.

CARPT 190 Introduction to Welding and Cutting 1 Unit

*Enrollment Limitation: Must be a registered Carpenter Apprentice.
Hours: 9 hours LEC; 27 hours LAB*

This course covers welding methods, brazing, and flame cutting. Topics include thermo-forming and thermo-setting plastics applicable to the building construction industry.

CARPT 200 Construction Mathematics & Introduction to Working Drawing 2 Units

*Enrollment Limitation: Registered Apprentice.
Hours: 36 hours LEC*

This course covers mathematics applications to the construction trade with specific focus on mathematical processes in carpentry. Topics include an introduction to elements of working drawings used in the construction process.

CARPT 290 Weatherization/Insulation Green Construction Commercial Applications 1 Unit

Enrollment Limitation: Must currently be a displaced journey person carpenter as defined by the California Energy Commission grant. Hours: 12 hours LEC; 18 hours LAB

This course covers installation of energy efficient materials in commercial buildings. Topics include theory and terminology of weatherization and energy efficiency. Pass/No Pass only.

CARPT 291 Introduction to Green Building for Commercial Carpenters 1 Unit

Enrollment Limitation: Must currently be a displaced journey person carpenter as defined by the California Energy Commission grant. Hours: 12 hours LEC; 18 hours LAB

This course covers green building terminology and products for carpenters. It includes an introduction to the Cal Green Building Codes, as well as procedures required to work on green certified projects with emphasis on door seals and hardware. Pass/No Pass only.

CARPT 292 Specialized Green Applications for Commercial Carpenters 1 Unit

Enrollment Limitation: Must currently be a displaced journey person carpenter as defined by the California Energy Commission grant. Hours: 12 hours LEC; 18 hours LAB

This course covers the skills needed for carpenters to install insulated concrete forms. Topics include solar installation, specifications for green products, and best practices for their installation. Pass/No Pass only.

CARPT 298 Work Experience in Carpenters Apprenticeship 1-4 Units

Enrollment Limitation: Indentured in the carpenters apprenticeship program. Hours: 60-300 hours LAB

This course provides students the opportunity to work in the carpenters apprenticeship program for the purpose of developing specific skills to meet the goals and objectives of the carpenters Joint Apprenticeship and Training Committee (J.A.T.C.). Students complete work experience hours at approved training sites. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Drywall/Lathing Apprenticeship

DRLTH 100 Introduction to the Trade 2 Units

Enrollment Limitation: Registered Drywall/Lathing Apprentice. Hours: 36 hours LEC

This course is an introduction to drywall/lathing apprenticeship, state and federal apprenticeship laws, apprenticeship record keeping, apprentice evaluation procedures, general safety, work ethic, sexual harassment issues, and basic tools of the trade.

DRLTH 102 Basic Applications 1.5 Units

Enrollment Limitation: Registered Drywall/Lathing Apprentice. Hours: 21 hours LEC; 18 hours LAB

This course is an introduction to basic gypsum wall covering and ceiling applications. Topics includes knot recognition and application to rigging on construction job-sites.

DRLTH 105 Mathematics for Drywall/Lathers 2 Units

Enrollment Limitation: Registered Drywall/Lathing Apprentice. Hours: 36 hours LEC

This course covers mathematics applications to drywall and lathing trades with specific focus on mathematical processes related to construction. Basic topics include whole numbers, fractions, decimal fractions, ratios, proportions, percentages, areas, and volumes.

DRLTH 110 Residential Metal Framing 1.5 Units

Enrollment Limitation: Registered Drywall/Lathing Apprentice. Hours: 21 hours LEC; 18 hours LAB

This course covers basic residential metal framing. It includes framing of floors, walls, doors, windows, roofs, trusses, and stairs.

DRLTH 112 Doors, Windows, Exterior Systems/ Building Documents 1.5 Units

Enrollment Limitation: Registered Drywall/Lathing Apprentice. Hours: 21 hours LEC; 18 hours LAB

This course covers doors, windows, door and window framing, and exterior wall covering systems. Topics include an introduction to blueprints and building codes.

DRLTH 120 Blueprint Reading I 1.5 Units

Enrollment Limitation: Registered Drywall/Lathing Apprentice. Hours: 21 hours LEC; 18 hours LAB

This course covers job specifications, blueprint structure and basic blueprint reading and interpretation. Topics include an introduction to construction drawings and sketching.

DRLTH 121 Blueprint Reading II 1.5 Units

Prerequisite: DRLTH 120 with a grade of "C" or better; or placement through the assessment process.

Enrollment Limitation: Registered Drywall/Lathing Apprentice. Hours: 21 hours LEC; 18 hours LAB

This course is a continuation of Blueprint Reading I (DRLTH 120). Topics include interpretation, problem solving, correlating specifications, prints, addenda, notes, sections and mathematics used with blueprints.

DRLTH 122 Blueprint Reading III 1.5 Units

Prerequisite: DRLTH 121 with a grade of "C" or better; or placement through the assessment process.

Enrollment Limitation: Registered Drywall/Lathing Apprentice. Hours: 21 hours LEC; 18 hours LAB

This course is a continuation of Blueprint Reading II (DRLTH 121). Topics include take-offs, material estimates, material requisition, job costs and layout from blueprints.

DRLTH 130 Welding I 1.5 Units

Enrollment Limitation: Registered Drywall/Lathing Apprentice. Hours: 21 hours LEC; 18 hours LAB

This course covers welding and welding concepts for construction job sites. Topics include welding safety, basic welding terms, definitions, positions, and cutting operations.

DRLTH 131 Welding II 1.5 Units

Prerequisite: DRLTH 130 with a grade of "C" or better; or placement through the assessment process.

Enrollment Limitation: Registered Drywall/Lathing Apprentice. Hours: 21 hours LEC; 18 hours LAB

This course is a continuation of Welding I (DRLTH 130). Topics include welding safety, concepts, processes, symbols, and certification performance.

DRLTH 140 Exterior/Advanced Fire Control System and Partitions 1.5 Units

*Enrollment Limitation: Registered Drywall/Lathing Apprentice.
Hours: 21 hours LEC; 18 hours LAB*

This course covers safety, principles, theory, and application of advanced fire control systems. Topics include principles and applications of partitions and metal framing.

DRLTH 142 Exterior Systems and Trims 1.5 Units

*Enrollment Limitation: Registered Drywall/Lathing Apprentice.
Hours: 21 hours LEC; 18 hours LAB*

This course covers safety, principles, and application of exterior wall framing, coverings, and trims.

DRLTH 150 Interior Metal Lathing System, Sound Control 1.5 Units

*Enrollment Limitation: Registered Drywall/Lathing Apprentice.
Hours: 21 hours LEC; 18 hours LAB*

This course covers materials, principles, theory, and application of lath and plaster interior hollow walls and partitions. Topics include principles, and application of sound control systems and an introduction to mathematics and layout for building arches.

DRLTH 160 Ceilings, Shaft Protection and Demountable Partitions 1.5 Units

*Enrollment Limitation: Registered Drywall/Lathing Apprentice.
Hours: 21 hours LEC; 18 hours LAB*

This course covers safety, materials, principles, theory, and installation of ceiling systems, demountable partitions, and shaft systems.

DRLTH 162 Arches, Furring and Advanced Systems 1.5 Units

*Enrollment Limitation: Registered Drywall/Lathing Apprentice.
Hours: 21 hours LEC; 18 hours LAB*

This course covers safety, materials, principles, theory, and installation of furring, arch systems, and fire retardant materials.

DRLTH 170 Advanced Construction Techniques 1.5 Units

*Enrollment Limitation: Registered Drywall/Lathing Apprentice.
Hours: 21 hours LEC; 18 hours LAB*

This course covers safety, materials, principles, and theory of advanced construction techniques. Topics include following written and verbal directions, construction directly from blueprints, and research techniques.

DRLTH 298 Work Experience Drywall/Lathing Apprenticeship 1-4 Units

*Enrollment Limitation: Indentured in the drywall/lathing apprenticeship program.
Hours: 60-300 hours LAB*

This course provides students the opportunity to work in the drywall/lathing apprenticeship program for the purpose of developing specific skills to meet the goals and objectives of the drywall/lathing Joint Apprenticeship and Training Committee (J.A.T.C.). Students complete work experience hours at approved training sites. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Electrical Apprenticeship

ELECT 110 Electrical Apprenticeship I 5 Units

*Enrollment Limitation: Registered Electrical Apprentice
Hours: 54 hours LEC; 108 hours LAB*

This course is an introduction to electrical apprenticeship, electrical shop practices, basic electrical layout, tools of the trade, and construction materials. Topics include working with electrical related mathematics and basic electrical formulas.

ELECT 111 Electrical Apprenticeship II 3.3 Units

*Enrollment Limitation: Registered Electrical Apprentice
Hours: 36 hours LEC; 70 hours LAB*

This course covers DC theory, DC series and parallel circuits, DC combination circuits, principles of electromagnetism, and power generation. Topics include an introduction to the National Electrical Code (NEC) and basic blueprint reading.

ELECT 120 Electrical Apprenticeship III 3.3 Units

*Enrollment Limitation: Registered Electrical Apprentice
Hours: 36 hours LEC; 70 hours LAB*

This course covers AC theory, AC generation, use of instruments, and phase and circuit calculations. Topics include codeology and how it applies to the National Electrical Code (NEC).

ELECT 121 Electrical Apprenticeship IV 3.3 Units

*Enrollment Limitation: Registered Electrical Apprentice
Hours: 36 hours LEC; 70 hours LAB*

This course covers AC theory in series, parallel and combination resistive-inductive (RL), resistive-capacitive (RC), inductive-capacitive (LC), and resistive-inductive-capacitive (RLC) circuits. Topics include conduit bending using a ratcheting and mechanical bender; transformer construction and installation; and applications of the National Electrical Code (NEC).

ELECT 130 Electrical Apprenticeship V 3.3 Units

*Enrollment Limitation: Registered Electrical Apprentice
Hours: 36 hours LEC; 70 hours LAB*

This course covers electrical safety-related work practices specified by the National Fire Protection Agency publication 70E (NFPA 70E). It covers industrial blueprint reading, conduit bending using electro-hydraulic benders, and introductions to motor control and semiconductors. Additional topics include applying the National Electrical Code (NEC) and emphasis on grounding and bonding.

ELECT 131 Electrical Apprenticeship VI 3.3 Units

*Enrollment Limitation: Registered Electrical Apprentice
Hours: 36 hours LEC; 70 hours LAB*

This course covers advanced grounding topics, transformer operation and theory, and advanced industrial blueprint reading. Topics include applying the National Electrical Code (NEC) and emphasis of over-current protection, transformers and ground fault protection.

ELECT 140 Electrical Apprenticeship VII 3.3 Units

*Enrollment Limitation: Registered Electrical Apprentice
Hours: 36 hours LEC; 70 hours LAB*

This course covers lightning protection systems, AC and DC motors, motor control systems. Topics include advanced blueprints and electrical room layout, as well as building take-offs.

ELECT 141 Electrical Apprenticeship VIII 3.3 Units

*Enrollment Limitation: Registered Electrical Apprentice
Hours: 36 hours LEC; 70 hours LAB*

This course covers AC motor speed controls, National Electrical Manufacturing Association (NEMA) standards, motor control troubleshooting, digital electronics and programmable logic controllers (PLC's). Topics include use of National Electrical Code (NEC) with cable trays, electric welders, phase converters, hazardous locations, and special occupancies.

ELECT 150 Electrical Apprenticeship IX 3.3 Units

*Enrollment Limitation: Registered Electrical Apprentice
Hours: 36 hours LEC; 70 hours LAB*

This course covers fire alarms, security, power quality, stewardship training and photo-voltaic systems. It also includes preparation for the state certification examination.

ELECT 151 Electrical Apprenticeship X 3.3 Units

*Enrollment Limitation: Registered Electrical Apprentice
Hours: 36 hours LEC; 70 hours LAB*

This course covers building automation, structured cabling systems, and an introduction to instrumentation used on industrial process controls. Topics include advanced programmable logic controllers (PLC's) used in motor control circuits.

ELECT 210 Electrician Trainee I 4 Units

*Advisory: ELECT 298, ET 310, MATH 100, MATH 104, or MATH 132
Hours: 63 hours LEC; 27 hours LAB*

This course is an introduction to the commercial/residential electrician trainee program. It includes safety procedures, Occupational Safety and Health Administration (OSHA) requirements, Environmental Protection Agency (EPA) requirements, basic rigging, basic electrical mathematics, Ohm's Law and DC theory.

ELECT 211 Electrician Trainee II 4 Units

*Prerequisite: ELECT 210 with a grade of "C" or better.
Hours: 63 hours LEC; 27 hours LAB*

This course is the second course required for the Commercial/Residential Electrician Trainee program. Topics include AC theory; AC and DC generation, phase, and circuit mathematical calculations; calculating inductance, capacitance, and reactance in series, parallel and series-parallel circuits. It also includes use of meters in different applications of alternating current. This course provides a basic introduction to electronics used in electrical installations; and an introduction and application of the National Electrical Code to job-site electrical installations.

ELECT 220 Electrician Trainee III 4 Units

*Prerequisite: ELECT 211 with a grade of "C" or better.
Hours: 63 hours LEC; 27 hours LAB*

This course is the third course of the Commercial/Residential Electrician Trainee program. Topics include conductors, cables, conduits, lighting systems, panelboard, switchboard, and overcurrent devices for residential and commercial installations. This course also covers reading blueprint drawings, making sketches, drawing architectural views, identifying common blueprint scales and electrical symbols.

ELECT 221 Electrician Trainee IV 4 Units

*Prerequisite: ELECT 211 with a grade of "C" or better.
Hours: 63 hours LEC; 27 hours LAB*

This course is the fourth course required for the Commercial/Residential Electrician Trainee program. Topics include electrical grounding systems and lightning protection systems. It also includes job-site personal development and job-site management.

ELECT 230 Electrician Trainee V 4 Units

*Prerequisite: ELECT 211 with a grade of "C" or better.
Hours: 63 hours LEC; 27 hours LAB*

This course is the fifth course required for the Commercial/Residential Electrician Trainee program. Topics include fundamentals of motors, motor controllers, process controllers, generators, and transformers. It also includes testing of cables, generators and motors.

ELECT 231 Electrician Trainee VI 4 Units

*Prerequisite: ELECT 211 with a grade of "C" or better.
Hours: 63 hours LEC; 27 hours LAB*

This course is the sixth course required for the Commercial/Residential Electrician Trainee program. Topics include fire alarm systems, burglar alarm systems, and information transport systems (voice, data and video). It also covers basic electrical requirements for heating, air conditioning and refrigeration systems.

ELECT 280 Electrical Workers State Certification Preparation 4.5 Units

*Advisory: Three years or more of electrical trade experience.
Hours: 81 hours LEC*

This is a preparatory course for the Electricians' State Licensing Certification for California. It reviews basic electrical formulas and provides an in-depth review of the National Electrical Code.

ELECT 281 Green Technology High Efficiency Lighting 2 Units

*Enrollment Limitation: Must be a current California State Certified General Electrician.
Hours: 27 hours LEC; 27 hours LAB*

This course covers installing, troubleshooting, commissioning and maintaining advanced lighting controls, switching controls, dimming controls, occupancy sensors, photo-sensors and controllers, distribution relay systems, remote controlled circuit breakers, and wireless systems. Pass/No Pass only.

ELECT 282 PV/Solar Installer 1.5 Units

*Enrollment Limitation: Must be a current California State certified General Electrician.
Hours: 18 hours LEC; 18 hours LAB*

This course covers installing, troubleshooting, commissioning, and maintaining photovoltaic/solar electrical energy systems. Pass/No Pass only.

ELECT 283 Energy Auditing 1 Unit

*Enrollment Limitation: Must be a California State Certified General Electrician.
Hours: 13.5 hours LEC; 13.5 hours LAB*

This course covers data gathering on building envelope energy usage. It also covers energy efficiency analysis, quantification of potential energy savings, and financial benefits. Pass/No Pass only.

ELECT 298 Work Experience in Electricians Apprenticeship 1-4 Units

*Enrollment Limitation: Indentured in the electricians apprenticeship program.
General Education: AA/AS Area III(b)
Hours: 60-300 hours LAB*

This course provides students the opportunity to work in the electricians apprenticeship program for the purpose of developing specific skills to meet the goals and objectives of the electricians Joint Apprenticeship and Training Committee (J.A.T.C.). Students complete work experience hours at approved training sites. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Electrical Residential Apprenticeship

ELRES 100 Electrical Residential Apprenticeship I 3 Units

*Enrollment Limitation: Registered Electrical Residential Apprentice
Hours: 39 hours LEC; 45 hours LAB*

This course is an introduction to electrical residential apprenticeship. Topics include apprenticeship orientation, safety procedures, basic electrical mathematics, conduit bending, and an introduction to the National Electrical Code (NEC). It also focuses on defining and analyzing DC theory, basic electrical layout, materials, fasteners and tools used on the construction job site.

ELRES 101 Electrical Residential Apprenticeship II 3 Units

*Enrollment Limitation: Registered Electrical Residential Apprentice
Hours: 39 hours LEC; 45 hours LAB*

This course covers application of electrical mathematics to the properties of resistance, voltage, current, and power in series, parallel, and combination DC circuits. Topics include interpreting architectural views, common scales, mechanical, and electrical symbols as used in residential blueprints.

ELRES 110 Electrical Residential Apprenticeship III 3 Units

*Enrollment Limitation: Registered Electrical Residential Apprentice
Hours: 39 hours LEC; 45 hours LAB*

This course covers AC theory, inductance, capacitance, series, parallel and combination circuits. Topics include codeology as it applies to the National Electrical Code (NEC) and basic fundamentals of electromagnetism as it applies to generators and transformers.

ELRES 111 Electrical Residential Apprenticeship IV 3 Units

*Enrollment Limitation: Registered Electrical Residential Apprentice
Hours: 39 hours LEC; 45 hours LAB*

This course covers National Electrical Code (NEC) requirements for services, conduit wiring methods, boxes, fittings, grounding and bonding for residential job sites. Topics include an introduction to residential heating, ventilating and air conditioning (HVAC), Community Antenna Television (CATV), phone, fire alarm, burglar alarm, and home automation systems.

ELRES 120 Electrical Residential Apprenticeship V 3 Units

*Enrollment Limitation: Registered Electrical Residential Apprentice
Hours: 39 hours LEC; 45 hours LAB*

This course covers advanced AC and DC principles, over-current protection, residential load calculations, motor terminations, and paging systems. Topics include a residential design project involving layout, circuit planning, and load calculations.

ELRES 121 Electrical Residential Apprenticeship VI 3 Units

*Enrollment Limitation: Registered Electrical Residential Apprentice
Hours: 39 hours LEC; 45 hours LAB*

This course covers advanced home automation applications, photo-voltaic systems, fiber optics, local area networks (LAN) systems, lightning protections systems, swimming pools, and fountains. Topics include an advanced residential project.

Ironworker Apprenticeship

IW 100 Orientation and History of the Trade 1.5 Units

*Enrollment Limitation: Registered Ironworkers Apprentice.
Hours: 18 hours LEC; 27 hours LAB*

This course is an introduction to Ironworker's Apprenticeship responsibilities. It includes Ironworker's rules and regulations, record keeping, as well as evaluations and advancement, work ethic, sexual harassment issues, and basic tools. It acquaints the Iron Worker apprentice with specifications that constitute a safe and healthful working environment under OSHA. It provides an introduction to the rights and obligations that OSHA imposes. An orientation and overview of the history of the Ironwork trade is presented.

IW 110 Mixed Base 1.5 Units

*Enrollment Limitation: Registered Ironworkers Apprentice.
Hours: 18 hours LEC; 27 hours LAB*

This Mixed Base course acquaints the Iron Worker apprentice with an overview of the type of construction blueprints commonly used with emphasis on function and interpretation. This course offers a brief review of basic math skills and provides an opportunity to apply these skills in solving typical problems relevant to the construction trades.

IW 120 Rigging 1.5 Units

*Enrollment Limitation: Registered Ironworkers Apprentice.
Hours: 18 hours LEC; 27 hours LAB*

This course is an introduction to rigging operations such as wire rope, chains, slings, cranes, helicopters, ladders and scaffolds. Also included are rigging safety, knot recognition and strength identification, as well as knot application to rigging.

IW 130 Reinforcing I 1.5 Units

*Enrollment Limitation: Registered Ironworkers Apprentice.
Hours: 18 hours LEC; 27 hours LAB*

This course introduces standard codes, code classifications, plans, schedules, charts and specifications commonly used by the ironworker. Topics include construction techniques used in reinforcing concrete members with steel, use of bar supports, placement of reinforcing iron and general principles of bar splicing and welding. Post tensioning and pre-stressing techniques are introduced.

IW 131 Reinforcing II/Post Tensioning 1.5 Units

*Prerequisite: IW 130 with a grade of "C" or better.
Enrollment Limitation: Registered Ironworkers Apprentice.
Hours: 18 hours LEC; 27 hours LAB*

This course includes the interpretation of standard codes, code classifications, plans, schedules, charts and specifications commonly used in the iron worker trade. Construction techniques, use of bar supports, placement of reinforcing iron, general principles of bar splicing and welding are presented in depth.

IW 140 Precast Concrete and Metal Buildings 1.5 Units

*Enrollment Limitation: Registered Ironworkers Apprentice.
Hours: 18 hours LEC; 27 hours LAB*

This course covers the erection of precast concrete and metal buildings. Topics include rigging, handling and installing these in a safe and economical manner. It also covers reading and interpreting charts, tables and blueprints.

IW 150 Welding I 1.5 Units

*Enrollment Limitation: Registered Ironworkers Apprentice.
Hours: 18 hours LEC; 27 hours LAB*

This course introduces the structure of ferrous metals and their reaction to heat. It provides knowledge of the equipment and materials employed in the use of shielded metal-arc, gas shielded-arc, and oxy-acetylene welding.

IW 151 Welding II 1.5 Units

*Prerequisite: IW 150 with a grade of "C" or better.
Enrollment Limitation: Registered Ironworkers Apprentice.
Hours: 18 hours LEC; 27 hours LAB*

This course extends the study of ferrous metals and their reactions to heat. Equipment and materials employed in the use of shielded metal-arc and gas shielded-arc are included in this course.

IW 152 Welding III 1.5 Units

*Prerequisite: IW 151 with a grade of "C" or better.
Hours: 18 hours LEC; 27 hours LAB*

This course focuses on skill development in shielded metal arc and gas shielded arc welding on ferrous and non-ferrous metals. Vertical and overhead positions on all types of joints as they relate to structural stability are also covered.

IW 160 Lead Hazard 1.5 Units

*Enrollment Limitation: Registered Ironworkers Apprentice.
Hours: 18 hours LEC; 27 hours LAB*

This course describes the health effects caused by lead exposure. Topics include OSHA regulations, sampling methods, legal rights of workers and the use of proper protective equipment and work methods.

IW 170 Structural I 1.5 Units

*Enrollment Limitation: Registered Ironworkers Apprentice.
Hours: 18 hours LEC; 27 hours LAB*

This course covers the theory and practice of blueprint reading, structural erection procedures and proper steel structure construction.

IW 171 Structural II 1.5 Units

*Prerequisite: IW 170 with a grade of "C" or better.
Hours: 18 hours LEC; 27 hours LAB*

This comprehensive course addresses the theory and practice of blueprint reading related to structure construction. Structural erection procedures including the operation of mobile and tower cranes and proper construction of various steel structures are presented.

IW 180 Architectural/Ornamental I 1.5 Units

*Enrollment Limitation: Registered Ironworkers Apprentice.
Hours: 18 hours LEC; 27 hours LAB*

This course covers architectural and ornamental iron working. It provides detailed knowledge of the procedures and practices employed by the ironworker in architectural and ornamental iron working. Topics include tools, anchors, fasteners, various layout instruments and constructing curtain walls.

IW 181 Architectural/Ornamental II 1.5 Units

*Prerequisite: IW 180 with a grade of "C" or better.
Hours: 18 hours LEC; 27 hours LAB*

This course is a continuation of IW 180 and provides detailed information on knowledge, procedures and practices employed by the ironworker in architectural and ornamental iron working. Topics include tools, anchors fasteners and various layout instruments. Additionally, constructing curtain wall systems, applying sealants, and glazing systems are covered.

IW 182 Architectural/Ornamental III 1.5 Units

*Prerequisite: IW 181 with a grade of "C" or better.
Hours: 18 hours LEC; 27 hours LAB*

This course is a continuation of IW 181. Topics include store fronts and entranceways, revolving doors, swing doors and closers, sliding fronts/sliding doors, hollow metal doors, balanced doors, and rolling services doors. Additionally the installation of sloped walls, stair and glass railings, wall handrails, ladders, toilet partitions, vanity supports, relief angles, flagpoles, and chain link fences are covered.

IW 183 The History of Ironworkers 2.5 Units

*Enrollment Limitation: Registered Ironworkers Apprentice.
Hours: 45 hours LEC*

This course covers the history of ironworking and the ironworkers union movement from its birth in 1896 to the present.

IW 184 Detailing I 2 Units

*Enrollment Limitation: Registered Ironworkers Apprentice.
Hours: 40 hours LEC*

This course describes the process of ironwork detailing. Topics include drawing placement, communication instruments, bar lists, bar schedules, mathematical computation and blueprint reading.

IW 185 Detailing II 1.5 Units

*Prerequisite: IW 184 with a grade of "C" or better.
Hours: 18 hours LEC; 27 hours LAB*

This course covers the procedures and practices employed by the detailer of reinforcing iron. Analysis and interpretation of placing patterns and practices in the erection of a wide variety of reinforced concrete structures are presented.

IW 298 Work Experience in Iron workers Apprenticeship 1-4 Units

Enrollment Limitation: Indentured in the iron workers apprenticeship program.

*General Education: AA/AS Area III(b)
Hours: 60-300 hours LAB*

This course provides students the opportunity to work in the iron workers apprenticeship program for the purpose of developing specific skills to meet the goals and objectives of the iron workers Joint Apprenticeship and Training Committee (J.A.T.C.). Students complete work experience hours at approved training sites. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Operating Engineers

OE3 101 Introduction to Operators 8 Units

*Enrollment Limitation: Registered Operating Engineer Apprentice.
Hours: 120 hours LEC; 72 hours LAB*

This course introduces the skills and knowledge required to be a Construction Equipment Operator in the Operating Engineers Apprenticeship. Topics include an introduction to grade checking and the operation of a compactor, dozer, scraper, and backhoe.

OE3 102 Introduction to Heavy Duty Repair 8 Units

*Enrollment Limitation: Registered Operating Engineer Apprentice.
Hours: 120 hours LEC; 72 hours LAB*

This course is an introduction to the Heavy Equipment Operator in the Operating Engineers Apprenticeship. Topics include an introduction to electrical, pneumatic, hydraulic, and power train systems for heavy duty construction equipment. Additional topics include engines and safety.

OE3 103 Introduction to Crane Operators 12 Units

*Enrollment Limitation: Registered Operating Engineer Apprentice.
Hours: 164 hours LEC; 156 hours LAB*

This course introduces the skills and knowledge to be a Crane Operator in the Operating Engineers Apprenticeship. Topics include rigging, crane operations, lubrication, booms, loading, and safety regulations.

OE3 104 Introduction to Grade Setter 8 Units

*Enrollment Limitation: Registered Operating Engineer Apprentice.
Hours: 120 hours LEC; 72 hours LAB*

This course introduces the skills and knowledge to be a Grade Setter in the Operating Engineers Apprenticeship. Topics include an introduction to grade checking and the operations of compactors, bulldozers, scrapers, and loaders.

OE3 110 Introduction to Dredge Operation 3 Units

*Enrollment Limitation: Registered Operating Engineer Apprentice.
Hours: 41 hours LEC; 39 hours LAB*

This course introduces dredge operations. Topics include principles of dredging, water safety, knot tying, hand signals, and crane operations for dredging operations.

OE3 112 Seamanship I 3 Units

*Enrollment Limitation: Registered Operating Engineer Apprentice.
Hours: 41 hours LEC; 39 hours LAB*

This course covers seamanship as it is required for dredge operations. Topics include boat handling, use of nautical charts, piloting, signaling, buoy safety, and general water safety requirements for dredge operations.

OE3 115 Seamanship II 3 Units

*Prerequisite: OE3 112 with a grade of "C" or better
Enrollment Limitation: Registered Operating Engineer Apprentice.
Hours: 41 hours LEC; 39 hours LAB*

This course is a continuation of OE3 112. Advanced topics include marine rescue, lifeboat seamanship, dredging material handling, shipboard fire suppression, and shore operations.

OE3 120 Plant Operations 3 Units

*Enrollment Limitation: Registered Operating Engineer Apprentice.
Hours: 41 hours LEC; 39 hours LAB*

This course covers the operation, maintenance, and troubleshooting of batch, crushing, screening, and washing plants in the construction industry. Topics include maintenance procedures, erecting and dismantling, and types of materials.

OE3 121 Welding and Cutting 3 Units

*Enrollment Limitation: Registered Operating Engineer Apprentice
Hours: 41 hours LEC; 39 hours LAB*

This course covers welding and oxyacetylene used in batch, crushing, screening, and washing application plants. Topics include shop safety practices, proper selection of welding equipment, use of oxyacetylene equipment, and proper welding techniques.

OE3 130 Backhoe & Excavator Operations 3 Units

*Enrollment Limitation: Registered Operating Engineer Apprentice
Hours: 41 hours LEC; 39 hours LAB*

This course covers the safe operation of a backhoe and/or excavator. Topics include trenching safety, hazards of underground construction, sloping, grade checking, and excavation for a manhole.

OE3 131 Grade Checking 3 Units

*Enrollment Limitation: Registered Operating Engineer Apprentice
Hours: 41 hours LEC; 39 hours LAB*

This course covers grade checking for the construction equipment operator. Topics include grade setting terminology, stake marking, laser levelers, street section grading, Global Positioning System (GPS) devices, plan reading, metric conversions, and locating underground infrastructure.

OE3 132 Scrapers 3 Units

*Enrollment Limitation: Registered Operating Engineer Apprentice
Hours: 41 hours LEC; 39 hours LAB*

This course covers the operation of a scraper. Topics include equipment safety, grading, dumping and spreading, grade checking, and operation with a scraper.

OE3 133 Loaders 3 Units

*Enrollment Limitation: Registered Operating Engineer Apprentice
Hours: 41 hours LEC; 39 hours LAB*

This course covers the safe operation of a loader. Topics include equipment safety, loading, transporting, stockpiling, and hand signals.

OE3 134 Motor Grader 3 Units

*Enrollment Limitation: Registered Operating Engineer Apprentice
Hours: 41 hours LEC; 39 hours LAB*

This course covers the operation of a motor grader. Topics include equipment safety, grading, mixing, compaction density, grade checking, and v-ditching.

OE3 135 Dozers 3 Units

*Enrollment Limitation: Registered Operating Engineer Apprentice
Hours: 41 hours LEC; 39 hours LAB*

This course covers the operation of dozers. Topics include equipment safety, cutting, spreading, and grade checking.

OE3 136 Directional Drilling 3 Units

*Enrollment Limitation: Registered Operating Engineer Apprentice.
Hours: 41 hours LEC; 39 hours LAB*

This course covers the operation, maintenance, and troubleshooting of directional boring machines. Topics include safety, tracker control, maintenance, and drilling fluids.

OE3 140 Boom Pumps 3 Units

*Enrollment Limitation: Registered Operating Engineer Apprentice.
Hours: 41 hours LEC; 39 hours LAB*

This course introduces boom pumps, such as those for overhead concrete pumping. Topics include safety, maintenance, components, controls, hand signals, and blockages.

OE3 141 Line Pumps 3 Units

*Enrollment Limitation: Registered Operating Engineer Apprentice.
Hours: 41 hours LEC; 39 hours LAB*

This course introduces line pumps, such as those for ground concrete pumping. Topics include safety, maintenance, components, controls, hand signals, and blockages.

OE3 142 Advanced Boom Pumps 3 Units

*Prerequisite: OE3 140 with a grade of "C" or better
Enrollment Limitation: Registered Operating Engineer Apprentice.
Hours: 41 hours LEC; 39 hours LAB*

This course covers advanced boom pumps such as those used for overhead concrete pumping. Topics include advanced safety, preventative maintenance, components, controls, hand signals, blockages, and troubleshooting procedures.

OE3 143 Advanced Line Pumps 3 Units

*Prerequisite: OE3 141 with a grade of "C" or better
Enrollment Limitation: Registered Operating Engineer Apprentice.
Hours: 41 hours LEC; 39 hours LAB*

This course covers advanced line pumps, such as those used for ground concrete pumping. Topics include advanced safety, preventative maintenance, components, controls, hand signals, blockages, and troubleshooting procedures.

OE3 160 Grade Setting I 3 Units

*Enrollment Limitation: Registered Operating Engineer Apprentice
Hours: 41 hours LEC; 39 hours LAB*

This course introduces the skills and knowledge required to be a grade setter in the Operating Engineer Apprenticeship. Topics include surveying principles, plan reading, global positioning systems (GPS), cut/fill slope staking, street section grading, and pad layout.

OE3 161 Grade Setting II 3 Units

*Prerequisite: OE3 160 with a grade of "C" or better
Enrollment Limitation: Registered Operating Engineer Apprentice
Hours: 41 hours LEC; 39 hours LAB*

This course covers the advanced skills and knowledge required to be a grade setter in the Operating Engineer Apprenticeship. Topics include sloping pad layout, sidewalk, curb, and gutter grading, and catch point slope staking using global positioning systems (GPS) for Trimble systems.

OE3 182 Heavy Duty Equipment Hydraulics 3 Units

*Enrollment Limitation: Registered Operating Engineer Apprentice.
Hours: 41 hours LEC; 39 hours LAB*

This course covers hydraulic systems of heavy duty equipment. Topics include pumps, actuators, hoses, schematic drawings, and similar systems.

OE3 183 Engines 3 Units

*Enrollment Limitation: Registered Operating Engineer Apprentice.
Hours: 41 hours LEC; 39 hours LAB*

This course covers the principles, operation, and diagnosis of heavy duty engines commonly used in construction equipment, such as earth moving equipment. Topics include fuel systems, specialty tool usage, and troubleshooting techniques.

OE3 184 Power Trains 3 Units

*Enrollment Limitation: Registered Operating Engineer Apprentice.
Hours: 41 hours LEC; 39 hours LAB*

This covers the principles, operation, and diagnosis of heavy duty power trains commonly used in construction equipment such as earth moving equipment. Topics include shop safety, transmissions, drive-lines, differentials, and troubleshooting techniques.

OE3 185 Equipment Welding 3 Units

*Enrollment Limitation: Registered Operating Engineer Apprentice
Hours: 41 hours LEC; 39 hours LAB*

This course covers welding and oxyacetylene processes used in heavy construction equipment, such as bulldozers, backhoes, or earth moving equipment. Topics include shop safety practices, proper selection of welding equipment, use of oxyacetylene equipment, and proper welding techniques.

OE3 186 Lubrication Preventative Maintenance 3 Units

*Enrollment Limitation: Registered Operating Engineer Apprentice.
Hours: 41 hours LEC; 39 hours LAB*

This course covers lubrication preventative maintenance for the construction lube technician. Topics include lubricants, air filters, engine oils, and manufacturer services on heavy construction equipment.

OE3 187 Oils, Lubricants, and Coolants 3 Units

*Enrollment Limitation: Registered Operating Engineer Apprentice.
Hours: 41 hours LEC; 39 hours LAB*

This course covers oils, lubricants, and coolants for the construction lube technician. Topics include lubricants, engine oils, gear oils, transmission oils, grease, and coolants.

OE3 188 Servicing and Inspections 3 Units

*Enrollment Limitation: Registered Operating Engineer Apprentice.
Hours: 41 hours LEC; 39 hours LAB*

This course covers servicing and inspection skills for the construction lube technician. Topics include minor repairs, performing services, and inspecting for prevention.

OE3 298 Work Experience in Operating Engineers Apprenticeship 1-4 Units

*Enrollment Limitation: Indentured in the operating engineers apprenticeship program.
General Education: AA/AS Area III(b)
Hours: 60-300 hours LAB*

This course provides students the opportunity to work in the operating engineers apprenticeship program for the purpose of developing specific skills to meet the goals and objectives of the operating engineers Joint Apprenticeship and Training Committee (J.A.T.C.). Students complete work experience hours at approved training sites. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Pre-Apprenticeship

PREAP 111 Infrastructure Pre-Apprenticeship 7 Units

*Corequisite: FITNS 102
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 8 Units

*Corequisite: FITNS 100
Advisory: MATH 145
Hours: 96 hours LEC; 144 hours LAB*

This course provides preparation for entry-level employment skills for the utility industry. Topics include safety, basic electrical fundamentals, gas principles, excavation, working at heights, industrial ergonomics, radio procedures, and knot tying. Field trips may be required.

PREAP 141 Green Technology Pre-Apprenticeship 7 Units

Corequisite: FITNS 101
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.

Sheet Metal Apprenticeship

SHME 100 Sheet Metal Apprenticeship I 3.3 Units

Enrollment Limitation: Registered Sheet Metal Apprentice
Hours: 40 hours LEC; 58 hours LAB

This course is an introduction to the sheet metal apprenticeship program. Topics include job-site safety practices, basic drafting, basic job-site drawings, and industry terminology.

SHME 101 Sheet Metal Apprenticeship II 3.3 Units

Enrollment Limitation: Registered Sheet Metal Apprentice
Hours: 40 hours LEC; 58 hours LAB

This course an introduction to sheet metal field installation with an emphasis in basic sheet metal layout, parallel and radial line development and an introduction to triangulation. Topics include soft soldering and drafting of sheet metal prior to fabrication.

SHME 110 Sheet Metal Apprenticeship III 3.3 Units

Enrollment Limitation: Registered Sheet Metal Apprentice
Hours: 40 hours LEC; 58 hours LAB

This course introduces basic layout skills for advanced pattern development. In addition topics include the basic bidding process, trigonometry for the sheet metal industry, fabrication of round fittings, and drafting of pictorial drawings.

SHME 111 Sheet Metal Apprenticeship IV 3.3 Units

Enrollment Limitation: Registered Sheet Metal Apprentice
Hours: 40 hours LEC; 58 hours LAB

This course covers advanced pattern development, architectural sheet metal principles, flashing, and gutters. Topics include hoisting and rigging, as well as installation of fire and smoke dampers.

SHME 120 Sheet Metal Apprenticeship V 3.3 Units

Enrollment Limitation: Registered Sheet Metal Apprentice
Hours: 40 hours LEC; 58 hours LAB

This course is an introduction to heating, ventilating, and air conditioning (HVAC) systems. It includes an overview of the properties of air, heating, and cooling. In addition, this course covers fans and duct systems, and measuring airflow in ductwork.

SHME 121 Sheet Metal Apprenticeship VI 3.3 Units

Enrollment Limitation: Registered Sheet Metal Apprentice
Hours: 40 hours LEC; 58 hours LAB

This course is an introduction to Occupational Safety and Health Administration (OSHA) regulations and a review of safe rigging practices. Topics include job specifications, blueprint reading, field measuring, and installation of package units and built-up systems.

SHME 130 Sheet Metal Apprenticeship VII 3.3 Units

Enrollment Limitation: Registered Sheet Metal Apprentice
Hours: 40 hours LEC; 58 hours LAB

This course covers the design and construction of rooftop steel, advanced plans and specifications, and duct leakage detection. It includes basic electricity for sheet metal workers.

SHME 131 Sheet Metal Apprenticeship VIII 3.3 Units

Enrollment Limitation: Registered Sheet Metal Apprentice
Hours: 40 hours LEC; 58 hours LAB

This course covers testing, adjusting, and balancing of heating, ventilating, and air conditioning (HVAC) systems. Topics include advanced drafting elevation views of shaft duct systems and complete takeoff of a HVAC system with cost, quantity and weight.

SHME 140 Sheet Metal Apprenticeship IX 3.3 Units

Enrollment Limitation: Registered Sheet Metal Apprentice
Hours: 40 hours LEC; 58 hours LAB

This course covers the installation of architectural metal, food service equipment, and commercial exhaust systems. It includes control wiring of these systems.

SHME 141 Sheet Metal Apprenticeship X 3.3 Units

Enrollment Limitation: Registered Sheet Metal Apprentice
Hours: 40 hours LEC; 58 hours LAB

This course covers shop foreman duties, procedures, and leadership training. In addition, the testing, adjusting, and balancing of blow pipe systems are addressed.

SHME 150 Sheet Metal Welding I 2.5 Units

Enrollment Limitation: Registered Sheet Metal Apprentice
Hours: 27 hours LEC; 54 hours LAB

This course covers oxyacetylene cutting, shielded metal arc (SMAW) and gas tungsten arc (GTAW) welding processes typically used in the sheet metal industry. Topics include welding safety procedures and maintenance techniques.

SHME 151 Sheet Metal Welding II 2.5 Units

Enrollment Limitation: Registered Sheet Metal Apprentice
Hours: 27 hours LEC; 54 hours LAB

This course covers advanced shielded metal arc (SMAW) and gas tungsten arc (GTAW) welding processes typically used in the sheet metal industry. Topics include welding safety procedures and maintenance techniques.

SHME 298 Work Experience in Sheet Metal Apprenticeship 1-4 Units

Enrollment Limitation: Indentured in the sheet metal apprenticeship program.
Hours: 60-300 hours LAB

This course provides students the opportunity to work in the sheet metal apprenticeship program for the purpose of developing specific skills to meet the goals and objectives of the sheet metal Joint Apprenticeship and Training Committee (J.A.T.C.). Students complete work experience hours at approved training sites. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Sheet Metal Residential Apprenticeship

SMRA 100 Sheet Metal Residential Apprenticeship I 3 Units

*Enrollment Limitation: Registered Sheet Metal Residential Apprentice
Hours: 40 hours LEC; 42 hours LAB*

This course is an introduction to sheet metal residential apprenticeship, residential and light commercial work, safety, tools, and materials. Topics include an introduction to basic sheet metal layout and fabrication.

SMRA 101 Sheet Metal Residential Apprenticeship II 3 Units

*Enrollment Limitation: Registered Sheet Metal Residential Apprentice
Hours: 40 hours LEC; 42 hours LAB*

This course covers trade-related mathematics, forklift training, sheet metal soldering, and basic reading of blueprints. Topics include basic layout of sheet metal elbows, offsets and triangulation.

SMRA 110 Sheet Metal Residential Apprenticeship III 3 Units

*Enrollment Limitation: Registered Sheet Metal Residential Apprentice
Hours: 40 hours LEC; 42 hours LAB*

This course covers servicing, troubleshooting and low voltage controls for residential heating and air conditioning (HVAC) equipment. Topics include residential architectural sheet metal and fabricating flashing, gutters and downspouts.

SMRA 111 Sheet Metal Residential Apprenticeship IV 3 Units

*Enrollment Limitation: Registered Sheet Metal Residential Apprentice
Hours: 40 hours LEC; 42 hours LAB*

This course covers advanced triangulation, draft and fabrication methods in residential heating, ventilation and air conditioning (HVAC) systems. Topics include servicing furnaces, air conditioners, and alternating-current (AC) control circuits. Additional topics include duct design and system sizing.

Sheet Metal Technician Apprenticeship

SMTEC 100 Sheet Metal Service Technician Apprenticeship I 2.5 Units

*Enrollment Limitation: Registered Sheet Metal Apprentice
Hours: 27 hours LEC; 54 hours LAB*

This course is an introduction to the Sheet Metal Service Technician Apprenticeship. Topics include environmental systems, basic refrigeration theory, balancing refrigeration systems, and field safety. It includes the testing, adjusting, and balancing of refrigeration systems.

SMTEC 101 Sheet Metal Service Technician Apprenticeship II 2.5 Units

*Enrollment Limitation: Registered Sheet Metal Apprentice
Hours: 27 hours LEC; 54 hours LAB*

This course covers diagnosing refrigeration systems, charging and recovery of small hermetic systems, and servicing small heating, ventilating, and air conditioning (HVAC) package units.

SMTEC 110 Sheet Metal Service Technician Apprenticeship III 2.5 Units

*Enrollment Limitation: Registered Sheet Metal Apprentice
Hours: 27 hours LEC; 54 hours LAB*

This course covers basic electrical fundamentals and control circuits in package air conditioning units. Topics include basic motor principles, construction, and motor control circuits.

SMTEC 111 Sheet Metal Service Technician Apprenticeship IV 2.5 Units

*Enrollment Limitation: Registered Sheet Metal Apprentice
Hours: 27 hours LEC; 54 hours LAB*

This course covers hermetically sealed electric motors, motor control circuits and their protection. Topics include electrical schematics and diagrams relating to air conditioning equipment.

SMTEC 120 Sheet Metal Service Technician Apprenticeship V 2.5 Units

*Enrollment Limitation: Registered Sheet Metal Apprentice
Hours: 27 hours LEC; 54 hours LAB*

This course covers duct systems including design, selection, layout, and outlets. Topics include the properties of air, airflow, and heat in heating, ventilating, and air conditioning (HVAC) system design. Additionally, types of heating systems are covered.

SMTEC 121 Sheet Metal Service Technician Apprenticeship VI 2.5 Units

*Enrollment Limitation: Registered Sheet Metal Apprentice
Hours: 27 hours LEC; 54 hours LAB*

This course covers chilled water systems, air cooled condensers, water cooled condensers, refrigerant lines and flow control devices. Topics include heat load calculations for cooling systems and heat pump operation, components, and controls.

SMTEC 130 Sheet Metal Service Technician Apprenticeship VII 2.5 Units

*Enrollment Limitation: Registered Sheet Metal Apprentice
Hours: 27 hours LEC; 54 hours LAB*

This course covers commercial systems such as walk-in freezers, ice makers, multi-zone systems and an introduction to computerized building management. Topics include constant volume air conditioning systems, and an introduction to pneumatic and electronic environmental system controls.

SMTEC 131 Sheet Metal Service Technician Apprenticeship VIII 2.5 Units

*Enrollment Limitation: Registered Sheet Metal Apprentice
Hours: 27 hours LEC; 54 hours LAB*

This course covers variable air volume systems used in airflow regulation and their electronic control components. Topics include an introduction to the principles and components of direct digital controls (DDC) and energy management systems (EMS).

SMTEC 140 Sheet Metal Service Technician Apprenticeship IX 2.5 Units

*Enrollment Limitation: Registered Sheet Metal Apprentice
Hours: 27 hours LEC; 54 hours LAB*

This course covers the installation and application of direct digital control (DDC) systems in energy management systems (EMS). Topics include an introduction to blueprint reading for service technicians, and the testing and balancing of heating, ventilating, and air conditioning (HVAC) systems integrated with EMS.

SMTEC 141 Sheet Metal Service Technician Apprenticeship X 2.5 Units

*Enrollment Limitation: Registered Sheet Metal Apprentice
Hours: 27 hours LEC; 54 hours LAB*

This course covers commissioning of direct digital control (DDC) systems in energy management systems (EMS). Topics include demand controlled ventilation systems and advanced blueprint reading for service technicians.

SMTEC 292 HVAC Energy Utilization 3.5 Units

Enrollment Limitation: Must currently be a displaced journeyman sheet metal worker as defined by the California Energy Commission grant.

Hours: 54 hours LEC; 36 hours LAB

This course covers Heating, Ventilating, Air Conditioning (HVAC) system energy utilization. Topics include maximum efficiency and occupant comfort.

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

Degree: A.A. - Art
 A.A. for Transfer - Art History
 A.A. for Transfer - Studio Art
 Certificate: Freelance Photography
 Department Certificate:
 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 Drawing and Composition I	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	Drawing and Composition II (3)
ART 304	Figure Drawing I (3)
ART 305	Figure Drawing II (3)
ART 306	Facial Expression and Anatomy (3)
ART 312	Portrait Drawing (3)
ART 314	Introduction to Illustration (3)
ART 323	Design: Color Theory (3)
ART 324	Collage and Assemblage (3)
ART 327	Painting I (3)
ART 328	Painting II (3)
ART 329	Painting III (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 376	Functional 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 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.

Art History A.A. for Transfer Degree

The Associate in Arts in Art History for Transfer provides a clearly articulated curricular track for students who wish to transfer to a CSU campus, while also serving the diverse needs of students interested in the breadth and depth of the field of Art History. Additionally, this degree exposes students to the core principles and practices of the field in order to build a foundation for their future personal, academic, or vocational paths.

The Associate in Arts degree in Art History for Transfer provides students with a major that fulfills the general requirements of the California State University for transfer. Students with this degree will receive priority admission with junior status to the California State University system. The Associate in Arts degree in Art History for Transfer (A.A.-T) may be obtained by the completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program outlined below (earning a C or better in these courses) and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

Student Learning Outcomes

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

- assess and evaluate the contributions of artists throughout history.
- identify and evaluate works of art or architecture according to their appropriate style and time frame.
- analyze and critique art and architecture within the context of their functions and meanings.
- research and assess theoretical information concerning the meanings and purposes of art and architecture.
- explain the history of cultures and civilizations and how art and architecture is a reflection of that history.

Career Opportunities

Art historians with undergraduate degrees are placed as registrars, preparators, and curatorial staff in art museums and galleries; they can also be employed as art critics in mass media publications, such as newspapers and magazines. An advanced degree allows an art historian a wider range of possible career applications, including museums directorships, curators, instructors, preservationists, researchers, and auction house personnel.

Requirements for Degree	21 Units
ART 300 Drawing and Composition I	3
ARTH 302 Art: Stone Age Through the Middle Ages	3
ARTH 308 Renaissance Tradition in Art	3
ARTH 310 Modern Art	3
And a minimum of 3 units from the following:	3
ARTH 333 Introduction to Islamic Art (3)	
ARTH 334 International Contemporary Art (3)	
And a minimum of 3 units from the following:	3
ART 304 Figure Drawing I (3)	
ART 320 Design: Fundamentals (3)	
ART 323 Design: Color Theory (3)	
ART 327 Painting I (3)	
ART 328 Painting II (3)	
ART 336 Watercolor Painting (3)	
ART 361 Printmaking: Survey (3)	

ART 370	Three Dimensional Design (3)
ART 372	Sculpture (3)
ART 375	Figure Sculpture (3)
ART 390	Ceramics (3)
ARTNM 303	Graphic Design: Typography (3)
ARTNM 310	Design: Fundamentals (3)
ARTNM 324	Digital Design (3)
ARTPH 300	Basic Art Photography (3)
ARTPH 305	Digital Photography (3)
And a minimum of 3 units from the following:	
ART 304	Figure Drawing I (3)
ART 320	Design: Fundamentals (3)
ART 323	Design: Color Theory (3)
ART 327	Painting I (3)
ART 328	Painting II (3)
ART 336	Watercolor Painting (3)
ART 361	Printmaking: Survey (3)
ART 370	Three Dimensional Design (3)
ART 372	Sculpture (3)
ART 375	Figure Sculpture (3)
ART 390	Ceramics (3)
ART 420	Film Making (2)
ART 430	Art and Children (3)
ARTH 333	Introduction to Islamic Art (3)
ARTH 334	International Contemporary Art (3)
ARTNM 303	Graphic Design: Typography (3)
ARTNM 305	History of Graphic Design (3)
ARTNM 310	Design: Fundamentals (3)
ARTNM 324	Digital Design (3)
ARTPH 300	Basic Art Photography (3)
ARTPH 305	Digital Photography (3)

¹Excluding any courses used to fulfill the degree requirements listed above.

Associate in Arts for Transfer Degree Requirements: The Associate in Arts in Art History for Transfer (AA-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

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:

(continued on next page)

(Studio Art A.A. for Transfer Degree continued)

- 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 **27 Units**

ART 300	Drawing and Composition I	3
ART 320	Design: Fundamentals (3)	3
or ARTNM 310	Design: Fundamentals (3)	
ART 370	Three Dimensional Design.....	3
ARTH 308	Renaissance Tradition in Art	3
ARTH 310	Modern Art	3
ARTH 302	Art: Stone Age Through the Middle Ages (3)	3
or ARTH 322	Art History of the Non-Western World (3)	

A minimum of 9 units from the following: 9

Select three courses, each from a different category below.

Drawing:

ART 302	Drawing and Composition II (3)
ART 304	Figure Drawing I (3)
ART 305	Figure Drawing II (3)
ART 312	Portrait Drawing (3)

Color Theory:

ART 323	Design: Color Theory (3)
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Painting:

ART 327	Painting I (3)
ART 336	Watercolor Painting (3)

Printmaking:

ART 361	Printmaking: Survey (3)
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Sculpture:

ART 372	Sculpture (3)
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Applied Design:

ART 383	Metal Design: Emphasis In Fabrication (3)
ART 384	Metal Design: Emphasis In Casting (3)

Ceramics:

ART 390	Ceramics (3)
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Photography:

ARTPH 300	Basic Art Photography (3)
ARTPH 305	Digital Photography (3)

Other Media:

ART 440	Artists' Materials and Techniques (3)
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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.

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.

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

Career Opportunities

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

See losrios.edu/gainful-emp-info/gedt.php?major=011026C01 for Gainful Employment Disclosure.

Requirements for Certificate **30 Units**

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

DEPARTMENT CERTIFICATE

Sculpture Certificate

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

Student Learning Outcomes

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

- analyze compositional principles as they apply to three-dimensional form and space.
- create sculpture utilizing basic traditional and contemporary techniques.
- demonstrate the proper and safe use of a gas forge, the anvil, and other related metal working equipment.
- demonstrate blacksmith techniques such as punching, twisting, drawing out, and upsetting.
- utilize tools and technology such as forms, molds, crucible, melting furnace, and metal pouring equipment.
- describe the proper technique for applying patinas.
- evaluate blue print drawings as they relate to foundry casting.
- define the properties of sculptural form and space.
- demonstrate creative abilities.
- generate sculpture(s) based on a variety of source material.
- cite traditional and non-traditional metal working techniques as they apply to three-dimensional functional and non-functional art forms.
- express creativity through a process of conception, design, execution, finish, and presentation.

Requirements for Certificate	12 Units
ART 370 Three Dimensional Design.....	3
ART 372 Sculpture.....	3
ART 375 Figure Sculpture	3
A minimum of 3 units from the following:	3
ART 373 Intermediate Sculpture (3)	
ART 376 Functional Sculpture (3)	

Art

ART 300 Drawing and Composition I 3 Units

Course Family: Drawing Fundamentals (see page 34 - limitation on active participatory courses)

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

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. (C-ID ARTS 110)

ART 302 Drawing and Composition II 3 Units

Course Family: Drawing Fundamentals (see page 34 - limitation on active participatory courses)

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. (C-ID ARTS 205)

ART 304 Figure Drawing I 3 Units

Course Family: Figure Studies (see page 34 - limitation on active participatory courses)

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 human structure based on the history and traditions of the human figure in art. Skills are developed by critically analyzing, drawing, and composing the undraped figure in a representational manner from direct observation. A variety of media are introduced in the exploration of the human form. Field trips may be required. (C-ID ARTS 200)

ART 305 Figure Drawing II 3 Units

Course Family: Figure Studies (see page 34 - limitation on active participatory courses)

Prerequisite: ART 304 with a grade of "C" or better

Advisory: ART 312

Course Transferable to UC/CSU

Hours: 36 hours LEC; 54 hours LAB

This course continues the study of the human figure in art as begun in ART 304. The pursuit of more complex strategies and skills are developed by critically analyzing, drawing, and composing the undraped figure. The use of color tools and the development of personal style are emphasized. Field trips may be required.

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 the study of the human image in portraiture. Emphasis is on developing the skills needed to portray specific individuals rather than a generalized image of people. Included are the history and traditions of portraiture, the use of color media, and the development of personal style. Field trips may be required.

ART 314 Introduction to Illustration 3 Units

Course Family: Applied Drawing (see page 34 - limitation on active participatory courses)

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

Course Family: Applied Drawing (see page 34 - limitation on active participatory courses)

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.

ART 320 Design: Fundamentals 3 Units

Same As: ARTNM 310

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 ARTNM 310. (C-ID ARTS 100)

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 studies the principles, theories, and application of additive and subtractive color in two dimensions. Included is the use of color systems found in major historical and contemporary artistic styles. A portfolio of design projects in applied color systems is required. Field trips may be required. (C-ID ARTS 270)

ART 324 Collage and Assemblage 3 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

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

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course investigates the creation of artworks using the technique of collage and assemblage (the process of assembling and adhering diverse materials and found objects onto another surface). The history of collage and assemblage and basic design theories are introduced. Development of a personal visual style is encouraged. Field trips may be required.

ART 327 Painting I 3 Units

Course Family: Painting (see page 34 - limitation on active participatory courses)

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. It includes the survey of historical and contemporary development of painting with emphasis on perceptual and technical skills, such as, color theory, paint mixing and technique, and creative responses to materials and subject matter. Field trips may be required. (C-ID ARTS 210)

ART 328 Painting II 3 Units

Course Family: Painting (see page 34 - limitation on active participatory courses)

Prerequisite: ART 327 with a grade of "C" or better

Course Transferable to UC/CSU

Hours: 36 hours LEC; 54 hours LAB

This course expands on the basic painting techniques and materials introduced in ART 327. It encourages the development of artistic style and general and specific criticism found in the history of painting. Field trips may be required.

ART 329 Painting III 3 Units

Course Family: Painting (see page 34 - limitation on active participatory courses)

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.

ART 336 Watercolor Painting 3 Units

Course Family: Painting (see page 34 - limitation on active participatory courses)

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 painting with aqueous media and techniques, including watercolor, gouache, and acrylic. It emphasizes historical and contemporary development, technical skill, color relationship(s), and self-expression using aqueous media in painting. Different artists and topics are covered each semester. Field trips may be required.

ART 337 Intermediate Watercolor Painting 3 Units

Course Family: Painting (see page 34 - limitation on active participatory courses)

Prerequisite: ART 336 with a grade of "C" or better

Course Transferable to UC/CSU

Hours: 36 hours LEC; 54 hours LAB

This course continues the study of the aqueous medium in painting begun in ART 336. More complex methods, concepts, varying approaches, and techniques using the aqueous medium are developed. Personal style is emphasized. Field trips may be required.

ART 339 Integrating Digital Media with Traditional Media I 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. It explores a wide variety of ideas, tools, and resources. Topics include history, theory, and practice surrounding digital and traditional image generation, image manipulation, image transfer, and material exploration.

The course emphasizes developing unique forms of portfolio quality projects demonstrating new approaches and methods of integrating digital media with traditional media forms. This course is not available to students who have taken ARTNM 331.

ART 361 Printmaking: Survey 3 Units

Course Family: Printmaking (see page 34 - limitation on active participatory courses)

Course Transferable to UC/CSU

Hours: 36 hours LEC; 54 hours LAB

This course covers various printmaking techniques, including but not limited to: relief printing, (wood, linoleum, collagraph, and rubber); monotype; stencil and/or silkscreen printing; and repetitive stencil printing. Each semester, different artists and/or visual examples are discussed. Field trips may be required.

ART 370 Three Dimensional Design 3 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

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 which may include but is not limited to clay, metal, wood, fibers, mixed media, plaster, and paper. (C-ID ARTS 101)

ART 371 Foundry Casting for Sculpture 3 Units

Course Family: Sculpture (see page 34 - limitation on active participatory courses)

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.

ART 372 Sculpture 3 Units

Course Family: Sculpture (see page 34 - limitation on active participatory courses)

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: CSU Area C1

Course Transferable to UC/CSU

Hours: 36 hours LEC; 54 hours LAB

This is an introductory course in sculpture. It covers expressive use of form, color, and various sculptural methods, such as additive and subtractive media using clay and plaster, and constructive media like wood and steel; found objects and other materials may also be explored. This course utilizes a problem-solving format in order to develop knowledge of technical process, formal vocabulary, and individual expression. Both historical and contemporary approaches in developing form and content are included. Field trips may be required.

ART 373 Intermediate Sculpture 3 Units

Course Family: Sculpture (see page 34 - limitation on active participatory courses)

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: 54-108 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.

ART 375 Figure Sculpture 3 Units

Course Family: Figure Studies (see page 34 - limitation on active participatory courses)

Advisory: ART 304

Course Transferable to UC/CSU

Hours: 36 hours LEC; 54 hours LAB

This course introduces figure sculpture, using the live undraped model as reference. Concepts of human anatomy are emphasized through the use of quick gestural studies and sustained sculptural projects. Field trips may be required.

ART 376 Functional Sculpture 3 Units

Course Family: Sculpture (see page 34 - limitation on active participatory courses)

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. Topics include hand forging metal techniques, furniture and sculpture design, finishing processes, and the use of patinas.

ART 382 Metal Design: Emphasis in Mixed Media 3 Units

Course Family: Small Metal Arts (see page 34 - limitation on active participatory courses)

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 glass work, enameling, plastics, etching, reticulation and granulation will be studied.

ART 383 Metal Design: Emphasis In Fabrication 3 Units

Course Family: Small Metal Arts (see page 34 - limitation on active participatory courses)

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.

ART 384 Metal Design: Emphasis In Casting 3 Units

Course Family: Small Metal Arts (see page 34 - limitation on active participatory courses)

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.

ART 390 Ceramics 3 Units

Course Family: Ceramics-Hybrid (see page 34 - limitation on active participatory courses)

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

Course Family: Ceramics-Hybrid (see page 34 - limitation on active participatory courses)

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.

ART 392 Ceramic Lab 1-2 Units

Corequisite: Currently enrolled in ART 390, 391, 397, or 398.

Course Transferable to UC/CSU

Hours: 54-108 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. UC credit granted only if taken concurrently with ART 390 or 391.

ART 397 Alternative Firing Processes in Ceramics 3 Units

Course Family: Ceramics-Hybrid (see page 34 - limitation on active participatory courses)

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.

ART 398 Ceramic Murals and Tiles 3 Units

Course Family: Ceramics-Hybrid (see page 34 - limitation on active participatory courses)

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.

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 completing a series of short, individual and/or group projects, focusing on various methods and techniques that can be used to create films/videos which are visually sophisticated and conceptually interesting. Work by contemporary and historically-significant filmmakers is also covered.

ART 430 Art and Children 3 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

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, including various movements (ism's) and concepts in creating artwork. This course covers the process of creating lesson plans, doing preparatory work for presenting art projects, and creation of drawings, paintings, and sculptures. It also covers how to identify and properly use, maintain, store, and clean commonly used art materials. Topics include proper identification, utilization, and presentation of basic art principles, and an understanding of age-specific capabilities in children. Field trips may be required.

ART 440 Artists' Materials and Techniques 3 Units

Course Family: Studio Art and Practice (see page 34 - limitation on active participatory courses)

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

General Education: AA/AS Area I

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course focuses on analyzing and developing artists' mediums and techniques. Historical information about various materials and their relationship to personal imagery and style are emphasized. The composition of pigments, their origins, and various binders are explored. The construction of various artists' substrates and supports as well as the techniques of matting and framing art work are also covered. A supply fee may be required for this course. Field trips may be required.

ART 442 Introduction to Art Gallery Operations 2 Units

Course Family: Gallery Management (see page 34 - limitation on active participatory courses)

Prerequisite: Successful completion of two studio courses from ART, ARTNM, ARTPH.

Course Transferable to CSU

Hours: 18 hours LEC; 54 hours LAB

This course introduces gallery operations to art students. It involves hands-on experience in curating, planning, and installing exhibitions. A portion of this course is offered in a TBA component of 16-30 hours which may include work as a gallery attendant or gallery docent. Field trips may be required.

ART 444 Art Gallery and Portfolio Preparation 3 Units

Course Family: Studio Art and Practice (see page 34 - limitation on active participatory courses)

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

Advisory: ENGWR 101 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. It emphasizes the creation of individual portfolios and portfolio management. Topics include selecting exhibitions, creating announcements, organizing receptions, and sending out press releases in addition to photographing art and preparing documents to accompany exhibitions. It also covers creating artist statements, digital portfolios properly formatted on a disk, business cards, cover letters, and resumes. Field trips to galleries and museums may be required.

ART 470 Art Lab 1-2 Units

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

Course Transferable to CSU

Hours: 54-108 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 for credit with a listed co-requisites.

ART 495 Independent Studies in Art 1-3 Units

Course Transferable to CSU

Hours: 54-162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

Art History**ARTH 300 Introduction to Art 3 Units**

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

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 and analysis of the visual arts, including drawing, painting, sculpture, architecture, and additional media. It offers a foundation for understanding art. Field trips to art galleries or museums may be required. (C-ID ARTH 100)

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. (C-ID ARTH 110)

ARTH 308 Renaissance Tradition in Art 3 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

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 mid-19th century. Outstanding art works of each major period are discussed, analyzed, and placed within historical context. A field trip to an art museum or art gallery may be required.

ARTH 310 Modern Art 3 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

General Education: AA/AS Area I; CSU Area C1; IGETC Area 3A

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course covers 18th, 19th, and 20th century art forms including painting, sculpture, and architecture in Europe and America. Styles discussed include Neoclassicism, Romanticism, Realism, Impressionism and Post-Impressionism, and the major movements of the 20th century. Post-Modern art is also discussed. A field trip to an art museum or art gallery may be required.

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

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
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 visits 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 surveys the art and culture of the Middle East. It focuses on Islamic art and architecture and provides fundamental information on the formation of Islamic art, its history, and philosophy. It includes visual examples from Arabic, Persian, and Indian cultures.

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: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340
General Education: AA/AS Area I; CSU Area C1
Course Transferable to UC/CSU
Hours: 36 hours LEC; 54 hours LAB

This course examines the formal and technical aspects of 35mm film photography. Topics include critiques of major movements in the history of photography and contemporary silver-gelatin process artists. A problem-solving approach is utilized to explore compositional ideas. Camera operation, black and white film developing, and silver-gelatin printmaking are covered. Digital photography file management and editing concepts are introduced through film scans. A 35mm single lens reflex (SLR) camera as well as darkroom and portfolio supplies are required. Processing chemicals are provided. Field trips may be required. (C-ID ARTS 260)

ARTPH 305 Digital Photography 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. ARTNM 302 with a grade of "C" or better.
General Education: AA/AS Area I (effective Summer 2014)
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, and re-writable 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) or digital single lens reflex (DSLR) camera or digital camera with manual options is required. Darkroom and portfolio supplies are also required. Field trips may be required.

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

Prerequisite: ARTPH 305 with a grade of "C" or better
Advisory: Eligible for ENGRD 116 AND ENGWR 102; OR ESLR 320 AND ESLW 320.
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.

ARTPH 322 Color Photography 3 Units

Prerequisite: ARTPH 300 or ARTPH 305 with a grade 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: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340

General Education: AA/AS Area I

Course Transferable to UC/CSU

Hours: 36 hours LEC; 54 hours LAB

This course covers alternative photographic printing processes produced in sunlight. No camera is necessary. Image processes such as salt prints, cyanotypes, Van Dyke brown prints, gum prints, palladium prints, and wet-plate photography are covered. It includes the history of photographic processes from the daguerreotype to the digital age. Negatives are produced from digital transparencies, Xerox transparencies, transparency film, and natural objects.

Varied printing substrates are covered. Papers and printing surfaces, brushes, memory storage devices, digital printing resources, safety glasses, and protective gloves are required. Chemistry is provided. Field trips may be required.

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

Corequisite: ARTPH 361 or 490

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 and metering, basic portraiture, choice of lighting equipment and modifiers, white balance adjustments, and color temperature. It also includes study of the history of studio photography. Black and white, color, and digital processes are included. A 35mm single lens reflex (SLR) or digital camera (dSLR) with manual options, lighting sync port, as well as darkroom or digital and portfolio supplies are required. Field trips may be required.

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.

ARTPH 495 Independent Studies in Art Photography 1-3 Units

Course Transferable to CSU

Hours: 54-162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

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
 3D Modeling and Texturing
 3D Rigging Technical Director
 3D Technical Director
 Web Design
 Technical Communications
 Department Certificate:
 Foundation

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

Career Opportunities

A few career opportunities include Graphic Designer, Character Designer, 3D Animator, Web Designer, 3D Modeler and Texture Artist, 3D Artist, Commercial Illustrator, and Print Designer.

Requirements for Degree	33 Units
ART 300 Drawing and Composition I	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 305 History of Graphic Design	3
ARTNM 450 Portfolio for Art New Media	3
And a minimum of 15 units from the following:	15
ARTNM 302 Digital Basics for Art New Media (1.5)	
ARTNM 303 Graphic Design: Typography (3)	
ART 306 Facial Expression and Anatomy (3)	
or ARTNM 320 Facial Expression and Anatomy (3)	
ARTNM 322 Beginning Digital Art (3)	
ARTNM 324 Digital Design (3)	
ARTNM 325 Intermediate Digital Design (3)	
ARTNM 326 Digital Painting (3)	
ARTNM 328 Beginning Digital Photo Imagery (3)	
ARTNM 330 Intermediate Digital Photo Imagery (3)	
ARTNM 331 Integrating Digital Media with Traditional Media I (3)	
or ART 339 Integrating Digital Media with Traditional Media I (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 372	Character Design (3)
or ART 317	Character Design (3)
ARTNM 401	Introduction to Web 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 (3)
ARTNM 422	3D Animation (3)
ARTNM 423	3D Texturing (3)
ARTNM 431	3D Short Production (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

(continued on next page)

(Graphic Design Certificate continued)

- create and assemble two-dimensional media projects taking into account form, composition, color and hierarchy 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

See losrios.edu/gainful-emp-info/gedt.php?major=011392C01 for Gainful Employment Disclosure.

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 or ART 320	Design: Fundamentals (3)	3
ARTNM 324	Digital Design	3
ARTNM 325	Intermediate Digital Design	3
ARTNM 328	Beginning Digital Photo Imagery	3
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 time frame

See losrios.edu/gainful-emp-info/gedt.php?major=011393C01 for Gainful Employment Disclosure.

Requirements for Certificate		37.5 Units
ART 300	Drawing and Composition I	3
ART 304	Figure Drawing I.....	3
ART 323	Design: Color Theory.....	3

ART 327	Painting I (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 focuses on traditional animation principles to create believable animations. Animations created will range from flying logos for broadcast television, to animated product placement, to characters used for the telling of fantastic stories. This certificate focuses on skill sets in both the traditional arts, and digital environments to create believable animations.

Student Learning Outcomes

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

- research and demonstrate application of the principles of animation to tell a story with meaning through movement.
- create the motions, gestures, and expressions of three-dimensional computer graphics characters and objects.
- critique animation and regularly improve upon demonstration reels.
- create high quality 3D models from live or image reference, and animate the models for use in demonstration reels.
- create a portfolio quality 3D animation demonstration reel.
- create animation from live reference, video reference, and from hand drawn imagery.
- create animation in various 2D and 3D software programs and apply the principles regardless of the software differences.
- block in movements in rough animation and show for the approval in a weekly review.
- finish work for approval in a timely manner.

Career Opportunities

Students can apply their 3D animation skills in film, game, and broadcast, as well as local industries, such as medical, legal, engineering, Web, fine art, and entrepreneurial. Students can continue their studies in 3D animation at a four year college or choose an entry level position in any of the 3D animation industries.

See losrios.edu/gainful-emp-info/gedt.php?major=011484C01 for Gainful Employment Disclosure.

Requirements for Certificate		18 Units
ART 375	Figure Sculpture	3
ARTNM 405	Digital 2D Animation	3
ARTNM 420	Introduction to 3D Modeling.....	3
ARTNM 422	3D Animation.....	3
A minimum of 3 units from the following:		
ART 306	Facial Expression and Anatomy (3)	
or ARTNM 320	Facial Expression and Anatomy (3)	

(continued on next page)

(3D Animation Certificate continued)

ART 317	Character Design (3)	
or ARTNM 372	Character Design (3)	
A minimum of 3 units from the following:		3
ARTNM 431	3D Short Production (3)	
WEXP 498	Work Experience in (Subject) (1 - 4)	

3D Modeling and Texturing Certificate

This certificate combines a foundation of traditional sculpture and painting with computer generated three dimensional digital modeling and painting. High polygon modeling techniques are used to create assets for any industry in need of 3D modeling and texturing. Texturing will focus primarily on the use of manipulated and painted imagery to create complex surfaces.

Student Learning Outcomes

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

- create complex 3D environments, characters, and props to be used in the any production.
- create believable models of objects from life, photographs, or hand drawn reference.
- create accurate models of the human anatomy with a clear and clean polygon flow showing muscle, fat, skin, and bone topology.
- create believable textures from reference images.
- analyze and assess the needs of a project and determine the complexity of the models and textures to match the project.
- create clean, high polygon count, polygon meshes ready for production.
- create facial structures and shape targets preparing the character for facial animation.
- create a portfolio quality modeling and texturing demonstration reel.

Career Opportunities

Students can continue their studies in 3D modeling and texturing at a four year college or choose to apply their 3D modeling and texturing skills in the film, game, and broadcast industries, as well as other local industries, such as medical, legal, engineering, Web, and fine art.

Requirements for Certificate **18 Units**

ART 375	Figure Sculpture	3
ARTNM 420	Introduction to 3D Modeling.....	3
ARTNM 421	3D Character Modeling.....	3
ARTNM 423	3D Texturing.....	3
A minimum of 3 units from the following:		3
ARTNM 320	Facial Expression and Anatomy (3)	
or ART 306	Facial Expression and Anatomy (3)	
ARTNM 372	Character Design (3)	
or ART 317	Character Design (3)	
A minimum of 3 units from the following:		3
ARTNM 431	3D Short Production (3)	
WEXP 498	Work Experience in (Subject) (1 - 4)	

3D Rigging Technical Director Certificate

This certificate offers training on the articulation of movement for 3D objects, environments, and characters. Rigging is the process of giving a character controls for movement, therein “articulating” its range of motion, or bringing the character to life. Standard rigs for vehicles,

bipedal, and quadrupedal characters will be created, as well as rig variations, such as cartoon rigs to maximize flexibility. In addition, students will be expected to increase efficiency of production by creating rig building tools. Also, interfacing tools will be created to increase efficiency and usability of the rigs in production.

Student Learning Outcomes

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

- differentiate the types of deformers to achieve a specific deformation called for by animation.
- create a concise set of animation controls.
- analyze the animator’s needs to provide and refine an articulation of the full range of expressions and body movement needed to support a character’s acting range.
- create a portfolio quality demonstration reel of their rigs animated.
- proficiently use a programming language to solve rigging problems, create new tools, and create interfacing tools for the animator.
- proficiently use math to solve rigging problems.
- design and maintain master rigs that can be re-used as a basis for articulating similar characters, or applying existing rigs to newly created character sculpts.
- differentiate the deformation needs of realistic musculature and traditional cartoon movement.

Career Opportunities

Students can apply their 3D rigging skills in film, game, and broadcast, as well as local industries, such as medical, legal, engineering, Web, fine art, and entrepreneurial. Students can continue their studies in 3D rigging at a four year college or choose an entry level position in any of the 3D animation industries.

Requirements for Certificate **19 Units**

ART 375	Figure Sculpture	3
ARTNM 420	Introduction to 3D Modeling.....	3
ARTNM 429	3D Rigging and Rig Building.....	3
ARTNM 431	3D Short Production	3
CISC 323	Linux Operating System	1
CISP 300	Algorithm Design/Problem Solving	3
MATH 330	Trigonometry	3

3D Technical Director Certificate

This certificate offers a comprehensive understanding of the computer generated three dimensional (CG 3D) production process. It’s designed for self-learners, entrepreneurs, and developers of independent content or someone looking for a high level position in a 3D animation company. A broad range of topics are covered, from traditional sculpting to digital rendering. In addition to technical direction, this certificate would be ideal for any 3D Generalist position.

Student Learning Outcomes

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

- plan a production pipeline and solve 3D production issues with a holistic understanding of 3D.
- create portfolio quality demonstration reels with animation, modeling, texturing, and rigging.
- differentiate various 3D software strengths and weaknesses.

(continued on next page)

(3D Technical Director Certificate continued)

- apply to any entry level 3D position calling for a 3D Technical Director or 3D Generalist.
- differentiate art mediums and physical materials, translate the medium and apply them in the computer generated environment.

Career Opportunities

Students can apply their 3D skills in film, game, and broadcast, as well as local industries, such as medical, legal, engineering, Web, fine art, and entrepreneurial. Students can continue their studies in 3D at a four year college or choose an entry level position in any of the 3D animation industries.

Requirements for Certificate	30 Units
ART 300 Drawing and Composition I	3
ARTNM 420 Introduction to 3D Modeling.....	3
CISP 300 Algorithm Design/Problem Solving	3
MATH 330 Trigonometry.....	3
ARTNM 320 Facial Expression and Anatomy (3)	3
or ARTNM 372 Character Design (3)	3
A minimum of 6 units from the following:	6
ART 304 Figure Drawing I (3)	3
ARTNM 310 Design: Fundamentals (3)	3
or ART 320 Design: Fundamentals (3)	3
ART 370 Three Dimensional Design (3)	3
ART 372 Sculpture (3)	3
ART 375 Figure Sculpture (3)	3
A minimum of 9 units from the following:	9
ARTNM 421 3D Character Modeling (3)	3
ARTNM 422 3D Animation (3)	3
ARTNM 423 3D Texturing (3)	3
ARTNM 429 3D Rigging and Rig Building (3)	3
ARTNM 431 3D Short Production (3)	3
WEXP 498 Work Experience in (Subject) (1 - 4)	4

Web Design Certificate

The Web Design certificate incorporates the fundamentals of visual communication with industry-standard work flow and tools to prepare creatives and talents for the web design industry. The certificate focuses on the visual language necessary for a web designer to produce compelling graphics in the web authoring environment. Students are encouraged to further their studies in interactive design by obtaining other Art New Media Certificates such as the Interactive Design Certificate, the Digital Imagery Certificate and the Video Certificate within the Art New Media department, or similar programs at a four-year college, or encouraged to choose an entry-level position in the web design industry.

Student Learning Outcomes

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

- produce compelling graphics incorporating industry-standard work flow and tools
- design visually successful web pages/web sites using visual design concepts
- evaluate content needs for target audience
- assess the most effective navigation flow
- conceive and deliver visual solutions for a client within a defined time frame

Career Opportunities

Web design skills are used in business, government, educational institutions, and the entertainment industry.

See losrios.edu/gainful-emp-info/gedt.php?major=011395C01 for Gainful Employment Disclosure.

Requirements for Certificate	31 Units
Semester 1:	
ARTNM 303 Graphic Design: Typography	3
ARTNM 324 Digital Design.....	3
ARTNM 328 Beginning Digital Photo Imagery	3
Semester 2:	
ARTNM 325 Intermediate Digital Design.....	3
ARTNM 330 Intermediate Digital Photo Imagery.....	3
ARTNM 401 Introduction to Web Design	3
Semester 3:	
ARTNM 331 Integrating Digital Media with Traditional Media I.....	3
ARTNM 332 Digital Video	3
ARTNM 402 Intermediate Web Design.....	3
Semester 4:	
ARTNM 410 Interactive Projects	4

Technical Communications Degree

This is an interdisciplinary course of study designed to prepare students for employment as professional writers and communicators in a variety of media intended to instruct and inform audiences. The degree program includes substantial course work in writing, information design, editing, page design, online help development, web site creation, and the use of industry standard applications.

Student Learning Outcomes

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

- analyze audience information needs and propose solutions to aid the audience.
- design technical communication solutions for a variety of industry and government purposes.
- design and create web sites and help systems with effective visual design, navigation, and written content.
- design and publish printed pages with effective design, organization, content, and indexing.
- compose professional prose for a variety of audiences with a variety of purposes.
- compose and edit professional documents in grammatically correct, concise English.
- create and use style templates in a variety of industry standard software.

Career Opportunities

Technical communicators may be employed in a variety of occupations in government, scientific firms, nonprofits, natural resources, finance, education, and high tech.

Requirements for Degree	36.5 Units
BUS 100 English for the Professional.....	3
CISA 305 Beginning Word Processing.....	2
CISW 300 Web Publishing	3
JOUR 300 Newswriting and Reporting.....	3
TECCOM 300 Introduction to Technical/Professional Communication.....	3
TECCOM 310 Technical/Professional Communication: Writing Reports.....	3

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(Technical Communications Degree continued)

TECCOM 320	Technical/Professional Communication: Proposal Writing.....	3
TECCOM 330	Technical/Professional Communication: Writing Technical Manuals.....	3
TECCOM 340	Technical/Professional Communication: Developing Help Systems.....	1.5
And a minimum of 12 units from the following:		12
ARTNM 328	Beginning Digital Photo Imagery (3)	
ARTNM 330	Intermediate Digital Photo Imagery (3)	
ARTNM 352	Design for Publication (3)	
CISA 331	Intermediate Desktop Publishing (2)	
CISW 310	Advanced Web Publishing (4)	
CISW 321	Web Site Development using Dreamweaver (3)	
CISW 400	Client-side Web Scripting (4)	
CISW 410	Middleware Web Scripting (4)	
ENGWR 301	College Composition and Literature (3)	

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.

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.

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.

See losrios.edu/gainful-emp-info/gedt.php?major=011222C01 for Gainful Employment Disclosure.

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
TECCOM 300 Introduction to Technical/Professional Communication	3
TECCOM 330 Technical/Professional Communication: Writing Technical Manuals.....	3

TECCOM 340	Technical/Professional Communication: Developing Help Systems.....	1.5
And a minimum of 6 units from the following:		6
BUS 100	English for the Professional (3)	
CISW 321	Web Site Development using Dreamweaver (3)	
CISW 400	Client-side Web Scripting (4)	
CISW 410	Middleware Web Scripting (4)	
TECCOM 310	Technical/Professional Communication: Writing Reports (3)	
TECCOM 320	Technical/Professional Communication: Proposal Writing (3)	

DEPARTMENT CERTIFICATE**Foundation Certificate**

This entry level certificate introduces the tools and context fundamental for the field of digital media.

Student Learning Outcomes

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

- construct visual composition using design fundamentals.
- construct visual composition using typography principles.
- integrate traditional media and digital media.
- construct composition based on the history of graphic design.
- create basic digital composition using industry-standard tools.

Career Opportunities

This program prepares students to apply their knowledge and experiences in many industries that require basic digital design skills. These positions include internship and entry-level visual communication opportunities within industries such as design, arts, entertainment, business, and education.

Requirements for Certificate	13.5 Units
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
ARTNM 331 Media Studio I: Pigment-Based Media.....	3

Art New Media**ARTNM 302 Digital Basics for Art New Media 1.5 Units**

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 include operating system(s), digital vocabulary, scanning, saving, and file formats. Distinctions between vector, bitmap, and page layout applications are made using Adobe Illustrator, Adobe Photoshop, and Adobe InDesign.

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. (C-ID ARTS 100)

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 322 Beginning Digital Art 3 Units

General Education: AA/AS Area I (effective Summer 2015)

Course Transferable to UC/CSU

Hours: 36 hours LEC; 54 hours LAB

This introductory digital art course focuses on digital media processes, including software and hardware tools that facilitate creative visual and conceptual approaches to digital art making. A wide range of digital imaging techniques are explored, and time-based processes are introduced, leading to the creation of digital images, animations/videos, and mixed media objects. The course also explores artists uses of new technologies in contemporary art-making practices. A vocabulary of new media terms and practices is developed through discussions and critiques.

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.

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

Advisory: ART 300 and ARTNM 302

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course introduces the fundamental principles of color, drawing, and painting using the basic tools of Corel Painter. Visual communication skills of color, drawing, and painting are applied to produce individual portfolio-quality projects.

ARTNM 328 Beginning Digital Photo Imagery 3 Units

Advisory: ART 300 and ARTNM 302

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course is an introduction to computer-based photographic imaging with emphasis on utilizing cutting edge digital imaging tools to realize design objects. Basic operating principles of Adobe Photoshop are covered. Topics include scanning, basic photo correction, selections, layer basics, adjustment layers, basic masking and channels, typography, vector drawings, and compositing. Design fundamentals are discussed. Topics include positive and negative space relationship, unity, balance, and basic color theory. Concept development is also introduced.

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.

ARTNM 331 Integrating Digital Media with Traditional Media I 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. It explores a wide variety of ideas, tools, and resources. Topics include history, theory, and practice surrounding digital and traditional image generation, image manipulation, image transfer, and material exploration. The course emphasizes developing unique forms of portfolio quality projects demonstrating new approaches and methods of integrating digital media with traditional media forms. This course is not available to students who have taken ART 339.

ARTNM 332 Digital Video 3 Units

Advisory: ARTNM 302

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course applies the principles of cinematography and editing to the production of digital video. Industry standard software is employed to capture/import, edit, and produce high-end visual productions. The course includes transitions, multiple layers, alpha channels, and composite green screen segments. Evaluation of multimedia projects containing video segments in terms of design aesthetics and technical competence is included. This course examines the genres of documentary, short narrative film, title sequencing, and experimental film.

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.

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.

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: ARTNM 352 and 359 with grades of "C" or better

Advisory: ARTNM 324 and 328 with grades of "C" or better

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course covers the basic techniques and approaches used by graphic design studios as they relate to concept development, branding, and target audience assessment. Emphasis is placed on project analysis, research, and presentation. Projects are produced through the integration of industry standard graphics software used for print production, vector based graphics, and digital imaging. A portfolio of professional level projects is developed and presented. Field trips are required.

ARTNM 358 College Magazine: Art Selection and Editing 1-2 Units

Advisory: ARTH 300 and ARTNM 302

Course Transferable to CSU

Hours: 12-24 hours LEC; 18-36 hours LAB

This course provides instruction in the editing of ARC's college magazine, the American River Review, for national competitions sponsored by organizations such as the Columbia Scholastic Press Association and the Associated Collegiate Press. The course focuses on the implementation of a submission process for art work including art handling, tracking of submissions, photography for print and evaluation of submissions. It may be taken four times for credit. A portion of this course may be offered in a TBA component of 6-20 hours which may include photographing 2D and 3D artwork, scanning or photographing photographic artwork, downloading or scanning digital submissions, and production organization such as reformatting and naming files, organizing files into media groups for evaluation.

ARTNM 359 College Magazine: Design and Production 3 Units

Advisory: ARTNM 302, 324, 328, 352, or 354

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course provides instruction in the design and production of ARC's college magazine, the American River Review, for national competitions sponsored by organizations such as the Columbia Scholastic Press Association and the Associated Collegiate Press. The course focuses on the graphic design, digital production, and printing of a literary and fine art magazine as well as the publicity, marketing, fund-raising, and distribution of the magazine. It provides the design staff a collaborative experience with the editorial staff taught by the English Department. It may be taken four times for credit.

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 401 Introduction to Web Design 3 Units

Advisory: ARTNM 303, 310, 324, and 328

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.

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.

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 rich interactive content suitable for graphical experiences across personal computers, mobile devices, and screens. Topics include generating interactivity between vector-based graphics, animation, integration of 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.

ARTNM 405 Digital 2D Animation 3 Units

Advisory: ART 300 and ARTNM 302

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course provides techniques for using the traditional principles of animation with industry-standard software. Topics include animating a bouncing ball, ball with a tail, ball with legs, full body bipedal, and a face synchronized to audio. Character animation topics involve locomotion, such as walking and jumping, using the traditional principles. Technical issues, such as frame-by-frame animation (cell animation), rotoscoping, interpolated or f-curve animation, are discussed and applied. Projects can be published on the Web, CD-Rom, DVD, and video.

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.

ARTNM 421 3D Character Modeling 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. Industry techniques and issues related to humanoid character modeling are analyzed and applied. Industry issues, such as the topology flow of human anatomy, facial blend targets, and joint correction, are developed. Clothing, hair, and accessories are added to the characters, strictly following concept designs.

ARTNM 422 3D Animation 3 Units

Advisory: ART 375, DANCE 390, or TAP 300

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course provides 3D 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 and 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.

ARTNM 423 3D Texturing 3 Units

Prerequisite: ARTNM 420 with a grade of "C" or better

Advisory: ARTNM 328, ARTPH 300, and ARTPH 305

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course provides texturing techniques, or image mapping, using industry standard software, such as Adobe Photoshop, Pixologic Zbrush, and Autodesk Maya. Topics include photo-manipulation, unwrapping and painting hard-surface and sub-division surface models and creating a texture library. Environment and character-texture maps are created using image-mapping techniques.

ARTNM 429 3D Rigging and Rig Building 3 Units

Prerequisite: ARTNM 420 with a grade of "C" or better

Advisory: ARTNM 421 and 422

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course provides skills for the articulation of computer-generated three-dimensional, or CG 3D, objects. Projects include the creation of rigs for inanimate objects with the intent to animate, and the creation of a full body rig for bipedal and quadrupedal characters. Scripting languages and rig building tools are utilized to expedite the rigging process. 3D production issues, such as interfaces for animators, are addressed.

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

The course provides essential skills, strategies and processes involved in organizing, selecting, writing and marketing one's creative work. Topics include file organization, file accessibility and backup, research techniques, target identification, resume building, letter of interest, portfolio construction, building resumes, interview techniques, interview body language, job research, and portfolio presentation. The portfolio can be tailored for application for jobs in the creative industry, transfer to 4-year art or graphics programs, graduate schools, gallery exhibitions, artist residencies, scholarships and artist grants.

ARTNM 495 Independent Studies in Art New Media 1-3 Units

Course Transferable to CSU

Hours: 54-162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

ARTNM 498 Work Experience in Art New Media 1-4 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position, or job related to art new media with a cooperating site supervisor. 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: 60-300 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 Title 5 required forms which document the student's progress and hours spent at the work site, and developing workplace skills and competencies. During the semester, the student is required to 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. First-time participants are required to attend a weekly orientation and a final meeting. Returning participants are required to attend the first class meeting, a mid-semester meeting, and a final meeting and may meet individually with the instructor as needed to complete a work site observation and all program forms, receive updates, and assignments. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Area: Humanities
 Dean: Kate Jaques
 Phone: (916) 484-8653
 Counseling: (916) 484-8572

Degree: A.A. - ASL-English Interpreter Preparation Program
 Certificate: ASL-English Interpreter Preparation Program

DEGREES AND CERTIFICATES

ASL-English Interpreter Preparation Program Degree

This program provides an integrated series of coursework in American Sign Language (ASL) and ASL-English interpretation to prepare students for entry-level positions. The series provides academic coursework based on a Deaf-centered framework that encourages students to embrace an empowered collaboration with Deaf people. A foundation in ASL discourse and interpretation is established through theoretical models. Emphasis is on the practical application of these models and knowledge in the areas of human relations, language skills, interpreting skills, cultural competence, service learning, and professionalism.

Student Learning Outcomes

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

- discuss and apply knowledge of linguistic, cross-cultural, and interpretation theories.
- demonstrate communicative competency in English and in ASL through effective communication in a variety of settings with Deaf and hearing participants of varying age, gender, and ethnicity.
- analyze, identify, and apply personal, professional, and ethical decisions in a manner consistent with theoretical models and standard professional practices that align in service with the goal of the setting and Deaf and hearing participants.
- demonstrate interpersonal competencies that foster effective communication and productive collaboration with colleagues, Deaf and hearing consumers, employers, and team members in an interpreting context.
- formulate effective interpretations both consecutively and simultaneously following a practice profession framework.
- develop an on-going professional action plan integrating interactions with Deaf related organizations, connections with interpreter employers, and the implications of certification on the provision of interpreting.

Career Opportunities

American Sign Language-English interpreters are in demand locally, regionally, and nationally. A qualified American Sign Language-English interpreter enjoys a rewarding, highly flexible career. This field is expanding; growth in the job market is projected.

Enrollment Eligibility

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

- Successful completion of one of the following:
 - a) Graduation from an accredited high school in the United States

- b) General Educational Development (GED) Test
 - c) California High School Proficiency Examination (CHSPE) prior to time of application
 - d) A high school diploma from a school outside the United States with transcripts evaluated by a National Association of Credential Evaluation Services (NACES) approved independent agency. Such cases will be evaluated on an individual basis.
 - e) An Associate of Arts/Associate of Science degree or higher from a regionally accredited college.
 - f) College attended outside the United States with transcripts evaluated by a NACES approved independent agency, demonstrating A.A./A.S. degree or higher. Such cases will be evaluated on an individual basis.
- DEAF 316: American Sign Language IV or the equivalent, 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 ASL-English Interpreter Preparation Program (IPP) are available from the Humanities Division, the coordinator of the IPP or at the ARC IPP website. The Interpreter Preparation Program currently accepts students once per year for the Fall semester which begins in August. Applications for the Fall semester are available by February 15th and the deadline to submit the application is by the second Friday in April.
- Only qualified applicants who meet the educational requirements and follow the pre-enrollment procedures will be considered for the program. Meeting all these requirements does not guarantee acceptance into the program.
- Upon completion and acceptance of the pre-enrollment application, students will participate in an interview/screening process conducted by the Interpreter Preparation Program. Should the number of qualified applicants exceed available space in the program, selection will be based on the rankings from the interview/screening process.

Requirements for Degree	50 Units
DEAF 318	American Sign Language V .....4
DEAF 351	Introduction to American Deaf Culture .....3
DEAF 352	Introduction to American Deaf Education .....3
DEAF 370	Structure of American Sign Language .....3
INTRP 300	Ethics and Professional Standards of Interpreting .....3
INTRP 301	American Sign Language Discourse .....3
INTRP 303	Orientation to the Interpreting Profession .....3
INTRP 305	ASL to English Interpreting .....3
INTRP 307	English to ASL Interpreting3
INTRP 310	Introduction to Deaf Blind Interpreting0.5

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(ASL-English Interpreter Preparation Program Degree continued)

INTRP 312	Introduction to Oral Transmission	0.5
INTRP 320	Simultaneous Interpreting	4
INTRP 325	Transliteration	4
INTRP 350	Service Learning for Interpreters	2
INTRP 352	Mock Interpreting I	1
INTRP 354	Mock Interpreting II	1
INTRP 356	Fieldwork in Interpretation	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 Video Relay and Telephone 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)	

Associate Degree Requirements: The ASL-English Interpreter Preparation Program Associate in Arts (A.A.) Degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

ASL-English Interpreter Preparation Program Certificate

This program provides an integrated series of coursework in American Sign Language (ASL) and ASL-English interpretation to prepare students for entry-level positions. The series provides academic coursework based on a Deaf-centered framework that encourages students to embrace an empowered collaboration with Deaf people. A foundation in ASL discourse and interpretation is established through theoretical models. Emphasis is on the practical application of these models and knowledge in the areas of human relations, language skills, interpreting skills, cultural competence, service learning, and professionalism.

Student Learning Outcomes

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

- discuss and apply knowledge of linguistic, cross-cultural, and interpretation theories.
- demonstrate communicative competency in English and in ASL through effective communication in a variety of settings with Deaf and hearing participants of varying age, gender, and ethnicity.
- analyze, identify, and apply personal, professional, and ethical decisions in a manner consistent with theoretical models and standard professional practices that align in service with the goal of the setting and Deaf and hearing participants.
- demonstrate interpersonal competencies that foster effective communication and productive collaboration with colleagues, Deaf and hearing participants, employers, and team members in an interpreting context.
- formulate effective interpretations both consecutively and simultaneously following a practice profession framework.

- develop an on-going professional action plan integrating interactions with Deaf related organizations, connections with interpreter employers, and the implications of certification on the provision of interpreting.

Career Opportunities

American Sign Language-English interpreters are in demand locally, regionally, and nationally. A qualified American Sign Language/English interpreter enjoys a rewarding, highly flexible career. This field is expanding; growth in the job market is projected.

See losrios.edu/gainful-emp-info/gedt.php?major=01X1309C01 for Gainful Employment Disclosure.

Enrollment Eligibility

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

- Successful completion of one of the following:
 - a) Graduation from an accredited high school in the United States
 - b) General Educational Development (GED) Test
 - c) California High School Proficiency Examination (CHSPE) prior to time of application
 - d) A high school diploma from a school outside the United States with transcripts evaluated by a National Association of Credential Evaluation Services (NACES) approved independent agency. Such cases will be evaluated on an individual basis.
 - e) An Associate of Arts/Associate of Science degree or higher from a regionally accredited college.
 - f) College attended outside the United States with transcripts evaluated by a NACES approved independent agency, demonstrating A.A./A.S. degree or higher. Such cases will be evaluated on an individual basis.
- DEAF 316: American Sign Language IV or the equivalent, 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 ASL-English Interpreter Preparation Program (IPP) are available from the Humanities Division, the coordinator of the IPP or at the ARC IPP website. The Interpreter Preparation Program currently accepts students once per year for the Fall semester which begins in August. Applications for the Fall semester are available by February 15th and the deadline to submit the application is by the second Friday in April.
- Only qualified applicants who meet the educational requirements and follow the pre-enrollment procedures will be considered for the program. Meeting all these requirements does not guarantee acceptance into the program.
- Upon completion and acceptance of the pre-enrollment application, students will participate in an interview/ screening process conducted by the Interpreter Preparation Program. Should the number of qualified applicants exceed available space in the program, selection will be based on the rankings from the interview/screening process.

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(ASL-English Interpreter Preparation Program Certificate continued)

Requirements for Certificate	50 Units
DEAF 318 American Sign Language V	4
DEAF 351 Introduction to American Deaf Culture	3
DEAF 352 Introduction to American Deaf Education	3
DEAF 370 Structure of American Sign Language	3
INTRP 300 Ethics and Professional Standards of Interpreting	3
INTRP 301 American Sign Language Discourse	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 Service Learning for Interpreters.....	2
INTRP 352 Mock Interpreting I	1
INTRP 354 Mock Interpreting II	1
INTRP 356 Fieldwork in Interpretation	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 Video Relay and Telephone 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)	

ASL-English Interpreter Preparation

INTRP 300 Ethics and Professional Standards of Interpreting 3 Units

Prerequisite: INTRP 303 and 305 with grades 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 301 American Sign Language Discourse 3 Units

Enrollment Limitation: Acceptance into the Interpreter Preparation Program through a pre-enrollment application and interview/screening process.
Course Transferable to CSU
Hours: 54 hours LEC

This course provides a foundation in American Sign Language (ASL) discourse and an introduction to translation with a focus on appropriate cultural norms used during interactions. Topics include conversational signals, prosodic features, register variation, message analysis, message transfer and translation. This course is formerly known as SILA 320.

INTRP 303 Orientation to the Interpreting Profession 3 Units

Enrollment Limitation: Acceptance into the Interpreter Preparation Program through a pre-enrollment application and interview/screening process.

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, extra linguistic knowledge 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 orientation to the Deaf-Blind community. Topics include sighted guide techniques, environmental and ergonomic considerations, modifications to the interpreting models, and additional responsibilities when interacting with Deaf-Blind individuals.

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. Topics include speechreading skills, articulation, and support techniques.

INTRP 314 Introduction to Multicultural Communication .5 Units

Prerequisite: SILA 316 with a grade of "C" or better
Advisory: INTRP 305 and 307
Course Transferable to CSU
Hours: 9 hours LEC

This course is a focus on the field of multicultural communication. Cultural and linguistic diversity, personal life experiences, and enhancing racial and ethnic diversity in the interpreting profession are emphasized.

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, incorporation of cultural considerations, and team interpreting.

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 ASL to English and English to ASL literal to idiomatic transliteration skills. Topics include language and consumer assessment, contact signing forms, semantic appropriateness, syntactic considerations, prosodic features, lipshadowing, lipreading, and fingerspelling reception and production.

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 introduces interpreting in the educational setting with a focus on the elementary and secondary levels of education. Emphasis is on vocabulary development and enrichment specific to educational interpreting, resource development, team building, roles and responsibilities, communicating with children, and ethics.

INTRP 332 Introduction to Educational Interpreting, Post Secondary 1 Unit

Prerequisite: INTRP 305 and 307 with grades 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 postsecondary level of education. Emphasis is on vocabulary development and enrichment specific to educational interpreting, resource development, team building, and ethics.

INTRP 334 Introduction to Medical Interpreting 1 Unit

Prerequisite: INTRP 305 and 307 with grades of "C" or better
Course Transferable to CSU
Hours: 18 hours LEC

The course is an introduction to interpreting in the medical setting. Logistics, role and ethics, the impact of culture and language use are considered.

INTRP 336 Introduction to Performing Arts Interpreting 1 Unit

Prerequisite: INTRP 305 and 307 with grades of "C" or better
Course Transferable to CSU
Hours: 18 hours LEC

This course is an introduction to interpreting in the performing arts setting. Character development, the function of space in American Sign Language (ASL), environmental considerations, team collaboration, and interpretation are considered.

INTRP 338 Introduction to Social Services and Employment Interpreting 1 Unit

Prerequisite: INTRP 305 and 307 with grades of "C" or better
Course Transferable to CSU
Hours: 18 hours LEC

This course is an introduction to interpreting in social services and employment settings. Environmental considerations, interpretation, resource building, teamwork, and ethics are considered.

INTRP 340 Introduction to Video Relay and Telephone Interpreting .5 Unit

Prerequisite: INTRP 305 and 307 with grades of "C" or better
Course Transferable to CSU
Hours: 9 hours LEC

This course is an introduction to video relay and telephone interpreting. Environmental considerations, vocabulary development, resource building, video relay and telephone processes, etiquette, and ethics are considered.

INTRP 342 Introduction to Religious Interpreting .5 Unit

Prerequisite: INTRP 305 and 307 with grades 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 are covered.

INTRP 344 Introduction to Working with a Certified Deaf Interpreter .5 Unit

Prerequisite: INTRP 305 and 307 with grades of "C" or better
Course Transferable to CSU
Hours: 9 hours LEC

This course is an introduction to interpreting while working with a certified Deaf interpreter (CDI). Topics include: language and communication variation; specialized skills of the CDI; explanation of the role, function, and process of Deaf/hearing teams; and an introduction to the conjoint work involved in the collaborative interpreting process.

INTRP 349 Signing for Dependency Situations .5 Unit

Prerequisite: INTRP 303 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. Resources available to Deaf people including Deaf Hope, Deaf Safe, and sobriety meetings are covered. Methods for interpreting these resources are covered.

INTRP 350 Service Learning for Interpreters 2 Units

Prerequisite: INTRP 301 and 303 with grades of "C" or better
Course Transferable to CSU
Hours: 27 hours LEC; 27 hours LAB

This course provides an opportunity to collaborate to build relationships with the Deaf community. Topics include aligning goals and values of the Deaf community through a reciprocal, respectful, and mutually rewarding partnership, resulting in progress toward the Deaf community's goals and enhanced learning of the responsibilities between future practitioners and the communities in which they work. A portion of this course may be offered in a TBA component of 27 hours which will include service learning provision.

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, team interpreting, 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. A portion of this course may be offered in a TBA component of 40.5 hours which may include preparation for and interpreting in mock interpreting settings.

INTRP 356 Fieldwork in Interpretation 5 Units

Prerequisite: INTRP 300 and 320 with grades of "C" or better
Course Transferable to CSU
Hours: 54 hours LEC; 108 hours LAB

This course provides an opportunity to apply classroom learning to real-world practice in interpreting in both on-campus and off-campus settings. It also provides an opportunity to take one of the national evaluation system examinations. A portion of this course may be offered in a TBA component of 108 hours which may include observation of interpreters and individual and team interpreting practice.

INTRP 495 Independent Studies in Sign Language Studies - Interpreting 1-3 Units

Course Transferable to CSU
Hours: 54-162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

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, Independent Studies in Astronomy, and an Astronomy Laboratory. All courses comply with general education transfer requirements.

Astronomy

ASTR 300 Introduction to Astronomy 3 Units

Advisory: MATH 100, 104 or 132 with a grade of "C" or better, AND eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
General Education: AA/AS Area IV; CSU Area B1; IGETC Area 5A
Course Transferable to UC/CSU
Hours: 54 hours LEC

This course covers topics in modern planetary and stellar astronomy, such as dwarf, jovian, terrestrial, and extrasolar planets and the life cycle of stars, black holes, and supernovae. It also includes topics on cosmology and galactic astronomy, such as dark matter, dark energy, the Big Bang, and the expansion of the Universe.

ASTR 310 The Solar System 3 Units

Advisory: MATH 100, 104 or 132 with a grade of "C" or better, AND eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
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 night-time sky, the history of astronomy, the tools of astronomy, and the origins and characteristics of planets, their satellites, and other components of the solar system. Emphasis is placed on how astronomers gain and refine their knowledge of the Universe and interpret the latest results of planetary exploration.

ASTR 320 Stars, Galaxies, and Cosmology 3 Units

Advisory: MATH 100, 104 or 132 with a grade of "C" or better, AND eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
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, 104 or 132 with a grade of "C" or better, AND eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
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 possibilities of life beyond Earth and what can we learn from terrestrial life forms surviving in extreme conditions. Topics include the origin, biology, and evolution of life on Earth, habitability and interior energy sources of Earth and other planets in the solar system, the likelihood of life existing on other planets or moons within our solar system, attempts to locate life within our solar system, and attempts to communicate with intelligent life in other parts of the galaxy.

ASTR 400 Astronomy Laboratory 1 Unit

Corequisite: ASTR 300, 310, 320, or 330
General Education: 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 visual observation of astronomical objects and the analysis of astronomical data. Topics may include constellation identification, stellar spectroscopy, solar and lunar observations, radio-physics and radio-astronomy, image analysis, measuring the properties of stars, and determining the age of the Universe. Night-time on-campus field trips are required.

ASTR 481 Honors Astronomy: Stars, Galaxies, and Cosmology 4 Units

Prerequisite: Placement into ENGWR 480 through the assessment process.
Advisory: MATH 100, 104, or 132 with a grade of "C" or better
General Education: AA/AS Area IV (effective Summer 2015)
Course Transferable to CSU
Hours: 54 hours LEC; 54 hours LAB

This seminar-style course is an in-depth introduction to astronomy, focusing on stars, galaxies, and cosmology. It approaches current topics in astronomy through class discussion and laboratory activities, with an emphasis on critical thinking, problem-solving techniques, and conceptual reasoning. This course is not open to students who have completed ASTR 320.

ASTR 495 Independent Studies in Astronomy 1-3 Units

Course Transferable to CSU
Hours: 54-162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

Area: Technical Education
 Dean: Dr. Trish Caldwell
 Phone: (916) 484-8354
 Counseling: (916) 484-8572
<http://wserver.arc.losrios.edu/~tech/>

Degree: A.S. - Automotive Collision Technology
 Certificate: Automotive Collision Technology
 Department Certificates:
 Automotive Claims Estimator
 Automotive Collision Technology - Non-Structural
 Automotive Collision Technology - Refinish
 Automotive Collision Technology - Structural

Automotive Collision Technology Degree and Certificate

This degree or certificate provides an extended combination of classroom and hands-on shop experience to prepare for careers in all phases of automotive collision technology. Topics include component repairs, structural and non-structural repairs and refinishing. It also covers various automotive systems, such as heating and air-conditioning, suspension steering, and electrical.

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. Students who have successfully completed this program are working as non-structural, structural, refinish and estimating technicians. The U.S. Labor Department reports that job opportunities for auto collision specialists are excellent because of the large number of older workers who are expected to retire in the next 5 to 10 years. In addition, it points out that experienced technicians are rarely laid off and that employers prefer to hire graduates of a formal training program for which provides a foundation in the latest collision technology, including the techniques and equipment used on the job.

See losrios.edu/gainful-emp-info/gedt.php?major=011038C01 for Gainful Employment Disclosure.

Requirements for Degree or Certificate	56 Units
ACT 100 Automotive Collision Basics.....	4
ACT 110 Component Repairs.....	4
ACT 120 Non-Structural Repair	4
ACT 130 Structural Repair.....	4
ACT 131 Automotive Collision Welding.....	4
ACT 140 Automotive Refinishing.....	4
ACT 161 Automotive Collision Software Systems, Estimating I.....	4
AT 100 Technical Basics for the Automotive Professional	4
AT 105 Mathematics for Automotive Technology.....	3
AT 180 Automotive Data Acquisition	3
AT 310 Heating and Air-Conditioning Systems.....	4
AT 311 Suspension and Steering Systems.....	4
AT 330 Automotive Electrical Systems.....	6
A minimum of 4 units from the following:	4
ACT 298 Work Experience in Collision Technology (1 - 4)	

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.

DEPARTMENT CERTIFICATES

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.

See losrios.edu/gainful-emp-info/gedt.php?major=011513C01 for Gainful Employment Disclosure.

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(Automotive Claims Estimator Certificate continued)

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
BUSTEC 300.1	Keyboarding/Applications: Beginning.....	1 ¹

¹Keyboard proficiency test. This program can be completed in 15 units if student passes keyboarding test.

Automotive Collision Technology – Non-Structural Certificate

This certificate provides a combination of classroom and hands-on experience to prepare for careers in non-structural automotive collision technology. Topics include automotive collision basic, component and non-structural repairs. This certificate is intended for students who have completed the Automotive Collision Technology Certificate and need to obtain a higher skill level to obtain higher I-CAR pro levels.

Student Learning Outcomes

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

- identify collision damage
- repair vehicle sheet steel
- determine repair or replace based on I-CAR/ASE criteria
- repair hybrid vehicles to meet legal safety standards

Career Opportunities

This program provides training and hands-on experience in high-demand skills that lead to promising career with high wages. Students who have successfully completed this program are working as body repair technicians. The U.S. Labor Department reports that job opportunity for auto collision specialists are excellent because of large number of older workers who are expected to retire in the next 4 to 10 years. In addition, it points out that experienced technicians are rarely laid off and employers prefer to hire graduates of a formal training program because it provides a foundation in the latest collision technology, including the techniques and equipment used on the job.

Requirements for Certificate		12 Units
ACT 100	Automotive Collision Basics.....	4
ACT 110	Component Repairs.....	4
ACT 120	Non-Structural Repair.....	4

Automotive Collision Technology – Refinish Certificate

This program provides a combination of classroom and hands-on shop experience to prepare for a career in automotive collision technology refinishing. Topics include component repair, non-structural repairs and, refinishing. This certificate is intended for students who are interested in exploring the field of Automotive Collision Refinish.

Student Learning Outcomes

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

- identify color matching and solutions
- apply color blending procedures including application
- apply paint material with proficiency

- polish repaired surface to factory finish
- prepare surface in all application phases
- remove and install adjacent parts for quality refinish preparation

Career Opportunities

This program provides training and hands-on experience in high-demand skills that lead to promising careers with high wages. Students who have successfully completed this program are qualified candidates for refinish apprenticeships. The U.S. Labor Department reports that job opportunities for auto collision specialists are excellent because of the large number of older workers who are expected to retire in the next 5 to 10 years. In addition, it points out that experienced technicians are rarely laid off and that employers prefer to hire graduates or a formal training program because it provides a foundation in the latest collision technology, including the techniques and equipment used on the job.

Requirements for Certificate		12 Units
ACT 110	Component Repairs.....	4
ACT 120	Non-Structural Repair.....	4
ACT 140	Automotive Refinishing.....	4

Automotive Collision Technology – Structural Certificate

This program provides a combination of classroom and hands-on shop experience to prepare for a career in automotive collision structural repairs. This certificate is intended for students who have completed the Automotive Collision Technology Certificate and need to obtain a higher skill level in the field.

Student Learning Outcomes

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

- identify structural damage
- mount and measure vehicles
- pull and square damaged structural areas
- perform collision related welding of sheet steel
- remove and install components

Career Opportunities

This program provides training and hands-on experience in high-demand skills that lead to promising careers with high wages. Students who have successfully completed this program are working as frame/uni-body technicians. The U.S. Labor Department reports that job opportunity 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 latest collision technology, including the techniques and equipment used on the job.

Requirements for Certificate		12 Units
ACT 110	Component Repairs.....	4
ACT 130	Structural Repair.....	4
ACT 131	Automotive Collision Welding.....	4

Automotive Collision Technology

ACT 100 Automotive Collision Basics 4 Units

Hours: 54 hours LEC; 54 hours LAB

This course covers the basics of automotive collision repair of traditional, electric, and electric hybrid vehicles. Topics include use and disposal of hazardous materials; lighting, starting, and charging systems; and appropriate use and maintenance of tools and equipment.

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 T3 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 131 Automotive Collision Welding 4 Units

Hours: 54 hours LEC; 54 hours LAB

This course covers the various processes of welding in automotive collision repairs using metal inert gas (MIG) and tungsten inert gas (TIG). Topics include preparation, welding, and finishing.

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 Advanced Collision Frame & Unibody 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 advanced chassis design, development, and construction. Extensive bracket and frame fabrication and welding are emphasized.

ACT 152 Advanced Collision 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 advanced suspension design, development, and construction. Topics include big brakes and air suspensions.

ACT 154 Advanced Collision Drivetrain 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 advanced engines and transmissions. Topics include engine performance tuning and transmission selection.

ACT 156 Advanced Collision 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 advanced 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.

ACT 298 Work Experience in Collision Technology 1-4 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position, or job related to the automotive collision field with a cooperating site supervisor. Students are advised to consult with the Automotive Collision Department faculty to review specific certificate and degree work experience requirements.

General Education: AA/AS Area III(b)

Hours: 60-300 hours LAB

This course provides students with opportunities to develop marketable skills in preparation for employment or advancement within the automotive collision field. It is designed for students interested in work experience and/or internships in associate degree level or certificate occupational programs. Course content includes understanding the application of education to the workforce, completion of Title 5 required forms which document the student's progress and hours spent at the work site, and developing workplace skills and competencies. During the semester, the student is required to 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. First-time participants are required to attend a weekly orientation and a final meeting. Returning participants are required to attend the first class meeting, a mid-semester meeting, and a final meeting and may meet individually with the instructor as needed to complete a work site observation and all program forms, receive updates, and assignments. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Area: Technical Education
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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, automatic transmissions, 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.
- analyze, diagnose, and repair automotive engines, automatic transmissions, electrical systems, fuel delivery systems, ignition systems, emissions control systems and computerized engine controls.
- operate a variety of aftermarket and factory scan tools.

Career Opportunities

Automotive Technician; Smog Check Technician

See losrios.edu/gainful-emp-info/gedt.php?major=011480C01 for Gainful Employment Disclosure.

Requirements for Degree or Certificate	40 Units
AT 100	Technical Basics for the Automotive Professional .....4
AT 105	Mathematics for Automotive Technology .....3
AT 180	Automotive Data Acquisition.....3
AT 181	Snap-On Multimeter Basics .....1
AT 186	Snap-On MODIS – Automotive Diagnostic Use and Operation.....2
AT 188	Snap-On SOLUS– Automotive Diagnostic Use and Operation.....1
AT 189	Snap-On VERUS – Automotive Diagnostic Use and Operation.....2
AT 330	Automotive Electrical Systems.....6
AT 331	Advanced Automotive Electrical Systems .....6
AT 332	Engine Performance & Electronic Engine Controls .....6
AT 333	California State Smog Check Inspector Training .....6

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.

See losrios.edu/gainful-emp-info/gedt.php?major=011269C01 for Gainful Employment Disclosure.

Requirements for Degree or Certificate		44 Units
AT 100	Technical Basics for the Automotive Professional	4
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 313	Automatic Transmission and Transaxles	4
AT 314	Automotive Engine Repair	4
AT 330	Automotive Electrical Systems	6

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 students for entry-level positions in the automotive industry with emphasis on engine management systems, emission controls, and complete automotive systems diagnosis and repair. It prepares students for all nine Automotive Service Excellence (ASE) certifications including Advanced Engine Performance (L-1). This program also fulfills the Bureau of Automotive Repair (BAR) requirements for California State Smog Check Inspector and California State Smog Check Repair Technician test candidates.

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.

See losrios.edu/gainful-emp-info/gedt.php?major=011037C01 for Gainful Employment Disclosure.

Requirements for Degree or Certificate		58 Units
AT 100	Technical Basics for the Automotive Professional	4
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 313	Automatic Transmission and Transaxles	4
AT 314	Automotive Engine Repair	4
AT 330	Automotive Electrical Systems	6
AT 331	Advanced Automotive Electrical Systems	6
AT 332	Engine Performance & Electronic Engine Controls	6
AT 333	California State Smog Check Inspector Training	6

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.

See losrios.edu/gainful-emp-info/gedt.php?major=011315C01 for Gainful Employment Disclosure.

(continued on next page)

(Air Conditioning Service Certificate continued)

Requirements for Certificate		20 Units
AT 100	Technical Basics for the Automotive Professional	4
AT 105	Mathematics for Automotive Technology	3
AT 180	Automotive Data Acquisition.....	3
AT 310	Heating and Air-Conditioning Systems.....	4
AT 330	Automotive Electrical Systems.....	6

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		28 Units
AT 100	Technical Basics for the Automotive Professional	4
AT 307	Biodiesel Technology.....	4
AT 309	Introduction to Hybrid and Electric Vehicle Technology....	4
AT 330	Automotive Electrical Systems.....	6
AT 331	Advanced Automotive Electrical Systems	6
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.

See losrios.edu/gainful-emp-info/gedt.php?major=011271C01 for Gainful Employment Disclosure.

Requirements for Certificate		40 Units
AT 100	Technical Basics for the Automotive Professional	4
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 313	Automatic Transmission and Transaxles.....	4
AT 314	Automotive Engine Repair	4
AT 330	Automotive Electrical Systems.....	6

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.

(continued on next page)

(Extreme Tuner Certificate continued)

Requirements for Certificate		38 Units
AT 100	Technical Basics for the Automotive Professional	4
AT 110	Automotive Brakes	4
AT 130	Manual Drive Trains and Axles.....	4
AT 311	Suspension and Steering 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
AT 330	Automotive Electrical Systems.....	6

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.

See losrios.edu/gainful-emp-info/gedt.php?major=011504C01 for Gainful Employment Disclosure.

Requirements for Certificate		19 Units
AT 100	Technical Basics for the Automotive Professional	4
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.

See losrios.edu/gainful-emp-info/gedt.php?major=011316C01 for Gainful Employment Disclosure.

Requirements for Certificate		32 Units
AT 100	Technical Basics for the Automotive Professional	4
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 313	Automatic Transmission and Transaxles.....	4
AT 317	Advanced Drivetrain	4
AT 330	Automotive Electrical Systems.....	6

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.

See losrios.edu/gainful-emp-info/gedt.php?major=011305C01 for Gainful Employment Disclosure.

Requirements for Certificate:		21 Units
AT 100	Technical Basics for the Automotive Professional	4
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 4 Units

Hours: 54 hours LEC; 54 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. 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

Advisory: AT 181 and 188

Hours: 54 hours LEC; 54 hours LAB

This course covers the theory, design, adjustment, and repair or overhaul of brake systems and components. The proper 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

Advisory: AT 181 and 188

Hours: 54 hours LEC; 54 hours LAB

This course covers the basic principles of manual transmissions and transaxles and service. Topics include clutches, manual transmissions and transaxles, drive line and shafts, differentials/limited slip differentials, and four-wheel drive/all-wheel drive. This course meets Automotive Service Excellence (ASE) standard A3.

AT 140 Advanced Automotive Skill and Speed Development 4 Units

Corequisite: AT 110, 130, 311, 312, and 314

Hours: 54 hours LEC; 54 hours LAB

This course covers automotive component diagnosis and repair, including brakes, suspension, heating and air conditioning, engine, transmissions, and other areas in preparation for competing in the regional, state, and national Skills USA competition. This course may be taken up to four times with different competitions.

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. This course offers preparation to students for the Automotive Service Excellence (ASE X1) exhaust systems test, which is required for the ASE Under-Car Specialist Certificate. Various welding techniques are covered during the semester.

AT 146 Automotive Service Consultant 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 consultant. It also offers preparation for the Automotive Service Excellence (ASE) C-1 Service Consultant exam. Topics include utilization of diagnostic flow charts, recruiting techniques, and small business operations.

- 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 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.
- AT 180 Automotive Data Acquisition 3 Units**
Hours: 54 hours LEC
This course covers the skills needed to adequately retrieve and apply automotive data, including on-line technical manuals and computerized shop management programs. Computer-based automotive service repair order generation is covered as well as usage and application currently utilized in many automotive repair facilities.
- AT 181 Snap-On Multimeter Basics 1 Unit**
Hours: 18 hours LEC; 9 hours LAB
This course explores the functionality and capability of the digital multimeter to improve technicians' diagnostic expertise when working with electrical related problems and prepares them for the Snap-on certification.
- AT 182 General Motors Diagnostic Tools 2 Units**
Hours: 27 hours LEC; 27 hours LAB
This course explores the functionality and capability of General Motors diagnostic tools to improve technicians' expertise when working with On-Board computer-related problems.
- AT 184 Toyota Techstream - Automotive
Diagnostic Use and Operation 2 Units**
Hours: 27 hours LEC; 27 hours LAB
This course explores the functionality and capability of Toyota's Techstream to improve technicians' diagnostic expertise when working with On-Board computer-related problems.
- AT 186 Snap-On MODIS - Automotive
Diagnostic Use and Operation 2 Units**
Hours: 27 hours LEC; 27 hours LAB
This course explores the functionality and capability of Snap-On's MODIS (Modular Diagnostic Information System) to improve the technician's diagnostic expertise when working with On-Board computer related problems.
- AT 188 Snap-On SOLUS - Automotive
Diagnostic Use and Operation 1 Unit**
Hours: 18 hours LEC; 9 hours LAB
This course explores the functionality and capability of Snap-On's SOLUS to improve the technician's diagnostic expertise when working with On-Board computer-related problems.
- AT 189 Snap-On VERUS - Automotive
Diagnostic Use and Operation 2 Units**
Hours: 27 hours LEC; 27 hours LAB
This course explores the functionality and capability of Snap-On's VERUS to improve technicians' diagnostic expertise when working with on-board computer-related problems.
- 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.
- AT 251 Automotive Electronic
Accessories and Installation 3 Units**
Same As: ET 251
Corequisite: AT 330 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. This course offers preparation to become a qualified Mobile Electronics Certified Professional (MECP) installer. This course is not open to students who have taken ET 251. Field trips are required.
- AT 295 Independent Studies in
Automotive Technology 1-3 Units**
Hours: 54-162 hours LAB
Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

AT 298 Work Experience in Automotive Technology 1-4 Units

Advisory: AT 100; and eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position, or job related to the automotive industry with a cooperating site supervisor. Students are advised to consult with the Automotive Department faculty to review specific certificate and degree work experience requirements.

General Education: AA/AS Area III(b)

Hours: 60-300 hours LAB

This course provides students with opportunities to develop marketable skills in preparation for employment or advancement within the automotive field. It is designed for students interested in work experience and/or internships in associate degree level or certificate occupational programs. Course content includes understanding the application of education to the workforce, completion of Title 5 required forms which document the student's progress and hours spent at the work site, and developing workplace skills and competencies. During the semester, the student is required to 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. First-time participants are required to attend a weekly orientation and a final meeting. Returning participants are required to attend the first class meeting, a mid-semester meeting, and a final meeting and may meet individually with the instructor as needed to complete a work site observation and all program forms, receive updates, and assignments. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

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. In addition, the small engine repair skill areas included in the regional, state, and national Skills USA competitions are covered. AT 301 and/or HORT 330 may be taken two times for credit for a maximum of 8 units, using different equipment.

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

Corequisite: AT 100

Advisory: AT 181 and 188

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

Corequisite: AT 100

Advisory: AT 181 and 188

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 313 Automatic Transmission and Transaxles 4 Units

Corequisite: AT 100

Advisory: AT 181 and 188

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

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 dis-assembly procedures, engine diagnosis, engine repair and rebuilding procedures, and engine reassembly procedures. Completion of AT 314 and AT 332 meets Automotive Service Excellence (ASE) A1 standards.

AT 316 Alternative Fuels and Advanced Technology Vehicles 4 Units

Corequisite: AT 100

Course Transferable to CSU

Hours: 54 hours LEC; 54 hours LAB

This hands-on course provides an overview of both conventional and alternative fuels with their impact on vehicle emissions in both gasoline and diesel engines. In addition, advanced vehicle technologies such as hybrid electric, direct injection, and fuel cells are explored. Topics include gasoline, E85, M85, diesel, biodiesel, CNG, LPG, LNG, RNG, EVs, HEVs, fuel cells, and dynamometer testing. Completion of this course helps students prepare for the Automotive Service Excellence (ASE) F1 Alternative Fuels Certification in addition to the ASE L3 Hybrid/Electric Vehicle Specialist Certification. Field trips may be required.

AT 317 Advanced Drivetrain 4 Units

Prerequisite: AT 313 with a grade of "C" or better

Hours: 54 hours LEC; 54 hours LAB

This course covers advanced aspects of automatic transmissions, automatic transaxles, manual drivetrains, diagnosis, service, and repair. Topics include mechanical, electrical, and electronic diagnosis, diagnosis and repair of vibration problems, advanced scan tool operation, and dynamometer testing. AT 317 and AT 313 together meet Automotive Service Excellence (ASE) standard A2.

AT 325 Engine Performance Testing & Tuning 4 Units

Prerequisite: AT 301, 316, and 333 with grades of "C" or better

Course Transferable to CSU

Hours: 54 hours LEC; 54 hours LAB

This course explores the performance and efficiency of modern vehicle engine systems through the use of engine dynamometers and flowbench test equipment. Course topics include dynamometer performance testing, high performance engine assembly, engine computer reprogramming, fuel injector flow testing, forced induction systems and how to achieve maximum performance by choosing components that complement each other. Field trips may be required.

AT 327 Introduction to Motorsports 4 Units

Prerequisite: AT 110, 130, and 311 with grades of "C" or better

Advisory: AT 325, 330, and 333

Course Transferable to CSU

Hours: 54 hours LEC; 54 hours LAB

This course is an introduction to motorsports through lecture, hands-on activities, and raceway experience. It discusses the operation of a race team, racing events, and race track operation. Course topics include the setup and modification of vehicle safety equipment, suspension, braking, and data acquisition systems. Field trips may be required.

AT 330 Automotive Electrical Systems 6 Units

Corequisite: AT 100, 105, and 180

Course Transferable to CSU

Hours: 81 hours LEC; 81 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. Along with completion of AT 331, this course meets Automotive Service Excellence (ASE) certification standards for the A6 Electrical Systems certification.

AT 331 Advanced Automotive Electrical Systems 6 Units

Prerequisite: AT 180 and 330 with grades of "C" or better

Advisory: AT 110 and 310

Course Transferable to CSU

Hours: 81 hours LEC; 81 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. Along with completion of AT 330, this course meets Automotive Service Excellence (ASE) certification standards for the A6 Electrical Systems certification.

AT 332 Engine Performance & Electronic Engine Controls 6 Units

Prerequisite: AT 331 and AT 333 with grades of "C" or better

Course Transferable to CSU

Hours: 81 hours LEC; 81 hours LAB

This course covers the principles, operation, and diagnosis of automotive engine performance systems including engine mechanics, ignition, fuel delivery, and electronic engine controls. It includes extensive troubleshooting, use of diagnostic test equipment, lab oscilloscopes, scantools, and emission analyzers. Along with completion of AT 333, this course meets Automotive Service Excellence (ASE) certification standards for the A8 Engine Performance certification. This course is formerly known as AT 326.

AT 333 California State Smog Check Inspector Training 6 Units

Prerequisite: AT 314 with a grade of "C" or better

Course Transferable to CSU

Hours: 81 hours LEC; 81 hours LAB

This course covers the Bureau of Automotive Repair (BAR) certified Level 1 and Level 2 smog inspector training. Topics include smog check laws, rules and regulations; standards of practice; engine theory, design, and operation; emission control theory, design, identification, operation, and testing; smog inspection visual and functional testing procedures; and loaded mode emission testing. It is required for first-time licensed inspection technicians. Along with completion of AT 332, this course meets Automotive Service Excellence (ASE) certification standards for the A8 Engine Performance certification. This course is formerly known as AT 323.

AT 334 BAR Specified Diagnostic and Repair Training 4 Units

Course Transferable to CSU

Hours: 72 hours LEC

State law currently requires that applicants for a Smog Check Repair license possess Automotive Service Excellence (ASE) certifications in the following areas: A6 Automotive Electrical/Electronic systems; A8 Automotive Engine Performance; L1 Advanced Engine Performance. This course is an intensive review of automotive electrical/electronic systems, engine mechanical systems, emission control systems, and computer control systems as they relate to automotive emissions controls. It satisfies the ASE certification requirement when applying for a Smog Check technician license and may be used by the applicant in lieu of the ASE certifications.

**AT 495 Independent Studies
in Automotive Technology 1-3 Units**

Course Transferable to CSU

Hours: 54-162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

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 Microbiology and Public Health (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)	
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.

See losrios.edu/gainful-emp-info/gedt.php?major=011416C01 for Gainful Employment Disclosure.

Requirements for Certificate 24-26 Units

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 Microbiology and Public Health (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.

Requirements for Degree 18 Units

A minimum of 18 units from the following: 18¹

Physical Science Courses:

ASTR	300, 310, 320, 330, 400, 481, 495, 499
CHEM	305, 306, 309, 310, 311, 400, 401, 420, 421, 423, 495, 499
GEOG	300, 301, 305, 306, 307, 308, 309, 390, 495, 499
GEO	300, 301, 305, 306, 310, 311, 320, 325, 330, 331, 342, 345, 390, 495, 499
PHYS	310, 311, 312, 350, 360, 410, 421, 431, 495, 499
PS	300, 301, 495, 499

Biological Science Courses:

ANTH	300, 301, 303, 370, 372, 480, 495, 499
BIOL	300, 301, 303, 305, 310, 322, 332, 342, 352, 370, 390, 400, 410, 415, 420, 430, 431, 440, 442, 482, 490, 491, 495, 499
BIOT	301, 305, 307, 308, 311, 312, 499
NATR	300, 302, 303, 304, 305, 306, 307, 310, 320, 322, 330, 332, 340, 346, 495, 499
PSYC	310, 311, 495, 499

¹must be transfer-level and must include one laboratory course in a physical science and one laboratory course in a biological science

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 300
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

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
Hours: 54 hours LEC*

This course covers basic human anatomy and physiology of the skin, skeletal, muscular, nervous, circulatory, and lymphatic systems. This course serves as a requirement for the Gerontology: Health Care Degree and the Gerontology: Health Care Certificate, and for the Healthcare Interpreting Certificate. Either BIOL 115 or 116 may be taken first; however, both courses are necessary for a complete study of human anatomy and physiology.

BIOL 116 Basic Anatomy and Physiology 3 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
Hours: 54 hours LEC*

This course provides instruction involving basic human anatomy and physiology. It covers body organization, basic chemistry, cells, and tissues. In addition, BIOL 116 covers respiratory, digestive, urinary, endocrine, and reproductive systems. BIOLOGY 116 serves as a required course for the Healthcare Interpreting Certificate. 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 312, 330, and 340*

*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 295 Independent Studies in Biology 1-3 Units

Hours: 54-162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

BIOL 300 The Foundations of Biology 3 Units

*Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
General Education: AA/AS Area IV; CSU Area B2; IGETC Area 5B
Course Transferable to UC/CSU
Hours: 54 hours LEC*

This course for non-science majors covers basic biological principles and how they relate to humans. Topics include an introduction to the philosophy of science and basic cell chemistry, structure, and physiology. An introduction to basic genetics (transmission and molecular) as well as some biotechnology principles are discussed. Additionally, human body systems, evolution, reproduction and development, as well as ecology and human impacts on the environment are addressed.

BIOL 301 Evolution 3 Units

*Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
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 is an introduction to evolutionary biology. It explores the history of life and the mechanisms that give rise to the diversity of life on earth. Topics include the scientific method, the history of evolutionary thought, the origins of life, population genetics, speciation, evolutionary developmental biology and systematics.

BIOL 303 Survey of Biology 4 Units

*Advisory: MATH 100, MATH 104, or MATH 132; AND ENGRD 116 and ENGWR 102, OR ESLR 320; and ESLW 320 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 the basic principles of cell biology, genetics (transmission and molecular), ecology, and evolution. Emphasis is also placed on the interrelationships among living organisms, and on the relationship of biological structures and functions. Plant and animal dissection are included as part of the laboratory activities. This course provides science preparation for those entering a Multiple Subject Teacher Credential Program and is taught with an inquiry-based approach. 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

*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; AND MATH 100, MATH 104 or MATH 132 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 laboratory course for non-science majors 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.

BIOL 322 Ethnobotany 3 Units

General Education: AA/AS Area VI

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course focuses on the multicultural use of plants. Emphasis is on the identification and use of plants from several cultures including the American Indians, Europeans, South Americans, and Chinese. Topics include the use of plants for food, medicine, basketry, technology, shelter, and music. Sight recognition of plants is emphasized. An analysis of ethnicity and ethnocentrism is also included. Field trips may be required.

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 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 course introduces biological and ecological principles involved in understanding and analyzing environmental problems and exploring scientifically sound conservation approaches. Major topics include forms and patterns of biodiversity, values of biodiversity, threats to biodiversity, conservation at the population and species levels, applied conservation biology, and conservation and sustainable development at the local, regional, national, and international levels. This course places emphasis on scientific processes and methodology, while also examining the economic, social, political, and ethical aspects of conservation issues. Course themes are explored through extensive use of interactive case studies, discussion, and activities surrounding relevant current events. Field trips may be required.

BIOL 370 Marine Biology 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."

Enrollment Limitation: The course is not open to students who have completed BIOL 482.

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 introduces marine biology. It includes the study of cell biology, evolution, physical oceanography, marine algae, marine vertebrate and invertebrate animals, and the ecology of various marine zones. Field trips focusing on the Central and Northern California coast are required. A portion of this course may be offered in a TBA component of 54 hours which may include but is not limited to natural history of the rocky intertidal, invertebrate identification, salt marsh ecology, sandy beach ecology, or estuary ecology.

BIOL 390 Natural History Field Study .5-4 Units

Course Transferable to CSU

Hours: 3-24 hours LEC; 18-144 hours LAB

This course focuses on the ecology and natural history of specific habitats of biological interest. Course content varies according to field destination but may include topics in botany, zoology, marine, conservation, and geography. Field study methodology and tools are also covered. Field trips are required and field trip expense fees may be required.

BIOL 400 Principles of Biology 5 Units

Prerequisite: CHEM 400 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 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 introduces biological concepts important for a general understanding and background for biology majors and pre-professional programs. Emphasis is on the scientific method and basic processes common to all forms of life. Topics include cell structure and function, cell physiology, cell reproduction, Mendelian and molecular genetics, evolution, and ecology.

BIOL 410 Principles of Botany 5 Units

Prerequisite: BIOL 400 with a grade of "C" or better

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340

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. It builds upon and applies concepts developed in cell and molecular biology to the study of plants. The anatomy and physiology, morphology, ecology, and evolution of higher plants are covered. Topics include the diversity, taxonomy, and evolutionary trends observed among the cyanobacteria, protists, fungi, and plants, with special emphasis on higher plants of all major phyla. General ecological principles are covered, including population, community, and ecosystem dynamics. Field trips may be required.

BIOL 415 Introduction to Biology: Biodiversity, Evolution, and Ecology 5 Units

Prerequisite: BIOL 400 with a grade of "C" or better
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340
Course Transferable to CSU
Hours: 54 hours LEC; 108 hours LAB

This course, intended for science majors, introduces the ecological and evolutionary processes that shape biodiversity, relating the patterns of biodiversity to small and large scale environmental effects. The diversity of life on Earth (including animals, plants, fungi, protists, and additional unicellular organisms) is covered. Overarching themes include evolutionary mechanisms, phylogenetic analysis, interactions of organisms with the environment, and global processes and patterns. Not open for credit to students who have completed BIOL 410 and BIOL 420 with a grade of C or better. Field trips may be required. (C-ID BIOL 140)

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
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, systematics, ecology, and comparative anatomy and physiology. Field trips may be required.

BIOL 430 Anatomy and Physiology 5 Units

Prerequisite: CHEM 305, 309, or 400 with a grade of "C" or better; AND ENGWR 101 or ESLW 320 with a grade of "C" or better, or placement into transfer-level English through the assessment process.
Advisory: Eligible for ENGRD 310 or ENGRD 312; OR ESLR 340
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 lecture and laboratory course in human anatomy and physiology emphasizes the integration of structure and function. The underlying basis of the course is built on the study of anatomical terminology, cells, and tissues. The course expands this study into the integumentary, skeletal, muscular, and nervous systems. Laboratory study is enhanced by the microscopic study of tissues, examination of anatomical models, and the dissection of preserved material. Laboratory study is also enhanced by the examination of prosected whole cadavers as well as prosected head, torso, upper and lower extremities, and individual organs. Laboratory activities also include both wet-lab experiments and computer simulations. Both BIOL 430 and BIOL 431 must be taken to complete the study of all major body systems.

BIOL 431 Anatomy and Physiology 5 Units

Prerequisite: BIOL 430 with a grade of "C" or better
Advisory: Eligible for ENGRD 310 or ENGRD 312; OR ESLR 340
General Education: AA/AS Area IV
Course Transferable to UC/CSU
Hours: 54 hours LEC; 108 hours LAB

This lecture and laboratory course in human anatomy and physiology emphasizes the integration of structure and function. It provides students with an understanding of the structure, function, and regulation of the human body through the physiological integration of the following systems: cardiovascular, lymphatic, respiratory, digestive, urinary, endocrine, and reproductive. Laboratory study is enhanced by the microscopic study of tissues, examination of anatomical models, and the dissection of preserved material. Laboratory activity is also enhanced by the examination of whole cadavers as well as prosected head, torso, upper and lower extremities, and individual organs. Laboratory activities also include both wet-lab experiments and computer simulations. Both BIOL 430 and BIOL 431 must be taken to complete the study of all major body systems.

BIOL 440 General Microbiology 4 Units

Prerequisite: CHEM 305, 309, or 400 with a grade of "C" or better
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340; AND BIOL 300 or CHEM 306 with a grade of "C" or better.
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 Microbiology and Public Health 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. A portion of this course may be offered in a TBA component of 54 hours which may include but is not limited to designing and conducting experiments in the rocky intertidal, invertebrate identification, salt marsh ecology, sandy beach ecology, estuary ecology, or comparative anatomy of fishes. The course is not open to students who have completed BIOL 370.

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. This course is offered in a flexible TBA format of 27 laboratory hours in order to accommodate the student's schedule. Registration is open through the tenth week of the semester. Pass/No Pass only.

BIOL 491 Science Skills and Applications II .5 Units

Prerequisite: BIOL 490

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 study strategies for science, nursing, or nutrition courses. Strategies include goal setting, the intensive study cycle, graphic organizers, constructing and interpreting graphs, mastering science vocabulary, self monitoring while reading, coding method of reading, and advanced problem solving. This course is offered in a flexible TBA format of 27 laboratory hours to accommodate the student's schedule. Registration is open through the ninth week of the semester. Pass/No Pass only.

BIOL 495 Independent Studies in Biology 1-3 Units

Course Transferable to CSU

Hours: 54-162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

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 303, BIOL 310, BIOL 400, BIOL 440, BIOL 442, BIOT 301, or BIOT 307 with a grade of "C" or better

Course Transferable to CSU

Hours: 14 hours LEC; 14 hours LAB

This course examines the basic concepts and techniques in bioinformatics, the computer analysis of nucleic acids and proteins. Topics include biotechnology databases, database searching, structure and function analysis of biological molecules, sequence alignment and analysis, and biological applications of bioinformatics.

BIOT 307 Biotechnology and Society 2 Units

Course Transferable to UC/CSU

Hours: 36 hours LEC

This course examines the scientific and social impact of biotechnology by introducing basic technical concepts to examine recent advances. Topics include biotechnology applications in medicine, agriculture, industry, and the environment, and their ethical implications and public perception.

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: Eligible for ENGRD 310 or ENGRD 312 AND ENGRD 300; OR ESLR 340 AND ESLW 340.

Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position, or job related to biotechnology with a cooperating site supervisor. Students are advised to consult with the Biotechnology Department faculty to review specific certificate and degree work experience requirements.

General Education: AA/AS Area III(b)

Course Transferable to CSU

Hours: 60-300 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 Title 5 required forms which document the student's progress and hours spent at the work site, and developing workplace skills and competencies. During the semester, the student is required to 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. First-time participants are required to attend a weekly orientation and a final meeting. Returning participants are required to attend the first class meeting, a mid-semester meeting, and a final meeting and may meet individually with the instructor as needed to complete a work site observation and all program forms, receive updates, and assignments. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

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

Degrees: A.S. for Transfer -
 Business Administration
 A.A. - General Business
 A.A. - Small Business Management
 A.A. - Technical Communications

Certificates: General Business
 Small Business Management
 Technical Communications

Department Certificates:
 Computer Applications for Small Business
 Cross-Cultural Conflict Resolution

DEGREES AND CERTIFICATES

Business Administration A.S. for Transfer Degree

This Associate in Science in Business Administration provides students with a major that fulfills the general requirements for transfer to the California State University. Students with this degree will receive priority admission with junior status to the California State University system. The Associate in Science in Business for Transfer (A.S.-T) may be obtained by the completion of 60 transferable, semester units with a minimum of a 2.0 GPA, including the major or area of emphasis described in the Required Program outlined below (earning a C or better in these courses), and the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

Students should work closely with their ARC counselor to ensure that they are taking the appropriate coursework to prepare for majoring in Business at the four year college they wish to transfer to.

Career Opportunities

Account executive, analyst, bank employee, buyer, manager, entrepreneur, financial planner, government service, insurance representative, investment counselor, public administration, purchasing agent, retail/industrial sales, stockbroker. Some options may require more than 2 years of study and additional licensing.

Student Learning Outcomes

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

- identify and explain the major functional areas of the business organizations including management, marketing, finance, and accounting.
- apply commonly used computer application programs to create relevant business documents.
- apply accounting and mathematical concepts and principles in making decisions about business operations.
- assess the relationships and interdependencies of economic, social, legal, and global environments in which businesses operate.

<u>Requirements for Degree</u>	<u>25 Units</u>
ACCT 301 Financial Accounting	4
ACCT 311 Managerial Accounting	4
BUS 340 Business Law	3
ECON 302 Principles of Macroeconomics	3
ECON 304 Principles of Microeconomics	3
A minimum of 3 units from the following:	3
MATH 340 Calculus for Business and Economics (3)	
MATH 342 Modern Business Mathematics (3)	
MATH 350 Calculus for the Life and Social Sciences I (3)	
STAT 300 Introduction to Probability and Statistics (4)	
STAT 305 Statway, Part II (6)	
A minimum of 5 units from the following:	5¹
BUS 310 Business Communications (3)	
or BUS 300 Introduction to Business (3)	
CISA 305 Beginning Word Processing (2)	
CISA 308 Exploring Word Processing and Presentation Software (1)	
CISA 315 Introduction to Electronic Spreadsheets (2)	
CISA 316 Intermediate Electronic Spreadsheets (2)	
CISA 318 Exploring Spreadsheet Software (1)	
CISA 340 Presentation Graphics (2)	
CISC 305 Introduction to the Internet (1)	
CISC 308 Exploring Computer Environments and the Internet (1)	
CISC 310 Introduction to Computer Information Science (3)	
CISC 320 Operating Systems (1)	
CISN 300 Network Systems Administration (3)	
CISP 350 Database Programming (3)	

¹Students can also select one of the following courses if not already used: MATH 340, MATH 342, MATH 350, STAT 300, STAT 305.

Associate in Science for Transfer Degree Requirements: The Business Administration 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.

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.

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: 6¹

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.

See losrios.edu/gainful-emp-info/gedt.php?major=011046C01 for Gainful Employment Disclosure.

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	Business Technology Essentials (1)	
BUSTEC 310	Introduction to Word/Information Processing (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.

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.

See losrios.edu/gainful-emp-info/gedt.php?major=011176C01 for Gainful Employment Disclosure.

Requirements for Certificate 15 Units

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 350	Small Business Management/Entrepreneurship	3
CISC 300	Computer Familiarization	1
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)	
BUS 340	Business Law (3)	
CISA 305	Beginning Word Processing (2)	
CISA 315	Introduction to Electronic Spreadsheets (2)	
MKT 300	Principles of Marketing (3)	
MKT 312	Retailing (3)	
MKT 314	Advertising (3)	

Technical Communications Degree

This is an interdisciplinary course of study designed to prepare students for employment as professional writers and communicators in a variety of media intended to instruct and inform audiences. The degree program includes substantial course work in writing, information design, editing, page design, online help development, web site creation, and the use of industry standard applications.

Student Learning Outcomes

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

- analyze audience information needs and propose solutions to aid the audience.
- design technical communication solutions for a variety of industry and government purposes.
- design and create web sites and help systems with effective visual design, navigation, and written content.
- design and publish printed pages with effective design, organization, content, and indexing.
- compose professional prose for a variety of audiences with a variety of purposes.
- compose and edit professional documents in grammatically correct, concise English.
- create and use style templates in a variety of industry standard software.

Career Opportunities

Technical communicators may be employed in a variety of occupations in government, scientific firms, nonprofits, natural resources, finance, education, and high tech.

Requirements for Degree 36.5 Units

BUS 100	English for the Professional	3
CISA 305	Beginning Word Processing	2
CISW 300	Web Publishing	3
JOUR 300	News Writing and Reporting	3
TECCOM 300	Introduction to Technical/Professional Communication	3
TECCOM 310	Technical/Professional Communication: Writing Reports	3
TECCOM 320	Technical/Professional Communication: Proposal Writing	3
TECCOM 330	Technical/Professional Communication: Writing Technical Manuals	3

(continued on next page)

(Technical Communications Degree continued)

TECCOM 340	Technical/Professional Communication: Developing Help Systems.....	1.5
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And a minimum of 12 units from the following: 12

ARTNM 328	Beginning Digital Photo Imagery (3)	
ARTNM 330	Intermediate Digital Photo Imagery (3)	
ARTNM 352	Design for Publication (3)	
CISA 331	Intermediate Desktop Publishing (2)	
CISW 310	Advanced Web Publishing (4)	
CISW 321	Web Site Development using Dreamweaver (3)	
CISW 400	Client-side Web Scripting (4)	
CISW 410	Middleware Web Scripting (4)	
ENGWR 301	College Composition and Literature (3)	

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.

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.

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.

See losrios.edu/gainful-emp-info/gedt.php?major=011222C01 for Gainful Employment Disclosure.

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
TECCOM 300	Introduction to Technical/Professional Communication.....	3
TECCOM 330	Technical/Professional Communication: Writing Technical Manuals.....	3
TECCOM 340	Technical/Professional Communication: Developing Help Systems.....	1.5

And a minimum of 6 units from the following:6

BUS 100	English for the Professional (3)	
CISW 321	Web Site Development using Dreamweaver (3)	
CISW 400	Client-side Web Scripting (4)	
CISW 410	Middleware Web Scripting (4)	
TECCOM 310	Technical/Professional Communication: Writing Reports (3)	
TECCOM 320	Technical/Professional Communication: Proposal Writing (3)	

DEPARTMENT CERTIFICATES

Computer Applications for Small Business Certificate

This certificate provides an overview of the specific computer related skills needed to run a small business. The focus is on word processing, electronic spreadsheets, desktop publishing, web page creation, computerized accounting, and an overview of small business/ entrepreneurship.

Student Learning Outcomes

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

- assess the ways to start a business and which form of business organization should be used
- explain the importance of a business plan, a financial plan, and a marketing plan
- apply principles of management and marketing relevant to the small business
- plan and execute strategies for working with multiple documents, templates, and macros, and apply techniques for using and editing pre-designed styles
- plan, construct, test, and evaluate worksheets that are efficient, accurate, and professional using a spreadsheet application
- create commonly used printed marketing documents using desktop publishing software
- evaluate web page content needs and design a web page
- generate and interpret various reports and financial statements in appropriate bookkeeping software

Requirements for Certificate 15-16 Units

ACCT 101	Fundamentals of College Accounting (3)	3- 4
or ACCT 301	Financial Accounting (4)	
ACCT 341	Computerized Accounting	2
BUS 350	Small Business Management/Entrepreneurship	3
CISA 305	Beginning Word Processing.....	2
CISA 315	Introduction to Electronic Spreadsheets	2
CISA 330	Desktop Publishing.....	2
CISC 306	Introduction to Web Page Creation.....	1

Cross-Cultural Conflict Resolution Certificate

This certificate provides the knowledge and skills needed to resolve cross-cultural conflict with both internal and external customers. It combines a theoretical understanding of conflict with the practical application of handling conflict within the context of a diverse environment.

Student Learning Outcomes

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

- adapt communication behaviors based on cultural values and communication styles.
- analyze negotiation processes, strategies, and techniques.
- develop tactics for effective conflict management and resolution.

Requirements for Certificate		12 Units
BUS 317	Managing Workplace Conflict	3
BUS 330	Managing Diversity in the Workplace	3
BUS 332	Cross-Cultural Customer Service	3
SPEECH 325	Intercultural Communication	3

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 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)

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 are covered with the emphasis towards applications. This course 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

Hours: 18 hours LEC

This course covers the sources and methods of raising capital for small businesses. It explores how much money is needed and where it can be obtained, start-up costs, and projecting monthly and yearly costs. Financial ratios and key financial statements are also covered.

BUS 216 Essential Records for the Small Business 1 Unit

Advisory: ENGWR 51 and ENGRD 15, OR ESLR 310 and ESLW 310; BUS 105 and 350 with a grade of "C" or better.

Hours: 18 hours LEC

This course emphasizes the various types of records that small businesses must keep. The focus is on financial, employment, and tax records. Simple, easy-to-use record-keeping systems are covered.

BUS 218 Management Skills for the Small Business 1 Unit

Advisory: ENGWR 51 and ENGRD 15, OR ESLR 310 and ESLW 310; BUS 105 and 350 with a grade of "C" or better.

Hours: 18 hours LEC

A small business owner must understand and motivate others to help the business reach its objectives. This course covers planning and organizing work flow, delegating responsibilities, leadership styles, decision making, stress management, and working with employee organizations, all of which help the business reach its objectives.

BUS 220 Retailing and Merchandising for the Small Business 1 Unit

Advisory: ENGWR 51 and ENGRD 15, OR ESLR 310 and ESLW 310; BUS 105 and 350 with a "C" grade or better.

Hours: 18 hours LEC

This course emphasizes retailing concepts, such as inventory control and turnover rates, selecting merchandise sources, using trade and cash discounts, pricing, markup and markdown, and shrinkage control. It also includes how to develop a merchandising plan, inventory control system, and assessing consumer behavior and demographics.

BUS 224 Customer Service 1 Unit

Advisory: BUS 350

Hours: 18 hours LEC

This course introduces a study of the principles involved in building and delivering effective customer service. It focuses on providing value-added service through improved attitude, improved listening, conflict management, problem solving, and successful customer service interactions.

BUS 228 Selling Techniques for the Small Business 1 Unit

Advisory: BUS 350
Hours: 18 hours LEC

The class focuses on those skills needed to successfully engage in the sales process of products/services. Special emphasis is given to small business owners and their needs.

BUS 250 Survey of International Business 3 Units

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 the operation of multi-national corporations.

BUS 295 Independent Studies in Business 1-3 Units

Hours: 54-162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

BUS 300 Introduction to Business 3 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

General Education: AA/AS Area V(b)

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course provides a multidisciplinary examination of how culture, society, economic systems, legal, international, political, financial institutions, and human behavior interact to affect a business organization's policy and practices within the U.S. and a global society. It covers specific areas such as management, marketing, finance, accounting, economics, and computer information systems. It is a core requirement for business majors. This course provides an overview that is helpful for selecting a specific career and/or major in the field of business. (C-ID BUS 110)

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 provides the basic concepts for understanding communication in a changing business environment and focuses on practicing the strategies and principles of effective communication in business situations. Tools to communicate effectively in a fast-paced technological, global marketplace are emphasized. The course provides opportunities to create, edit, evaluate, and critique business documents and reports. A formal research paper using research and analytical skills, and drawing conclusions and making recommendations is required. An oral business presentation is prepared and delivered.

BUS 312 Workplace Behavior and Ethics 3 Units

Advisory: BUSTEC 300 and CISC 300 with a grade of "C" or better; ENGRD 116 and ENGWR 102, 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 basic procedures that promote effective workplace practices. Specific topics include communicating effectively, working on teams, problem-solving, preparing and processing information, understanding business ethics, researching ethical business standards, and implementing ethical principles. Activities and techniques help to develop competencies needed in the workplace to communicate with coworkers and customers effectively.

BUS 317 Managing Workplace Conflict 3 Units

Course Transferable to CSU

Hours: 54 hours LEC

This course focuses on identifying and understanding the underlying causes of workplace conflict and strategies for managing conflict effectively. It explores the impact of conflict on workplace communication, decision making, and leadership. It includes practical and strategic skills to prevent escalation of conflict and defuse disruptive behaviors.

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 332 Cross-Cultural Customer Service 3 Units

Course Transferable to CSU

Hours: 54 hours LEC

This course focuses on defining and developing skills to ensure customer service satisfaction and success. Emphasis is placed on dealing with difficult situations and people from a cross-cultural perspective, and on bringing out the best in others. It provides practical, hands-on techniques for those engaged in customer contact.

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. (C-ID BUS 125)

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 495 Independent Studies in Business 1-3 Units

Course Transferable to CSU
Hours: 54-162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

BUS 498 Work Experience in Business 1-4 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position, or job related to business with a cooperating site supervisor. 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: 60-300 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 Title 5 required forms which document the student's progress and hours spent at the work site, and developing workplace skills and competencies. During the semester, the student is required to 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. First-time participants are required to attend a weekly orientation and a final meeting. Returning participants are required to attend the first class meeting, a mid-semester meeting, and a final meeting and may meet individually with the instructor as needed to complete a work site observation and all program forms, receive updates, and assignments. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

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

Degrees: A.A. - Administrative Professional
 A.A. - Virtual Administrative Professional
 Certificates: Law Office Clerical Assistant
 Office Technology
 Virtual Office Professional
 Department Certificate:
 Office Assistant

DEGREES AND CERTIFICATES

Administrative Professional Degree

The degree is designed to develop advanced skills needed for upper-level administrative support and office management careers. The course work includes communication skills, organizational management, business documents and projects, teamwork, financial data, ethics, and a variety of computer and office technologies.

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 300.1 Keyboarding/Applications: Beginning	1
BUSTEC 305 Business Technology Essentials	1
BUSTEC 310 Introduction to Word/Information Processing.....	3
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)	

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.

Virtual Administrative Professional Degree

This degree offers enterprising individuals an opportunity to develop their own business ventures to perform administrative tasks using new technology and the Internet. The current trend toward “outsourcing” work supports the growing need for virtual professionals. Confidence in being customer focused and creative are essential activities of this program. The goal of the virtual administrative professional degree is to assist students in developing a niche that meets the needs of today’s employers.

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 assistant. Industries that virtual professionals support are sales, law, finance, church, Internet enterprises, marketing firms, public relations, direct mail, concierge, authors, contractors, and therapists.

Student Learning Outcomes

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

- categorize essential records into an adequate record keeping system.
- compose written communications and deliver oral presentations for business proposals and projects that focus on the audience.
- explain the importance of a business plan, financial plan, and marketing plan for a business.
- create, arrange, and edit business documents using word processing features.
- select different technologies and software to complete business projects.
- design a virtual office atmosphere which includes marketing oneself, satisfying clients, and managing resources and capital.
- manipulate and format data into a worksheet and database.
- choose appropriate search strategies when using the Internet.

Requirements for Degree	32 Units
BUS 105 Business Mathematics	3
BUS 216 Essential Records for the Small Business.....	1
BUS 224 Customer Service.....	1
BUS 310 Business Communications.....	3
BUS 350 Small Business Management/Entrepreneurship	3
BUSTEC 110 Business Procedures for Professional Success.....	3

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(Virtual Administrative Professional Degree continued)

BUSTEC 300.1	Keyboarding/Applications: Beginning	1
BUSTEC 300.2	Keyboarding/Applications: Document Formatting	1
BUSTEC 300.3	Keyboarding/Applications: Advanced Document Formatting.....	1
BUSTEC 310	Introduction to Word/Information Processing	3
BUSTEC 332	Integrated Business Projects.....	3
BUSTEC 350	Virtual Office Careers and Technologies.....	3
CISA 315	Introduction to Electronic Spreadsheets.....	2
CISA 320	Introduction to Database Management	1
CISC 305	Introduction to the Internet.....	1
A minimum of 2 units from the following:		2
BUS 498	Work Experience in Business (1 - 4)	

Associate Degree Requirements: The Virtual Administrative Professional Associate in Arts (A.A.) Degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

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		15 Units
BUS 312	Workplace Behavior and Ethics	3
BUSTEC 100.1	Keyboarding Skills: Beginning (1)	1
or BUSTEC 300.1 Keyboarding/Applications: Beginning (1)		
BUSTEC 100.2	Keyboarding Skills: Intermediate (1).....	1
or BUSTEC 300.2 Keyboarding/Applications: Document Formatting (1)		
BUSTEC 305	Business Technology Essentials	1
BUSTEC 310	Introduction to Word/Information Processing.....	3
LA 300	Introduction to Law and the American Legal System.....	3
LA 350	Law Office Management.....	3

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.

See losrios.edu/gainful-emp-info/gedt.php?major=011211C01 for Gainful Employment Disclosure.

Requirements for Certificate		21 Units
BUS 310	Business Communications	3
BUS 312	Workplace Behavior and Ethics	3
BUSTEC 101	Computer Keyboarding: 10-Key	1
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 300.1	Keyboarding/Applications: Beginning	1
BUSTEC 300.2	Keyboarding/Applications: Document Formatting	1
BUSTEC 305	Business Technology Essentials	1
BUSTEC 332	Integrated Business Projects	3
CISA 315	Introduction to Electronic Spreadsheets.....	2
CISA 320	Introduction to Database Management.....	1
And a minimum of 3 units from the following:		3
BUSTEC 310	Introduction to Word/Information Processing (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.

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(Virtual Office Professional Certificate continued)

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:	16-17 Units
BUS 100 English for the Professional	3
BUS 312 Workplace Behavior and Ethics.....	3 ¹
BUSTEC 110 Business Procedures for Professional Success.....	3
BUSTEC 127 Outlook: Tools (1).....	1
BUSTEC 300.1 Keyboarding/Applications: Beginning	1
BUSTEC 300.2 Keyboarding/Applications: Document Formatting	1
BUSTEC 350 Virtual Office Careers and Technologies.....	3
CISA 320 Introduction to Database Management (1)	1-2
or CISA 315 Introduction to Electronic Spreadsheets (2)	
or CISC 305 Introduction to the Internet (1)	

¹Individuals who hold a certificate as a Certified Administrative Professional (CAP) may receive credit for this option with evidence of completion of the CAP certification.

DEPARTMENT CERTIFICATE

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 100.1 Keyboarding Skills: Beginning 1 Unit

Prerequisite: BUSTEC 300.1 with a grade of "C" or better; or placement through the assessment process.

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300 or BUS 310; OR ESLR 340 AND ESLW 340.

Hours: 12 hours LEC; 18 hours LAB

This course helps students improve their keyboarding speed and accuracy. Individualized skill improvement plans are based on a computerized assessment of computer keyboarding speed and accuracy. This course is not open to students who have previously completed the first module of BUSTEC 100. This course is for students who know how to correctly touch type and want to improve their keyboarding speed and accuracy. Students who want to learn to correctly touch type should take BUSTEC 300.1. Pass/No Pass only.

BUSTEC 100.2 Keyboarding Skills: Intermediate 1 Unit

Prerequisite: BUSTEC 100.1

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300 or BUS 310; OR ESLR 340 AND ESLW 340.

Hours: 12 hours LEC; 18 hours LAB

This course helps students improve their keyboarding speed and accuracy and builds upon the skills learned in BUSTEC 100.1. Individualized skill improvement plans are based on a computerized assessment of computer keyboarding speed and accuracy. This course is not open to students who have previously completed the second module of BUSTEC 100. This course is for students who know how to correctly touch type and want to improve their keyboarding speed and accuracy. Pass/No Pass only.

BUSTEC 100.3 Keyboarding Skills: Advanced 1 Unit

Prerequisite: BUSTEC 100.2

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300 or BUS 310; OR ESLR 340 AND ESLW 340.

Hours: 12 hours LEC; 18 hours LAB

This course helps students improve their keyboarding speed and accuracy and builds upon the skills learned in BUSTEC 100.2. Individualized skill improvement plans are based on a computerized assessment of computer keyboarding speed and accuracy. This course is not open to students who have previously completed the third module of BUSTEC 100. This course is for students who know how to correctly touch type and want to improve their keyboarding speed and accuracy. Pass/No Pass only.

BUSTEC 101 Computer Keyboarding: 10-Key 1 Unit

Advisory: BUSTEC 300.1 with a grade of "C" or better

Hours: 12 hours LEC; 18 hours LAB

This course introduces the numeric keypad and alphanumeric data entry. Course content focuses on developing proper 10-key technique, speed, and accuracy. Simulated employment tests based on industry standards are included. Ten-key certification testing is completed at the end of the course.

BUSTEC 110 Business Procedures for Professional Success 3 Units

Prerequisite: BUSTEC 300.3 with a grade of "C" or better

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 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 Keyboarding/Applications 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.

Course Transferable to CSU

Hours: 12-36 hours LEC; 18-54 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 300.1 Keyboarding/Applications: Beginning 1 Unit

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300 or BUS 310; OR ESLR 340 AND ESLW 340.

Course Transferable to CSU

Hours: 12 hours LEC; 18 hours LAB

This course introduces touch typing of alphabetic, numeric, and symbol keys. It covers keyboarding techniques, speed-and-accuracy development, and essential computer-keyboarding information. This course is specifically designed for the beginning typist as well as those who have been typing for a long time using improper technique. This course is not open to students who have previously completed the first module of BUSTEC 300.

BUSTEC 300.2 Keyboarding/Applications: Document Formatting 1 Unit

Prerequisite: BUSTEC 300.1 with a grade of "C" or better

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300 or BUS 310; OR ESLR 340 AND ESLW 340.

Course Transferable to CSU

Hours: 12 hours LEC; 18 hours LAB

This course provides beginning to intermediate document formatting and skill development for academic, employment, personal, and businesses purposes. This course builds upon skills learned in BUSTEC 300.1 to provide students with additional computer keyboarding skills in the creation and modification of word processing documents. It covers use of an office-level word processing program to create and format business correspondence, academic reports, business reports, and tables. English grammar, spelling, punctuation, and proofreading are reinforced throughout. Timed writing tests are used to increase keyboarding speed and accuracy. This course is not open to students who have previously completed the second module of BUSTEC 300.

BUSTEC 300.3 Keyboarding/Applications: Advanced Document Formatting 1 Unit

Prerequisite: BUSTEC 300.2 with a grade of "C" or better

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300 or BUS 310; OR ESLR 340 AND ESLW 340.

Course Transferable to CSU

Hours: 12 hours LEC; 18 hours LAB

This course provides advanced skill development of documents for business, academic, employment, or personal use. This course builds on skills learned in BUSTEC 300.2. This course includes enhancing proofreading proficiency, reinforcing communication skills, increasing speed and accuracy, and using features of a current office-level word processing program to create a variety of business documents with advanced formatting. This course is not open to students who have previously completed the third module of BUSTEC 300.

BUSTEC 305 Business Technology Essentials 1 Unit

Course Transferable to CSU
Hours: 18 hours LEC

This course focuses on the integration of technology and administrative skills in a business environment. Topics include hardware and software; electronic, voice, and fax communications; electronic calendars; internet resources; digital copiers and scanners; and the virtual office. This is an introductory course recommended for all business students.

BUSTEC 310 Introduction to Word/Information Processing 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, and other business-related documents. It emphasizes formatting and document production techniques to produce professional business documents used in today's workplace. Intermediate and advanced word processing topics include tables, columns, themes and styles, merge, graphics, macros, collaboration, and templates.

BUSTEC 313 Presentations for the Business Professional 2 Units

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 315, and CISA 320
Course Transferable to CSU
Hours: 54 hours LEC

This course applies office administration skills and procedures using a suite of software. Course content integrates word processing, spreadsheet, database, presentation, and communication software to create, format, revise, share, and maintain business documents and data. Hands-on business projects require use of current office systems and incorporate problem-solving skills and real world business simulations.

BUSTEC 350 Virtual Careers and Technologies 3 Units

Course Transferable to CSU
Hours: 54 hours LEC

This course explores careers in a virtual environment and identifies techniques and technologies needed by virtual workers. Specific topics include types of virtual environments, technologies and skills needed in a virtual office, ways to establish and manage a virtual career, effective communication, and job opportunities. This course also examines issues for career preparation in a virtual environment.

Technical Communication**TECCOM 300 Introduction to Technical/Professional Communication 3 Units**

Advisory: Eligible for ENGRD 310 or ENGRD 312 and ENGWR 300; OR ESLR 340 and ESLW 340.
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. It covers 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. This course is formerly known as ENGWR 342.

TECCOM 310 Technical/Professional Communication: Writing Reports 3 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Course Transferable to CSU
Hours: 54 hours LEC

This course emphasizes the writing of reports for the workplace and for technical and scientific disciplines. It covers audience analysis, standard report formats, research techniques, and concise, grammatical writing. This course is formerly known as ENGWR 344.

TECCOM 320 Technical/Professional Communication: Proposal Writing 3 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Course Transferable to CSU
Hours: 54 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. This course is formerly known as ENGWR 350.

TECCOM 330 Technical/Professional Communication: Writing Technical Manuals 3 Units

Advisory: ARTNM 352 and CISA 305
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. This course is formerly known as ENGWR 352.

TECCOM 340 Technical/Professional Communication: Developing Help Systems 1.5 Units

Advisory: CISA 305; Eligible for ENGRD 310 or ENGRD 312 and ENGWR 300; OR ESLR 340 and ESLW 340.
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. This course is formerly known as ENGWR 353.

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: 18¹

Physical Science Courses:

ASTR	300, 310, 320, 330, 400, 481, 495, 499
CHEM	305, 306, 309, 310, 311, 400, 401, 420, 421, 423, 495, 499
GEOG	300, 301, 305, 306, 307, 308, 309, 390, 495, 499
GEOL	300, 301, 305, 306, 310, 311, 320, 325, 330, 331, 342, 345, 390, 495, 499
PHYS	310, 311, 312, 350, 360, 410, 421, 431, 495, 499
PS	300, 301, 495, 499

Biological Science Courses:

ANTH	300, 301, 303, 370, 372, 480, 495, 499
BIOL	300, 301, 303, 305, 310, 322, 332, 342, 352, 370, 390, 400, 410, 415, 420, 430, 431, 440, 442, 482, 490, 491, 495, 499
BIOT	301, 305, 307, 308, 311, 312, 499
NATR	300, 302, 303, 304, 305, 306, 307, 310, 320, 322, 330, 332, 340, 346, 495, 499
PSYC	310, 311, 495, 499

¹must be transfer-level and must include one laboratory course in a physical science and one laboratory course in a biological science

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 305 Introduction to Chemistry 5 Units

Prerequisite: MATH 100, 104, or 132 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 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. (C-ID CHEM 101)

CHEM 306 Introduction to Chemistry 5 Units

Prerequisite: CHEM 305 with a grade of "C" or better
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND
 ENGWR 300; OR ESLR 340 AND ESLW 340.
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, 129, or 132 with a grade of "C" or better; or placement through the assessment process.
Advisory: ENGRD 116, ENGWR 102, ESLR 320, and ESLW 320; AND MATH 120, MATH 124, or MATH 133
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, 129, or 132 with a grade of "C" or better
Corequisite: MATH 120, 124, or 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.
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. Pass/No Pass only.

CHEM 400 General Chemistry 5 Units

Prerequisite: MATH 120, 124, 129 or 133 with a grade of "C" or better AND one of the following: 1) CHEM 310 with a grade of "C" or better 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. (C-ID CHEM 110)

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 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 to prepare students who are majoring in chemistry or chemical engineering, for transfer to a four-year institution, or to prepare students for entrance into professional schools in the fields of medicine, pharmacy, or dentistry. Emphasis is on the application of modern principles regarding structure, reactivity, methods of synthesis and physical properties of carbon compounds. (C-ID CHEM 160S)

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, ultraviolet-visible (UV-VIS) spectroscopy, and carbon-13 nuclear magnetic resonance (NMR). Special attention is given to development of reaction mechanisms, methods of organic synthesis, and instrumental analysis as they apply to organic chemistry.

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 a survey of carbon containing compounds with emphasis on organic compounds of biological interest. Topics include the chemistry of organic functional groups, Infra Red spectroscopy, and mechanisms of reactions. This course is designed primarily for students majoring in the life sciences, nutrition/dietetics, and related fields. This course is not recommended for students majoring in chemistry, chemical engineering, medicine, dentistry, pharmacy, or chiropractics.

**CHEM 495 Independent Studies
in Chemistry 1-3 Units**

Course Transferable to CSU

Hours: 54-162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

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

DEGREES AND CERTIFICATES

Computer Science Degree

This degree provides a comprehensive exposure to programming languages, algorithms and problem solving in preparation for upper division computer science courses. The Computer Science degree includes substantial course work in mathematics required by most university computer science programs.

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 Structures .....4	
CISP 440 Discrete Structures for Computer Science .....3	
MATH 400 Calculus I .....5	
MATH 401 Calculus II .....5	

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.

(continued on next page)

(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.

(continued on next page)

(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.

See losrios.edu/gainful-emp-info/gedt.php?major=011427C01 for Gainful Employment Disclosure.

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

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(CIS: Computer Programming Degree continued)

Java Concentration 18-20 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
A minimum of 3 units from the following:	3
CISC 320 Operating Systems (1)	
CISC 323 Linux Operating System (1)	
CISC 324 Intermediate Linux Operating System (1)	
CISP 310 Assembly Language Programming for Microcomputers (4)	
CISP 362 Programming for Mobile Devices I (4)	
CISP 363 Programming for Mobile Devices II (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.

See losrios.edu/gainful-emp-info/gedt.php?major=011326C05 for Gainful Employment Disclosure.

Core Requirements for Certificate 4 Units

CISC 310 Introduction to Computer Information Science.....	3
CISC 320 Operating Systems.....	1

C++ Concentration Requirements 18-20 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
A minimum of 1 unit from the following:	1
CISC 323 Linux Operating System (1)	
CISC 324 Intermediate Linux Operating System (1)	

Java Concentration Requirements 18-20 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
A minimum of 2 units from the following:	2
CISC 323 Linux Operating System (1)	
CISC 324 Intermediate Linux Operating System (1)	
CISP 310 Assembly Language Programming for Microcomputers (4)	
CISP 362 Programming for Mobile Devices I (4)	
CISP 363 Programming for Mobile Devices II (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.

(continued on next page)

(CIS: Database Management Degree continued)

- 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
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.

See losrios.edu/gainful-emp-info/gedt.php?major=011324C01 for Gainful Employment Disclosure.

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
BUSTEC 300.1	Keyboarding/Applications: Beginning	1
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 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)	

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(CIS: Microcomputer Applications Degree continued)

CISS 301	Ethical Hacking (2)	
CISW 300	Web Publishing (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.

See losrios.edu/gainful-emp-info/gedt.php?major=011327C01 for Gainful Employment Disclosure.

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.
- 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)
- 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.

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
or 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.

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(Information Systems Security Degree continued)

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
or CISS 342	Implementing Linux Operating System Security (3)	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.

See losrios.edu/gainful-emp-info/gedt.php?major=011554C01 for Gainful Employment Disclosure.

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:		3
CISN 110	Networking Technologies - Preparation for N+ Certification (2)	2
CISN 111	Intermediate Networking Technologies - Preparation for N+ Certification (2)	2
CISN 140	CISCO Networking Academy (CCNA)tm: Networking Fundamentals (3)	3
CISS 301	Ethical Hacking (2)	2

Mobile Programming Certificate

This certificate offers a program of study for students seeking jobs in the fields of mobile application development. It provides opportunities to develop the necessary skills and aptitudes for designing, developing, and testing a variety of application programs for mobile devices.

Student Learning Outcomes

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

- develop a mobile application program using tools included in a software development kit.
- design software using object-oriented methods to develop event-driven programs for mobile application programs.
- publish mobile applications in an application marketplace.

Career Opportunities

Mobile devices such as tablets and smart phones continue to be more cost effective and versatile. Due to the portability, cost, built-in devices and user-friendliness, mobile devices gain much popularity in end-user and commercial markets. As a result, there is a great demand for developers and software engineers who can write application programs for mobile devices. A developer with this certificate can work as an independent mobile application developer or join a team of developers in software firms that specialize in mobile application development.

Requirements for Certificate 15 - 16 Units

1st semester:		
CISP 300	Algorithm Design/Problem Solving (3)	3 - 4
or CISP 370	Beginning Visual Basic (4)	
CISP 362	Programming for Mobile Devices I	4
2nd semester:		
CISP 360	Introduction to Structured Programming	4
CISP 363	Programming for Mobile Devices II	4

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
CISW 410	Middleware Web Scripting (4)	4
or CISW 420	Server-side Web Scripting (4)	

A minimum of 4 units from the following:

CISW 304	Cascading Style Sheets (2)	4
CISW 350	Imaging for the Web (1)	
CISW 355	Web Imaging Projects (2)	
CISW 410	Middleware Web Scripting (4)	
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.

See losrios.edu/gainful-emp-info/gedt.php?major=011424C01 for Gainful Employment Disclosure.

Requirements for Certificate

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:

CISW 310	Advanced Web Publishing (4)	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:

ARTNM 402	Intermediate Web Design (3)	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

This is an interdisciplinary course of study designed to prepare students for employment as professional writers and communicators in a variety of media intended to instruct and inform audiences. The degree program includes substantial course work in writing, information design, editing, page design, online help development, web site creation, and the use of industry standard applications.

Student Learning Outcomes

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

- analyze audience information needs and propose solutions to aid the audience.
- design technical communication solutions for a variety of industry and government purposes.
- design and create web sites and help systems with effective visual design, navigation, and written content.
- design and publish printed pages with effective design, organization, content, and indexing.
- compose professional prose for a variety of audiences with a variety of purposes.
- compose and edit professional documents in grammatically correct, concise English.
- create and use style templates in a variety of industry standard software.

Career Opportunities

Technical communicators may be employed in a variety of occupations in government, scientific firms, nonprofits, natural resources, finance, education, and high tech.

Requirements for Degree	36.5 Units
BUS 100 English for the Professional.....	3
CISA 305 Beginning Word Processing.....	2
CISW 300 Web Publishing	3
JOUR 300 Newswriting and Reporting.....	3
TECCOM 300 Introduction to Technical/Professional Communication.....	3
TECCOM 310 Technical/Professional Communication: Writing Reports.....	3
TECCOM 320 Technical/Professional Communication: Proposal Writing.....	3
TECCOM 330 Technical/Professional Communication: Writing Technical Manuals.....	3
TECCOM 340 Technical/Professional Communication: Developing Help Systems.....	1.5
And a minimum of 12 units from the following:	12
ARTNM 328 Beginning Digital Photo Imagery (3)	
ARTNM 330 Intermediate Digital Photo Imagery (3)	
ARTNM 352 Design for Publication (3)	
CISA 331 Intermediate Desktop Publishing (2)	
CISW 310 Advanced Web Publishing (4)	
CISW 321 Web Site Development using Dreamweaver (3)	
CISW 400 Client-side Web Scripting (4)	
CISW 410 Middleware Web Scripting (4)	
ENGWR 301 College Composition and Literature (3)	

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.

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.

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.

See losrios.edu/gainful-emp-info/gedt.php?major=011222C01 for Gainful Employment Disclosure.

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
TECCOM 300 Introduction to Technical/Professional Communication.....	3
TECCOM 330 Technical/Professional Communication: Writing Technical Manuals.....	3
TECCOM 340 Technical/Professional Communication: Developing Help Systems.....	1.5
And a minimum of 6 units from the following:	6
BUS 100 English for the Professional (3)	
CISW 321 Web Site Development using Dreamweaver (3)	
CISW 400 Client-side Web Scripting (4)	
CISW 410 Middleware Web Scripting (4)	
TECCOM 310 Technical/Professional Communication: Writing Reports (3)	
TECCOM 320 Technical/Professional Communication: Proposal Writing (3)	

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*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, creating dynamic forms, manipulating graphics, and using Acrobat in a review cycle.

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.

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.

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**General Education: AA/AS Area II(b)**Course Transferable to CSU**Hours: 27 hours LEC; 27 hours LAB*

This course introduces the basic concepts and applications of an electronic spreadsheet program, including organizing, creating, and modifying a spreadsheet. It presents the basics of entering data in a worksheet using columns and rows, labels, and values; completing worksheet calculations using formulas and functions; and producing professional looking charts. In addition, the course introduces formatting, sorting, querying, and multi-sheet management. It also introduces 3-D cell referencing, financial functions, Goal Seek, VLOOKUP, What If, and decision-making.

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.

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.

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.

CISA 330 Desktop Publishing 2 Units

Advisory: BUSTEC 100.1 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 other marketing material. Additionally, it covers importing and placing graphics and text, using layers, master pages, frames, creating graphics using the pen tool, and working with color both digitally and in print.

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 effects and advanced techniques, applying styles, importing and linking graphics, tabs and tables, and working with transparency effects. It also covers producing long documents and book features, output and exporting to PDF format, and creating interactive documents for online use.

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.

CISA 345 Technical Marketing Applications 2 Units

Advisory: CISC 305
Course Transferable to CSU
Hours: 27 hours LEC; 27 hours LAB

This course provides an overview of online tactical marketing tools. It includes Search Engine Optimization (SEO), analytic tools, web building and blog applications, email marketing, and other technical marketing tools.

CISA 346 Social Media Applications 1 Unit

Advisory: CISC 305
Course Transferable to CSU
Hours: 18 hours LEC; 18 hours LAB

This course introduces using a variety of social media applications and content platforms for marketing both small and large businesses. It includes popular applications for online social networking services, microblogging, visual bookmark boards, video-sharing websites, photoshare sites, and online image editing. It also includes tracking social media, apps and integration, link building and monetization.

Computer Information Science - Core**CISC 100 Computer Fundamentals with Hands-on Lab 2 Units**

Hours: 27 hours LEC; 27 hours LAB

This introductory course develops basic computer skills needed for college-level courses, workplace productivity, and personal enrichment. It provides individuals who are new to computing or who have very little computing experience with slower paced, general, non-technical information as well as in-class hands-on instruction reinforcement. This course introduces common computer terminology and concepts, file management, electronic mail, online course management, productivity application software, and the Internet.

CISC 295 Independent Studies in Computer Information Science - Core 1-3 Units

Hours: 54-162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

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 introductory course develops and improves the basic computer skills necessary for college-level courses, workplace productivity, and personal enrichment. It introduces common computer terminology and concepts, file management, electronic mail, online learning, productivity application software, and the Internet.

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 introduces how the Internet works and how to effectively use basic Internet services. Topics include browser basics, search engines and search techniques, e-mail, the World Wide Web, Internet security, Internet resources, the Cloud, social networking, and building basic web pages using Hypertext Markup Language (HTML).

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.

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 Pass/No Pass only.

CISC 310 Introduction to Computer Information Science 3 Units

Course Transferable to UC/CSU
Hours: 54 hours LEC

This course examines information technology and its role in solving business problems. Topics include information systems, database management systems, networking, e-commerce, ethics and security, and computer systems hardware and software components. These concepts and related methods are applied through hands-on projects to develop computer-based solutions to business problems. (C-ID ITIS 120)

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.

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.

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 495 Independent Studies in Computer Information Science - Core 1-3 Units

Course Transferable to CSU

Hours: 54-162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

CISC 498 Work Experience in Computer Information Science - Core 1-4 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position, or job related to computer information science with a cooperating site supervisor. Students are advised to consult with the Computer Information Science Department faculty to review specific certificate and degree work experience requirements.

General Education: AA/AS Area III(b)

Course Transferable to CSU

Hours: 60-300 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 Title 5 required forms which document the student's progress and hours spent at the work site, and developing workplace skills and competencies. During the semester, the student is required to 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. First-time participants are required to attend a weekly orientation and a final meeting. Returning participants are required to attend the first class meeting, a mid-semester meeting, and a final meeting and may meet individually with the instructor as needed to complete a work site observation and all program forms, receive updates, and assignments. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

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 OR Math 41
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).

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).

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. Topics include hierarchy LAN design, basic switch concepts and configuration, Virtual LANs (VLANs), Virtual Trunking Protocol (VTP), Spanning Tree Protocol (STP), Inter-VLAN routing, basic wireless concepts and configuration. Implementing, verifying, securing and troubleshooting converged switching technologies in a small-to-medium network, including integrating wireless devices into a LAN, are also covered. This is the third course in preparation for Cisco CCNA certification examination. ARC is a certified Cisco Networking Academy and all courses are taught by Cisco Certified Academy Instructors (CCAI).

CISN 143 CISCO Networking Academy (CCNA)tm: 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).

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.

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.

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.

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).

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 UC/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 or 480 with a grade of "C" or better**Course Transferable to UC/CSU**Hours: 54 hours LEC; 54 hours LAB*

This course covers the organization and behavior of real computer systems at the assembly-language level. Topics include the mapping of statements and constructs in a high-level language onto sequences of machine instructions, as well as the internal representation of simple data types and structures. Numerical computation is examined, noting the various data representation errors and potential procedural errors.

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 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. (C-ID COMP 112)

CISP 362 Programming for Mobile Devices I 4 Units*Corequisite: CISP 300 or 370**Course Transferable to CSU**Hours: 54 hours LEC; 54 hours LAB*

This course introduces mobile device programming, including devices such as cell phones and tablets. Topics include development tools, user interface design, documentation, testing, debugging, and publishing.

CISP 363 Programming for Mobile Devices II 4 Units*Prerequisite: CISP 362 with a grade of "C" or better**Corequisite: CISP 360**Course Transferable to CSU**Hours: 54 hours LEC; 54 hours LAB*

This course introduces intermediate level programming for mobile devices such as cell phones and tablets. Topics include the syntax of Java, object oriented programming, and mobile-specific techniques and considerations.

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.

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.

CISP 372 Beginning Visual Basic for Applications Programming 1 Unit*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. (C-ID COMP 132)

CISP 440 Discrete Structures for Computer Science 3 Units*Prerequisite: CISP 360 and MATH 370 with grades 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 discrete structures used in computer science with an emphasis on their applications. Topics include functions, relations, and sets; basic logic; proof techniques; basics of counting; graphs and trees; and discrete probability. (C-ID COMP 152)

CISP 480 Honors Introduction to Structured Programming 5 Units*Prerequisite: Placement into ENGWR 480 through the assessment process.**Advisory: CISC 310**General Education: AA/AS Area II(b) (effective Summer 2013)**Course Transferable to UC/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**

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: CISC 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.

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.

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 Language (HTML), organizing a series of pages into a web site, and uploading web pages to a server. This course makes extensive use of the computer tools necessary to insert HTML tags, create images, and view web documents. It takes beginning web designers through the process of designing, building, and publishing a working web site.

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 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.

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.

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.

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/Ajax. Topics include the Document Object Model of web pages, core features of the client-side scripting language, event handling, control of windows and frames, functions, and form validation.

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.

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.

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: Humanities
 Dean: Kate Jaques
 Phone: (916) 484-8653
 Counseling: (916) 484-8572

Degree: A.A. - Deaf Culture & American Sign Language Studies
 Certificate: Deaf Culture & American Sign Language Studies

DEGREES AND CERTIFICATES

Deaf Culture & American Sign Language Studies Degree and Certificate

This program provides academic coursework based on a Deaf-centered framework that encourages students to embrace an empowered collaboration with Deaf people. It provides an introductory overview of the Deaf community and American Sign Language in a cultural context, with the psychosocial dynamics of people working in the Deaf community. It also emphasizes 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:

- compare and contrast characteristics that impact a Deaf person's life in the following areas: the world of work, education, family, language, and social development.
- demonstrate ability to carry on American Sign Language conversation consistent with the ability of a 4th semester second language learner with a Deaf individual or groups of Deaf people.
- apply entry-level positions working with the Deaf community.
- demonstrate characteristics related to personal growth and adjustment in various populations within and outside of the Deaf community.
- apply skills in working with Deaf 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.
- demonstrate appropriate cultural interaction within the Deaf community.
- demonstrate ability to communicate respectfully in a Deaf-culture setting.

Career Opportunities

This program prepare students for entry-level positions such as paraprofessional services in an individual or group setting, in an educational or social services agency which serves deaf clients.

See losrios.edu/gainful-emp-info/gedt.php?major=011311C01 for Gainful Employment Disclosure.

Requirements for Degree or Certificate	34-35.5 Units
DEAF 300 Introduction to Deaf Culture and ASL Studies Orientation	0.5
DEAF 310 American Sign Language I	4
DEAF 312 American Sign Language II	4
DEAF 314 American Sign Language III	4
DEAF 316 American Sign Language IV	4
DEAF 320 Fingerspelling I.....	0.5 - 1
DEAF 322 Classifiers I.....	0.5 - 1
DEAF 324 ASL Numbers I	0.5 - 1
DEAF 351 Introduction to American Deaf Culture	3
DEAF 352 Introduction to American Deaf Education	3
DEAF 355 Audism and Inequality of the Deaf	3
DEAF 370 Structure of American Sign Language.....	3
DEAF 400 Deaf Culture and ASL Studies Capstone.....	1
And a minimum of 3 units from the following:	3
DEAF 318 American Sign Language V (4)	
DEAF 380 American Sign Language Literature (3)	

Associate Degree Requirements: The Deaf Culture & American Sign Language Studies Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Deaf Culture and ASL Studies

DEAF 300 Introduction to Deaf Culture and ASL Studies Orientation .5 Units

Course Transferable to CSU
Hours: 9 hours LEC

This course provides an overview of Deaf Culture and American Sign Language (ASL) Studies at American River College. Topics include an introduction to the field of Deaf culture and ASL, job opportunities, and the skills needed to be successful in the field. Pass/No Pass only.

DEAF 310 American Sign Language I 4 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGRD 300; OR ESLR 340 AND ESLW 340.

General Education: AA/AS Area I (effective Summer 2015); IGETC Area 6

Course Transferable to CSU
Hours: 72 hours LEC

This is the first course in a series of five courses in American Sign Language (ASL). The instructional activities are based on an immersion approach, in which the learners develop language competency in source and target language. The emphasis is on non-speech communication. Topics include grammatical features such as adjective descriptors, differentiation between cardinal/ordinal numbers, contrastive structure, temporal aspect markers and temporal sequencing, conversational skills, narrative skills, and discussions with peers. This course is formerly known as SILA 305.

DEAF 312 American Sign Language II 4 Units

Prerequisite: DEAF 310 or SILA 305 with a grade of "C" or better.

Advisory: Eligible for ENGRD 310 AND ENGRD 312 AND ENGWR 300; OR ESLR 340 and ESLW 340

General Education: AA/AS Area I; IGETC Area 6

Course Transferable to CSU

Hours: 72 hours LEC

This is the second in a series of five courses in American Sign Language (ASL). The emphasis is on nonverbal communication. Topics include grammatical features such as adjective descriptors, differentiation between cardinal/ordinal numbers, contrastive structure, temporal aspect markers and temporal sequencing, conversational skills, narrative skills, and discussions with peers. This course is formerly known as SILA 306.

DEAF 314 American Sign Language III 4 Units

Prerequisite: DEAF 312 or SILA 306 with a grade of "C" or better

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 and ESLW 340.

General Education: AA/AS Area I (effective Summer 2015);

CSU Area C2; IGETC Area 6

Course Transferable to CSU

Hours: 72 hours LEC

This course is the third in a series of five courses in American Sign Language. It emphasizes expressive and receptive nonverbal communication skills between signers who have preliminary American Sign Language syntactical and lexical skills. It provides an understanding of deaf cultural processes by identifying behaviors and norms from activities assigned in the class. It also includes dialogs that involve asking, empathizing, negotiating and agreeing or disagreeing. The emphasis is on non-speech communication. This course is formerly known as SILA 315.

DEAF 316 American Sign Language IV 4 Units

Prerequisite: DEAF 314 or SILA 315 with a grade of "C" or better

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; or ESLR 340 AND ESLW 340.

General Education: AA/AS Area I (effective Summer 2015);

CSU Area C2; IGETC Area 6

Course Transferable to CSU

Hours: 72 hours LEC

This course is the fourth in a series of five courses in American Sign Language (ASL). It emphasizes expressive communication skills that involve locating and signing interesting facts, making major life decisions, discussing health conditions, and using money. It incorporates information and activities previously learned about Deaf culture into these narratives. The emphasis is on non-speech communication. This course is formerly known as SILA 316.

DEAF 318 American Sign Language V 4 Units

Prerequisite: DEAF 314 or SILA 315 with a grade of "C" or better

Corequisite: DEAF 316 or SILA 316

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

General Education: AA/AS Area I (effective Summer 2015);

IGETC Area 6

Course Transferable to CSU

Hours: 72 hours LEC

This is the last course in a series of five courses in American Sign Language (ASL). It prepares for the effective communication with Deaf people. It emphasizes expressive communication skills that involve narrating unforgettable moments, telling about accidents, and storytelling. It incorporates information and activities previously learned about Deaf culture into these narratives. The emphasis is on non-speech communication. This course is formerly known as SILA 318.

DEAF 320 Fingerspelling I .5-1 Units

Prerequisite: DEAF 310 or SILA 305 with a grade of "C" or better

Course Transferable to CSU

Hours: 27-54 hours LAB

This course provides hands-on experiences with fingerspelling. Topics include expressive and receptive fingerspelling techniques. This laboratory course enables American Sign Language learners to develop, expand, and reinforce hands-on experiences with fingerspelling skills while working independently, in small groups and with media such as DVDs and record video clips in ASL that incorporate fingerspelling. Coursework includes study topics integrated with expressive and receptive fingerspelling techniques. Students may register until the sixth week of the semester. This course may be taken up to two times, for a total of 1.0 unit, using different topics. Pass/No Pass only. This course is formerly known as SILA 346.

DEAF 322 Classifiers I .5-1 Units

Prerequisite: DEAF 312 or SILA 306 with a grade of "C" or better

Course Transferable to CSU

Hours: 27-54 hours LAB

This course provides hands-on experiences in American Sign Language (ASL) using basic and complex classifiers. It enables American Sign Language learners to develop, expand, and reinforce hands-on experiences with ASL using basic and complex classifiers skills while working independently, in small groups and with media such as DVDs and record video clips in ASL that incorporate ASL classifiers. Coursework includes study topics integrated with expressive and receptive ASL classifiers techniques. Students may register until the sixth week of the semester. This course may be taken up to 2 times, for a total of 1.0 unit, using different topics. Pass/No Pass only. This course is formerly known as SILA 350.

DEAF 324 ASL Numbers I .5-1 Units

Prerequisite: DEAF 310 or SILA 305

Course Transferable to CSU

Hours: 27-54 hours LAB

This course provides hands-on experiences with ASL numbers. Topics include expressive and receptive ASL numbers techniques. This laboratory course enables American Sign Language learners to develop, expand, and reinforce hands-on experiences with ASL cardinal, ordinal and unique numbers skills while working independently, in small groups and with media such as DVDs and record video clips in ASL that incorporate ASL numbers. Coursework includes study topics integrated with expressive and receptive ASL numbers techniques. Students may register until the sixth week of the semester. This course may be taken up to two times, for a total of 1.0 unit, using different topics. Pass/No Pass only. This course is formerly known as SILA 344.

DEAF 351 Introduction to American Deaf Culture 3 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND

ENGWR 300; OR ESLR 340 AND ESLW 340.

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. This course is formerly known as SILA 330.

DEAF 352 Introduction to American Deaf Education 3 Units

Prerequisite: DEAF 351 or SILA 330 with a grade of "C" or better
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
General Education: AA/AS Area V(b) (effective Summer 2015)
Course Transferable to CSU
Hours: 54 hours LEC

This course surveys topics related to educating Deaf children, adults, and individuals with additional disabilities. It also covers teaching methods and philosophies, school placement issues, child development, and methods of addressing developmental and linguistic stages. Selected visits to a residential Deaf school in Fremont and/or a local mainstreaming/Deaf program school may be required. This course is formerly known as SILA 332.

DEAF 355 Audism and Inequality of the Deaf 3 Units

Prerequisite: DEAF 351 or SILA 330 with a grade of "C" or better
Advisory: SOC 320; AND eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
General Education: AA/AS Area V(b) (effective Summer 2015); AA/AS Area VI (effective Summer 2015)
Course Transferable to CSU
Hours: 54 hours LEC

This course focuses on topics in the field of race and ethnicity in Deaf community. It provides theoretical background and contexts of audism and oppression. It also covers the contribution of minorities including Deaf people to the United States as well as the sociological reasons for inequality of Deaf people in the United States.

DEAF 370 Structure of American Sign Language 3 Units

Prerequisite: DEAF 314 or 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, syntax, and sociolinguistics aspects of ASL usage. This course is formerly known as SILA 317.

DEAF 380 American Sign Language Literature 3 Units

Prerequisite: DEAF 314 or SILA 315 with a grade of "C" or better
General Education: AA/AS Area I (effective Summer 2015); AA/AS Area VI (effective Summer 2015)
Course Transferable to CSU
Hours: 54 hours LEC

This course introduces American Sign Language (ASL) literature genres such as folklore and folktales, storytelling, visual vernacular, personification, classifier story, poetry, ABC and number stories and non-fiction narrative. Topics include analyzing and applying ASL usage in ASL literature genres.

DEAF 390 Introduction to the Interpreting Profession .5 Units

Prerequisite: DEAF 310 or SILA 305 with a grade of "C" or better
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. Pass/No Pass only. This course is formerly known as SILA 362.

DEAF 400 Deaf Culture and ASL Studies Capstone 1 Unit

Prerequisite: DEAF 355 AND DEAF 316 or SILA 316 with grades of "C" or better
Course Transferable to CSU
Hours: 18 hours LEC

This course applies classroom learning to real-world practice in the Deaf community. It includes development of portfolios and digital portfolios from previous work in DEAF courses. Topics also include resume writing and interview skills.

DEAF 495 Independent Studies in Deaf Culture and American Sign Language Studies 1-3 Units

Hours: 54-162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

Area: Technical Education
 Dean: Dr. Trish Caldwell
 Phone: (916) 484-8354
 Counseling: (916) 484-8572

Degree: A.A. - Design Technology
 A.S. - Engineering Technology
 Certificate: Design Technology
 Engineering Technology

http://www.arc.losrios.edu/Programs_of_Study/Technical_Education/Design_Technology.htm

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.

NOTE TO TRANSFER STUDENTS:

It is critical that students meet with an ARC counselor to select and plan the courses required for transfer to a four-year college or university in order to pursue a bachelor's degree in Architecture and/or Engineering Technology. Colleges vary widely in terms of the required preparation. The courses that ARC requires for an associate's degree in this major may be different from the requirements needed for the bachelor's degree.

Admission to accredited Schools of Architecture/Engineering technologies is highly competitive. It is recommended that students keep a portfolio of all design/engineering technology coursework completed at ARC to present for evaluation by college program advisors. Some colleges require portfolios prior to granting transfer credit or gaining admission.

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.

See losrios.edu/gainful-emp-info/gedt.php?major=011284C01 for Gainful Employment Disclosure.

Requirements for Degree or Certificate	37 - 38 Units
DESN 300	Introduction to Design Resources .....3
DESN 302	Technical Documentation with CADD .....3
DESN 310	Graphic Analysis and Documentation .....3
DESN 320	Three Dimensional Graphics and Design .....3
DESN 325	Architectural Modeling and Design .....3
DESN 328	Engineering Modeling and Design .....3
DESN 330	Engineering Systems and Design .....5
DESN 340	Architecture and Construction .....5
DESN 350	Surveying and Land Planning (5) 4 - 5
or ENGR 310	Engineering Survey Measurements (4)
DESN 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.

NOTE TO TRANSFER STUDENTS:

It is critical that students meet with an ARC counselor to select and plan the courses required for transfer to a four-year college or university in order to pursue a bachelor's degree in Engineering Technology. Colleges vary widely in terms of the required preparation. The courses that ARC requires for an associate's degree in this major may be different from the requirements needed for the bachelor's degree.

Admission to accredited Schools of Engineering Technologies is highly competitive. It is recommended that students keep a portfolio of all design/engineering technology coursework completed at ARC to present for evaluation by college program advisors. Some colleges require portfolios prior to granting transfer credit or gaining admission.

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.

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.

See losrios.edu/gainful-emp-info/gedt.php?major=011108C01 for Gainful Employment Disclosure.

Requirements for Degree or Certificate 40 - 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
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
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.

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.

DESGN 298 Work Experience in Design Technology 1-4 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position, or job related to the architectural and engineering field with a cooperating site supervisor. Students are advised to consult with the Design Technology Department faculty to review specific certificate and degree work experience requirements.

General Education: AA/AS Area III(b)

Hours: 60-300 hours LAB

This course provides students with opportunities to develop marketable skills in preparation for employment or advancement within the architectural and engineering field. It is designed for students interested in work experience and/or internships in associate degree level or certificate occupational programs. Course content includes understanding the application of education to the workforce, completion of Title 5 required forms which document the student's progress and hours spent at the work site, and developing workplace skills and competencies. During the semester, the student is required to 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. First-time participants are required to attend a weekly orientation and a final meeting. Returning participants are required to attend the first class meeting, a mid-semester meeting, and a final meeting and may meet individually with the instructor as needed to complete a work site observation and all program forms, receive updates, and assignments. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

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 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.

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 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, MATH 129, and MATH 133

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.

DESGN 495 Independent Studies in Design Technology**1-3 Units**

Course Transferable to CSU

Hours: 54-162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

Area: Technical Education
 Dean: Dr. Trish Caldwell
 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
 Department Certificates:
 Clean Diesel Hybrid Technology
 Clean Diesel Management Systems
 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.

Student Learning Outcomes

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

- apply established procedures in the diesel repair industry.
- inspect and maintain various diesel engine systems.
- diagnose and repair diesel engine systems.

Career Opportunities

This certificate prepares the students for various entry level positions exist in the diesel repair industry, such as entry level technician.

See losrios.edu/gainful-emp-info/gedt.php?major=011039C01 for Gainful Employment Disclosure.

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.

Student Learning Outcomes

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

- access requirements for converting fossil fuel to biodiesel vehicles.
- apply basic principles to the modern diesel engine.
- apply technical information for repowering, rebuilding, and replacing diesel engine components.
- locate, download, and print information specific to diesel tractor manufacturers.
- apply manufacturer specifications for diesel engine retrofit.

Career 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.

See losrios.edu/gainful-emp-info/gedt.php?major=011040C01 for Gainful Employment Disclosure.

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

DEPARTMENT CERTIFICATE

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 Certificate		12 Units
DCDT 100	Diesel Technology Basics	4
DCDT 101	Diesel Preventive Maintenance.....	4
DCDT 110	Diesel Engine Repair.....	4

Clean Diesel Hybrid Technology Certificate

This certificate covers hybrid-diesel components. Topics include heavy duty hybrid-diesel component application, diesel-hybrid motor generators, clean diesel software, and industrial software and systems.

Career Opportunities

Various entry-level positions exist in the hybrid diesel repair industry, such as entry-level technician and hybrid service advisor.

Student Learning Outcomes

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

- apply basic principles of hybrid diesel component application to proper troubleshooting procedures.
- explain electronic control in diesel hybrid vehicles.
- apply procedural information, illustrations, diagnostic information, and wiring diagrams to Cummins INSITE and Eaton diesel systems.
- locate, download, and apply retrieved data to diesel tractor conditions.

Requirements for Certificate		16 Units
DCDT 109	Hybrid Diesel Component Application.....	4
DCDT 113	Diesel Hybrid Motor Generators	4
DCDT 162	Clean Diesel Software Support.....	4
DCDT 163	Industrial Software and Systems.....	4

Clean Diesel Management Systems Certificate

This program covers hybrid diesel technology. Topics include hybrid diesel power trains, hybrid diesel high voltage systems, clean diesel software support, and industrial software systems.

Career Opportunities

Various entry-level positions exist in the hybrid diesel repair industry, such as entry-level technician and hybrid diagnostic technician.

Student Learning Outcomes

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

- describe and explain power flow of hybrid diesel power trains.
- diagnose and repair high voltage cables, connectors, and components.
- locate, download, and apply retrieved information to diesel tractor conditions.
- communicate technical information about Cummins INSITE and Eaton diesel systems.

Requirements for Certificate		16 Units
DCDT 107	Hybrid Diesel Power Trains	4
DCDT 108	Hybrid Diesel High Voltage Systems.....	4
DCDT 162	Clean Diesel Software Support	4
DCDT 163	Industrial Software and Systems.....	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.

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.

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.

DCDT 107 Hybrid Diesel Power Trains 4 Units*Hours: 54 hours LEC; 54 hours LAB*

This course covers diesel hybrid power trains found in current hybrid technology. Topics include basic diesel hybrid power trains, hybrid power modes, and power electronic carriers.

DCDT 108 Hybrid Diesel High Voltage Systems 4 Units*Hours: 54 hours LEC; 54 hours LAB*

This course covers high voltage power systems on diesel hybrid powered vehicles. Topics include high voltage main component identification and inspection, inspection of high voltage cables, testing, re-use, and end-of-service decisions.

DCDT 109 Hybrid Diesel Component Application 4 Units*Hours: 54 hours LEC; 54 hours LAB*

This course covers testing and replacement of diesel hybrid components. Topics include electronic shifting theory and diesel hybrid component application.

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.

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, welding, and diesel particulate filter systems.

DCDT 113 Diesel Hybrid Motor Generators 4 Units*Hours: 54 hours LEC; 54 hours LAB*

This course covers diesel hybrid motor/generator found in current hybrid technologies. Topics include basic diesel hybrid motor/generator, hybrid power modes, and power electronic components.

DCDT 120 Basic Hydraulic Principles of Diesel Technology 4 Units*Hours: 54 hours LEC; 54 hours LAB*

This course introduces basic hydraulic principles and functions of the diesel engine. Topics include hydraulic fundamentals and principles, functions of hydraulic fluids, directional and flow control valves, welding, and machine hydraulic overview.

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.

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.

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.

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.

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.

DCDT 163 Industrial Software and Systems 4 Units*Hours: 72 hours LEC*

This course covers the skills needed to adequately retrieve and apply Cummins INSITE and Eaton diesel engine information using Internet-based technical manuals specifically geared toward diesel tractor emission control systems.

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 laboratory projects in clean diesel technology. Projects are selected by the Diesel Technology Department.

DCDT 298 Work Experience in Clean Diesel Technology 1-4 Units*Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.*

Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position, or job related to the clean diesel technology field with a cooperating site supervisor. Students are advised to consult with the Diesel Department faculty to review specific certificate and degree work experience requirements.

*General Education: AA/AS Area III(b)**Hours: 60-300 hours LAB*

This course provides students with opportunities to develop marketable skills in preparation for employment or advancement within the clean diesel technology field. It is designed for students interested in work experience and/or internships in associate degree level or certificate occupational programs. Course content includes understanding the application of education to the workforce, completion of Title 5 required forms which document the student's progress and hours spent at the work site, and developing workplace skills and competencies. During the semester, the student is required to 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. First-time participants are required to attend a weekly orientation and a final meeting. Returning participants are required to attend the first class meeting, a mid-semester meeting, and a final meeting and may meet individually with the instructor as needed to complete a work site observation and all program forms, receive updates, and assignments. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

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
 Department Certificates:
 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 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 325 Positive Guidance Strategies with Young Children.....	3
ECE 326 Making Learning Visible Through Observation and Documentation.....	3
ECE 331 Care and Education of Infants and Toddlers.....	3
ECE 342 Constructive Math and Science in Early Childhood Education.....	3
ECE 343 Language and Literacy Development in Early Childhood.....	3
ECE 361 Introducing Young Children to Visual Arts (3)	
or ECE 363 Music and Movement with Young Children (3).....	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
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 and Toddler Development (3)	
ECE 356 Programs for the School-Age Child (3)	
ECE 358 Activities for the School-Age Child (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 is designed to facilitate students' successful transfer to certain California State University (CSU) campuses that prepare them for advanced study in a variety of graduate programs, as well as a variety of careers such as teaching, Child Development Specialist, Program Directors, and Child Life Specialists. With a BA in ECE/Child Development, students are eligible for the Master Teacher and Site Supervisor levels of the CA Child Development Permit, using the Alternative Qualifications category.

The Associate in Science degree in ECE for Transfer provides students with a major that fulfills the general requirements of the California State University for transfer. Students with this degree will receive priority admission with junior status to certain California State University campuses.

The Associate in Science degree in ECE for Transfer (A.S.-T) may be obtained by the completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program outlined below (earning a C or better in these courses) and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education Breadth Requirements. The ECE courses required in this program are part of the CA Curriculum Alignment Project, Lower Division 8 coursework.

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 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 415 or NUTRI 320	Children's Health, Safety and Nutrition (3).....	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.

See losrios.edu/gainful-emp-info/gedt.php?major=011329C01 for Gainful Employment Disclosure.

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	Care and Education of Infants and Toddlers.....	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.

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(Master Teacher Certificate continued)

- create a continuing professional growth plan and advocate for public policy that supports children, families and the profession of early childhood education.

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.

See losrios.edu/gainful-emp-info/gedt.php?major=011328C01 for Gainful Employment Disclosure.

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)	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	Care and Education of Infants and Toddlers.....	3
ECE 415	Children's Health, Safety and Nutrition (3).....	3
or NUTRI 320	Children's Health, Safety and Nutrition (3)	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)	3
ARTH 300	Introduction to Art (3)	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)	3
NUTRI 300	Nutrition	3
¹ If ECE 415/NUTRI 320 was taken for the Teacher Certificate, it may be used towards a Specialization for the Master Teacher level. The certificate will then be a total of 50 units.		

Children's Literature 53 Units

Core Requirements	47	
ENGLT 370	Children and Literature	3
ECE 343	Language and Literacy Development in Early Childhood.....	3

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
² ECE 430 may be used for this specialization, even if it was used for the teacher Level Certificate. The certificate will then be a total of 50 units.		

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)	3

Infant Care 53 Units

Core Requirements	47	
ECE 330	Infant and Toddler Development	3
ECE 331	Care and Education of Infants and Toddlers.....	3 ³
³ ECE 331 may be used for the Master Teacher specialization, even when used toward the Teacher Certificate. If ECE 331 is used, then this certificate totals 50 units.		

Music with Children 53 Units

Core Requirements	47	
ECE 363	Music and Movement with Young Children.....	3
And a minimum of 3 units from the following: 3		
MUFHL 330	World Music (3)	3
MUIVI 340	Beginning Piano (2)	2
MUIVI 341	Piano II (2)	2
MUIVI 370	Beginning Guitar (2)	2
MUIVI 371	Intermediate Guitar (2)	2

School-Age Care 53 Units

Core Requirements	47	
ECE 356	Programs for the School-Age Child.....	3
ECE 358	Activities for the School-Age Child	3

Special Needs 53 Units

Core Requirements	42	
ECE 404	Children with Special Needs.....	3
ECE 407	Curriculum and Strategies for Children with Special Needs.....	3

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.

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(Site Supervisor Certificate continued)

- manage program planning, budgeting, governing boards, enrollment, and personnel in accordance with the regulations of Title 5 (California Education Code of Regulations) and Title 22 (California Social Services Code of Regulations).
- create procedures for implementing standards of health, nutrition, and safety in group care early childhood education settings.
- plan professional and personal growth and advocacy activities to support children, families and teachers.

Career 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.

See losrios.edu/gainful-emp-info/gedt.php?major=011330C01 for Gainful Employment Disclosure.

Requirements for Certificate	60 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	Care and Education of Infants and Toddlers.....3
ECE 415	Children's Health, Safety and Nutrition (3).....3
or NUTRI 320	Children's Health, Safety and Nutrition (3)
ECE 420	Administration I: Programs in Early Childhood Education .....3
ECE 422	Administration II: Personnel and Leadership in Early Childhood Education.....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 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.

See losrios.edu/gainful-emp-info/gedt.php?major=011489C01 for Gainful Employment Disclosure.

Requirements for Certificate	22 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 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
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).

See losrios.edu/gainful-emp-info/gedt.php?major=011094C01 for Gainful Employment Disclosure.

Requirements for Certificate	23 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 330 Infant and Toddler Development	3
ECE 331 Care and Education of Infants and Toddlers.....	3
ECE 334 Laboratory with Infants and Toddlers.....	1
ECE 415 Children's Health, Safety and Nutrition (3).....	3
or NUTRI 320 Children's Health, Safety and Nutrition (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.

See losrios.edu/gainful-emp-info/gedt.php?major=011446C01 for Gainful Employment Disclosure.

Requirements for Certificate	24 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 415 Children's Health, Safety and Nutrition (3).....	3
or NUTRI 320 Children's Health, Safety and Nutrition (3)	
ECE 420 Administration I: Programs in Early Childhood Education	3
ECE 422 Administration II: Personnel and Leadership in Early Childhood Education	3
ECE 424 Adult Supervision: Mentoring in a Collaborative Learning Setting.....	2

School Age Certificate

This certificate provides the educational coursework that serves as the core curriculum for the early childhood education field. Topics include an introduction to the profession, observation techniques, age-appropriate curriculum, and a supervised field/lab experience. Additionally, it covers specific school-age program requirements and activities.

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.

See losrios.edu/gainful-emp-info/gedt.php?major=011098C01 for Gainful Employment Disclosure.

<u>Requirements for Certificate</u>	<u>22 Units</u>
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 356 Programs for the School-Age Child.....	3
ECE 358 Activities for the School-Age Child.....	3
ECE 415 Children’s Health, Safety and Nutrition (3).....	3
or NUTRI 320 Children’s Health, Safety and Nutrition (3)	

DEPARTMENT CERTIFICATES

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.

<u>Requirements for Certificate</u>	<u>6 Units</u>
ECE 300 Introduction to Principles and Practices in Early Childhood Education.....	3
ECE 312 Child Development (3).....	3
or PSYC 372 Child Development (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.

<u>Requirements for Certificate</u>	<u>10 Units</u>
ECE 305 Introduction to Family Child Care.....	1
ECE 312 Child Development (3).....	3
or PSYC 372 Child Development (3)	
ECE 314 The Child, the Family and the Community.....	3
ECE 415 Children’s Health, Safety and Nutrition (3).....	3
or NUTRI 320 Children’s Health, Safety and Nutrition (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 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. (C-ID ECE 120)

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 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 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 interaction of maturational and environmental factors. 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. (C-ID CDEV 100)

ECE 314 The Child, the Family and the Community **3 Units**

Advisory: ENGWR 102, 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; IGETC Area 4G

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. (C-ID CDEV 110)

ECE 316 Mass Media and Young Children **1 Unit**

Course Transferable to CSU

Hours: 18 hours LEC

This course covers the impact of mass media on socializing young children with emphasis on the influence of mass media on development, including the impact of television, movies, commercial advertising, books, and popular music. It also includes strategies for minimizing the negative influences of mass media on children.

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. (C-ID ECE 130)

**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. (C-ID ECE 210)

**ECE 325 Positive Guidance Strategies
with Young Children 3 Units**

Course Transferable to CSU
Hours: 54 hours LEC

This course introduces strategies that teachers and parents can use to help young children develop social and emotional skills. It examines theories, research, and practical applications for teachers in early childhood classrooms and parents at home. Developmental stages of children's behavior, positive discipline techniques, and promotion of social-emotional skills are also covered.

**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. (C-ID ECE 200)

ECE 330 Infant and Toddler Development 3 Units

General Education: AA/AS Area III(b)
Course Transferable to CSU
Hours: 54 hours LEC

This course provides a study of infants and toddlers from pre-conception to age three including physical, cognitive, language, social, and emotional growth and development. It applies theoretical frameworks to interpret behavior and interactions between heredity and environment. Additionally, it emphasizes the role of family and relationships in development.

**ECE 331 Care and Education of
Infants and Toddlers 3 Units**

Course Transferable to CSU
Hours: 54 hours LEC

This course applies current theory and research to the care and education of infants and toddlers in group settings. It examines essential policies, principles, and practices that lead to quality care and developmentally appropriate curriculum for children birth to 36 months.

**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 course 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.

**ECE 342 Constructive Math and Science
in Early Childhood Education 3 Units**

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Course Transferable to CSU
Hours: 54 hours LEC

The course is an introduction to the constructivist approach to teaching math and science concepts in early childhood education. The content and teaching techniques support the perspective that children construct knowledge through a dynamic, interactive process that facilitates their development of working theories related to math and science. Topics include an overview of the role of the teacher in developing appropriate experiences for children and a review of current standards and guidelines, including California's Early Learning Foundations and Frameworks.

**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: Before students can attend the school site for field work, they are required to show proof of TB clearance. They may also need to complete a fingerprint clearance through the cooperating school district, if the district requires it.

General Education: AA/AS Area III(b)

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course introduces the concepts and issues related to teaching diverse learners in today's contemporary schools, kindergarten through grade 12 (K-12). Topics include teaching as a profession and career, historical and philosophical foundations of the American education system, contemporary educational issues, California's content standards and frameworks, and teacher performance standards. In addition to class time, the course requires a minimum of 45 hours of structured fieldwork in public school elementary classrooms that represent California's diverse student population, and includes cooperation with campus-approved certificated classroom teachers. This course is not open to students who have completed ENGED 324. (C-ID EDUC 200)

ECE 356 Programs for the School-Age Child 3 Units

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 3 Units

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 introduces the variations in development of children with special needs ages birth through eight and the resulting impact on families. It includes an overview of historical and societal influences, laws relating to children with special needs, and the identification and referral process. Observations in public or private children's centers, schools, and agencies may be required.

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 407 Curriculum and Strategies for Children with Special Needs 3 Units

Prerequisite: ECE 404 with a grade of "C" or better

Course Transferable to CSU

Hours: 54 hours LEC

This course covers curriculum and intervention strategies for working with children with special needs and partnering with their families. It focuses on the use of observation and assessment in meeting the individualized needs of children and families in inclusive and natural environments. Topics include the role of the teacher as a professional working with families, collaboration with interdisciplinary teams, and the importance of cultural competence.

ECE 414 CPR and Pediatric First Aid 1.5 Units

Same As: HEED 311

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

Course Transferable to UC/CSU

Hours: 27 hours LEC

This course meets the requirements for American Red Cross certification in California Child Care Health & Safety Training which includes adult, child, and infant CPR and pediatric first aid. It also includes legal considerations, avoiding disease transmission, responding to sudden illnesses and injuries, and recognition of common childhood diseases. This course is not open to students who have completed HEED 311.

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. (C-ID ECE 220)

ECE 420 Administration I: Programs in Early Childhood Education 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 course is an introduction to the administration of early childhood programs. It covers program types, budgets, management, regulations, laws, and the development and implementation of policies and procedures. It also examines various administrative tools, philosophies, and techniques needed to open, organize, and operate an early care and education program.

ECE 422 Administration II: Personnel and Leadership in Early Childhood Education 3 Units

Prerequisite: ECE 420 with a grade of "C" or better

Course Transferable to CSU

Hours: 54 hours LEC

This course covers effective strategies for personnel management and leadership in early care and education settings. It includes legal and ethical responsibilities, supervision techniques, professional development, and reflective practices for a diverse and inclusive early care and education program.

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 methods of supervising student teachers, volunteers, staff, and other adults in early care and education settings. Emphasis is on the roles and development of early childhood professionals as mentors and teachers working collaboratively to guide a teaching team or individual within a classroom setting. This course satisfies the adult supervision requirement for the CA Child Development Master Teacher Permit and Site Supervisor permit issued by the CA Commission on Teacher Credentialing.

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. (C-ID ECE 230)

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

Course Transferable to CSU

Hours: 18 hours LEC

This course examines Environment Rating Scales (ERS): Infant/Toddler (ITERS); Early Childhood (ECERS); School-Age Programs (SACERS); and Family Child Care (FCCERS) 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.

ECE 495 Independent Studies in Early Childhood Education 1-3 Units

Course Transferable to CSU

Hours: 54-162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

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

Degree: A.A. for Transfer - Economics

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 A.A. for Transfer Degree

The Associate in Arts degree in Economics for Transfer provides students with a major that fulfills the general requirements of the California State University for transfer. Students with this degree will receive priority admission with junior status to the California State University system. The Associate in Arts degree in Economics for Transfer (AA-T) may be obtained by the completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program outlined below (earning a C or better in these courses) and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education Breadth Requirements.

Students interested in transferring to a CSU campus to pursue a bachelor's degree in Economics should meet with a counselor to confirm the courses required for lower-division preparation in the major.

Student Learning Outcomes

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

- explain terms and concepts used in macroeconomics and microeconomics.
- evaluate models to explore consequences of economic policy proposals on households and businesses.
- evaluate economic models to explore the consequences of macroeconomic events and the probable consequences of macroeconomic policy proposals on the whole economy.
- solve problems requiring the application of economics, statistics, and mathematics.
- apply accounting and economic concepts and principles in making decisions about firm operations.

Requirements for Degree 18 Units

ECON 302	Principles of Macroeconomics	3
ECON 304	Principles of Microeconomics	3
And a minimum of 3 units from the following:		
PSYC 330	Introductory Statistics for the Behavioral Sciences (3)	
STAT 300	Introduction to Probability and Statistics (4)	
STAT 305	Statway, Part II (6)	
And a minimum of 3 units from the following:		
MATH 340	Calculus for Business and Economics (3)	
MATH 400	Calculus I (5)	
And a minimum of 6 units from the following:		
ACCT 301	Financial Accounting (4)	
ACCT 311	Managerial Accounting (4)	
CISA 315	Introduction to Electronic Spreadsheets (2)	
CISC 310	Introduction to Computer Information Science (3)	
CISP 360	Introduction to Structured Programming (4)	
CISP 370	Beginning Visual Basic (4)	
MATH 336	College Algebra (5)	
MATH 350	Calculus for the Life and Social Sciences I (3)	
MATH 370	Pre-Calculus Mathematics (5)	
MATH 401	Calculus II (5)	
MATH 402	Calculus III (5)	
MATH 410	Introduction to Linear Algebra (3)	

Associate in Arts for Transfer Degree Requirements: The Associate in Arts in Economics for Transfer (AA-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

Economics

ECON 302 Principles of Macroeconomics 3 Units

Prerequisite: MATH 100, 104, or 132 with a grade of "C" or better, or placement through the assessment process.

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

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. (C-ID ECON 202)

ECON 304 Principles of Microeconomics 3 Units

Prerequisite: MATH 100, 104, or 132 with a grade of "C" or better, or placement through the assessment process.

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

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. (C-ID ECON 201)

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.

ECON 495 Independent Studies in Economics 1-3 Units

Course Transferable to CSU

Hours: 54-162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College (ARC). They must also discuss the study with a professor from the Department of Economics at ARC in this subject and secure approval. Only one independent study for each catalog course will be allowed.

Area: Technical Education
 Dean: Dr. Trish Caldwell
 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. - Mechatronics
 Certificates: Advanced Electronics and Telecommunications
 Biomedical Equipment Technology
 Digital Home Technology Integration
 Digital Repair & Upgrade Technician
 Electronic Systems Technology
 Fiber Optics
 Mechatronics
 Robotics
 Telecommunication Specialist
 Department Certificate:
 Basic Electronics and Telecommunications
 Basic Mechatronics

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.

See losrios.edu/gainful-emp-info/gedt.php?major=011564C01 for Gainful Employment Disclosure.

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 253	Industrial Communication Systems Support	4
ET 335	Integrated Circuits with Computer Applications	4
ET 380	Introduction to Electronic Communications.....	4
ET 381	Electronic Communication Regulations.....	3
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.

Mechatronics Degree and Certificate

This degree or certificate provides training in a multi-disciplinary field focusing on industrial automation. Topics include electricity, electronics, industrial motor controls, programmable logic controllers, robotics, AC/DC drives, mechanical design, and manufacturing technologies.

Student Learning Outcomes

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

- integrate the principles of mechanical, electronic, and electrical technologies into the design of mechatronic systems.
- evaluate mechanical and electrical solutions to technological problems.
- apply industry-appropriate design techniques to develop technical design documents from a conceptual design.
- design robotic and machine automation systems using mechatronic principles.
- evaluate welding projects in accordance with welding procedures and specifications.
- contrast DC (direct current), AC (alternating current), brushless, servo, and stepper motor operation.
- create technical documentation/presentations of models from the mechanical engineering discipline in both technically correct and visually pleasing solid, orthographic, and section view formats.
- design programmable logic controller (PLC) programs demonstrating input/output capabilities.
- design programs for an operator interface terminal (OIT) demonstrating input/output capabilities.

Career Opportunities

This degree or certificate prepares the student for the following technical and supervisory career opportunities: industrial mechanical/electrical systems technician, food processing machine service technician, facilities systems technician, waste water systems technician, manufacturing coordinator, field service technician, and mechanical electrical machine systems installer.

See losrios.edu/gainful-emp-info/gedt.php?major=011562C01 for Gainful Employment Disclosure.

Requirements for Degree or Certificate 27 Units

1st Semester:	
DESN 100	Introduction to Computer Aided Drafting and Design (CADD).....3
ET 302	Principles of Electricity and Electronics .....4
WELD 300	Introduction to Welding .....3
2nd Semester:	
DESN 302	Technical Documentation with CADD .....3
ET 197	Introduction to Mechatronics .....4
Following Semesters:	
ET 199	Advanced Mechatronics .....4
DESN 310	Graphic Analysis and Documentation .....3
DESN 328	Engineering Modeling and Design.....3

Associate Degree Requirements: The Mechatronics Associate in Science (A.S.) Degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

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 Kirchhoff's laws.
- research and interpret basic electronic components using manufacturers' data manuals, library resources, and the Internet.
- analyze and apply mathematics, including logarithms and decibels to determine, analyze, and control outputs when problem solving transistor and field effect transistor (FET) circuits.
- evaluate electrical parameters using various types of test and measurement equipment used in the analysis of power supply and amplifier circuits.
- apply mathematics and semiconductor theory to identify, evaluate, and troubleshoot electronic circuits.
- calculate the mathematical relationships among voltage, current, resistance, capacitance, inductance, reactance, frequency, and phase angle as they relate to electronic circuits.
- construct and test circuits on prototyping boards and printed circuit boards.
- design and simulate circuits in software.

Career 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.

See losrios.edu/gainful-emp-info/gedt.php?major=011502C01 for Gainful Employment Disclosure.

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 theory, operation, maintenance, troubleshooting, and certification of biomedical equipment used in hospitals, medical device manufacturers, or other service organizations. It includes an in-depth study of frequently used medical equipment.

(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 prepares electronics technology students for a biomedical technician internship or trainee position.

See losrios.edu/gainful-emp-info/gedt.php?major=010950C01 for Gainful Employment Disclosure.

Requirements for Certificate 20 Units

ET 302	Principles of Electricity and Electronics.....	4
ET 312	Mathematics for Circuit Analysis	3
ET 322	Semiconductors and Nanotechnology	4
ET 425	Introduction to Biomedical Equipment Technology	4
ET 426	Advanced Biomedical Equipment Technology.....	4
A minimum of 1 unit from the following:		
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 20 Units

ET 115	Fiber Optics and Telecommunication Cabling.....	4
ET 253	Industrial Communication Systems Support	4
ET 302	Principles of Electricity and Electronics.....	4
ET 385	Digital Home Technology Integration	4
ET 388	Fiber Optics.....	4

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.

See losrios.edu/gainful-emp-info/gedt.php?major=011570C01 for Gainful Employment Disclosure.

Requirements for Certificate		12 Units
ET 115	Fiber Optics and Telecommunication Cabling	4
ET 302	Principles of Electricity and Electronics.....	4
ET 388	Fiber Optics.....	4

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		12 Units
ET 192	Introduction to Robotics	2
ET 194	Intermediate Robotics.....	2
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. See losrios.edu/gainful-emp-info/gedt.php?major=011571C01 for Gainful Employment Disclosure.

(continued on next page)

(Telecommunication Specialist Certificate continued)

Requirements for Certificate		32 Units
1st Semester		
ET 115	Fiber Optics and Telecommunication Cabling	4
ET 302	Principles of Electricity and Electronics.....	4
ET 308	Technical Soldering Practices and Techniques.....	2
2nd Semester		
ET 312	Mathematics for Circuit Analysis	3
ET 322	Semiconductors and Nanotechnology.....	4
Following Semesters		
ET 253	Industrial Communication Systems Support	4
ET 380	Introduction to Electronic Communications.....	4
ET 381	Electronic Communication Regulations.....	3
ET 388	Fiber Optics.....	4

DEPARTMENT CERTIFICATE**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

Basic Mechatronics Certificate

This certificate provides introductory training in the multidisciplinary field of mechatronics which combines mechanical and electronic technologies. Topics include introductory courses in electronics, programmable logic controllers, basic CAD design, and welding.

Career Opportunities

This certificate prepares students for internships and entry-level employment with local industries using mechatronic and design principles.

Student Learning Outcomes

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

- integrate the basic principles of mechanical, electronic, and electrical technologies into the design of mechatronic systems.
- evaluate mechanical and electrical solutions to technological problems.
- apply basic design techniques to develop technical design documents.
- design basic robotic and machine automation systems using mechatronic principles.
- create and evaluate welding projects in accordance with welding procedures and specifications.

Requirements for Certificate **17 Units****First Semester:**

DESGN 100	Introduction to Computer Aided Drafting and Design (CADD)	3
ET 302	Principles of Electricity and Electronics	4

Second Semester:

DESGN 302	Technical Documentation with CADD	3
ET 197	Introduction to Mechatronics	4

Any Semester:

WELD 300	Introduction to Welding.....	3
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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 115 Fiber Optics and Telecommunication Cabling 4 Units

Hours: 54 hours LEC; 54 hours LAB

This course introduces the concepts of telecommunication cable installation and connection practices and standards. It includes the study of commonly used fiber optic and copper cable types and connectors, installation tools, and test equipment. Emphasis is on installation techniques in practical situations. Laboratory activities provide practical hands-on experience in the operation and use of tools and test equipment specific to the telecommunication industry. Field trips may be required.

ET 192 Introduction to Robotics 2 Units

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 may be required.

ET 194 Intermediate Robotics 2 Units

Advisory: ET 192

Hours: 36 hours LEC

This course covers intermediate robotics utilizing various robotic systems such as the Robix and VEX. Topics include the operation and design of robots, hardware component selection, assembly, and software programming of various types of robotic assemblies. Field trips may be required.

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 197 Introduction to Mechatronics 4 Units

Prerequisite: ET 302 with a grade of "C" or better

Hours: 54 hours LEC; 54 hours LAB

This course introduces mechatronics, the combination of electronic and mechanical components and systems used in the control and transmission of mechanical power. Topics include the analysis of electric controls, programmable logic controllers (PLCs), electromagnetic devices, sensors, pneumatic devices, and electric motors.

ET 199 Advanced Mechatronics 4 Units

Prerequisite: ET 197 with a grade of "C" or better

Hours: 54 hours LEC; 54 hours LAB

This course continues the study of mechatronics, the combination of electronic and mechanical components and systems used in the control and transmission of mechanical power. Topics include the analysis of electric circuits and controls, operator interface terminals, programmable logic controllers (PLCs), electromagnetic devices, analog and digital measurements, sensors, pneumatic devices, and electric motors.

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 330 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. This course offers preparation to become a qualified Mobile Electronics Certified Professional (MECP) installer. This course is not open to students who have taken AT 251. Field trips are required.

ET 253 Industrial Communication Systems Support 4 Units

Prerequisite: ET 115 with a grade of "C" or better

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 also covered. 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 295 Independent Studies in Electronics Technology 1-3 Units

Hours: 54-162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

ET 298 Work Experience in Electronics Technology 1-4 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position, or job related to the electronics industry with a cooperating site supervisor. Students are advised to consult with the Electronics Technology Department faculty to review specific certificate and degree work experience requirements.

General Education: AA/AS Area III(b)

Hours: 60-300 hours LAB

This course provides students with opportunities to develop marketable skills in preparation for employment or advancement within the electronics industry. It is designed for students interested in work experience and/or internships in associate degree level or certificate occupational programs. Course content includes understanding the application of education to the workforce, completion of Title 5 required forms which document the student's progress and hours spent at the work site, and developing workplace skills and competencies. During the semester, the student is required to 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. First-time participants are required to attend a weekly orientation and a final meeting. Returning participants are required to attend the first class meeting, a mid-semester meeting, and a final meeting and may meet individually with the instructor as needed to complete a work site observation and all program forms, receive updates, and assignments. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

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
Corequisite: ET 312
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 312 and 322 with grades of "C" or better
Course Transferable to CSU
Hours: 54 hours LEC; 54 hours LAB

This course covers integrated circuits (ICs) and applications used in industrial and consumer products. Topics include digital theory and applications from standard transistor-transistor logic (TTL) logic circuits to complex circuits built on programmable logic devices (PLDs). Field trips may be required.

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 to design and build advanced projects. It includes work on approved electronics projects outside the scope of typical classroom applications. It covers the process of planning, design, prototyping, and fabrication while building an actual working project. Completed projects are entered in county and statewide technology contests 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.

ET 380 Introduction to Electronic Communications 4 Units

Prerequisite: ET 312 and 322 with grades of "C" or better
Course Transferable to CSU
Hours: 54 hours LEC; 54 hours LAB

This course covers electronic communications including UHF, VHF, microwave, satellite, and fiber optics. AM and FM transmitters, transmission lines, antennas, and receivers are analyzed down to the component level. Propagation, wave theory, decibels, and signal transmission limitations are also covered. Technician safety and proper test equipment use are stressed throughout the course. Field trips may be required.

ET 381 Electronic Communication Regulations 3 Units

Prerequisite: ET 312 and 322 with grades of "C" or better
Advisory: ET 380
Course Transferable to CSU
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 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 may be required.

ET 388 Fiber Optics 4 Units

Prerequisite: ET 302 with a grade of "C" or better
Advisory: ET 380
Course Transferable to CSU
Hours: 54 hours LEC; 54 hours LAB

This course in fiber optics covers optical theory and operation including the complete fiber optic communication system. It includes fiber optic terminology and instruction in the use of tools and equipment associated with fiber optic installation and maintenance. Tests of the fiber optic systems are performed using sophisticated equipment such as optical power meters and optical time domain reflectometers (OTDR). It also includes system design and troubleshooting procedures. A field trip may be required.

ET 420 Microcontrollers and Digital Signal Processors 4 Units

Prerequisite: ET 312 and 322 with grades of "C" or better
Advisory: ET 335
Course Transferable to CSU
Hours: 54 hours LEC; 54 hours LAB

This course is an in-depth study of microcontrollers and digital signal processors (DSP). The focus is on digital concepts, such as data flow, internal architecture, memory, data converters, special registers, and the interfacing of input/output devices, sensors, and motors. Field trips may be required.

ET 425 Introduction to Biomedical Equipment Technology 4 Units

Prerequisite: ET 302 with a grade of "C" or better
Course Transferable to CSU
Hours: 72 hours LEC

This course covers the fundamentals of biomedical equipment and the responsibilities of electronics technicians in the medical device service industry for hospitals, medical device manufacturers, or other service organizations. It includes a detailed study of the theory, operation, and maintenance of hospital equipment, systems and procedures, and the related electronic systems. Additional topics include basic anatomy and physiology as they relate to the biomedical equipment. Field trips are required.

ET 426 Advanced Biomedical Equipment Technology 4 Units

Prerequisite: ET 425 with a grade of "C" or better
Course Transferable to CSU
Hours: 54 hours LEC; 54 hours LAB

This course covers the operation, maintenance, troubleshooting, and certification of biomedical equipment used in the medical device industry. It includes an in-depth, hands-on study of frequently used medical equipment preparing electronic technology students for a biomedical technician internship or trainee position in a hospital, medical device manufacturer, or other service organization. Field trips are required.

ET 490 Advanced Student Projects Laboratory 2 Units

Prerequisite: ET 335 or 380 with a grade of "C" or better
Course Transferable to CSU
Hours: 108 hours LAB

This course provides an opportunity for students to pursue advanced electronics projects to learn and practice skills needed in the construction, installation, maintenance, and repair of electronic devices.

ET 495 Independent Studies in Electronics Technology 1-3 Units

Course Transferable to CSU
Hours: 54-162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

Area: Health & Education
Dean: Dr. Steven Boyd
Coordinator: Dr. Grant Goold
Phone: (916) 484-8843 or (916) 484-8902
Counseling: (916) 484-8572

Emergency Medical Technician (EMT)

see Paramedic, pg. 428

Area: Technical Education
 Dean: Dr. Trish Caldwell
 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 for a solar photovoltaic system using both the SunEye and the Pathfinder sun angle and shade predictor.
- identify typical locations of electrical/mechanical failures in PV systems.
- maximize communication effectiveness by specifying, planning for, and adapting to the specific audience.
- identify and analyze factors that contribute to effective design, development, and delivery of presentations.
- relate the communication process to public speaking situations.
- assess the ways to start a business and which form of business organization should be used.
- explain the importance of a business plan, a financial plan, and a marketing plan.
- describe the financing process and how to access capital.

- apply principles of management and marketing relevant to the small business.
- evaluate financial reports.
- analyze the impact of legal requirements and government regulations as related to the operation of the small business.

Career 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.

See losrios.edu/gainful-emp-info/gedt.php?major=010669C01 for Gainful Employment Disclosure.

Requirements for Certificate	20 Units
BUS 350	Small Business Management/Entrepreneurship.....3
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
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.

(continued on next page)

(Solar Energy Technology Certificate continued)

- identify tools and test equipment necessary for solar photovoltaic panel installations.
- identify different sizes of wire according to American Wire Gauge (AWG) tables.
- 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	14 Units
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***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. Field trips may be 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.

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.

**ENERGY 143 Solar Photovoltaic
Systems Design, Installation,
and Troubleshooting 4 Units**

*Prerequisite: ENERGY 141 with a grade 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. Ten-hour Occupational Safety and Health Administration (OSHA) training is provided. Students must pay the OSHA required fee in order to obtain the OSHA safety card. Field trips may be required.

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

The Engineering program offers courses necessary to transfer to a four-year university where students can complete a bachelor's degree in various branches of engineering.

Most lower division engineering programs require the following ARC courses: Mathematics 400, 401, 402, 420; Physics 410, 421, 431; Chemistry 400; Engineering 401, 413, 420. Students should consult the institution to which they wish to transfer for specific lower division requirements.

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 310 Engineering Survey Measurements 4 Units

Prerequisite: MATH 330 with a grade of "C" or better

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

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 earthwork quantity calculations. This course is intended for civil engineers, but may also be required for other programs.

ENGR 312 Engineering Graphics 3 Units

Advisory: ENGR 305

Course Transferable to UC/CSU

Hours: 36 hours LEC; 72 hours LAB

This course covers the application of graphical tools 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 401 Introduction to Electrical Circuits and Devices 4 Units

Prerequisite: PHYS 421 with a grade of "C" or better

Corequisite: MATH 420

Course Transferable to UC/CSU

Hours: 72 hours LEC

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 495 Independent Studies
in Engineering****1-3 Units***Course Transferable to CSU**Hours: 54-162 hours LAB*

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

Area: English
 Dean: Vicky Maryatt, Interim
 Phone: (916) 484-8101
 Counseling: (916) 484-8572

Degree: A.A. for Transfer - English
 A.A. for Transfer - Elementary Teacher Education
 A.A. - English Communication and Literature
 Department Certificate: Literary Publishing

The Technical Communications Degree and Certificate 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 A.A. for Transfer Degree

The Associate in Arts in English 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 English. Additionally, this degree exposes students to the core principles and practices of the field in order to build a foundation for their future personal, academic, or vocational paths.

The Associate in Arts degree in English 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 English for Transfer (A.A.-T) may be obtained by the completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program outlined below (earning a C or better in these courses) and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

Student Learning Outcomes

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

- analyze rhetorical and literary patterns to extract meaning, whether stated directly or implied
- discuss authors, forms, and movements of literature in English
- define and employ terminology of literary analysis
- compose essays that are generally free of sentence errors and that support a clear thesis with unified paragraphs
- evaluate and integrate research materials to support an original argument
- employ current Modern Language Association (MLA) bibliographic methods and forms

Requirements for Degree 19 Units

ENGWR 303 Argumentative Writing and Critical Thinking Through Literature4

A minimum of 9 units from the following:..... 9

ENGL 310 English Literature (3)
 ENGL 311 English Literature (3)
 ENGL 320 American Literature (3)
 ENGL 321 American Literature (3)

A minimum of 3 units from the following:..... 3¹

ENGL 300 Introduction to Fiction (3)
 ENGL 304 Introduction to Poetry (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 380 Introduction to Shakespeare (3)
 ENGL 382 Introduction to Dramatic Literature (3)
 ENGL 370 Children and Literature (3)

A minimum of 3 units from the following:..... 3²

ENGCW 400 Creative Writing (3)
 ENGL 308 The Graphic Novel and Manga (3)
 ENGL 327 Literature of California (3)
 ENGL 360 Women in Literature (3)
 ENGL 378 Young Adult Literature (3)
 ENGL 392 Science Fiction and Fantasy (3)
 ENGL 403 Film Adaptations (3)

¹Students may also substitute any course from the previous list not already taken to fulfill degree requirements.

²Students may also substitute any course from previous lists not already taken to fulfill degree requirements.

Associate in Arts for Transfer Degree Requirements:

The Associate in Arts in English for Transfer (AA-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

Elementary Teacher Education A.A. for Transfer Degree

The Associate in Elementary Teacher Education for Transfer provides a clearly articulated curricular track for students who wish to transfer to a CSU campus, while also serving the diverse needs of students interested in the breadth and depth of the field of Elementary Teacher Education. Additionally, this degree exposes students to the core principles and practices of the field in order to build a foundation for their future personal, academic, or vocational paths.

The Associate in Arts degree in Elementary Teacher Education for Transfer provides students with a major that fulfills the general requirements of the California State University for transfer. Students with this degree will receive

(continued on next page)

(Elementary Teacher Education A.A. for Transfer Degree continued)

priority admission with junior status to the California State University system. The Associate in Arts degree in Elementary Teacher Education for Transfer (AA-T) may be obtained by the completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program outlined below (earning a C or better in these courses) and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

Student Learning Outcomes

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

- apply the scientific method using inquiry, data collection, quantitative reasoning, and basic mathematical concepts to analyze results
- assess teaching practices and learning conditions through application of child development theories
- evaluate attitudes, actions, and behaviors indicative of a professional educator
- apply analytical reading and writing, research, and critical thinking essential for completing assigned tasks
- explain relationships and interactions between humans and the earth
- apply knowledge of world history and cultures to identify the values of a culture and work with others of diverse cultures
- analyze statistical data
- present information effectively to an intended audience
- compare and contrast various forms and styles of music, artworks, and theatrical performances

Career Opportunities

Public or private instructional assistant or classroom aide, grades K-8; private tutor; publishing and textbook salesperson; curriculum and test developer; teacher, grades K-12 with additional education.

Requirements for Degree		51 Units
BIOL 303	Survey of Biology (4).....	4
or BIOL 310	General Biology (4)	
ECE 312 Child	Development (3).....	3
or PSYC 372	Child Development (3)	
ENGED 324	Introduction to Elementary Teaching with Field Experience (3).....	3
or ECE 350	Introduction to Elementary Teaching with Field Experience (3)	
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)	
GEOG 320	World Regional Geography.....	3
GEOL 305	Earth Science.....	3
GEOL 306	Earth Science Laboratory.....	1
HIST 307	History of World Civilizations to 1500.....	3
HIST 310	History of the United States (3).....	3
or HIST 483	History of the United States - Honors (3)	
MATH 310	Mathematical Discovery.....	3
PS 300	Introduction to Physical Science.....	3
PS 301	Physical Science Laboratory.....	1
POLS 301	Introduction to Government: United States (3).....	3
or POLS 481	Introduction to Government: United States - Honors (3)	
SPEECH 301	Public Speaking.....	3

And a minimum of 3 units from the following:3

ART 300	Drawing and Composition I (3)
MUFHL 300	Introduction to Music (3)
TA 300	Introduction to the Theatre (3)

And a minimum of 6 units from the following:6

ART 430	Art and Children (3)
ECON 302	Principles of Macroeconomics (3)
ENGED 305	Structure of English (3)
ENGED 320	Service Learning: Tutoring Elementary Students in Reading (3)
ENGWR 302	Advanced Composition and Critical Thinking (3)
or ENGWR 482	Honors Advanced Composition and Critical Thinking (3)
SPEECH 361	The Communication Experience (3)

Associate in Arts for Transfer Degree Requirements: The Associate in Arts in Elementary Teacher Education for Transfer (AA-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

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)	
ENGWR 303	Argumentative Writing and Critical Thinking Through Literature (4)	
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)	

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(English Communication and Literature Degree continued)

ENGL 345	Mythologies of the World (3)
ENGL 360	Women in Literature (3)
ENGL 370	Children and Literature (3)
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 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.

DEPARTMENT CERTIFICATE

Literary Publishing Certificate

This certificate benefits students who are interested in the business of publishing literary works. Work required to publish the American River Review forms the core of the certificate. Additional course work focuses on the various genres both as literature and as creative writing.

Student Learning Outcomes

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

- compose literary works using the full process of drafting, receiving feedback, revising, editing, and proofreading.
- examine literary works from various genres, styles, and historical periods.
- critique literary works.
- select literary works for publication.
- edit the literary works of others for publication.
- assemble a collection of literary works for publication.

Career Opportunities

This certificate prepares students for careers in publishing houses of full length or periodical literature. In addition, students may use the skills to work on publications such as yearbooks, creative writing magazines, and newsletters in a commercial or educational setting.

Requirements for Certificate		12 Units
ENG CW 450	College Literary Magazine.....	3
A minimum of 9 units from the following:		9¹
ENG CW 400	Creative Writing (3)	
ENG CW 410	Fiction Writing Workshop (3)	
ENG CW 420	Poetry Writing Workshop (3)	
ENG CW 430	Creative Non-Fiction Writing Workshop (3)	
ENG CW 450	College Literary Magazine (3)	
ENGL 304	Introduction to Poetry (3)	
or ENGL 300	Introduction to Fiction (3)	

¹A second semester of ENG CW 450 may be taken as one of the elective classes.

English - Creative Writing

ENG CW 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. (C-ID ENGL 200)

ENG CW 410 Fiction Writing Workshop 3 Units

Prerequisite: ENGWR 102 with a grade of “C” or better; or placement through the assessment process.
Advisory: ENG CW 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.

ENG CW 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.

ENG CW 421 A Short Course in Poetry Writing 1 Unit

Prerequisite: ENGWR 101 or 102 with a grade of “C” or better; or placement into ENGWR 300 or ENGWR 480 through the assessment process.
Advisory: ENG CW 400
Course Transferable to CSU
Hours: 18 hours LEC

This creative writing course is an abbreviated version of the three-unit Poetry Writing Workshop, ENG CW 420, focusing on the writing of several poems. It examines literary styles in traditional and contemporary poetry and demonstrates revising and editing processes.

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

Prerequisite: ENGWR 101 or 102 with a grade of "C" or better; or placement into ENGWR 300 or ENGWR 480 through the assessment process.

Advisory: ENGCW 400, ENGWR 300, or ENGWR 480

Course Transferable to CSU

Hours: 54 hours LEC

This course introduces the writing of feature-length film scripts. It requires three proposals for projects, one of which is developed through the first act in official screen format, plus scene descriptions for major scenes, character sketches, and plot outlines. Several classic feature films and/or scripts are analyzed for their writing strengths.

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, ENGWR 300, or ENGWR 480

Course Transferable to CSU

Hours: 54 hours LEC; 18 hours LAB

This course provides instruction and editorial staff experience in producing a literary and fine arts magazine. Editorial staff collaborate with art selection or design staff in Art New Media to prepare ARC's college magazine, the American River Review, for national competitions sponsored by organizations such as the Columbia Scholastic Press Association and the Associated Collegiate Press. The course focuses on the selection and editing of literary content, and on the publicity, marketing, fund-raising, and distribution of a magazine. It may be taken four times for credit.

ENGCW 495 Independent Studies in English - Creative Writing 1-3 Units

Course Transferable to CSU

Hours: 54-162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

English - Education**ENGED 305 Structure of English 3 Units**

Prerequisite: ENGWR 300 or 480 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 as it relates to irregularities in modern English. This course is designed for those who plan to teach or who are especially interested in grammar as it relates to writing.

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, if required by the school district, complete a fingerprint clearance through the cooperating school district before they can attend the school site for field work.

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 reading below grade level. The class meets on campus for the first part of the semester for tutor training. Students are then placed at a nearby elementary school for in-depth practice tutoring elementary children in reading. This course offers field experience for teacher preparation.

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: Before students can attend the school site for field work, they are required to show proof of TB clearance. They may also need to complete a fingerprint clearance through the cooperating school district, if the district requires it.

General Education: AA/AS Area III(b)

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course introduces the concepts and issues related to teaching diverse learners in today's contemporary schools, kindergarten through grade 12 (K-12). Topics include teaching as a profession and career, historical and philosophical foundations of the American education system, contemporary educational issues, California's content standards and frameworks, and teacher performance standards. In addition to class time, the course requires a minimum of 45 hours of structured fieldwork in public school elementary classrooms that represent California's diverse student population, and includes cooperation with campus-approved certificated classroom teachers. This course is not open to students who have completed ECE 350. (C-ID EDUC 200)

ENGED 495 Independent Studies in English - Education 1-3 Units

Course Transferable to CSU

Hours: 54-162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

English - Literature**ENGLT 300 Introduction to Fiction 3 Units**

Prerequisite: ENGWR 300 or 480 with a grade of "C" or better

Advisory: ENGWR 301, 303, or 481

General Education: AA/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. It typically examines at least twenty short stories and at least three novels, critically analyzing plot, setting, character, theme, and style. This course includes fiction written in English, as well as fiction in translation.

ENGLT 304 Introduction to Poetry 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 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: 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 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 or 480 with a grade of "C" or better

Advisory: ENGWR 301, 303, or 481

General Education: AA/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 contexts of particular works and authors are also covered. Whenever possible, works are read in their entirety. (C-ID ENGL 160)

ENGLT 311 English Literature 3 Units

Prerequisite: ENGWR 300 or 480 with a grade of "C" or better

Advisory: ENGWR 301 or 481

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 representative works in English literature from the late eighteenth century through the present, covering the Romantic, Victorian, modernist, and postmodern periods. Prose, poetry, and drama are represented, and whenever possible, works are read in their entirety. (C-ID ENGL 165)

ENGLT 320 American 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 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. (C-ID ENGL 130)

ENGLT 321 American Literature 3 Units

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

Advisory: ENGWR 301 or 303

General Education: AA/AS Area I; CSU Area C2; IGETC Area 3B

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course surveys representative American literature from the post-Civil War period until the present, with consideration of important aspects of American literary history. Readings - from a variety of stories, novels, plays, and poetry - and discussion highlight the multicultural nature of American literature and society. (C-ID ENGL 135)

ENGLT 327 Literature of California 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 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 or 480 with a grade of "C" or better
Advisory: ENGWR 301 or 481
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. (C-ID ENGL 140)

ENGLT 341 World Literature 3 Units

Prerequisite: ENGWR 300 or 480 with a grade of "C" or better
Advisory: ENGWR 301 or 481
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 late seventeenth century to the present. In addition to significant works in the Western tradition, masterpieces of non-Western literature from Asia, Africa, the Middle East and Central and South America are studied. The entire range of genres is represented, and, whenever possible, works are read in their entirety. (C-ID ENGL 145)

ENGLT 345 Mythologies of the World 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 of mythic literature provides an introduction to characters and themes in stories from world literature: creation stories, heroic journeys, and moments of transcendent transformation. It explores the timeless metaphors of these stories, metaphors which continue to not only influence characters and stories in modern literature, but also captivate contemporary readers.

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 365 Introduction to Gay, Lesbian, Bisexual and Transgender Literature 3 Units

Prerequisite: ENGWR 300 with a grade of "C" or better
Advisory: ENGWR 301
Course Transferable to CSU
Hours: 54 hours LEC

This course surveys representative literature concerning gay, lesbian, bisexual, transgender, and queer or questioning (GLBTQ) themes and issues as written by or about GLBTQ people from throughout its literary history to the present day. The comprehensive literary study includes analysis of significant historical and cultural influences.

ENGLT 370 Children and Literature 3 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
General Education: AA/AS Area I; CSU Area C2
Course Transferable to CSU
Hours: 54 hours LEC

This course is a survey of high-quality literature, past and present, created for children, and of the criteria for selecting, evaluating, and discussing children's literature. It includes discussion of the history of children's literature and current issues such as censorship, literacy, multiculturalism, and diversity. The course is intended for prospective teachers, early childhood education (ECE) majors, librarians, parents, those interested in writing or publishing children's books, and those who enjoy children's literature. It includes reading to children in a formal group setting, which may include an off-campus location.

ENGLT 378 Young Adult Literature 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 presents an overview of young adult literature and is designed to incorporate the ever changing nature of this genre. The literature addressed reflects themes of interest to young people. Topics include a review of the history of young adult literature, readings of contemporary award-winning young adult literature, as well as a look at some of the classics from the past. Authors may include Suzanne Collins, Orson Scott Card, Markus Zusak, Yann Martel, Alexandre Dumas, J. K. Rowling, Sandra Cisneros, Lois Lowry, John Knowles, and J. D. Salinger. Censorship concerns and culturally diverse selections also form a core part of the course. This course includes an analysis of literary elements, an examination of 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 or 480 with a grade of "C" or better
Advisory: ENGWR 301 or 481
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 various historical periods and cultures are covered, with an emphasis on the analysis of plot, characterization, setting, theme, and other literary elements of drama. Attendance at a live theater production is required.

ENGLT 392 Science Fiction and Fantasy 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 explores the literature of science fiction and fantasy. It includes an exploration of the roots of these genres: the fantastic, the Gothic, terror and horror; and the development of their diverse contemporary forms. Texts may include selections from television, film, anime, short stories, and novels.

ENGLT 403 Film Adaptations 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 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 495 Independent Studies in Literature 1-3 Units

Course Transferable to CSU
Hours: 54-162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

English - Reading**ENGRD 12 Reading Center: Individualized Support Skills for ENGRD 14 .5 Units**

Corequisite: Concurrent enrollment in ENGRD 14.
Hours: 9 hours LEC

This course offers supplemental instruction in basic reading skills for those concurrently enrolled in ENGRD 14. Pass/No Pass only.

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 vocabulary development and basic reading comprehension.

ENGRD 15 Basic Reading Skills 3 Units

Prerequisite: ENGRD 14 with a "C" or better, or 1.5 units of ENGRD 54 with a "P" AND ENGRD 55 with a "P," or placement through the assessment process.
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 ENGRD 50, Reading Center: Individualized Support Skills for ENGRD 15, 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.

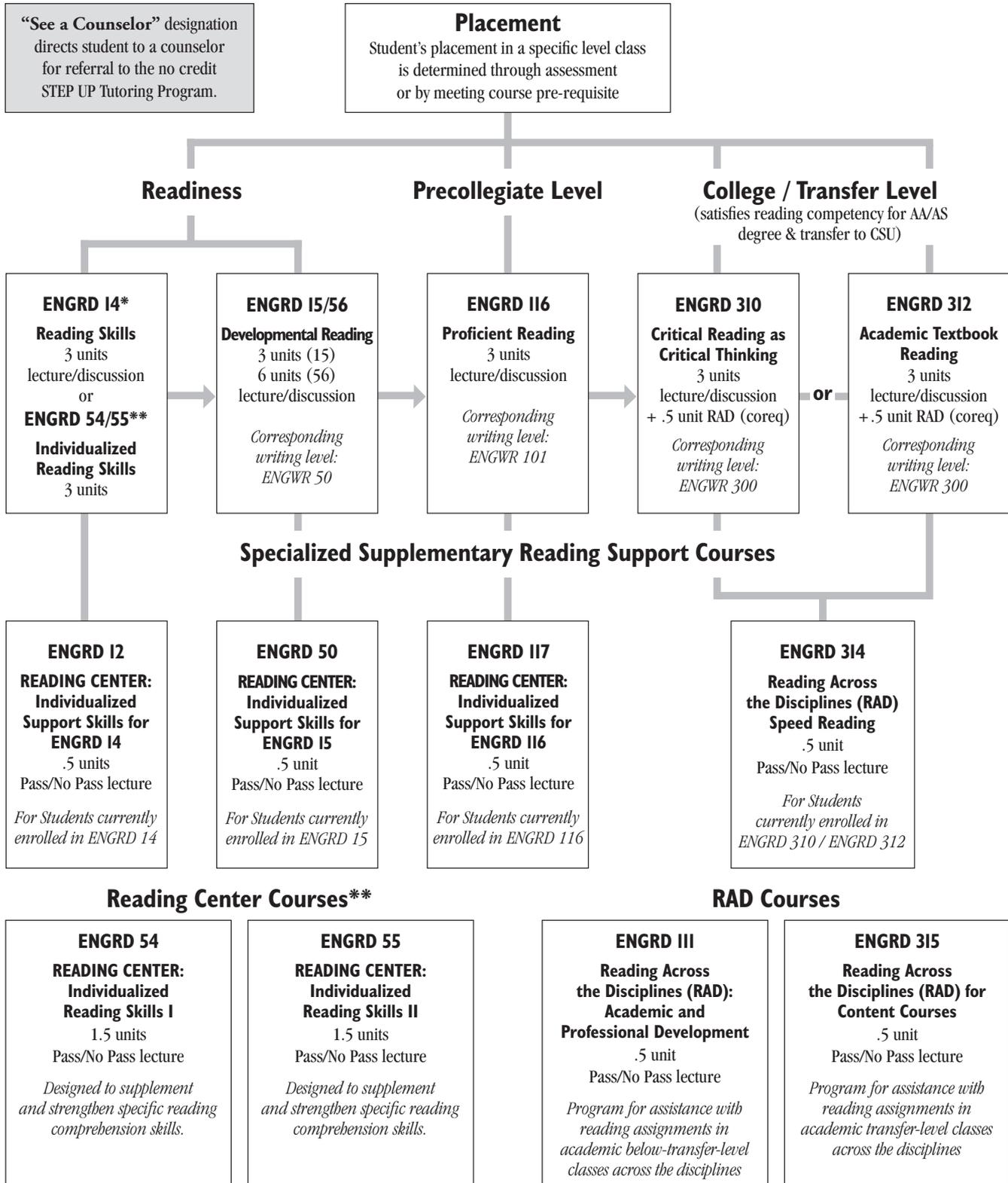
ENGRD 50 Reading Center: Individualized Support Skills for ENGRD 15 .5 Units

Corequisite: Concurrent enrollment in ENGRD 15.
Hours: 9 hours LEC

This course offers supplemental practice in beginning reading skills for those concurrently enrolled in ENGRD 15. Pass/No Pass only.

Reading Courses

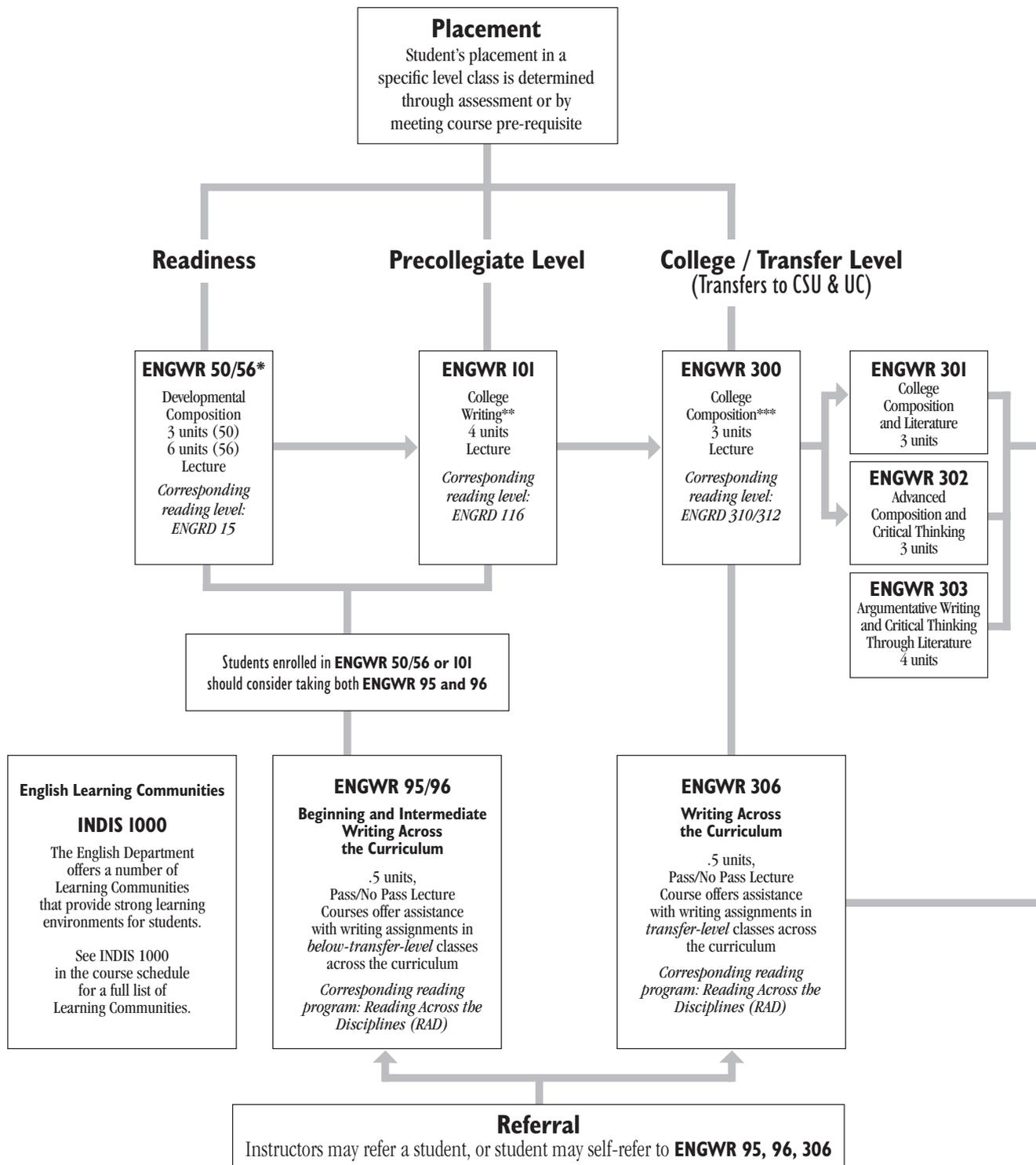
with corresponding writing courses



* Fulfills prerequisite for ENGWR 50.
** ENGRD 54 and 55 taken together fulfills prerequisite for ENGWR 50 and ENGRD 15.

Composition Courses

with corresponding reading courses



* ENGRD 14 or ENGRD 54 and 55 fulfills the prerequisite for ENGWR 50.
 ** Prerequisite for ENGWR 300.
 *** Fulfills writing competency requirement for AA/AS degree and prerequisite for ENGWR 301, 302, and 303.

ENGRD 54 Reading Center: Individualized Reading Skills I 1.5 Units

Prerequisite: Placement through the assessment process.
Advisory: ESLR 50 with a "C" or better for non-native speakers.
Hours: 27 hours LEC

The course offers individualized instruction in basic reading skills in specific areas. Course offerings are based on needs and abilities. This course starts with work at the paragraph level before moving into longer selections. Subjects include vocabulary acquisition, locating an essay's thesis and major details, textbook reading, and study skills. Pass/No Pass only.

ENGRD 55 Reading Center: Individualized Reading Skills II 1.5 Units

Prerequisite: Placement through the assessment process.
Advisory: ESLR 50 with a "C" or better for non-native speakers.
Hours: 27 hours LEC

This course offers individualized instruction focused on discrete reading comprehension skills and application of those skills to persuasive and expository essays, textbooks, and fiction. Subjects include SQ3R (Study, Question, Read, Recite, and Review), patterns of development, and inferential comprehension. Pass/No Pass only.

ENGRD 56 Integrated Reading, Writing and Study Skills 6 Units

Same As: ENGWR 56
Prerequisite: ENGRD 14 and ENGWR 43 with grades of "C" or better; 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: Academic and Professional Development .5 Units

Corequisite: Enrollment in a below transfer-level course.
Hours: 9 hours LEC

This course offers reading skills development for students below transfer-level as applied to various content-area courses. Topics include the following: strategies for textbook comprehension, note-taking, annotating, mastering disciplined-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. Pass/No Pass only.

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: Individualized Support Skills for ENGRD 116 .5 Units

Corequisite: Concurrent enrollment in ENGRD 116.
Hours: 9 hours LEC

This course offers instruction in intermediate reading skills. It provides supplementary practice to students who are concurrently enrolled in ENGRD 116. Pass/No Pass only.

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); CSU Area A3
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.

ENGRD 314 Reading Across the Disciplines: Speed Reading .5 Units

Corequisite: ENGRD 310 or 312
Course Transferable to CSU
Hours: 9 hours LEC

This course offers reading skills to transfer-level students as applied to various content-area courses. Topics include the following: assessing the reading process and material to employ appropriate strategies to meet the purpose for reading; utilize ones reading rates and style based on purpose and material; utilize college-level, discipline-based vocabulary; and master the skills needed to critically read and analyze future transfer level courses and texts. Pass/No Pass only.

**ENGRD 315 Reading Across the Disciplines
for Content Courses .5 Units**

Corequisite: another transfer-level content-area course
Course Transferable to CSU
Hours: 9 hours LEC

This course offers reading skills to transfer-level students 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. Pass/No Pass only.

**ENGRD 495 Independent Studies in English -
Reading 1-3 Units**

Course Transferable to CSU
Hours: 54-162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in Reading, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in Reading and secure approval. Only one independent study for each catalog course will be allowed.

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 need to enroll in ENGRD 1000 Reading Across the Disciplines for 0.5 unit of lecture credit. Students are placed in ENGRD 111, ENGRD 209, or ENGRD 315. This TBA course includes 9 hours of instruction in which the following topics will be covered: strategies for textbook comprehension, note-taking, annotating, mastering discipline-based vocabulary, paraphrasing, reading graphics, test-taking, speed reading, and research techniques. ENGRD 111, ENGRD 209, and ENGRD 315 may be taken one time each for credit when used in conjunction with a different content area course. 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 50 Developmental Composition 3 Units

Prerequisite: ENGRD 14 or ENGWR 43 with a grade of "C" or better; or placement through the assessment process.; or ENGRD 54 AND ENGRD 55 each with a grade of Pass
Advisory: BUSTEC 300
Hours: 54 hours LEC

This course focuses on developmental writing skills, emphasizing the connection between writing and reading with the goal of building fluency. It includes writing in response to assigned readings as well as practicing the writing process: prewriting, thesis development and organization of ideas, drafting of essays, and revision.

ENGWR 51 Developmental Writing 4 Units

Prerequisite: 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 and ENGWR 43 with grades of "C" or better; 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 94 Intermediate Writing
in the Disciplines (WID) .5-1 Units**

Hours: 9-18 hours LEC

This course offers small and large group instruction on the writing processes and writing strategies appropriate to composing paragraphs, short essays, or reports that follow the guidelines and requirements of a specific discipline. Topics vary according to need and may include the principles of the writing process, analysis of discipline-specific writing assignments, strategies for revision, and research and documentation skills such as APA or MLA. In order to take this course, students must be enrolled in at least one other course that requires writing. Pass/No Pass only.

**ENGWR 95 Beginning Writing
Across the Curriculum (WAC) .5 Units**

Advisory: BUSTEC 300 or CISC 300
Hours: 9 hours LEC

This course offers both individualized and group instruction in appropriate writing processes and strategies for a variety of basic written assignments in all academic disciplines. Topics include understanding writing assignments, strategies for revision, and proofreading. Pass/No Pass only.

**ENGWR 96 Intermediate Writing
Across the Curriculum (WAC) .5 Units**

Advisory: BUSTEC 300 or CISC 300
Hours: 9 hours LEC

This course offers both individualized and group instruction in appropriate writing processes and strategies for a variety of college-level writing assignments in all academic disciplines. Topics include understanding writing assignments, strategies for revision, and basic documentation. Pass/No Pass only.

ENGWR 101 College Writing 4 Units

Prerequisite: ENGWR 50 or 51 with a grade of "C" or better; or placement through the assessment process.
Hours: 72 hours LEC

This course focuses on the connections between critical thinking, writing, and reading that are necessary for the independent development of essays in ENGWR 300 and other transfer-level courses. It emphasizes writing in response to various reading selections, including at least one full-length work. The essay writing process includes prewriting, thesis development and organization of ideas, drafting of essays, and revision. The course also requires outside research and includes an introduction to basic formatting and referencing of sources using MLA-style documentation. Written final drafts totaling at least 4,500 words are required.

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 300 College Composition 3 Units

Prerequisite: ENGWR 101 or 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 (6,000 words minimum for course) using MLA documentation and format. Reading assignments include a variety of transfer-level texts of substantial length. This course is not open to students who have successfully completed ENGWR 480. (C-ID ENGL 100)

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 (6,000 words minimum) generalize from the texts to present carefully reasoned arguments. At least one essay includes citations from secondary sources, documented according to current MLA format. Not open to students who have successfully completed ENGWR 481. (C-ID ENGL 120)

ENGWR 302 Advanced Composition and Critical Thinking 3 Units

Prerequisite: ENGWR 300 or 480 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 (6,000 words minimum) draw from the texts to present carefully reasoned arguments. At least one essay includes citations from secondary sources, documented according to current MLA format. This course is not open to students who have successfully completed ENGWR 482. (C-ID ENGL 105)

ENGWR 303 Argumentative Writing and Critical Thinking Through Literature 4 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: 72 hours LEC

Through the study of complex literary works in all major genres, this course offers instruction in analytical, critical, and argumentative writing; critical thinking; research strategies; information literacy; and proper documentation. Close reading skills and the aesthetic qualities of literature are also studied. A minimum of 6000 words of formal writing is required. Attendance at readings, plays, and/or films may be required. (C-ID ENGL 105; C-ID ENGL 110; C-ID ENGL 120)

ENGWR 304 Advanced Writing in the Disciplines (WID) .5-1 Units

Course Transferable to CSU
Hours: 9-18 hours LEC

This course offers small and large group instruction on the writing processes and writing strategies necessary to compose academic essays and reports that follow the guidelines and requirements of a specific discipline. Additionally, approaches to composing longer, more complex writing tasks following a discipline's style are taught. Topics vary according to need and may include the principles of the writing process, analysis of discipline-specific writing assignments, strategies for revision, and research and documentation skills such as APA or MLA. In order to take this course, students must be enrolled in at least one other transfer-level course. Pass/No Pass only.

ENGWR 306 Advanced Writing Across the Curriculum (WAC) .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. Pass/No Pass only.

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. This course is not open to students who have successfully completed ENGWR 300. (C-ID ENGL 100)

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. This course is not open to students who have successfully completed ENGWR 301. (C-ID ENGL 120)

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. This course is not open to students who have successfully completed ENGWR 302. (C-ID ENGL 105)

ENGWR 495 Independent Studies in English - Writing 1-3 Units

*Course Transferable to CSU
Hours: 54-162 hours LAB*

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

Area: Humanities
 Dean: Kate Jaques
 Phone: (916) 484-8653
 Counseling: (916) 484-8572

Department Certificates:
 Intermediate Proficiency in ESL
 Advanced Proficiency in ESL
 Advanced-High Proficiency in ESL

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.

DEPARTMENT CERTIFICATES

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.

Requirements for Certificate		16 Units
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

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.

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.

Requirements for Certificate		16 Units
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.

Requirements for Certificate		16 Units
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)	

English as a Second Language

ESL 34 Novice-High Skills Lab .5-1.5 Units

Prerequisite: ESLL 20, ESLR 20, or ESLW 20 with a grade of "C" or better; or placement through the assessment process.

Hours: 27-81 hours LAB

This course develops, expands, and reinforces multiple English language skills at the novice-high level in an independent and/or small group environment. Coursework includes integrated study topics relative to vocabulary and study skills, reading and grammar use, idiomatic language study and application, conversation and listening skills, and assorted integrated software programs. Late registration is allowed as long as space is available and with the permission of the instructor. This course may be taken up to 3 times, for a total of 1.5 units, using different modules. This course is not a substitute for other ESL courses. Pass/No Pass only.

ESL 44 Intermediate-Low Skills Lab .5-1.5 Units

Prerequisite: ESLL 30, ESLR 30, or ESLW 30 with a grade of "C" or better; or placement through the assessment process.

Hours: 27-81 hours LAB

This course develops, expands, and reinforces multiple English language skills at the intermediate-low level in an independent and/or in small group environment. Coursework includes integrated study topics relative to vocabulary and study skills, reading and grammar use, idiomatic language study and application, conversation and listening skills, and assorted integrated software programs. Late registration is allowed as long as space is available and with the permission of the instructor. This course may be taken up to 3 times, for a total of 1.5 units, using different modules. This course is not a substitute for other ESL courses. Pass/No Pass only.

ESL 54 Intermediate-Mid Skills Lab .5-1.5 Units

Prerequisite: ESLL 40, ESLR 40, or ESLW 40 with a grade of "C" or better; or placement through the assessment process.

Hours: 27-81 hours LAB

This course develops, expands, and reinforces multiple English language skills at the intermediate-mid level in an independent and/or small group environment. Coursework includes integrated study topics relative to vocabulary and study skills, reading and grammar use, idiomatic language study and application, conversation and listening skills, and assorted integrated software programs. Late registration is allowed as long as space is available and with the permission of the instructor. This course may be taken up to 3 times, for a total of 1.5 units, using different modules. This course is not a substitute for other ESL courses. Pass/No Pass only.

ESL 55 Intermediate-Mid Integrated Reading and Writing 6 Units

Prerequisite: ESLR 40 and ESLW 40 with grades of "C" or better; or placement through the assessment process.

Hours: 108 hours LEC

This intermediate-mid level integrated-skills course for non-native speakers of English is an accelerated pathway to complete 50-level coursework in reading and writing. This course integrates two existing courses, ESLR 50 (Intermediate-Mid Reading) and ESLW 50 (Intermediate-Mid Writing) and introduces academic reading skills through analyzing readings from a number of rhetorical styles as well as techniques and processes essential to reading comprehension and essay writing. Language instruction focuses on strengthening individual proofreading and editing skills. Completion of this course is equivalent to completion of both ESLW 50 and ESLR 50 and serves as a prerequisite to ESLR 310 and ESLW 310. This course is not open to students who have completed ESLW 50 and/or ESLR 50.

ESL 56 Intermediate-Mid Integrated Reading, Listening, and Speaking 4 Units

Prerequisite: ESLL 40 and ESLR 40 with grades of "C" or better; or placement through the assessment process.

Corequisite: ESL 55

Hours: 72 hours LEC

This intermediate-mid level integrated-skills course for non-native speakers of English, along with ESL 55, is an accelerated pathway to complete 50-level coursework in reading, writing, listening, and speaking skills. This course integrates two existing courses, ESLL 50 (Intermediate-Mid Listening and Speaking) and ESLR 50 (Intermediate-Mid Reading), and includes listening and reading comprehension strategies, oral skills for discussing ideas from reading and listening passages, and application of critical thinking skills, vocabulary, and pronunciation in oral discussions. Completion of this course is equivalent to completion of both ESLL 50 and ESLR 50 and serves as a prerequisite to ESLL 310 and ESLR 310. This course is not open to students who have completed ESLL 50 and/or ESLR 50.

ESL 94 Intermediate-High Skills Lab .5-1.5 Units

Prerequisite: ESL 55, ESL 56, ESLG 50, ESLL 50, ESLR 50, or ESLW 50 with a grade of "C" or better; or placement through the assessment process.

Hours: 27-81 hours LAB

This course develops, expands, and reinforces multiple English language skills at the intermediate-high level in an independent and/or in small group environment. Coursework includes integrated study topics relative to vocabulary and study skills, reading and grammar use, idiomatic language study and application, conversation and listening skills, workplace skills, composition and writing, and assorted integrated software programs. Late registration is allowed as long as space is available and with the permission of the instructor. This course is not a substitute for other ESL courses. This course may be taken up to three times for a total of 1.5 units, using different modules. Pass/No Pass only.

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: 13.5-54 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 is graded 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).

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 310 Intermediate-High Listening and Speaking 4 Units

Prerequisite: ESLL 50 OR ESL 56 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**

Prerequisite: Placement through the assessment process.
Advisory: One year of adult school and concurrent enrollment in ESL Writing and Listening/Speaking courses at the student's assessed levels are highly recommended.
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 ESL Listening and Speaking and Writing courses at the student's assessed level(s).
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 vocabulary and readings at the Intermediate-Low level. It emphasizes developing reading skills, building vocabulary, and increasing fluency. Additional class activities include discussing and writing about readings.

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.

ESLR 310 Intermediate-High Reading 4 Units

Prerequisite: ESLR 50, OR both ESL 55 and ESL 56, with a grade of "C" or better; or, for those not previously enrolled in an ESL reading course within the Los Rios District, placement through the assessment process.
Advisory: Concurrent enrollment in ESL Listening and Speaking and Writing courses at the student's assessed level(s).
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 at the Intermediate-High level 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.

English as a Second Language - Writing**ESLW 20 Novice Writing 4 Units**

Prerequisite: Placement through the assessment process
Advisory: One year of adult school and concurrent enrollment in ESL Reading and Listening/Speaking courses at the student's assessed levels are highly recommended.
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 other ESL skills and/or an ESL Center course 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, paragraph structures, and a three-paragraph essay format 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.
Advisory: Concurrent enrollment in other ESL skills and/or an ESL Center course at the student's assessed level.
Hours: 72 hours LEC

This intermediate-low course, intended for non-native speakers of English, provides brief practice in writing paragraphs with a clear beginning, middle, and end. It also introduces how to organize and focus paragraphs within basic essay structure. The writing processes introduced include multiple drafts of essays. In the process of writing multiple drafts, critical thinking skills and grammar and sentence structure in writing are also stressed.

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.
Advisory: Concurrent enrollment in other ESL skills and/or an ESL Center 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 310 Intermediate-High Writing 4 Units

Prerequisite: ESLW 50 OR ESL 55 with a grade of "C" or better OR, for those not previously enrolled in an ESL writing course within the Los Rios District, placement through the assessment process.
Advisory: Concurrent enrollment in other ESL skills and/or an ESL Center course at the student's assessed level.
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 and/or an ESL Center course at the student's assessed level.
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.

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
 Department Certificates:
 Apparel Construction
 Fashion Entrepreneur
 Fashion Illustration
 Fashion Retailing
 Patternmaking and Draping
 Runway Design

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 and 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	Fashion Illustration II.....	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

This certificate provides the skills necessary to coordinate original design concepts with manufacturing, marketing, and merchandising practices. Course work concentrates on apparel construction techniques, pattern drafting, historic and current fashion trends, hand and computer illustration, textiles, and entrepreneurial opportunities as they relate to the fashion industry.

Student Learning Outcomes

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

- identify and evaluate opportunities to start a design business in the fashion industry.
- analyze fashion fundamentals, fashion trends, fashion marketing, and global influences, as they relate to changes within the fashion industry.
- identify characteristics of various fibers, yarns, finishes, and fabrics as they relate to garments.
- communicate an idea or concept through a flat sketch or illustration utilizing free-hand and computer-generated techniques.
- utilize draping techniques to create original garment designs.
- construct patterns by computer generation and the flat pattern method.
- conceive designs, construct patterns, and sew garments to be shown in a fashion show.
- describe fashion and style features of historical and contemporary periods.

(continued on next page)

(Fashion Design Certificate continued)

- create sample constructions utilizing basic apparel sewing skills.
- construct a garment with appropriate embellishment applications.
- research and identify apparel details, styles, and elements of design.

Career Opportunities

This certificate prepares students for entry-level jobs in apparel production companies, apparel manufacturing plants, designer workrooms, and custom sewing workrooms. Examples of careers in Fashion Design include Assistant Designer, Customer Services, Designer, Design Room Assistant, Fashion Illustrator, Fashion Stylist, First Pattern Maker, Manufacturer’s Sales Representative, Piece Goods Buyer, Product Specialist, Quality Controller, Sample Maker, Sewing Room Supervisor, Tailor, Textile Colorist, Textile Croquis Painter, Textile Designer, and Trim Buyer.

See losrios.edu/gainful-emp-info/gedt.php?major=011123C01 for Gainful Employment Disclosure.

Requirements for Degree and 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	Fashion Illustration II .....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 382	Collection Design and Production .....3
FASHN 398	Fashion Entrepreneur.....3
A minimum of 3 units from the following:.....3	
FASHN 359	Knitwear Construction (1.5)
FASHN 362	Tailoring Techniques (3)
FASHN 363	Fashion Accessories and Embellishments (1.5)
FASHN 380	Computer Patternmaking (3)
FASHN 381	Couture Draping for Eveningwear (3)

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 Opportunities

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. It also prepares students for self-employment or entrepreneurship.

See losrios.edu/gainful-emp-info/gedt.php?major=011125C01 for Gainful Employment Disclosure.

Requirements for Degree and Certificate	33 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	Fashion Illustration II .....3
FASHN 393	Fashion Promotion .....3
FASHN 395	Visual Merchandising.....3
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 312	Retailing (3)
MKT 314	Advertising (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.

DEPARTMENT CERTIFICATES

Apparel Construction Certificate

This certificate 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 prepares students for entry-level jobs in apparel production companies, designer workrooms, and custom sewing workrooms.

Requirements for Certificate	15 Units
FASHN 300	Introduction to the Fashion Industry .....3
FASHN 310	Fashion Analysis/Clothing Selection.....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 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.
- research current trends, formulate stock plans, and calculate market purchases.
- formulate a business plan that relates to a specific fashion business.
- compare and analyze the technical, economic, and global influences on fashion marketing.

Career Opportunities

This certificate prepares students to become an entrepreneur in the fashion industry. It addresses the creation of a fashion-oriented business. Career opportunities exist in visual merchandising, retail buying, Internet-based businesses, and small boutiques.

See losrios.edu/gainful-emp-info/gedt.php?major=011128C01 for Gainful Employment Disclosure.

Requirements for Certificate	15 Units
FASHN 300 Introduction to the Fashion Industry	3
FASHN 395 Visual Merchandising	3
FASHN 397 Fashion Retail Buying	3
FASHN 398 Fashion Entrepreneur	3
A minimum of 3 units from the following:	3
ARTPH 370 Fashion, Wedding, and Portrait Photography (3)	
FASHN 393 Fashion Promotion (3)	
MKT 310 Selling Professionally (3)	
MKT 312 Retailing (3)	
MKT 314 Advertising (3)	

Fashion Illustration Certificate

This certificate provides the skills to be a fashion illustrator. Utilizing the elements and principles of design, topics include the awareness of apparel details and styles, drawing flats and fashion illustrations, and the creation of a personal style. Both freehand and computer illustration techniques are utilized.

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 certificate 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 Drawing and Composition I	3
ART 304 Figure Drawing I	3
FASHN 310 Fashion Analysis/Clothing Selection	3
FASHN 342 Fashion Illustration	3
FASHN 344 Fashion Illustration II	3

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.
- describe the characteristics of various textile fabrications in relation to their use in textile items.
- assess the role of various advertising media as related to the fashion industry including newspaper, television, radio, and the internet.
- compare and contrast various retail locations, including shopping centers and malls, central business districts, and nontraditional locations, such as airports and hospitals.

Career 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 Fashion Illustration II	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)	
FASHN 393 Fashion Promotion (3)	
MKT 312 Retailing (3)	

Patternmaking and Draping Certificate

This certificate is intended for students who have completed the Apparel Construction Certificate and need to obtain a higher skill level in the field. It explores draping and advanced apparel construction techniques, and develops beginning, advanced, and computer patternmaking skills. It offers students the necessary sewing and patternmaking skills to enter the job market.

Student Learning Outcomes

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

- create samples for a technique book.
- identify appropriate fabrics, notions, and tools for a given project.
- analyze basic pattern alterations and apply them to commercial and custom patterns.
- create patterns using flat-pattern or draping methods.
- construct a garment utilizing basic or advanced sewing construction techniques.

Career Opportunities

This certificate prepares students for entry-level jobs in apparel production and manufacturing companies, designer workrooms, and custom sewing workrooms. It also prepares students for self-employment or entrepreneurship. Examples of careers in fashion design include Assistant Designer, CADD Technician, First Pattern Maker, Production Pattern Maker, Sample Maker, Sewing Room Supervisor, and Tailor.

Requirements for Certificate 12 Units

FASHN 374	Pattern Making and Design.....	3
FASHN 378	Advanced Pattern Making and Design.....	3
FASHN 379	Draping.....	3
A minimum of 3 units from the following: 3		
FASHN 362	Tailoring Techniques (3)	
FASHN 380	Computer Patternmaking (3)	
FASHN 381	Couture Draping for Eveningwear (3)	

Runway Design Certificate

This certificate is intended for students who have completed the Patternmaking and Draping Certificate and need to obtain a higher level of competency in the field. It explores the social, cultural, and environmental influences of fashion trends on fashion design. It develops freehand and computer illustration techniques commonly used in the fashion industry. Apparel construction techniques are combined with patternmaking and draping skills to create couture quality garments. This program provides the necessary skills to create a garment for the runway, as well as exploring entrepreneurial opportunities.

Student Learning Outcomes

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

- analyze and sketch style variations and interpret them in fabric.
- design and organize a fashion apparel line.
- recommend appropriate sewing equipment, supplies, and techniques for a given project.
- research entrepreneur opportunities and market segments in the fashion industry.
- create original patterns using flat pattern methods, draping techniques, or computer patternmaking software.

- construct a garment from an original pattern utilizing advanced sewing construction techniques.

Career Opportunities

This certificate prepares students for entry level design-related jobs in apparel production companies, designer workrooms, and custom sewing workrooms. It also prepares students for self-employment or entrepreneurship. Examples of careers in Fashion Design include Assistant Designer, Designer, Design Room Assistant, Fashion Illustrator, Fashion Stylist, First Pattern Maker, Sample Maker, Sewing Room Supervisor, and Tailor.

Requirements for Certificate 16.5 Units

FASHN 342	Fashion Illustration.....	3
FASHN 344	Fashion Illustration II.....	3
FASHN 359	Knitwear Construction (1.5).....	1.5
or FASHN 363	Fashion Accessories and Embellishments (1.5)	
FASHN 382	Collection Design and Production.....	3
A minimum of 6 units from the following: 6		
FASHN 362	Tailoring Techniques (3)	
FASHN 380	Computer Patternmaking (3)	
FASHN 381	Couture Draping for Eveningwear (3)	
FASHN 398	Fashion Entrepreneur (3)	

Fashion

FASHN 300 Introduction to the Fashion Industry 3 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 and ESLW 340.

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 social, political, cultural, technological, and environmental influences are reflected in current fashion trends. Attitude of dress, aesthetics, image projection, and gender roles are explored as a form of silent communication. Consumer buying behavior and the response towards fashion trends are examined from varying generational viewpoints. Other aspects of fashion analysis include identifying apparel details, styles, and utilizing the elements and principles of design as they relate to fashion.

FASHN 320 Textiles 3 Units

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 fabrics as they relate to clothing and home furnishings.

FASHN 330 History of Western World Fashion 3 Units

*Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
General Education: AAIAS 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

*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: 9-18 hours LEC; 27-54 hours LAB*

This course covers the factors that influence historical costume design and production included. 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. Not open to those who have completed TA 434.

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 Fashion Illustration II 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 builds on the skills acquired in FASHN 342. Emphasis is placed on advanced design and illustration skills utilizing computer software. Topics include creating custom brushes and symbols, digital textile design and technical flats. The design process and layout techniques for fashion presentations are also introduced.

FASHN 357 Apparel Construction I 3 Units

*Course Transferable to CSU
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
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. Current 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: MATH 25 or MATH 41 with a grade of "C" or better or placement through the placement process; AND eligible for ENGRD 116 and ENGWR 102 OR ESLR 320 and ESLW 320.
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 grades of "C" or better
Course Transferable to CSU
Hours: 36 hours LEC; 54 hours LAB*

This course covers the creation of full-scale patterns, using advanced patternmaking techniques that include pattern drafting, flat patterning, duplicating ready-to-wear and grading. Full-scale garments are created from original designs, with an emphasis on fit and construction. Field trips may be required.

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 374 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 FASHN 374 Patternmaking. Working from a designer's sketch or photograph, patterns are drafted and completed using computer software.

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 grades 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.

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 3 Units

Course Transferable to CSU
Hours: 36 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 is 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

Advisory: Eligible for MATH 32 or MATH 42.
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, as well as marketing and selling techniques. A model business plan is developed by exploring resources necessary to be successful in a fashion business.

FASHN 495 Independent Studies in Fashion 1-3 Units

Course Transferable to CSU
Hours: 54-162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

FASHN 498 Work Experience in Fashion 1-4 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position, or job related to fashion with a cooperating site supervisor. Students are advised to consult with the Fashion Department faculty to review specific certificate and degree work experience requirements.

General Education: AA/AS Area III(b)
Course Transferable to CSU
Hours: 60-300 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 Title 5 required forms which document the student's progress and hours spent at the work site, and developing workplace skills and competencies. During the semester, the student is required to 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. First-time participants are required to attend a weekly orientation and a final meeting. Returning participants are required to attend the first class meeting, a mid-semester meeting, and a final meeting and may meet individually with the instructor as needed to complete a work site observation and all program forms, receive updates, and assignments. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Dean: Steven Segura
 Director: Albert Iannone
 Phone: (916) 570-5000
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Degree: A.A. - Fire Technology
 Certificate: Fire Technology
 Firefighter Recruit Academy
 Department Certificates:
 Fire Investigation 1A
 Fire Investigation 1B
 Fire Investigation 2A
 Fire Investigation 2B
 Fire Management 1
 Training Instructor 1A
 Training Instructor 1B
 Training Instructor 1C
 USDA Basic Academy
 USDA Advanced Academy

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 (ICS)
- compare and contrast the makeup of a moderate size fire department with a large fire department
- describe the components of firefighting personnel protective equipment (PPE)
- compare and contrast modern PPE with antiquated PPE
- analyze simulated fire situations for indicators of flashover versus backdraft potential and prescribe mitigation measures to prevent them from occurring
- assess the fundamentals of physical science as they relate to the fire services: measurements; energy and work theories; power and transfer of heat principles; the laws of matter and the conservation of energy; and the exothermic chemical reaction called combustion
- classify and compare various types of municipal water systems
- describe the fundamentals of building construction and apply this knowledge to fire situations where forcible entry and overhaul evolutions may weaken the already fire-weakened structure
- compare and contrast fire prevention versus fire suppression efforts
- draft a pre-fire plan
- evaluate and analyze the rate of fire spread in a structure fire
- explain the physical and chemical properties of fire
- describe how ICS is used by fire departments at emergencies
- compare and contrast the makeup of a fully paid department with a volunteer fire department

Career 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.

See losrios.edu/gainful-emp-info/gedt.php?major=011127C01 for Gainful Employment Disclosure.

Requirements for Degree or Certificate 29 Units

To maximize the successful completion of this program it is suggested the student first enroll in FT 300. Other FT courses may be taken concurrently.

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
FT 305	Firefighter Safety and Survival	3
And a minimum of 11 units from the following:		11
EMT 111	Emergency Medical Technician (EMT) Practicum (1)	
and EMT 110	Emergency Medical Technician (EMT) Didactic (6)	
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 200	Emergency Medical Technician I (5)	
FT 310	Fire Service Hydraulics (3)	
FT 320	Hazardous Materials (3)	
PMED 100	Emergency Medical Technician - Basic (5)	

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.

Firefighter Recruit Academy Certificate

This program provides the knowledge necessary to assume the role of firefighter with the ability to work effectively and safely with the fire environment as well as within a company in the fire department in all functions of that company. Topics include indoctrination into the fire service, general maintenance, apparatus and equipment operations, fire control, wildland firefighting, emergency vehicle

(continued on next page)

(Firefighter Recruit Academy Certificate continued)

operations, salvage, fire prevention and public education, fire and arson investigation, rapid intervention crew tactics, vehicle extrication, physical fitness/wellness, emergency care, and forcible entry.

Student Learning Outcomes

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

- identify and describe the history, development, structure, organization and responsibility of the Fire Service
- define, identify and apply the components and principles of the Incident Command System
- explain the core values of the fire service and its duty of providing service delivery to the public
- perform preventative maintenance to fire station, apparatus and equipment
- demonstrate the use of fire department apparatus and tools within the scope of assignment
- explain and apply the basic concept of fire control, fire and arson investigation and fire communication systems
- identify and demonstrate basic skills in public education procedures and instruction
- interpret work place rules and laws regarding harassment/discrimination policies and mandated reporting procedures
- relate to wellness programs, stress management and approved academy physical fitness programs
- identify and demonstrate first responder responsibilities for handling medical emergencies
- identify first responder responsibilities for mitigation of hazardous material incidents
- choose safe driving procedures for emergency response vehicles
- apply principles of vehicle extraction
- apply fire suppression tactics and strategies
- interpret wild land fire behavior, suppression techniques and safety measures
- demonstrate firefighter rescue and survival skills

Requirements for Certificate 14 - 15 Units

FIRE 1500 Firefighter Recruit Academy-Module 1..... 14-15

DEPARTMENT CERTIFICATES

Fire Investigation 1A Certificate

This program provides participants with an introduction and basic overview of fire scene investigation. The focus of this course is to provide information in determining the area of fire origin in fires involving vehicles, structures, and wildland. Accidental and criminal fire causes are discussed in detail.

Student Learning Outcomes

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

- distinguish the four different methods of heat transfer and compare their effects during a fire’s progression
- choose the correct California Arson Law section when applying it to a factual situation
- recognize the elements necessary for the ignition and the sustained combustion of fuel and heat
- explain the elements required for an electrically caused fire to occur
- identify common scene indicators of arson and apply it to a factual situation

- describe the methodology required for a proper and thorough investigation of a structure, vehicle, and wildland fire
- differentiate between the different types of explosions and their unique effects

Requirements for Certificate 2 Units

FIRE 1670 Fire Investigation 1A, Fire Cause and Origin Determination..... 2

Fire Investigation 1B Certificate

This program expands on specific topics encountered by the fire investigator. These topics include detailed information on motives of fire setters; conducting a post blast scene; the investigation of a fire death; the recognition, collection, and preservation of evidence; interviewing and interrogation of witnesses and suspects; and the effect of a building’s construction on the spread of fire.

Student Learning Outcomes

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

- differentiate between the six common motives associated with fire setters
- examine a fire scene appraising the different safety hazardous associated with an investigation
- compare a fire scene investigation versus a post blast scene investigation
- examine a fire scene to determine the appropriate evidence to support a fire cause
- compare factures associated with an interview and an interrogation
- appraise a fire death scene to determine if a criminal act has occurred
- organize their case investigations utilizing proper case reports, resources, and insurance information

Requirements for Certificate 2 Units

FIRE 1671 Fire Investigation 1B, Techniques of Fire Investigation...2

Fire Investigation 2A Certificate

This program provides information on how to investigate, apprehend, and convict arsonists. It focuses heavily on legal case preparation. Topics include interviewing and interrogating suspects, search and seizure, warrants, courtroom demeanor, and working with the district attorney’s office.

Student Learning Outcomes

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

- differentiate among the three effects of an explosion
- validate an arson corpus after examining a practical fire scene
- appraise an explosion scene to determine if a criminal act has occurred
- organize a fire investigation utilizing case reports, court exhibits, and testimony
- differentiate between the U.S. Supreme Court’s finding and California’s Supreme Court’s requirements in preparing a search warrant
- recognize the elements necessary for the ignition and the sustained combustion of fuel and heat in a practical situation
- describe the methodology and procedure required for a proper surveillance operation

Requirements for Certificate 2 Units

FIRE 1672 Fire Investigation 2A.....2

Fire Investigation 2B Certificate

This program provides advanced instruction in fire scene investigation, case preparation, and courtroom presentation. Topics include reviewing fire scene photography, sketching, evidence collection, interviewing and interrogation, and extensive use of simulations for developing and presenting an arson case in court.

Student Learning Outcomes

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

- demonstrate the proper procedure of qualifying as an expert witness in fire origin and cause
- structure interview questions with witnesses and suspects in accordance with federal and state law requirements
- identify common scene indicators of arson and apply it to a practical situation
- examine a fire scene to determine the appropriate evidence needed to support a criminal fire cause
- verify an arson corpus after examining a criminal fire scene

Requirements for Certificate	2 Units
FIRE 1673 Fire Investigation 2B.....	2

Fire Management 1 Certificate

This program is designed to enhance the first-line supervisor’s ability to supervise subordinates. It introduces key management concepts and practices utilized in the California Fire Service. Topics include decision making, time management, leadership styles, personnel evaluations, and counseling guidelines.

Student Learning Outcomes

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

- explain the transition from fire fighter to fire officer
- examine how internal and external influences affect the fire officer and how to effectively deal with these influences
- describe the skills and responsibilities required of first level supervisors
- compare the advantages, disadvantages, and effects of various recognized styles of leadership and leadership profiles
- identify common, emotional, and behavioral characteristics of an individual or working group as it applies to the responsibility of subordinates and supervisors

Requirements for Certificate	2 Units
FIRE 1680 Fire Management 1.....	2

Training Instructor 1A Certificate

This certificate is the first of a three-certificate series. Topics include methods and techniques for training in accordance with the latest concepts in career education; selecting, adapting, organizing, and using instructional materials appropriate for teaching cognitive lessons; criteria and methods to evaluate teaching and learning efficiency; and an opportunity to apply major principles of learning through teaching demonstrations. Two (2) student instructor teaching demonstrations are required of all.

Student Learning Outcomes

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

- implement a variety of methods and techniques for training in accordance with the latest concepts in career education
- utilize information to select, adapt, organize, and apply instructional materials appropriate for teaching cognitive lessons
- apply the criteria and methods to evaluate teaching and learning efficiency
- demonstrate how to apply major principles of learning through teaching presentations

Requirements for Certificate	1.5 Units
FIRE 1650 Training Instructor 1A.....	1.5

Training Instructor 1B Certificate

This certificate is the second of a three-certificate series. Topics include methods/techniques for training with the latest concepts in career education; selecting, adapting, organizing, and using instructional materials appropriate for teaching psycho-motor lessons; criteria and methods to evaluate teaching and learning efficiency; and an opportunity to apply major principles of learning through teaching demonstrations.

Student Learning Outcomes

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

- assess the needs for and develop a complete technical course for fire service training
- analyze, prepare, and deliver a technical lesson
- develop student performance goals for each lesson plan
- identify the principles of evaluation and prescriptive training
- mentor instructional assistants
- apply the major principles of learning through teaching two live demonstrations
- construct a written objective test

Requirements for Certificate	1.5 Units
FIRE 1651 Training Instructor 1B.....	1.5

Training Instructor 1C Certificate

This certificate is the third of a three-certificate series. Topics include methods and techniques for developing lesson plans, ancillary components, and tests in accordance with the latest concepts in career education. This course offers the opportunity to develop, receive feedback, and finalize instructional materials, and deliver a teaching demonstration.

Student Learning Outcomes

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

- implement a variety of methods and techniques for training in accordance with the latest concepts in career education
- utilize information to select, create, organize, and utilize instructional materials appropriate for teaching cognitive lessons
- apply the criteria and methods to evaluate teaching and learning efficiency
- demonstrate how to apply major principles of learning through teaching presentations

Requirements for Certificate	1.5 Units
FIRE 1652 Training Instructor 1C.....	1.5

USDA Basic Academy Certificate

This course is designed to provide the skills and knowledge necessary to perform as a skilled Wildland Firefighter. Topics include physical fitness, wellness, nutrition, first responder medical, fire prevention, maps, compass, fire line construction, hand tool use, communications, leadership, and firefighter skills. The academy is presented in a formal setting.

Student Learning Outcomes

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

- construct a handline using various tools
- operate a belt weather kit
- document and analyze weather observations
- demonstrate two-rescuer cardiopulmonary resuscitation (CPR)
- evaluate types and extent of injuries
- formulate a course of immediate care after evaluating injuries
- compare and contrast media awareness related to fire safety and prevention
- inspect camp sites for fire violations and safety
- employ the four facets of physical fitness
- explain styles of leadership required in different settings

Requirements for Certificate		6.5 - 7 Units
FIRE 1501	USDA Basic Academy.....	6.5 - 7

USDA Advanced Academy Certificate

This program is designed to provide the skills and knowledge necessary to perform as a team leader. Topics include leadership, fuels management, fire behavior, basic air operations, firing equipment and techniques, and fireline fatalities. This course is presented in a formal academy setting.

Student Learning Outcomes

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

- formulate a course of action based upon a hazard assessment of the fire environment
- evaluate for additional personnel at a fire scene
- identify and apply stress control techniques
- compare the roles and responsibilities of Firing-Boss and Ignition Specialist
- recognize ignition devices
- distinguish aircraft types and their capabilities
- compare the tactical and logistical missions of an aircraft
- explain basic smoke management
- construct a fire management plan

Requirements for Certificate		7.5 - 8 Units
FIRE 1502	USDA Advanced Academy.....	7.5 - 8

Fire Fighting Training Center

FIRE 1084 Wildfire Powersaws Refresher (S-212) .5 Units

Hours: 8 hours LEC; 8 hours LAB

This course is designed to refresh and re-certify chain saw operators in the job performance requirements of the wildfire power saw operator position in the Incident Command System and on the fire ground. This course may be taken one time for credit. Credit/No-Credit Only

FIRE 1500 Firefighter Recruit Academy-Module 1 14-15 Units

Prerequisite: HEED 311 with a grade of "C" or better
 Enrollment Limitation: Acceptance into the California State Fire Marshal's complete approved Firefighter 1 Academy.
 Hours: 137 hours LEC; 401 hours LAB

This course provides the knowledge necessary to assume the role of firefighter with the ability to work effectively and safely with the fire environment as well as within a company in the fire department in all functions of that company. Topics include indoctrination into the fire service, general maintenance, apparatus and equipment operations, fire control, wildland firefighting, emergency vehicle operations, salvage, fire prevention and public education, fire and arson investigation, rapid intervention crew tactics, vehicle extrication, physical fitness/wellness, emergency care, and forcible entry. This course was formerly listed as FIRE 1090 prior to September 2010. Pass/No Pass only.

FIRE 1501 USDA Basic Academy 6.5-7 Units

Enrollment Limitation: Acceptance into the US Forest Service firefighter program.
 Hours: 99 hours LEC; 56-81 hours LAB

This course is designed to provide the skills and knowledge necessary to perform as a skilled Wildland Firefighter. Topics include physical fitness, wellness, nutrition, first responder medical, fire prevention, maps, compass, fire line construction, hand tool use, communications, leadership, and firefighter skills. The academy is presented in a formal setting. This course was formerly listed as FIRE 1091 prior to October 2010. Pass/No Pass Only.

FIRE 1502 USDA Advanced Academy 7.5-8 Units

Prerequisite: FIRE 1501
 Hours: 121-130 hours LEC; 37-40 hours LAB

This course is designed to provide the skills and knowledge necessary to perform as a team leader. Topics include leadership, fuels management, fire behavior, basic air operations, firing equipment and techniques, and fireline fatalities. This course is presented in a formal academy setting. This course was formerly listed as FIRE 1092 prior to October 2010. Pass/No Pass Only.

FIRE 1503 Firefighter Intern Recruit Academy 12-12.5 Units

Enrollment Limitation: Completion of a firefighter intern certificate.
 Hours: 130 hours LEC; 290 hours LAB

This course is a continuation of the firefighter intern program. It provides the techniques and skills to work effectively and safely within the fire environment as well as the fire department. Topics include indoctrination into the fire service, general maintenance, apparatus and equipment operations, fire control, wildland firefighting, emergency vehicle operations, salvage, fire prevention and public education, fire and arson investigation, rapid intervention crew tactics, vehicle extrication, physical fitness/wellness, emergency care, and forcible entry. This course was formerly listed as SMFD 1121 prior to November 2010. Pass/No Pass Only.

FIRE 1504 CDF Firefighter 1 Basic 3 Units

Hours: 48 hours LEC; 18 hours LAB

This course provides basic knowledge, skills, and demonstrated abilities as required to perform as a California Department of Forestry (CDF) Firefighter 1 Basic. Topics include fire physics and vegetation terminology, personal protective gear, self-contained breathing apparatus, ground ladders, firefighting equipment, fire shelters, wildland hose-lays, structural firefighting, and safety procedures. This course was formerly listed as FIRE 1096 prior to October 2010. Pass/No Pass Only.

FIRE 1506 Transitional Fire Academy 11.5-13.5 Units

Enrollment Limitation: Acceptance into the transitional firefighter academy AND successful completion of a California State Fire Training accredited fire academy or lateral transfer from a full-time career fire department

Hours: 140 hours LEC; 205-300 hours LAB

This course provides the knowledge necessary to assume the role of firefighter with the ability to work effectively and safely with the fire environment as well as within a company in the fire department in all functions of that urban fire agency. Topics include indoctrination into a particular fire department, general maintenance, apparatus and equipment operations, fire control, wildland firefighting, emergency vehicle operations, salvage, fire prevention and public education, fire and arson investigation, rapid intervention crew tactics, vehicle extrication, physical fitness/wellness, emergency care, and forcible entry. Pass/No Pass only.

FIRE 1520 Fire Apparatus Driver/Operator 1A 1.5 Units

Enrollment Limitation: Valid Class B California Drivers License

Hours: 18 hours LEC; 22 hours LAB

This course is designed to provide information on driver responsibilities, recognized standards, and related laws for fire apparatus. Topics include basic inspections, documentation, maintenance, troubleshooting fire apparatus, and techniques on driving and positioning fire apparatus. This course was formerly listed as FIRE 1260 prior to October 2010. Pass/No Pass only.

FIRE 1521 Fire Apparatus Driver/Operator 1B 1 Unit

Enrollment Limitation: Valid Class B California Drivers License

Hours: 10 hours LEC; 30 hours LAB

This course provides information on pump construction and theory of pump operations. Topics include methods for performing basic hydraulics and techniques on basic inspections, documentation, maintenance, and troubleshooting pumps. This course was formerly listed as FIRE 1261 prior to October 2010. Pass/No Pass only.

FIRE 1522 Fire Apparatus Engineer Refresher 1.5 Units

Enrollment Limitation: Must be in the position of Fire Engineer or above.

Hours: 20 hours LEC; 20 hours LAB

This course provides updates, enhancements, and refreshes the skills required by the fire apparatus engineer. Topics include wildland firefighting, arson identification, structural firefighting, incident command, strategy and tactics on initial attack incidents, supervision, management and company officer skills. This course may be taken one time for credit. This course was formerly listed as FIRE 1010 prior to October 2010. Pass/No Pass Only.

FIRE 1523 Emergency Vehicle Operator - Phase I .25 Units

Enrollment Limitation: Completion of a State of California Fire Marshal approved Firefighter 1 academy.

Hours: 2 hours LEC; 7 hours LAB

This course is the first phase of operating the emergency vehicle for fire personnel. The course includes skid pan exercises and vehicle driving exercises. This course was formerly listed as SMFD & SFD 1041 prior to October 2010. Pass/No Pass Only.

FIRE 1524 Emergency Vehicle Operator - Phase II .25 Units

Hours: 2 hours LEC; 7 hours LAB

This course is a continuation of Driver Emergency Vehicle Operator Phase I training techniques. It includes vehicle placement, steering basics, acceleration, and braking. This course was formerly listed as SMFD & SFD 1042 prior to October 2010. Pass/No Pass Only.

FIRE 1525 Emergency Vehicle Operator: Fire .5 Units

Hours: 9 hours LEC

This course is a continuation of Emergency Vehicle Operator - Phase II training techniques. It includes apparatus inspection, safety, code 3 driving, and special considerations. This course was formerly listed as SMFD & SFD 1043 prior to October 2010. Pass/No Pass Only.

FIRE 1540 CDF Computer Applications .25 Units

Hours: 4 hours LEC; 5 hours LAB

This course covers the basic functions of software and utilization of CDF computers. Topics include working with the Internet and CDF Intranet, CDF specific programs and software, and Microsoft programs and software. This course was formerly listed as CDF 1082 prior to October 2010. Pass/No Pass Only.

FIRE 1550 Post Licensure/Certification Out-of-Hospital Skills: Cardiac .5 Units

Enrollment Limitation: Current certification as an EMT-Basic (1) or licensure as an EMT-Paramedic; current employment with an emergency medical services provider (911 transport).

Hours: 6 hours LEC; 12 hours LAB

This course provides education modules related to cardiac emergencies for prehospital health care professionals. Each module will specifically address issues related to prehospital emergencies and local treatment protocol. This course provides continuing education credit necessary for maintenance of EMT-Basic certification or a Paramedic license. This course was formerly listed as FIRE 1112 prior to November 2010. Pass/No Pass Only.

FIRE 1554 Communicable Disease Awareness .5 Units

Enrollment Limitation: Currently certified as a California EMT-1

Hours: 9 hours LEC

This course provides emergency responders with communicable disease awareness. Topics include identification, recognition, communicability, prevention, and the operation of communicable diseases. This course was formerly listed as FIRE 1116 prior to November 2010. Pass/No Pass Only.

FIRE 1556 Emergency Medical Technician 1 - Basic Refresher 1.5 Units

Enrollment Limitation: Currently certified as an Emergency Medical Technician 1 or Basic.

Hours: 23 hours LEC; 12 hours LAB

This course provides current Emergency Medical Technicians (EMTs) certified at the Basic Life Support (BLS) level with continuing education and skills verification modules. 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 (NR) of EMTs entry or recertification exam. This course may be taken one time for credit. Pass/No Pass Only.

FIRE 1570 Wildland Fire Behavior (S-190) .5 Units

Hours: 8 hours LEC

This course provides instruction in the primary factors affecting the start and spread of wildfires and recognition of potentially hazardous situations. Topics include fire behavior factors affecting the start and spread of wildland fires, and weather conditions. Pass/No Pass only.

FIRE 1571 Intermediate Wildland Fire Behavior (S-290) 1.75 Units

Prerequisite: FIRE 1570

Hours: 32 hours LEC

This course provides the firefighter with the knowledge to predict wildland fire behavior based on fire conditions, weather, fuel and topography. This course was formerly listed as FIRE 1071 prior to November 2010. Pass/No Pass only.

FIRE 1572 Flashover and Hydraulic Theory .5 Units

Enrollment Limitation: Completion of a State of California Fire Marshal approved Firefighter 1 academy.

Hours: 5 hours LEC; 12 hours LAB

This course is designed to provide the theory and techniques of hydraulics and flashover. Topics include flashover conditions, survival during flashover, water applications, fire flow calculations, and master streams. This course was formerly listed as CDF 1120 prior to November 2010. Pass/No Pass Only.

FIRE 1573 Introduction To Wildland Fire Behavior Calculations S-390 2 Units

Hours: 36 hours LEC

This course provides an introduction into fire behavior calculations by manual methods, using nomograms and the Introduction to Wildland Fire Behavior Calculations (S-390) Handbook. Topics include studying inputs (weather, slope, fuels, and fuel moisture), interpreting fire behavior outputs, documentation processes, and fire behavior briefing components. This course applies to the California Fire Service Training and Education system's certification program. Pass/No Pass only.

FIRE 1600 Hazmat First Responder Operational 1 Unit

Hours: 24 hours LEC

This course covers the basic strategies involving potential exposure to hazardous materials. This course also covers how to detect hazmat substances, consult references for information, and implement operational procedures. This course was formerly listed as FIRE, CDF, FJPA, SFD, and SMFD 1068 prior to April 2011. Pass/No Pass only.

FIRE 1601 Hazardous Materials First Responder Operational Refresher .25 Unit

Hours: 6 hours LEC; 3 hours LAB

This course is a refresher covering the basic strategies involving potential exposure to hazardous materials. Topics include detecting hazardous material substances, consulting references for information, and implementing operational procedures. May be taken one time for credit. This course was formerly listed as CDF 1085 prior to April 2011. Pass/No Pass Only.

FIRE 1602 Hazardous Materials Incident Commander 1 Unit

Enrollment Limitation: Completion of a State of California Fire Marshal approved Firefighter 1 academy.

Hours: 18 hours LEC; 6 hours LAB

This course provides the content related to the role of an Incident Commander (IC), as well as any other general or command staff ICS position, during a hazardous material event, with the emphasis on personnel safety and management. Topics include decontamination and clean-up, command and scene management, managing the media, and disposal. This course was formerly listed as CDF, FJPA, SFD, SMFD, and USDA 1091 prior to April 2011. Pass/No Pass Only.

FIRE 1621 Incident Command System (I-200) .5 Unit

Hours: 12 hours LEC; 4 hours LAB

This class introduces the basic components of the Incident Command System (ICS) used to manage all types of emergency incidents. This management system includes common structure, responsibilities and terminology used on incidents at the local, state, and federal levels. This course was formerly listed as FIRE 1052 prior to April 2011. Pass/No Pass only.

FIRE 1622 Incident Command System (I-300) 1 Unit

Prerequisite: FIRE 1621

Hours: 18 hours LEC; 6 hours LAB

Intermediate Incident Command System (ICS) provides expanded description and detail of the organization and operation of the Incident Command System, management of resources, position descriptions (including the Air Operations organization), and essential principles for incident and event planning. This course was formerly listed as FIRE 1053 prior to April 2011. Pass/No Pass only.

FIRE 1623 Incident Command System (I-400) .75 Unit

Prerequisite: FIRE 1622

Hours: 16 hours LEC

This course provides in-depth training in the Incident Command System (ICS) and its components. This course provides the necessary training needed to manage and command large scale complex incidents, as well as the knowledge to develop organizational structures. This course was formerly listed as FIRE 1054 prior to April 2011. Pass/No Pass only.

FIRE 1624 Command 1A 2 Units

Prerequisite: FIRE 1621

Hours: 40 hours LEC

This course provides an introduction to the principles of command, an overview of the concepts of command safety and the risk management process, pre-incident planning considerations, command considerations at structure fire incidents, Company Officer initial actions at an incident including the development of incident priorities, strategy, and tactics, information on the roles and responsibilities of a Company Officer for post-incident actions. Pass/No Pass only.

FIRE 1625 Fire Command 1B **2 Units**

Prerequisite: FIRE 1621
Hours: 40 hours LEC

This course provides instruction in tactics and strategies and scene management principals for incidents involving hazardous materials. The course includes areas of discussion on identification and on hazard mitigation, decontamination, protective clothing, environmental concerns, and legal issues. This course was formerly listed as FIRE 1201 prior to April 2011. Pass/No Pass only.

FIRE 1626 Command 1C **2 Units**

Hours: 40 hours LEC

This course provides information to bring the structural Company Officer out of the city and into the wildland urban interface (WUI); in other words, from his or her comfort zone into an area that could be very well quite unfamiliar. Topics include fire suppression in the wildland urban interface environment; jurisdictional authority and responsibility; WUI company officer responsibilities and leadership fundamentals; collecting and using wildland fire weather, fuels, and topographic information; WUI fire suppression considerations; WUI plan of action; and mobilization and response to an expanding incident. Pass/No Pass only.

FIRE 1627 Fire Command 2A **1.75 Units**

Prerequisite: FIRE 1622
Hours: 28 hours LEC; 12 hours LAB

This course prepares the officer to use management techniques and the Incident Command System when commanding multiple alarms or large suppression forces. This course was formerly listed as FIRE 1202 prior to April 2011. Pass/No Pass only.

FIRE 1628 High Rise Incident Management - Basic Organization **.25 Units**

Hours: 3 hours LEC; 3 hours LAB

This course provides the content related to management of major high rise fire incidents. The content is based on curricula established at the National Fire Academy and Firefighting Resources of Southern California Organized for Potential Emergencies (FIREScope), program. This course was formerly listed as FIRE 1078 prior to April 2011. Pass/No Pass only.

FIRE 1629 Facilities and Supply Unit Leader (I-354/I-356) **1-2 Units**

Hours: 42 hours LEC

This course provides the information required for a facilities and/or supply unit leaders in the Incident Command System's logistics section. Topics include position coordination between unit leaders, and procedures to set up a supply or facility unit. This course was formerly listed as CDF, FJPA, SFD, SMFD, and USDA 1117 prior to April 2011. Pass/No Pass Only.

FIRE 1631 Incident Management **1 Unit**

Enrollment Limitation: Completion of a State of California Fire Marshal approved Firefighter 1 academy.
Hours: 20 hours LEC; 4 hours LAB

This course provides an in-depth look into the various areas of commanding an initial attack. Topics include command presence, transfer of command, tactics and strategy, and size-up. This course was formerly listed as CDF, FJPA, SFD, and SMFD 1092 prior to April 2011. Pass/No Pass Only.

FIRE 1633 Fire Command 2B **1.75 Units**

Prerequisite: FIRE 1625 and 1627
Hours: 26.5 hours LEC; 13.5 hours LAB

This course provides fire incident commanders with the skills and competency necessary to mitigate an incident, initiate remedial action, and ensure the restoration of normal services with a comprehensive resource management approach. Topics include skills and competency necessary to mitigate an incident, initiate remedial action, and ensure the restoration of normal services with a comprehensive resource management approach. This course applies to California Fire Service Training and Education system's certification program. Pass/No Pass only.

FIRE 1634 Fire Command 2C **2 Units**

Prerequisite: FIRE 1622 and 1627
Hours: 33 hours LEC; 7 hours LAB

This course is approached from a system basis and is applied to both small and large high-rise buildings. Topics include: Prefire planning, building inventory, problem identification, ventilation methods, water supply, elevators, life safety, strategy and tactics, application of the Incident Command System (ICS), and specific high-rise responsibilities. Case studies and simulation are used. Pass/No Pass only.

FIRE 1650 Training Instructor 1A **1.5 Units**

Hours: 23.5 hours LEC; 16.5 hours LAB

This is the first of a three-course series. Topics include methods and techniques for training in accordance with the latest concepts in career education; selecting, adapting, organizing, and using instructional materials appropriate for teaching cognitive lessons; criteria and methods to evaluate teaching and learning efficiency; and an opportunity to apply major principles of learning through teaching demonstrations. Two (2) student instructor teaching demonstrations are required of all. Pass/No Pass only.

FIRE 1651 Training Instructor 1B **1.5 Units**

Prerequisite: FIRE 1650
Hours: 20 hours LEC; 20 hours LAB

This is the second of a three-course series. Topics include methods/techniques for training with the latest concepts in career education; selecting, adapting, organizing, and using instructional materials appropriate for teaching psychomotor lessons; criteria and methods to evaluate teaching and learning efficiency; and an opportunity to apply major principles of learning through teaching demonstrations. Pass/No Pass only.

FIRE 1652 Training Instructor 1C **1.5 Units**

Prerequisite: FIRE 1650 and 1651
Hours: 22.5 hours LEC; 17.5 hours LAB

This is the third of a three-course series. Topics include methods and techniques for developing lesson plans, ancillary components, and tests in accordance with the latest concepts in career education. This course offers the opportunity to develop, receive feedback, and finalize instructional materials, and deliver a teaching demonstration. Pass/No Pass only.

FIRE 1670 Fire Investigation 1A, Fire Cause and Origin Determination **2 Units**

Hours: 40 hours LEC

This course provides participants with an introduction and basic overview of fire scene investigation. The focus of this course is to provide information in determining the area of fire origin in fires involving vehicles, structures, and wildland. Accidental and criminal fire causes are discussed in detail. This course was formerly listed as FIRE 1240 prior to September 2010. Pass/No Pass only.

**FIRE 1671 Fire Investigation 1B,
Techniques of Fire Investigation 2 Units***Prerequisite: FIRE 1670**Hours: 40 hours LEC*

This course expands on specific topics encountered by the fire investigator. These topics include detailed information on motives of fire setters; conducting a post blast scene; the investigation of a fire death; the recognition, collection, and preservation of evidence; interviewing and interrogation of witnesses and suspects; and the effect of a building's construction on the spread of fire. This course was formerly listed as FIRE 1241 prior to September 2010.

Pass/No Pass only.

FIRE 1672 Fire Investigation 2A 2 Units*Prerequisite: FIRE 1671**Hours: 40 hours LEC*

This course provides information on how to investigate, apprehend, and convict arsonists. It focuses heavily on legal case preparation. Topics include interviewing and interrogating suspects, search and seizure, warrants, courtroom demeanor, and working with the district attorney's office. This course was formerly listed as FIRE 1242 prior to September 2010. Pass/No Pass only.

FIRE 1673 Fire Investigation 2B 2 Units*Prerequisite: FIRE 1672**Hours: 40 hours LEC*

This course provides advanced instruction in fire scene investigation, case preparation, and courtroom presentation. Topics include reviewing fire scene photography, sketching, evidence collection, interviewing and interrogation, and extensive use of simulations for developing and presenting an arson case in court. This course was formerly listed as FIRE 1243 prior to September 2010.

Pass/No Pass only.

FIRE 1680 Fire Management 1 2 Units*Hours: 40 hours LEC*

This course is designed to enhance the first-line supervisor's ability to supervise subordinates. It introduces key management concepts and practices utilized in the California Fire Service. Topics include decision making, time management, leadership styles, personnel evaluations, and counseling guidelines. Pass/No Pass only.

**FIRE 1682 Interagency Incident
Business Management (S-260) .75 Units***Hours: 16 hours LEC*

This course provides the foundation of incident business management practices. Topics include property management, recruitment, acquisition, and accident investigation. This course was formerly listed as FIRE 1093 prior to April 2011. Pass/No Pass only.

**FIRE 1688 California Firefighters
Bill of Rights Act (FBOR) 1 Unit***Hours: 16 hours LEC*

This course provides an introduction to the California Firefighters Bill of Rights Act (FBOR) enacted in 2008. It is designed for fire management, supervisors and union representatives. Topics include who is covered, employee rights during investigations and interrogations, right to representation, personnel files, financial disclosure, lie detector tests, and locker searches. Pass/No Pass only.

FIRE 1691 Fire Management 2A 1.5 Units*Prerequisite: FIRE 1680**Hours: 17 hours LEC; 24 hours LAB*

This course is the sixth of a ten-course series for Chief Officer certification through California State Fire Training. It provides information on the foundations of individual behavior, personality, and emotions, motivational concepts, individual decision making, group behavior, work teams, group dynamics, group communication, conflict, and negotiations. Completion of this course applies to California's Fire Service Training and Education System's certification program. Pass/No Pass only.

FIRE 1692 Fire Management 2B 1.5 Units*Prerequisite: FIRE 1680**Hours: 16 hours LEC; 24 hours LAB*

This course is the seventh of a ten-course series for Chief Officer certification through California State Fire Training. This course provides insight into the cyclical nature of budgeting and financial management in the fire service. As a management course, students will become familiar with essential elements of financial planning, budget preparation, budget justification, and budget controls. Completion of this course applies to California's Fire Service Training and Education System's certification program. Pass/No Pass only.

FIRE 1693 Fire Management 2C 1.5 Units*Prerequisite: FIRE 1680**Hours: 16 hours LEC; 24 hours LAB*

This course is the eighth of a ten-course series for Chief Officer certification through California State Fire Training. It provides a fire manager with knowledge and insight of personnel, human resource, diversity management, legal mandates, labor relations, and related areas. Topics include areas of organizational development, productivity, recruitment and selection, performance systems, discipline, and collective bargaining. Completion of this course applies to California's Fire Service Training and Education System's certification program. Pass/No Pass only.

FIRE 1694 Fire Management 2D 1.5 Units*Prerequisite: FIRE 1680**Hours: 16 hours LEC; 24 hours LAB*

This course is the ninth of a ten-course series for Chief Officer certification through California State Fire Training. It is designed to educate Chief Officers on the strategic planning process and why each of the steps in the process is critical if the plan is to succeed. Although the strategic planning process may be thought of as extremely complicated, this course will provide timely advice and easy to use tools to assist in the strategic planning process. This course is consistent with critical elements of the accreditation process and its associated self-assessment manual. Completion of this course applies to California's Fire Service Training and Education System's certification program. Pass/No Pass only.

FIRE 1695 Fire Management 2E 1.5 Units*Prerequisite: FIRE 1680**Hours: 16 hours LEC; 24 hours LAB*

This course is the tenth of a ten-course series for Chief Officer certification through California State Fire Training. Topics include the correlation of personal core values and characteristics to ethical decisions and behaviors. In addition, the participant will explore ethical and principle-centered leadership, including ethical systems, ethical dilemmas, and ethical decision-making models. The participant will also examine challenges and develop strategies for leading in public safety organizations serving diverse and dynamic communities. The participant will use a variety of learning modalities including case studies, video analysis, and critical thinking scenarios to explore ethics and the challenges of leadership. Completion of this course applies to California's Fire Service Training and Education System's certification program. Pass/No Pass only.

FIRE 1700 Fire Prevention 1 2 Units

Hours: 36 hours LEC

This course provides the knowledge for the Company Officer certification track, the Capstone Task Book process, and the skills related to the Company Officer's role in fire prevention. Additionally, it includes the relationship between life safety and building construction, the elements of a quality company inspection program, and how to address complex hazards encountered during an inspection. Topics include complex hazards, relationship between life safety and building construction, elements of a company inspection program, and the company officer's role in fire prevention relationship between life safety and building construction. Pass/No Pass only.

FIRE 1703 Basic Wildland Fire Prevention 1 Unit

Hours: 24 hours LEC

This course provides the basic methods and practices used in wildland fire prevention. Topics include fire prevention history, campfire safety, powerline safety and fire investigation. This course was formerly listed as USDA 1107 prior to April 2011. Pass/No Pass Only.

FIRE 1722 Division/Group Supervisor (S-339) 1 Unit

Prerequisite: CDF 1066 with a grade of "C" or better

Hours: 24 hours LEC

This course provides the knowledge and skills to perform specific responsibilities as a Division/Group Supervisor within the Incident Command System. Topics include pre-incident responsibilities, incident arrival and check-in, assigned and available status, and out-of-service status and demobilization. This course was formerly listed as CDF, EGF, FJPA, SMFD, and USDA 1086 prior to April 2011. Pass/No Pass Only.

FIRE 1723 Professional Training for Fire Service Personnel 7.5-9.75 Units

Enrollment Limitation: Completion of a State of California Fire Marshal approved Firefighter 1 academy

Hours: 84-114 hours LEC; 156-186 hours LAB

This course provides current knowledge and techniques needed to maintain and improve fire service skills. It meets mandatory state and local training requirements. Topics may include fire service administration, suppression, emergency medical services, fire prevention, wellness and fitness, rescue, leadership/management, and command and control. This course was formerly listed as SFD and SMFD 1104 prior to April 2011. Pass/No Pass Only.

FIRE 1760 Low Angle Rope Rescue Operational (LARRO) 1.25 Units

Enrollment Limitation: Completion of a State of California Fire Marshal approved Firefighter 1 academy.

Hours: 24 hours LEC

This course provides the techniques and methods for using rope, webbing, hardware friction devices, and litters in low angle rescue situations. Areas covered include rope and related equipment, anchor systems, safety lines, stretcher lashing and rigging, mechanical advantage systems, and single line and two line rescue systems. This course is formerly known as CDF 1044, FJPA 1044, SFD 1044, and SMFD 1044. Pass/No Pass only.

FIRE 1761 Rescue Systems 1 1 Unit

Hours: 6 hours LEC; 34 hours LAB

This course provides rescue professionals with the level of knowledge to perform urban search and rescues. Topics include: team organization, rescue, and environmental considerations, use of ropes, knots rigging and pulley systems, descending, rappelling, and belaying tools and techniques, subsurface rescue techniques, use of cribbing, wedges, cutting/prying and hydraulic tools, use of fire service ladders in specialized rescue situations, and day and night simulated rescue exercises. Pass/No Pass only.

FIRE 1762 Aircraft Rescue and Firefighting (FC 5) 1 Unit

Hours: 19 hours LEC; 5 hours LAB

This course provides the knowledge to operate safely during an aircraft emergency. This course identifies types of aircraft, aviation fuels, proper extinguishing agents, and airport communication systems used in aircraft emergencies. This course was formerly listed as CDF, FJPA, SFD, SMFD, USDA, and FIRE 1062 prior to April 2011. Pass/No Pass only.

FIRE 1763 Rescue Boat Operations 1 Unit

Advisory: Ability to Swim

Hours: 6 hours LEC; 18 hours LAB

This course provides the skills needed to operate a rescue boat and perform rescue in river and flood situations. Safety, course philosophy, and terminology are covered. "In water" experiences for students include how to read dynamics flow for safety travel, perform self-rescue and victim-rescue operations, along with executing pre/post-inspections of the personal watercraft (PWC). This course was formerly listed as FIRE 1059 prior to April 2011. Pass/No Pass only.

FIRE 1764 Personal Watercraft Operations .5 Unit

Advisory: Ability to swim.

Hours: 4 hours LEC; 12 hours LAB

This course provides the knowledge and skills necessary to operate personal watercraft on water related incidents. Subjects learned are the reading of water movement and the tactics/strategies for operating personal water craft. Not open to students who have completed CDF 1063, Rescue Water Craft. This course was formerly listed as CDF,SFD, and SMFD 1061 prior to April 2011. Pass/No Pass Only.

FIRE 1766 River and Flood Water Rescue .5 Unit

Hours: 5 hours LEC; 11 hours LAB

This course is intended for the training of fire service personnel in water rescue techniques. Topics include swift water rescue, submerged vehicles, drowning, use of engine/truck company equipment for water rescue, use of rafts and boats, and underwater search and recovery. This course was formerly listed as FIRE 1079 prior to April 2011. Pass/No Pass only.

FIRE 1791 Fatality Fire Case Studies (PMS-490) .5 Unit

Enrollment Limitation: Completion of a State of California Fire Marshal approved Firefighter 1 academy.

Hours: 9 hours LEC

This course provides a study on lessons learned on fatality fires to help fireline tactical decision-makers avoid similar mistakes in the future. Topics include hazard controls, hazard assessment, and decision making. This course was formerly listed as USDA 1095 prior to April 2011. Credit/No Credit only.

FIRE 1792 FIRE: Safety Officer S-404 1.5 Units

Hours: 25 hours LEC; 5 hours LAB

This course is designed to meet the training needs of the fire safety officer position in the incident command system. Topics include: safety officer effectiveness, analysis techniques, safety messages, briefings and reports, and high hazard operations. This course applies to the California Fire Service Training and Education system's certification program. Pass/No Pass only.

FIRE 1800 Firefighter Training (S-130) 2 Units

Prerequisite: FIRE 1570

Hours: 35.5 hours LEC

This course provides new firefighters with basic wildland firefighting skills. It also provides the knowledge needed to identify basic weather conditions, topography, fuels, and their effect on fire behavior. Pass/No Pass only.

FIRE 1803 Rapid Intervention Crew Operations .5 Units

Hours: 5 hours LEC; 19 hours LAB

This course provides essential basic training components for all structural firefighters to operate as members of a Rapid Intervention Crew. Topics include identifying causes of firefighter injuries and fatalities at structure fires, describing and preventing common fire ground errors that have caused injuries or fatalities, demonstrating self-survival knowledge and techniques, demonstrating and applying firefighter rescue and self-survival techniques. This course was formerly listed as FIRE 1050 prior to April 2011. Pass/No Pass only.

FIRE 1804 Confined Space Awareness .5 Units

Enrollment Limitation: Completion of a State California Fire Marshal approved Firefighter 1 academy.

Hours: 9 hours LEC

This course introduces fire service personnel to the hazards, equipment, procedures, codes that impact operations within confined spaces, and prepares the individual for confined space entry and rescue training. This fulfills the California Occupational Safety and Health Administration (Cal-OSHA) requirements for confined space awareness training for fire service personnel. Topics include atmospheric hazards, lock out procedures, ventilation equipment, and case studies. This course was formerly listed as CDF 1081 prior to April 2011. Pass/No Pass only.

FIRE 1805 Wildland Firefighting Skills 1.75 Units

Hours: 26 hours LEC; 20 hours LAB

This course provides the necessary information required in wildland firefighting to safely operate in emergency conditions. Topics include map/compass and GPS use, radio use, hand tool use, fire shelters, belt weather kits, and human factors. This course was formerly listed as USDA 1109 prior to April 2011. Credit/No Credit only.

FIRE 1807 Advanced Firefighter Training (S-131) .5 Units

Prerequisite: FIRE 1800

Hours: 8 hours LEC

This course provides advanced training in wildland firefighting skills with an emphasis on safety and tactics. This is suggested training for firefighters who wish to become qualified at first level supervisory positions. This course also meets the training requirements for Advanced Firefighter/Squad Boss and Incident Commander Type 5. This course was formerly listed as FIRE 1067 prior to April 2011. Pass/No Pass only.

FIRE 1808 Fire Ground Skills: Update .25 Units

Prerequisite: Completion of a State of California Fire Marshal approved Firefighter 1 academy

Hours: 4 hours LEC; 4 hours LAB

This course updates critical knowledge, skills, and abilities employed in emergency conditions. Topics include self-contained breathing apparatus, ground ladders, ropes and knots, apparatus operation, wildland hoselays, and fire shelter deployment and safety.

This course was formerly listed as CDF 1048 prior to April 2011. Credit/No Credit only.

FIRE 1809 Wildfire Powersaws (S-212) 1 Unit

Hours: 18 hours LEC; 14 hours LAB

This course is designed for prospective chainsaw operators. It includes performance requirements for the wildfire power saw operator position in the Incident Command System and on the fireground. This course was formerly listed as CDF, FJPA, SMFD, USDA, EGF, and SFD 1080 prior to September 2011. Credit/No Credit only.

FIRE 1860 Physical Fitness for Fire Service Personnel 1.5-3 Units

Hours: 13 hours LEC; 42-130 hours LAB

This course is a physical fitness course for employed firefighters. It includes fire service wellness initiatives, cardiovascular and muscular fitness, safety and proper usage of exercise equipment, joint flexibility, hydration, nutrition and weight control, cardiac risk factors, and sleep disorders. This course was formerly listed as FITNS 341 prior to April 2011. Pass/No Pass only.

FIRE 1872 Basic Air Operations (S-270) .5 Unit

Hours: 16 hours LEC

This course covers aircraft types and capabilities, aviation management and safety, tactical and logistical uses of aircraft, and requirements for helicopter take-off and landing areas. Topics include the four types of helicopters and air tankers and the criteria that make up each type. Also included are safe firefighting conduct operations when aircraft are being used. This course was formerly listed as FIRE 1058 prior to April 2011. Pass/No Pass only.

FIRE 1873 Task Force/Strike Team Leader (S-330) 1.5 Units

Hours: 25 hours LEC

This course provides the basic knowledge and skills to operate as a strike team task force leader on emergency incidents. Also included are identifying safety issues, managing response teams, and coordinating with other agencies. This course was formerly listed as FIRE 1066 prior to April 2011. Pass/No Pass only.

FIRE 1874 Task Force/Strike Team Leader Refresher .25-.5 Units

Hours: 4-8 hours LEC

This course presents the rules and regulations required to operate as a strike team/task force leader on emergency incidents. Additionally, this course explains the many rules and regulations governing strike team leaders' actions. This course was formerly listed as CDF, FJPA, SMFD, and USDA 1075 prior to April 2011. Credit/No Credit only.

FIRE 1875 Fire Operations in the Wildland/Urban Interface (S-215) 1-1.5 Units

Hours: 24 hours LEC; 8 hours LAB

This course is designed for the firefighter operating as incident commander, in areas where urban growth and expansion interfaces with wildland. Topics include safety operations in environments where wildland fire threatens life and property. This course was formerly listed as FIRE 1073 prior to April 2011. Pass/No Pass only.

FIRE 1880 Field Observer/Display Processor (S-244/S-245) 1.5 Units

Prerequisite: CDF 1052
Hours: 24 hours LEC; 8 hours LAB

This course provides the techniques, theory, and practical experience to be a field observer/display processor in the Incident Command System Planning Section. Topics include identifying and interpreting maps, making map calculations, using observation aids, mapping from aircraft, making field observations, and processing and displaying data. This course was formerly listed as CDF, FJPA, SMFD, and USDA 1118 prior to April 2011. Credit/No Credit only.

FIRE 1881 Helicopter Training (S217) 1.5 Units

Prerequisite: FT 55 (SMFD 1055) and FT 52 (SMFD 1052)
Hours: 26 hours LEC; 14 hours LAB

This course provides an understanding of basic helicopter operations and their use on wildland firefighting incidents. This course includes aircraft terminology, helicopter support systems and helicopter tactics used in their operation. This course was formerly listed as FIRE 1070 prior to April 2011. Credit/No Credit only.

FIRE 1882 Ignition Operations (S-234) 1 Unit

Prerequisite: FIRE 1571
Hours: 16 hours LEC; 8 hours LAB

This course presents the functions of an Ignition Specialist or Firing-Boss on emergency incidents. It includes backfire and burnout safety training and the proper application of fire suppression firing methods and practices. This course was formerly listed as FIRE 1094 prior to April 2011. Pass/No Pass only.

FIRE 1883 Chainsaw Bench .5 Unit

Hours: 9 hours LEC

This course covers basic chainsaw field mechanics and troubleshooting. Topics include chainsaw components, attachments, adjustments, problems, and maintenance. This course was CDF, FJPA, and USDA 1083 prior to September 2011. Pass/No Pass only.

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.

FT 300 Fire Protection Organization 3 Units

Advisory: ENGRD 116 (Proficient Reading) and ENGWR 102 (Proficient Writing) 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 an introduction to fire protection, its career opportunities, and related fire service fields. Topics include philosophy and history of fire protection, fire loss analysis, organization and function of public and private fire protection services, fire departments as part of local government, as well as laws and regulations affecting the fire service. Additionally, fire service nomenclature, specific fire protection functions, basic fire chemistry and physics, introduction to fire protection systems, and introduction to fire strategy and tactics, are covered.

FT 301 Fire Prevention Technology 3 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
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

Advisory: ENGRD 116 (Proficient Reading) and ENGWR 102 (Proficient Writing) 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 information relating to sprinkler design and the operation of fire detection and alarm systems. Topics include fire cause and effect, heat and smoke control systems, sprinkler systems, water supply for fire protection, standpipe systems, and portable fire extinguishers.

FT 303 Building Construction for Fire Protection 3 Units

Advisory: ENGRD 116 (Proficient Reading) and ENGWR 102 (Proficient Writing) 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 covers the components of building construction that relate to fire safety. Specific focus is on elements of construction and the design of structures that are shown to be key factors regarding inspecting buildings, pre-planning fire operations and emergency operations at fires. Topics includes principles of fire and smoke growth, fire resistance construction, as well as wood, ordinary, steel, and concrete construction.

FT 304 Fire Behavior and Combustion 3 Units

Advisory: ENGRD 116 (Proficient Reading) and ENGWR 102 (Proficient Writing) 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

This course covers the theories and fundamentals of how and why fires start and spread, and how they are controlled. Topics include an in-depth study of fire chemistry and physics, fire characteristics of materials, extinguishing agents, and fire control techniques.

FT 305 Firefighter Safety and Survival 3 Units

Advisory: ENGRD 116 (Proficient Reading) and ENGWR 102 (Proficient Writing) 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 introduces the principles and history related to the national firefighter life safety initiatives, focusing on the need for cultural and behavioral changes throughout the emergency services profession. Emphasis is placed on occupational health and safety of firefighters as well as their personal and organizational accountability. Topics include safety, risk management, medical and fitness standards, industry standards relating to vehicle operation and road scene safety as well as firefighter fatality case studies and analysis. The course emphasizes best safety practices before, during, and after the emergency incident.

FT 310 Fire Service Hydraulics 3 Units

Advisory: FT 300; MATH 32 or MATH 42
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
- 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.

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)
- ENGWR 303 Argumentative Writing and Critical Thinking Through Literature (4)
- 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

- DEAF 310 American Sign Language I (4)
- DEAF 312 American Sign Language II (4)
- DEAF 314 American Sign Language III (4)
- DEAF 316 American Sign Language IV (4)
- DEAF 318 American Sign Language V (4)
- 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)
- ITAL 412 Intermediate Italian (4)
- RUSS 401 Elementary Russian (4)
- RUSS 402 Elementary Russian (4)
- SPAN 401 Elementary Spanish (4)

- SPAN 402 Elementary Spanish (4)
- SPAN 411 Intermediate Spanish (4)
- SPAN 412 Intermediate Spanish (4)

Associate Degree Requirements: The Language Studies Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

French

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**

Course Transferable to CSU
Hours: 54 hours LEC

This course is designed for students at the first-semester level in German. Conversations and discussions, both controlled and spontaneous, are used to develop basic skills in German. Emphasis includes oral proficiency and development of German culture awareness.

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 second-semester level in German. It continues the development of oral-aural skills in German through conversations and discussions, both controlled and spontaneous. Emphasis includes oral proficiency and development of German cultural awareness.

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 continues to develop proficiency in speaking, reading and writing German. It also explores the German culture and affords opportunities to make cross-linguistic and cross-cultural comparisons.

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, which is the third in a series of four German courses, continues to develop proficiency in speaking, listening, reading, and writing German. It reviews German grammar and offers readings of varied texts, which further explore study of historical and cultural background of German-speaking countries and afford opportunities to make cross-linguistic and cross-cultural comparisons.

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 listening, speaking, reading, and writing skills through reading, discussing, and interpreting various works of German literature; writing summaries, reports and short compositions; and studying the historical, artistic, and cultural background of the German-speaking world.

Italian

ITAL 351 Conversational Italian, Elementary I **3 Units**

Course Transferable to CSU
Hours: 54 hours LEC

This course is designed for students at the first-semester level in Italian. Conversations and discussions, both controlled and spontaneous, are used to develop basic conversational skills in Italian. Emphasis includes oral proficiency and development of Italian cultural awareness.

ITAL 352 Conversational Italian, Elementary II **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 second-semester level in Italian. It continues the development of oral-aural skills in Italian through conversations and discussions, both controlled and spontaneous. Emphasis includes 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: AA/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: AA/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.

ITAL 412 Intermediate Italian 4 Units

Prerequisite: ITAL 411 with a grade of "C" or better; or 4 years of high school Italian.

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 the development of the four basic skills: reading, writing, speaking and listening through reading and discussion of major types of Italian literature (short story, drama, poetry). Writing of paragraphs and short compositions is included. The course discusses the historical and cultural background of the Italian-speaking world.

Russian**RUSS 401 Elementary Russian 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 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: AA/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.

Spanish**SPAN 131 Elementary Spanish Lab I .5-1 Units**

Advisory: Concurrent enrollment in SPAN 401.

Hours: 27-54 hours LAB

This laboratory course enables Spanish language learners to develop, expand, and reinforce multiple Spanish language skills while working independently and/or in small groups. Coursework includes integrated study topics related to vocabulary, grammar, reading, writing, listening, and oral skills covered in first semester Spanish courses. Students may register until the sixth week of the semester. This course may be taken up to 2 times, for a total of 1.0 unit, using different topics. Pass/No Pass only.

SPAN 132 Elementary Spanish Lab II .5-1 Units

Advisory: SPAN 131, or concurrent enrollment in SPAN 402.

Hours: 27-54 hours LAB

This laboratory course enables Spanish language learners to continue developing, expanding, and reinforcing multiple Spanish language skills while working independently and/or in small groups. Coursework includes integrated study topics related to vocabulary, grammar, reading, writing, listening, and oral skills covered in second semester Spanish courses. Students may register until the sixth week of the semester. This course may be taken up to two times for a total of 1.0 unit, using different topics. Pass/No Pass only.

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

Course Transferable to CSU

Hours: 54 hours LEC

This course is an introduction to the language and culture of the Spanish-speaking world. It includes the development of listening, speaking, reading, and writing Spanish with emphasis on communicative skills. Class discussions and group interaction, both controlled and spontaneous, are used to develop basic conversational skills in Spanish.

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. (C-ID SPAN 100)

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. (C-ID SPAN 110)

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. (C-ID SPAN 200)

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: 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 reviews and provides further study and complex grammar topics of the cultural and historical background of Spanish-speaking countries as well as their major literary types and works.

Area: Health & Education
 Dean: Dr. Steven Boyd
 Coordinator: Dr. Damon de la Cruz
 Phone: (916) 484-8158 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).

National Board Examination scores, graduation rates and employment rates for this and other ABFSE-accredited programs are available at www.abfse.org. To request a printed copy of this program’s scores and rates, go to Health and Education 770 or by e-mail at delacrd@arc.losrios.edu or by telephone at (916)484-8158.

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

As an accredited mortuary college our program goals and objectives are as follows:

- To prepare students to be members of a human services profession
- To prepare students to be members of the community in which they serve
- To be participants in the relationship between bereaved families and those engaged in the funeral service profession
- To offer professional knowledge of and compliance with federal, state provincial/territorial, and local regulatory guidelines
- To be sensitive to the responsibility for public health, safety and welfare in caring for human remains

The Primary Objectives of this Program are:

- 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 or BIOL 103, ENGWR 300 or ENGWR 480, FSE 300, and MATH 100 or MATH 104 with a grade of “C” or better.
- Minimum cumulative college GPA of 2.0.

(continued on next page)

(Funeral Service Education Degree continued)

- A Curriculum Planning Summary Sheet completed by an ARC counselor and dated within the semester the enrollment packet is submitted.
- A completed pre-enrollment application.

Enrollment Process

Eligible students are selected for the program according to the following steps:

- Pre-enrollment applications to the program may be obtained from the Health and Education Division Office, the Coordinator of the Funeral Service Education program, or at www.arc.losrios.edu/fse. The Funeral Service Education program currently accepts students once per year for the Spring semester which begins in January. Deadline to submit the application is by the second Friday in November.
- Only students who meet the pre-enrollment requirements and follow the pre-enrollment procedures will be considered for the program.
- Selection is based on a random selection process 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 300	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 Law	3
CHEM 130	Chemistry for Funeral Service	4
FSE 310	Funeral Directing I	2
FSE 320	Funeral Service Law and Ethics	3
SPEECH 301	Public Speaking (3)	3
or SPEECH 331	Group Discussion (3)	

2nd Semester

BIOL 130	Microbiology for Funeral Services	3
FSE 312	Funeral Directing II	2
FSE 330	Merchandising in the Funeral Service Industry	3
FSE 340	Pathology for Funeral Service	2

3rd Semester

ACCT 101	Fundamentals of College Accounting.....	3
FSE 335	Funeral Service Management	3
FSE 350	Restorative Art	3.5
FSE 360	Embalming I	3

4th Semester

FSE 297	Internship in Funeral Service Education	5
FSE 365	Embalming II	2
FSE 370	Funeral Services Counseling	3
PSYC 390	Psychology of Death and Dying	3

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 297 Internship in Funeral Service Education 5 Units

Prerequisite: ACCT 101, BIOL 130, BUS 340, FSE 312, FSE 350, and FSE 360 with grades of "C" or better

Corequisite: FSE 365, FSE 370, 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 300 Introduction to Funeral Service 2 Units

Advisory: ENGWR 300, ENGWR 480, or ESLW 340

Hours: 36 hours LEC

This course is a survey of the history of the funeral service industry and a comprehensive overview of the field of funeral service. 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 may be required.

FSE 310 Funeral Directing I 2 Units

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

Corequisite: CHEM 130 and FSE 320

Enrollment Limitation: Acceptance into the Funeral Service Education Program.

Hours: 36 hours LEC

This course introduces the general practices of funeral directing. It focuses on the sociological phenomena that affect all the elements of funeral service including cultural differences, family structures, and factors of change that relate to funeralization. It also includes notification of death, transfer and disposition of bodies, arrangement conferences, pre-planned funerals, and post-arrangement follow-up. Field trips may be required.

FSE 312 Funeral Directing II 2 Units

Prerequisite: FSE 310 and 320 with grades of "C" or better

Corequisite: BIOL 130, FSE 330, and FSE 340

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 320 Funeral Service Law and Ethics 3 Units

Corequisite: CHEM 130 and FSE 310

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 330 Merchandising in the Funeral Service Industry 3 Units

Prerequisite: FSE 310 and 320 with grades of "C" or better
Corequisite: BIOL 130, FSE 312, and FSE 340
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 335 Funeral Service Management 3 Units

Prerequisite: ACCT 101, 301, or 481 with a grade of "C" or better
Corequisite: FSE 350 and 360
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, management theory as it relates to funeral service practice is addressed. Field trips may be required.

FSE 340 Pathology for Funeral Service 2 Units

Prerequisite: CHEM 130 or 305 with a grade of "C" or better
Corequisite: BIOL 130, BIOL 440, FSE 312, or FSE 330
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 350 Restorative Art 3.5 Units

Prerequisite: FSE 340 with a grade of "C" or better
Corequisite: FSE 360
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. Topics include the study of facial features, cosmetics, and restorative treatment for a variety of situations faced by the practitioner.

FSE 360 Embalming I 3 Units

Prerequisite: BIOL 130 and FSE 340 with grades of "C" or better
Corequisite: FSE 335 and 350
Hours: 54 hours LEC

This course introduces the phenomenon of death in the human body. It includes the processes of preservation, restoration, and sanitation in treating the dead human body. Field trips may be required.

FSE 365 Embalming II 2 Units

Prerequisite: FSE 350 and 360 with grades of "C" or better
Corequisite: FSE 297 and 370
Enrollment Limitation: Students must show proof they are within the final semester of coursework including funeral service education courses, general education courses, and competencies.
Hours: 36 hours LEC

This course is a continuation of FSE 360. It is the study of vascular anatomy, case analysis, the selection and injection of embalming fluids, and treatment of specific conditions requiring special attention.

FSE 370 Funeral Service Counseling 3 Units

Prerequisite: FSE 335, 350, and 360 with grades of "C" or better
Corequisite: FSE 297, FSE 365, and PSYC 390
Hours: 54 hours LEC

This course examines communication skills and the role of the funeral director as facilitator, counselor, and caregiver. Topics include specific communication and counseling techniques as they are applied in funeral service practice as well as normal and abnormal grief reactions, children and death, crisis intervention counseling, and dealing with stress and burnout. Field trips may be required.

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.A. for Transfer - 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.

Requirements for Degree 20 - 24 Units

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 (1-4)	1 - 4 ¹
or GEOL 390	Field Studies in Geology (1-4)	
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 302	Principles of Macroeconomics (3)	
or ECON 304	Principles of Microeconomics (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)
or NATR 334	Soil Science and Management (3)
PHIL 350	Philosophy of Religion (3)
POLS 310	Introduction to International Relations (3)
SOC 300	Introductory Sociology (3)

¹One unit of GEOG 390 or GEOL 390 is required for the degree; up to 1 additional units of GEOG 390 and/or GEOL 390 may be counted toward the six units of required electives.

²One unit of GEOG 390 or GEOL 390 is required for the degree; up to 1 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.

Geography A.A. for Transfer 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 examines 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 geography examines the physical elements and spatial processes that make up and shape the natural environment, including energy, air, water, weather, climate, landforms, soils, animals, and plants. Many geographers also utilize geospatial technologies such as Geographic Information Systems (GIS), the Global Positioning System (GPS), and remote sensing.

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 climate change, desertification, deforestation, loss of biodiversity, groundwater pollution, flooding, and more.

The Associate in Arts in Geography 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 Geography. Additionally, this degree exposes students to the core principles and practices of the field in order to build a foundation for their future personal, academic, or vocational paths.

The Associate in Arts degree in Geography 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 Geography for Transfer (AA-T) may be obtained by the completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program outlined below (earning a C or better in these courses) and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education Breadth Requirements.

Students interested in transferring to a CSU campus to pursue a bachelor's degree in geography should meet with a counselor to confirm the courses required for lower division preparation in the major. Although additional preparatory courses are not required for this degree, a careful review of the requirements at your chosen CSU will increase the likelihood that your transfer experience is smooth and successful.

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 in natural resource management, environmental consulting, urban and regional planning, and elementary and secondary teaching. Geographic skills and knowledge are also quite valuable in diverse fields such as real estate, marketing, and demography.

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(Geography A.A. for Transfer Degree continued)

Student Learning Outcomes

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

- describe the general content and scope of baccalaureate-level geography studies.
- compare and contrast the general biophysical and sociocultural differences and similarities among world regions.
- interpret maps and mapped data utilizing basic map elements, including scales, common coordinate systems, and map symbols.
- compare and contrast common geospatial technologies such as Geographic Information Systems (GIS), Global Positioning System (GPS), and remote sensing.
- evaluate and analyze common geographic problems and their solutions.
- list and describe at least three career options for geographers.

Requirements for Degree		19 Units
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
A minimum of 6 units from the following:		6¹
GEOG 306	Weather and Climate (3)	
GEOG 320	World Regional Geography (3)	
GEOG 322	Geography of California (3)	
GEOG 390	Field Studies in Geography (1-4)	
A minimum of 6 units from the following:		6²
ANTH 310	Cultural Anthropology (3)	
GEOG 305	Global Climate Change (3)	
GEOG 307	Environmental Hazards and Natural Disasters (3)	
GEOG 330	Introduction to Geographic Information Systems (3)	
GEOL 300	Physical Geology (3)	

¹GEOG 390 must be taken for at least 1.0 units.
²Students may also substitute any course from the previous list not already taken to fulfill degree requirements.

Associate in Arts for Transfer Degree Requirements: The Geography 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.

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 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

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(Geographic Information Systems (GIS) Degree continued)

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	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 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
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 ¹	

Physical Science Courses:

ASTR	300, 310, 320, 330, 400, 481, 495, 499
CHEM	305, 306, 309, 310, 311, 400, 401, 420, 421, 423, 495, 499
GEOG	300, 301, 305, 306, 307, 308, 309, 390, 495, 499
GEOL	300, 301, 305, 306, 310, 311, 320, 325, 330, 331, 342, 345, 390, 495, 499
PHYS	310, 311, 312, 350, 360, 410, 421, 431, 495, 499
PS	300, 301, 495, 499

Biological Science Courses:

ANTH	300, 301, 303, 370, 372, 480, 495, 499
BIOL	300, 301, 303, 305, 310, 322, 332, 342, 352, 370, 390, 400, 410, 415, 420, 430, 431, 440, 442, 482, 490, 491, 495, 499
BIOT	301, 305, 307, 308, 311, 312, 499
NATR	300, 302, 303, 304, 305, 306, 307, 310, 320, 322, 330, 332, 340, 346, 495, 499
PSYC	310, 311, 495, 499

¹must be transfer-level and must include one laboratory course in a physical science and one laboratory course in a biological science

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.

(continued on next page)

(Geographic Information Systems (GIS) - Certificate continued)

- 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 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.

See losrios.edu/gainful-emp-info/gedt.php?major=011364C01 for Gainful Employment Disclosure.

Requirements for Certificate	29.5-32.5 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 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, 39 or 42; 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 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. (C-ID GEOG 110)

GEOG 301 Physical Geography Laboratory 1 Unit

Corequisite: GEOG 300

Advisory: MATH 32, 39 or 42 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 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. (C-ID GEOG 111)

GEOG 305 Global Climate Change 3 Units

Same As: GEOL 320

Advisory: ENGWR 102 or ESLW 310 AND ENGRD 116 or ESLR 310 AND and MATH 100, 104 or 132 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, 39 or 42; 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. (C-ID GEOG 130)

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 301 or GEOL 301

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 the world's oceans, including the physical, chemical, biological and human-made processes that affect the oceans. Topics include plate tectonics, ocean basins and sediments, water chemistry, waves, tides, shoreline processes, ocean currents and its biosystems. Humans have impacted nearly all aspects of the oceans, which are critical to our species. Regional oceanographic features are emphasized and a field trip to gain familiarity with regional physical shoreline features is required. This course is not open to students who have completed GEOL 330.

GEOG 309 Introduction to Oceanography Lab 1 Unit

Same As: GEOL 331

Corequisite: GEOG 308 or GEOL 330

Advisory: GEOG 301 and 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 Earth's oceans, emphasizing coastal processes of California. Most laboratory exercises are incorporated into field studies of California's coast, which involves visiting and comparing several distinct coastal environments. Camping is required, and a small fee is to be paid by the student. This course is not open to students who have completed GEOL 331.

GEOG 310 Human Geography: Exploring Earth's Cultural Landscapes 3 Units

Advisory: MATH 32, 39 or 42 with a grade of "C" or better or placement through the assessment process; AND eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

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. (C-ID GEOG 120)

GEOG 320 World Regional Geography 3 Units

Advisory: MATH 32, 39 or 42; 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 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. (C-ID GEOG 125)

GEOG 322 Geography of California 3 Units

Advisory: MATH 32, 39 or 42 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. (C-ID GEOG 140)

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 331 Exploring Maps and Geographic Technologies 3 Units

Advisory: GEOG 300; CISC 300 or equivalent with a grade of "C" or better

Course Transferable to CSU

Hours: 50 hours LEC; 12 hours LAB

This course introduces students to the world of maps (both hard-copy and digital) and the geographic techniques and technologies that are utilized in the creation of modern cartographic documents. Examination of cartographic design, basic statistics, the Global Positioning System (GPS), Internet mapping, remote sensing, and Geographic Information Systems (GIS) are covered.

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.

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: 50 hours LEC; 12 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, 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

Prerequisite: GEOG 330 with a grade of "C" or better

Course Transferable to CSU

Hours: 54 hours LEC

This course introduces the techniques, theory, and practical experience necessary to acquire, convert, and create digital spatial data. Topics include acquisition of existing Geographic Information Systems (GIS) data, metadata, formatting and conversion of GIS data, 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 and tabular data applicable to GIS, as well as relevant issues such as hardware and software requirements. Particular attention is paid to determining an appropriate methodology, conversion plan, and data quality assurance procedure. 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 spatial data engine service management, spatial functions, multi-user editing, replication, and data organization. Traditional spatial database topics are rigorously examined in a GIS context, including data integration, warehousing, complex SQL spatial coding, and system integration.

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.

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.

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. Map authoring and Web service management tools (such as ArcGIS and ArcGIS Server) are used to teach the techniques of creating, managing, maintaining, and deploying Web map services. In addition this course introduces several options for using published Web map services (such as Web-based and mobile) mapping applications.

GEOG 390 Field Studies in Geography 1-4 Units

Same As: GEOL 390
Course Transferable to CSU
Hours: 3-24 hours LEC; 18-144 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. A portion of this course may be offered in a TBA component of 18-144 hours which may include composing field notes, making field sketches, collecting various forms of field data, analysis of field data, and use of maps, compass, and/or the Global Positioning System. (C-ID GEOG 160)

GEOG 495 Independent Studies in Geography 1-3 Units

Course Transferable to CSU
Hours: 54-162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

GEOG 498 Work Experience in Geography 1-4 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position, or job related to geography or geographic information systems (GIS) with a cooperating site supervisor. Students are advised to consult with the Geography Department faculty to review specific certificate and degree work experience requirements.

General Education: AA/AS Area III(b)
Course Transferable to CSU
Hours: 60-300 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 Title 5 required forms which document the student's progress and hours spent at the work site, and developing workplace skills and competencies. During the semester, the student is required to 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. First-time participants are required to attend a weekly orientation and a final meeting. Returning participants are required to attend the first class meeting, a mid-semester meeting, and a final meeting and may meet individually with the instructor as needed to complete a work site observation and all program forms, receive updates, and assignments. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

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

This transfer degree can only be awarded using the IGEC pattern:

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) the Intersegmental General Education Transfer Curriculum (IGETC).

Student Learning Outcomes

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

- evaluate new and accepted ideas about the natural universe using testable methodology.

- articulate orally and/or in writing the importance of continuous examination and modification of accepted ideas as a fundamental element in the progress of science.
- sort, arrange, and quantify objects using the international system of measurement (metric) as the standard.
- analyze a wide variety of natural phenomena using basic definitions and fundamental theories of natural science.
- compare the scales at which geologic processes work.
- apply knowledge of current geologic processes to the understanding of Earth's past geologic history.

Career 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 Arts for Transfer Degree Requirements: The Associate in Science in Geology for Transfer (AA-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) the Intersegmental General Education Transfer Curriculum (IGETC) 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.

(continued on next page)

(General Science Degree continued)

- 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: 18¹

Physical Science Courses:

ASTR	300, 310, 320, 330, 400, 481, 495, 499
CHEM	305, 306, 309, 310, 311, 400, 401, 420, 421, 423, 495, 499
GEOG	300, 301, 305, 306, 307, 308, 309, 390, 495, 499
GEOLOGY	300, 301, 305, 306, 310, 311, 320, 325, 330, 331, 342, 345, 390, 495, 499
PHYS	310, 311, 312, 350, 360, 410, 421, 431, 495, 499
PS	300, 301, 495, 499

Biological Science Courses:

ANTH	300, 301, 303, 370, 372, 480, 495, 499
BIOL	300, 301, 303, 305, 310, 322, 332, 342, 352, 370, 390, 400, 410, 415, 420, 430, 431, 440, 442, 482, 490, 491, 495, 499
BIOT	301, 305, 307, 308, 311, 312, 499
NATR	300, 302, 303, 304, 305, 306, 307, 310, 320, 322, 330, 332, 340, 346, 495, 499
PSYC	310, 311, 495, 499

¹must be transfer-level and must include one laboratory course in a physical science and one laboratory course in a biological science

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, 104 or 132 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. (C-ID GEOL 100)

GEOL 301 Physical Geology Laboratory **1 Unit**

Corequisite: GEOL 300

General Education: 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. (C-ID GEOL 100L)

GEOL 305 Earth Science **3 Units**

Advisory: MATH 32, 39 or 42; 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 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. (C-ID GEOL 120)

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. (C-ID GEOL 120L)

GEOL 310 Historical Geology **3 Units**

Advisory: GEOL 300, GEOL 305, MATH 100, MATH 104, or MATH 132; AND eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

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. Plate tectonics and its driving mechanisms are used to understand the assembly and breakup of supercontinents, growth and erosion of mountains and changing sea levels. The evolution of species, ecosystems, climates, and landscapes is placed in a plate tectonics context. Stratigraphic, mineralogic, geochemical, and petrographical techniques for interpreting the sequence of past geological events are studied. Field trips may be required. (C-ID GEOL 110)

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. (C-ID GEOL 110L)

GEOL 320 Global Climate Change 3 Units

Same As: GEOG 305

Advisory: ENGWR 102 or ESLW 310, ENGRD 116 or ESLR 310, and MATH 100, 104 or 132 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 the world's oceans, including the physical, chemical, biological and human-made processes that affect the oceans. Topics include plate tectonics, ocean basins and sediments, water chemistry, waves, tides, shoreline processes, ocean currents and its biosystems. Humans have impacted nearly all aspects of the oceans, which are critical to our species. Regional oceanographic features are emphasized and a field trip to gain familiarity with regional physical shoreline features is required. This course is not open to students who have completed GEOG 308.

GEOL 331 Introduction to Oceanography Lab 1 Unit

Same As: GEOG 309

Corequisite: GEOG 308 or GEOL 330

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 Earth's oceans, emphasizing coastal processes of California. Most laboratory exercises are incorporated into field studies of California's coast, which involves visiting and comparing several distinct coastal environments. Camping is required, and a small fee is to be paid by the student. This course is not open to students who have completed GEOG 309.

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, 39 or 42; 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 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. (C-ID GEOL 200)

GEOL 390 Field Studies in Geology 1-4 Units

Same As: GEOG 390

Course Transferable to CSU

Hours: 3-24 hours LEC; 18-144 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. A portion of this course may be offered in a TBA component of 18-144 hours which may include composing field notes, making field sketches, collecting various forms of field data, analysis of field data, and use of maps, compass, and/or the Global Positioning System.

GEOL 495 Independent Studies in Geology 1-3 Units

Course Transferable to CSU

Hours: 54-162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

Area: Behavioral & Social Sciences
 Dean: Carlos Reyes
 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

Department Certificates:
 Activity Coordinator Certification
 Dementia Care
 Elder Care
 Ethnicity and Aging
 Leadership in Assisted Living Communities
 Social Service Designee

Gerontology is the study of human growth and development during adulthood. It includes the psychological and physiological changes that touch each individual, as well as, the social implications that flow from these changes.

The Gerontology program at American River College offers continuing education credit for specific courses for RNs, LVNs, CNAs, RCFE Administrators, LMFTs, LCSWs, and Nursing Home Administrators.

ARC has gained a reputation as a leader in gerontology studies and has been awarded National Program of Merit Status by the Association for Gerontology in Higher Education. The program co-sponsors events with AARP and California Council on Gerontology and Geriatrics. This leadership has enriched its offerings and enhanced the career value of an ARC gerontology degree or certificate.

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.

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(Gerontology: Business Degree continued)

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

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(Gerontology: Environmental Design Degree continued)**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)	

¹Prerequisite 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 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
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)	
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.

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(Gerontology: Recreation Degree continued)

Gerontology: Recreation 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 430 Activity Coordinator Certification (6.5)	
KINES 302 Introduction to 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.

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(Gerontology: Business Certificate continued)

See losrios.edu/gainful-emp-info/gedt.php?major=011300C01 for Gainful Employment Disclosure.

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.

See losrios.edu/gainful-emp-info/gedt.php?major=011299C01 for Gainful Employment Disclosure.

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.

See losrios.edu/gainful-emp-info/gedt.php?major=011297C01 for Gainful Employment Disclosure.

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)	

¹Prerequisite 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
- 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.

See losrios.edu/gainful-emp-info/gedt.php?major=011298C01 for Gainful Employment Disclosure.

Gerontology: Health Care 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
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)	
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.

See losrios.edu/gainful-emp-info/gedt.php?major=011301C01 for Gainful Employment Disclosure.

Gerontology: Recreation 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 430	Activity Coordinator Certification (6.5)	
KINES 302	Introduction to 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

(continued on next page)

(Gerontology: Social Policy/Advocacy Certificate continued)

- 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.

See losrios.edu/gainful-emp-info/gedt.php?major=011302C01 for Gainful Employment Disclosure.

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 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)	

DEPARTMENT CERTIFICATES

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

Dementia Care Certificate

This certificate provides a comprehensive overview of dementias, behavior management, and communication. It expands the knowledge of students to enter the workforce where they will be dealing with seniors diagnosed with a form of dementia.

Student Learning Outcomes

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

- differentiate between reversible and irreversible dementias
- develop strategies for care for those with dementia
- create a safe environment for those with dementia
- evaluate a specific problem to decide if the problem is the patient's or the caregiver's
- assess specific dementia behavior problems and select appropriate responses
- demonstrate appropriate responses to dementia behaviors
- analyze various types of dementia and their characteristics
- identify communication strategies for enhanced understanding by the dementia patient
- identify principles of behavior management
- define caregiver issues
- assess elements of communication that relate to Validation theory
- analyze the theory behind Validation and describe the benefits of using Validation techniques
- demonstrate Validation techniques
- analyze dementia stages and select appropriate Validation techniques

Career Opportunities

Direct care of dementia patients. Supervision and inservice for dementia patients' caregivers

Requirements for Certificate	2 units
GERON 204 Alzheimer's Disease and Other Dementias	0.5
GERON 205 Validation: Theory and Practice.....	0.5
GERON 206 Dementia: Behavior Management	0.5
GERON 271 Dementia: Behaviors and Activity	0.5

Elder Care Certificate

This Certificate provides a comprehensive overview of the caregiving experience. It expands the knowledge of students to enter the workforce where they will be dealing with seniors and their caregivers.

Student Learning Outcomes

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

- design caregiving strategies based on the elders’ needs and available resources
- explain the concept of “Caring for the Caregiver”
- describe effective procedures for caring for elderly people with memory impairments
- analyze role reversal and sources of guilt within families
- define what constitutes elder abuse, including different types of abuse
- assess causes of elder abuse
- evaluate prevention approaches and resources to intervene before abuse occurs
- identify elder abuse reporting steps and forms
- evaluate the different causes of stress in caregiving situations
- analyze aspects of belief systems which enhance stress in caregiving
- apply new talking and listening skills for reducing stress in self and others
- assess elements of communication that relate to Validation theory
- analyze theory of Validation
- demonstrate Validation techniques
- analyze dementia stages and select appropriate Validation techniques

Career Opportunities

Direct care of seniors. Supervision and inservice for caregivers.

Requirements for Certificate		2 units
GERON 205	Validation: Theory and Practice.....	0.5
GERON 207	Elder Abuse.....	0.5
GERON 208	Stress Management: New Approaches.....	0.5
GERON 209	Strategies for Caregivers: Effectively Caring for the Elderly in the Community.....	0.5

Ethnicity and Aging Certificate

This Certificate provides a comprehensive overview of how ethnicity affects the aging experience. It expands the knowledge of students to enter the workforce where they will be dealing with seniors from different cultures and ethnic groups.

Student Learning Outcomes

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

- synthesize and discuss the importance of cultural sensitivity as it relates to working with older people
- evaluate and discuss differences among ethnic groups in life expectancy, mortality, mobility, family dynamics, work/retirements, mental health, views on death, and use of senior services
- define and discuss ways of overcoming barriers to understanding and using senior services
- evaluate the impact of culture and society on the aging process

- compare and contrast values and beliefs of Asian, Hispanic, African-American cultures and the dominant Western culture
- develop strategies for assessing and assisting aging Asians, Hispanics, and African-Americans and their families
- describe historical events or institutions that have influenced African-American elderly
- describe the economic, educational, and social groups found among the African-American elderly
- discuss the health conditions found most frequently among the Asian, Hispanic, and African-American elderly

Career Opportunities

Direct care of seniors from diverse backgrounds. Supervision and inservice for caregivers.

Requirements for Certificate		2 units
GERON 210	Aging Experience in Asian Families.....	0.5
GERON 211	Aging Experience in Hispanic Families.....	0.5
GERON 212	Aging Experience in African-American Families.....	0.5
GERON 360	Ethnic Diversity and Aging.....	0.5

Leadership in Assisted Living Communities Certificate

This certificate provides a comprehensive overview of leadership, communication, and professionalism and ethics required for effective leadership and supervision in assisted living communities.

Student Learning Outcomes

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

- analyze three categories of leadership
- compare and apply four facets of problem solving in regards to long-term care facilities
- analyze the essential elements in team building and being a part of the team in long-term care facilities
- identify and exhibit effective communication techniques
- demonstrate effective motivational practices
- differentiate between ethics and morals as related to working with seniors
- evaluate professional conduct in long-term care facilities
- demonstrate listening skills when working with the elderly
- describe the parameters of confidentiality
- describe professional boundaries
- analyze patterns of communication
- demonstrate validation of feelings and viewpoints
- evaluate adaptive behaviors in long-term care settings
- compare different types of staff support systems

Career Opportunities

Administrative positions in long-term care communities, such as staff coordinator, marketing specialist, resident coordinator, facility administrator.

Requirements for Certificate		1.5 units
GERON 201	Leadership and Team Building in Long-term Care Facilities.....	0.5
GERON 202	Professionalism and Ethics in Long-term Care.....	0.5
GERON 203	Communication for Supervision in Long-term Care.....	0.5

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 state requirements to be licensed as an administrator of a residential care facility for the elderly (RCFE). Topics include philosophy, mission, and operations of a RCFE; regulations, rights and responsibilities of licensees; fingerprinting and criminal record clearances; psychosocial needs of residents; physical plant requirements; resident assessment, retention, and eviction; resident records and services; food service regulations; admission agreement; special diets; medications; abuse reporting; residents' rights; and community resources. Pass/No Pass only.

**GERON 230 Motivating Older Adults
to Stay Active .5 Units***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 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**

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

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. After the first class session, this course is held off campus in a long-term care setting. Supervision by a professor in a long-term care setting is required. This course is not open to students who have completed PSYC 378.

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.
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 and techniques of reminiscence therapy and provides experience in planning, facilitating, and evaluating reminiscence groups with the elderly in an institutional setting. After the first class session, this course is held off campus in a long-term care setting. This course is not open to students who have completed PSYC 379.

GERON 335 Wellness for Older Adults 3 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
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: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
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, 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

Course Transferable to CSU
Hours: 9 hours LEC

This course is an overview of ethnicity and culture as factors in the aging process. It focuses on values, beliefs, and culture, and their impact on the design and delivery of senior services with an emphasis on health and residential care services. Pass/No Pass only.

GERON 362 Biology of Aging .5 Units

Course Transferable to CSU
Hours: 9 hours LEC

This course is an overview of the biology of aging and health of the older adult. The focus is on chronic and acute illnesses, normal aging changes, sexuality, nutrition, and strategies for good health. Pass/No Pass only.

GERON 366 Coping with Death and Related Bereavement .5 Units

Course Transferable to CSU
Hours: 9 hours LEC

This course explores our societal/cultural and personal views of death, dying, and bereavement. Topics include the processes of dying and grieving from the perspectives of the patient, family, friends, and caregivers; the dynamics of loss, grief, and bereavement; and the needs of the bereaved. Pass/No Pass only.

GERON 368 Mental Health and Aging .5 Units

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. Pass/No Pass only.

GERON 378 Body Mechanics and Safety .5 Units

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: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
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.

GERON 490 Aging Policy and Practice 3 Units

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 495 Independent Studies in Gerontology 1-3 Units

Course Transferable to CSU
Hours: 54-162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

GERON 498 Work Experience in Gerontology 1-4 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position, or job related to gerontology with a cooperating site supervisor. Students are advised to consult with the Gerontology Department faculty to review specific certificate and degree work experience requirements.

Course Transferable to CSU
Hours: 60-300 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 Title 5 required forms which document the student's progress and hours spent at the work site, and developing workplace skills and competencies. During the semester, the student is required to 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. First-time participants are required to attend a weekly orientation and a final meeting. Returning participants are required to attend the first class meeting, a mid-semester meeting, and a final meeting and may meet individually with the instructor as needed to complete a work site observation and all program forms, receive updates, and assignments. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

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 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.

Area: Kinesiology and Athletics
 Dean: Greg Warzecka
 Phone: (916) 484-8201
 Counseling: (916) 484-8572

Courses: HEED 310, 311, 315, 316, 323, 495

Area: Science and Engineering
 Dean: Dr. Rina Roy
 Phone: (916) 484-8107
 Counseling: (916) 484-8572

Courses: HEED 300, 308, 352, 495

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

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

General Education: AA/AS Area III(b); CSU Area E1

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course focuses upon factors which influence the health status of both the individual and the community. Topics include personal fitness, nutrition, sexuality, sexually transmitted disease, drug dependence including alcohol and tobacco, as well as diseases related to lifestyle.

HEED 308 Environmental Health Science 3 Units

General Education: AA/AS 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.

HEED 311 CPR and Pediatric First Aid 1.5 Units

Same As: ECE 414

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

Course Transferable to UC/CSU

Hours: 27 hours LEC

This course meets the requirements for American Red Cross certification in California Child Care Health & Safety Training which includes adult, child, and infant CPR and pediatric first aid. It also includes legal considerations, avoiding disease transmission, responding to sudden illnesses and injuries, and recognition of common childhood diseases. This course is not open to students who have completed ECE 414.

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.

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: HEED 310 with a grade of "C" or better, or current American Red Cross or American Heart Association Community or Professional Rescuer CPR certification

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

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, avoiding disease transmission, controlling severe bleeding, and moving victims, as well as professional rescuer situation practice sessions.

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 495 Independent Studies in
Health Education 1-3 Units**

Course Transferable to CSU

Hours: 54-162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

Area: Health & Education
 Dean: Dr. Steven Boyd
 Program Director:
 Susan Peterson
 Phone: (916) 484-8254 or 484-8873
 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.

See losrios.edu/gainful-emp-info/gedt.php?major=011538C01 for Gainful Employment Disclosure.

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 Providers .....3
[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 II .....3
HCI 330	Healthcare Interpreting III .....3
3rd Semester:	
HCI 340	Healthcare Interpreting IV .....3
HCI 350	Healthcare Interpreting Fieldwork .....3

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. A portion of this course may be offered in a TBA component of 50 - 60 hours which may include directed practice in precepted clinical settings and fieldwork or workplace experience.

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

Degree: A.A. for Transfer - History

The study of history equips the student with cultural literacy and promotes critical thinking and well-informed perspectives on today's world.

History A.A. for Transfer Degree

The Associate in Arts degree in History for Transfer provides a clearly articulated curricular track for students who wish to transfer to a CSU campus, while also serving the diverse needs of students interested in the breadth and depth of the field of history. Additionally, this degree exposes students to the core principles and practices of the study of history in order to build a foundation for their future personal, academic, and professional paths.

The degree is designed to facilitate students' successful transfer to certain CSU four-year programs that prepare them for advanced study in graduate and professional programs, as well as a variety of careers including teaching, archival research, public history, government service, journalism, business, and the law. History graduates are well suited to many fields of endeavor that require effective reading, writing, and critical thinking skills, as well as historically informed perspectives on today's global societies.

The Associate in Arts degree in History for Transfer provides students with a major that fulfills the general requirements of the California State University for transfer. Students with this degree will receive priority admission with junior status to the California State University system.

The Associate in Arts degree in History for Transfer (A.A.-T) may be obtained by the completion of 60 transferable, semester units with a minimum of a 2.0 GPA, including (a) the major or area of emphasis described in the Required Program outlined below (earning a C or better in these courses), and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

Student Learning Outcomes

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

- identify and correctly use basic historical terminology, and distinguish between primary and secondary sources as historical evidence.
- analyze multiple causes for an historical event, and properly evaluate why that event happened.
- identify various interpretations used by historians to explain history.
- identify the major time periods and relevant geography of history.
- analyze and evaluate the major economic, social, political, and cultural developments in history.

- analyze and evaluate the experiences and conflicts of diverse groups of people, including "common people" in history.
- make historical generalizations based on a study and understanding of historical evidence.

Career Opportunities

This degree is designed to prepare students for a wide variety of occupational endeavors, including careers in education, business, public history, government service, the military, and the law.

Requirements for Degree 18 Units

HIST 310	History of the United States (3)	3
or HIST 483	History of the United States - Honors (3)	
HIST 311	History of the United States (3)	3
or HIST 484	History of the United States - Honors (3)	
HIST 300	History of Western Civilization (3)	3
or HIST 480	History of Western Civilization - Honors (3)	
or HIST 307	History of World Civilizations to 1500 (3)	
HIST 302	History of Western Civilization (3)	3
or HIST 481	History of Western Civilization - Honors (3)	
or HIST 308	History of World Civilizations, 1500 to Present (3)	

A minimum of 3 units from the following:..... 3

HIST 305	Women in Western Civilization (3)	
HIST 320	History of the United States: African-American Emphasis (3)	
HIST 321	History of the United States: African-American Emphasis (3)	
HIST 325	History of Asian/Pacific Americans (3)	
HIST 327	History of the Chicano/Mexican American (3)	
HIST 330	Women in American History (3)	
HIST 364	Asian Civilization (3)	
HIST 365	Asian Civilization (3)	
HIST 373	History of Mexico (3)	

A minimum of 3 units from the following:..... 3¹

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 318	American Intellectual and Cultural History (3)	
HIST 320	History of the United States: African-American Emphasis (3)	
HIST 321	History of the United States: African-American Emphasis (3)	
HIST 323	History of the United States: The American Indian Experience (3)	
HIST 325	History of Asian/Pacific Americans (3)	
HIST 327	History of the Chicano/Mexican American (3)	
HIST 330	Women in American History (3)	
HIST 340	History of California through 1879 (3)	
HIST 341	History of California: 1879 to Present (3)	
HIST 364	Asian Civilization (3)	
HIST 365	Asian Civilization (3)	
HIST 367	History of Russia (3)	
HIST 373	History of Mexico (3)	

¹Student may choose any course from this last list if not previously used.

(continued on next page)

(History A.A. for Transfer Degree continued)**Associate in Arts for Transfer Degree Requirements:**

The Associate in Arts in History for Transfer (AA-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

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; IGETC Area 4F

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; IGETC Area 4F

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. (C-ID HIST 180)

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; IGETC Area 4F

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, 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; AA/AS Area VI; CSU Area C2; CSU Area D6; IGETC Area 3B; IGETC Area 4F

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course surveys world civilizations from antiquity to the 1500s, with a particular emphasis on the dynamic interaction and comparison of diverse peoples, ethnicities, and cultures. Special attention is given to the social, political, economic, cultural, and religious influences that shaped major world civilizations. (C-ID HIST 150)

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 3B; 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. (C-ID HIST 130)

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. (C-ID HIST 140)

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: AA/AS Area V(b); CSU Area C2; CSU Area D6; IGETC Area 3B; IGETC Area 4F

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: AA/AS Area V(b); CSU Area C2; CSU Area D6; IGETC Area 3B; IGETC Area 4F

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: AA/AS Area V(b); CSU Area D6

Course Transferable to CSU

Hours: 9-54 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.

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: AA/AS Area V(b); AA/AS Area I; CSU Area C2; CSU Area D6; IGETC Area 3B; IGETC Area 4F

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: 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 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: AA/AS Area V(b); CSU Area C2; CSU Area D6; IGETC Area 3B; IGETC Area 4F

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: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

General Education: AA/AS Area V(b); CSU Area C2; CSU Area D6; IGETC Area 3B; IGETC Area 4F

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: AA/AS Area I; AA/AS 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; IGETC Area 4F
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; IGETC Area 4F
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. (C-ID HIST 180)

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. (C-ID HIST 130)

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. (C-ID HIST 140)

HIST 495 Independent Studies in History 1-3 Units

*Course Transferable to CSU
Hours: 54-162 hours LAB*

Independent Study is an opportunity for the student to extend classroom experience in the subject of history, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

Dean: Steven Segura
 Director: Jerry Manduca
 Phone: (916) 570-5000
 Counseling: (916) 484-8572

Department Certificate:
 Homeland Security

DEPARTMENT CERTIFICATE

Homeland Security

This certificate examines the roots of terrorism, weapons of mass destruction, intelligence analysis, response methods, natural disaster incidents, threat mitigation, crisis negotiation, and conflict resolution. It explores topics directly associated with border security and security for transportation infrastructure, including: seaports, ships, aircraft, trains, train stations, highways, bridges, rail lines, pipelines, and bus systems.

Student Learning Outcomes

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

- construct a historical time-line reflecting significant terrorist threats and events in the United States and globally.
- classify the roles, functions of, and interdependency among local, federal and international law enforcement and military agencies to counter and combat terrorism.
- differentiate between ethical and unethical attitudes and actions regarding the execution of homeland security practices.
- identify the characteristics, ideologies, motives and behaviors of various extremist and terrorist groups that foster and support terrorist, criminal activities.
- explain operational knowledge of intelligence gathering and analysis processes pertinent to homeland security.
- identify and describe threats to national and international security.
- outline the primary federal, state, and local agencies in the United States that are affiliated with border and transportation security and the ethical parameters in which they operate.
- discuss differences in dealing with security threats for passengers versus freight/cargo transportation systems and border security.
- describe the impact of technology on countering threats to transportation systems and border security.

Requirements for Certificate	9 Units
HLS 300 Introduction to Homeland Security	3
HLS 302 Intelligence Analysis and Security Management	3
HLS 304 Transportation and Border Security.....	3

Homeland Security

HLS 300 Introduction to Homeland Security 3 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

Course Transferable to CSU

Hours: 54 hours LEC

This course introduces the vocabulary and various components of homeland security. Emphasis is placed on the agencies associated with homeland security and their interrelated duties and relationships. Critical threats confronting homeland security, historical events impacting homeland security, and related state, national, and international laws are examined.

HLS 302 Intelligence Analysis and Security Management 3 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

Course Transferable to CSU

Hours: 54 hours LEC

This course examines intelligence analysis and its relationship to the security management of terrorist attacks and natural disasters, as well as vulnerabilities of our national defense and private sectors. Emphasis is placed on ethical principles and how the intelligence community operates in support of federal, state, and local homeland security agencies.

HLS 304 Transportation and Border Security 3 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

Course Transferable to CSU

Hours: 54 hours LEC

This course provides an overview of modern border and transportation security challenges, as well as presenting different methods to address these challenges. Topics include: security for transportation infrastructure related to seaports, ships, aircraft, airports, trains, train stations, trucks, highways, bridges, rail lines, pipelines, and bus systems. Emphasis is placed on technological solutions employed to enhance security of borders and transportation systems.

Coordinator: Kathy Rodgers
 Phone: (916) 484-8359
 Counseling: (916) 484-8572

Certificate: Honors Transfer

Honors Transfer Certificate

The American River College (ARC) 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 15 units of approved Honors coursework. A maximum of 6 units of Honors coursework may be transferred from other colleges. Some courses may need to be petitioned. A total of 12 units of degree-applicable coursework must be earned at ARC to meet residency requirements. Most courses in the certificate fulfill requirements for the ARC A.A., A.S., A.A.-T., A.S.-T. degrees, the Intersegmental General Education Transfer Curriculum (IGETC), and the CSU General Education Certification Pattern. Check with an ARC counselor for exceptions. 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, Anthropology, Biology, Computer Information Science, English-Writing, History, Nutrition, Political Science, Psychology, or Sociology or visit the Honors website at www.arc.losrios.edu/Honors_Program.htm.

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

ANTH 480	Honors Physical Anthropology (3)
ANTH 481	Honors Cultural Anthropology (3)
BIOL 482	Honors Marine Biology (4)
CISP 480	Honors Introduction to Structured Programming (5)
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)
NUTRI 481	Honors - Cultural Foods of the World (3)
POLS 481	Introduction to Government: United States - Honors (3)
PSYC 480	Honors General Principles (3)
PSYC 481	Honors Abnormal Behavior (3)
SOC 480	Introductory Sociology - Honors (3)

Area: Technical Education
 Dean: Dr. Trish Caldwell
 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
 Department Certificates:
 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.

See losrios.edu/gainful-emp-info/gedt.php?major=011146C01 for Gainful Employment Disclosure.

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.

See losrios.edu/gainful-emp-info/gedt.php?major=011152C01 for Gainful Employment Disclosure.

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)	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
DESIGN 100	Introduction to Computer Aided Drafting and Design (CADD)	3
DESIGN 302	Technical Documentation with CADD	3
DESIGN 300	Introduction to Design Resources	3
DESIGN 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.

DEPARTMENT CERTIFICATES

Floristry Certificate

The Floristry certificate provides well-balanced training in the fundamentals of floral design, the identification of flowers and foliage, the care of fresh cut product and the sources of floral materials. Courses cover special event floral design such as weddings, funerals and holidays, and 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.

See losrios.edu/gainful-emp-info/gedt.php?major=011140C01 for Gainful Employment Disclosure.

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 or Certification 2 Units

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

Advisory: HORT 100

Hours: 36 hours LEC

This course introduces the safe and proper use of horticultural chemicals, laws and regulations, and the Integrated Pest Management (IPM) principles involved. It covers the laws and regulations for operators, applicators, and advisors, including the study of weeds, diseases, insects, and accepted standards for control.

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.

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. 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.

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.

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.

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.

HORT 298 Work Experience in Horticulture 1-4 Units*Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.*

Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position, or job related to the field of horticulture with a cooperating site supervisor. Students are advised to consult with the Horticulture Department faculty to review specific certificate and degree work experience requirements.

*General Education: AA/AS Area III(b)**Hours: 60-300 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 or certificate occupational programs. Course content includes understanding the application of education to the workforce, completion of Title 5 required forms which document the student's progress and hours spent at the work site, and developing workplace skills and competencies. During the semester, the student is required to 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. First-time participants are required to attend a weekly orientation and a final meeting. Returning participants are required to attend the first class meeting, a mid-semester meeting, and a final meeting and may meet individually with the instructor as needed to complete a work site observation and all program forms, receive updates, and assignments. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

HORT 300 Introduction to Horticulture 3 Units*General Education: AA/AS Area IV**Course Transferable to CSU**Hours: 54 hours LEC*

Designed to inform those seeking a career in horticulture, this course surveys sustainable principles and practices of horticulture. Emphasis is on plant growth, care and appearance, and how those are influenced by plant structure, function, and growing environment. Topics include plant naming, growing conditions and processes, cultural practices, propagation, pruning, careers in horticulture, pest problems and control, and use of references for future learning.

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 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, with special emphasis on types of propagules and techniques utilized to make more plants. Topics include history of plant propagation, tools and facilities, seed and vegetative propagation, media selection, growing propagules on, and sales of plants produced. Field trips may be required.

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: ENGWR 102 and ENGRD 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. In addition, the small engine repair skill areas included in the regional, state, and national Skills USA competitions are covered. AT 301 and/or HORT 330 may be taken two times for credit for a maximum of 8 units, using different equipment. (C-ID AG - MA 120L)

HORT 495 Independent Studies in Horticulture 1-3 Units

Course Transferable to CSU

Hours: 54-162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

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	41 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 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 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.

See losrios.edu/gainful-emp-info/gedt.php?major=011149C01 for Gainful Employment Disclosure.

(continued on next page)

(Culinary Arts/Restaurant Management Certificate continued)

Requirements for Certificate		41 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 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.

See losrios.edu/gainful-emp-info/gedt.php?major=011148C01 for Gainful Employment Disclosure.

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.

See losrios.edu/gainful-emp-info/gedt.php?major=011574C01 for Gainful Employment Disclosure.

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 41; 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

Hours: 27 hours LEC

This course introduces the foundational skills required for all entry-level food preparation courses. Topics include the development of job skills, equipment utilization, weights, measurements, knife cut identification, speed and accuracy, as well as kitchen product identification and utilization.

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

*Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340
Hours: 36 hours LEC*

This course introduces principles involved in advertising for food service establishments. Topics covered include menu planning, design and pricing; marketing plans; market information systems; consumer behavior; and internal and external promotions.

HM 120 Beverage Operation 2 Units

*Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Hours: 36 hours LEC*

This course is a study of beverages, both alcoholic and non-alcoholic, used in the food service industry. Topics include non-alcoholic beverages, spirits, beer, and wine, including their production methods and regions, quality and characteristics. Beverage service, wine analysis, service and pairing with food are also covered, as are government regulations, licenses and product costing. Field trips may be required.

HM 150 Catering 3 Units

*Prerequisite: HM 315 with a grade of "C" or better
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340
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; event design, menu development, pricing, staffing, equipping, and transporting catered services. On and off-campus catering events are required. A portion of this course may be offered in a TBA component of 6-20 hours which may include setting tables, preparing, and serving food for catered events.

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

*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, Floribian, 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: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
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 include hors d'oeuvre, canape, salads, brining, pickling, curing, and smoking. This course also includes basic charcuterie with emphasis on forcemeats, mousselines, terrines, pate, galantines, and sausages.

HM 290 Competitive Culinary Training 2-4 Units

*Prerequisite: HM 315 with a grade of "C" or better
Hours: 18 hours LEC; 54-162 hours LAB*

This course is a cooperative effort between the college, The American Culinary Federation and The Capital Chefs' Association. This course offers the skills necessary to compete in regional and national culinary competitions, using the American Culinary Federation format. 54 hours per unit of TBA practices include knife skills and hot food preparation. Field trips to local restaurants are required to work with local chefs. This course may be taken up to 4 times for credit.

HM 295 Independent Studies in Hospitality Management 1-3 Units

Hours: 54-162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

HM 297 Internship in Hospitality Management 1-4 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

Enrollment Limitation: Must have completed 15 units in Hospitality Management with a grade of "C" or better.

Hours: 6 hours LEC; 36-198 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. A portion of this course may be offered in a TBA component of 36 - 198 hours which may include setting tables, setting up food, and serving food.

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

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

Course Transferable to CSU

Hours: 54 hours LEC

This course covers all phases of food sanitation, including the cause, control and investigation of illness related to food contamination. Sanitary practices in food preparation; proper dishwashing procedures, sanitation of kitchen, dining room, and all equipment; cleaning materials and procedures and garbage and refuse disposal. This course includes general safety precautions, maintenance and operation of appropriate food service equipment, along with elements of kitchen planning and types of equipment used. Successful completion of this course results in Servsafe certification.

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: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

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. It focuses on cakes, fine pastry, chocolate work, decoration, and classic and modern desserts. This course is intended for students interested in commercial application in restaurants, bakeries and other food service facilities.

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

Prerequisite: HM 100 with a grade of "C" or better

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

Course Transferable to CSU

Hours: 36 hours LEC

This course covers accounting and cost control principles in the food service industry. It includes the use of accounting techniques to analyze food and labor cost control, business operations, budgeting, financing, and profit and loss statements.

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 covers intermediate and advanced culinary techniques. It includes production standards, recipe analysis, presentation, stocks, sauces, and major ingredients used in professional cooking. The laboratory component includes use of equipment, skills development, and time management in the commercial kitchen.

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 eight hours per week of work experience in the operation of the front of the house for The Oak Café 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 guest expectations, methods of service, management of service operations and personnel, internal and external marketing, and daily reports and controls. The work experience component allows for hands-on experience running the dining room of the Oak Café two days a week.

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 495 Independent Studies in Hospitality Management 1-3 Units

Course Transferable to CSU
Hours: 54-162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

HM 498 Work Experience in Hospitality Management 1-4 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position, or job related to hospitality management with a cooperating site supervisor. Students are advised to consult with the Hospitality Management Department faculty to review specific certificate and degree work experience requirements.
General Education: AA/AS Area III(b)
Course Transferable to CSU
Hours: 60-300 hours LAB

This course provides students with opportunities to develop marketable skills in preparation for employment or advancement within the field of hospitality management. It is designed for students interested in work experience and/or internships in transfer-level degree occupational programs. Course content includes understanding the application of education to the workforce, completion of Title 5 required forms which document the student's progress and hours spent at the work site, and developing workplace skills and competencies. During the semester, the student is required to 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. First-time participants are required to attend a weekly orientation and a final meeting. Returning participants are required to attend the first class meeting, a mid-semester meeting, and a final meeting and may meet individually with the instructor as needed to complete a work site observation and all program forms, receive updates, and assignments. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Area: Counseling
 Dean: Dr. Judy Mays, Interim
 Phone: (916) 484-8375

American River College's Human Career Development classes are designed to help the student in achieving success in college through a variety of classes, which include study skills, exploration of careers, college success, and academic strategies for students with specific learning disabilities.

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
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
Advisory: Eligible for ENGRD 116 AND ENGWR 101; OR ESLR 320 AND ESLW 320.
Hours: 18 hours LEC

This course covers specific study skills strategies. It provides the opportunity to analyze attitudes toward studying and current study skills or habits. Topics include specific learning styles, strategies for time management, goal setting, note-taking, memory improvement, reading skills, and how to prepare for and take exams.

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: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340
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 interests, personality type, values, and skills assessments. Personal and career goals are formulated using career research and decision-making strategies.

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 assists students preparing for the current job market. Topics include; researching career fields, developing specific career/educational goals, informational interviewing, internships, professional networking, resume writing, interviewing skills, and current job search strategies.

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; 45-162 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). A portion of this course may be offered in a TBA component of 18 hours which may include meeting with instructor to: determine eligibility, discover learning styles and study strategies, accessing and utilizing campus resources, practice using adaptive software. 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.

Area: Behavioral & Social Sciences
 Dean: Carlos Reyes
 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

See losrios.edu/gainful-emp-info/gedt.php?major=011151C01 for Gainful Employment Disclosure.

Requirements for Degree or Certificate	32 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 Psychology Applied to Modern Life (3)	
PSYC 340 Abnormal Behavior	3
or PSYC 481 Honors Abnormal Behavior (3)	
SOC 300 Introductory Sociology	3
HSER 362 Practices in Human Services	3
HSER 498 Work Experience in Human Services	2 ¹

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).

See losrios.edu/gainful-emp-info/gedt.php?major=011153C01 for Gainful Employment Disclosure.

Requirements for Degree or Certificate	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 Psychology Applied to Modern Life (3)	

(continued on next page)

(Chemical Dependency Studies Degree and Certificate continued)

PSYC 340	Abnormal Behavior.....	3
or PSYC 481	Honors Abnormal Behavior (3)	
HSER 362	Practices in Human Services.....	3
HSER 498	Work Experience in Human Services.....	4 ¹

¹Four units are required.

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 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 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 495 Independent Services in Human Services 1-3 Units

Course Transferable to CSU

Hours: 54-162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

HSER 498 Work Experience in Human Services 1-4 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position, or job related to human services with a cooperating site supervisor. Students are advised to consult with the Human Services Department faculty to review specific certificate and degree work experience requirements.

General Education: AA/AS Area III(b)

Course Transferable to CSU

Hours: 60-300 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 Title 5 required forms which document the student's progress and hours spent at the work site, and developing workplace skills and competencies. During the semester, the student is required to 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. First-time participants are required to attend a weekly orientation and a final meeting. Returning participants are required to attend the first class meeting, a mid-semester meeting, and a final meeting and may meet individually with the instructor as needed to complete a work site observation and all program forms, receive updates, and assignments. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

HSER 1000 Supervised Tutoring 0 Units

Corequisite: Student must be enrolled in a college credit course and be referred by an instructor or counselor.

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 other world religions and atheistic viewpoints.

Humanities

HUM 300 Classical Humanities 3 Units

Advisory: Eligible for ENGRD 310 or 312, AND ENGWR 300; OR ESLR 340 or ESLW 340.

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. Field trips may be required.

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; IGETC Area 3B

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 UC/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: Eligible for ENGRD 310 or 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

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. Field trips may be required.

HUM 320 Asian Humanities 3 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 and ESLW 340.

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, literatures, art, music, and film of India, China, and Japan from ancient times to the present. Emphasis is on the inter-relationships of the arts, literatures, and philosophies in their historical contexts within each geographical area. Topics may include arts and cultures of other Asian countries such as Vietnam, Laos, Cambodia, Thailand, and Korea.

HUM 326 Middle Eastern Humanities 3 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 and ESLW 340.

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 355 Introduction to World Religions 3 Units

Advisory: Eligible for ENGRD 310 OR ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340

General Education: AA/AS Area I (effective Summer 2014);

AA/AS Area VI (effective Summer 2014); CSU Area C2

Course Transferable to CSU

Hours: 54 hours LEC

This course surveys selected major world religions. Emphasis is on the origins, development, beliefs, practices, social ethics, and ethnic/cultural issues of indigenous tribal religions, Hinduism, Sikhism, Jainism, Buddhism, Confucianism, Taoism, Shintoism, Judaism, Christianity, and Islam. This course focuses on the central beliefs and practices of these religions using selected material from each religion's sacred texts and arts.

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.

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)
 ENGWR 303 Argumentative Writing and Critical Thinking Through Literature (4)
 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 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 301 Introduction to the 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 355 Introduction to World Religions (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)
 MUFHL 315 Jazz History (3)
 MUFHL 330 World Music (3)

(continued on next page)

(History of the Creative Arts Degree continued)

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 319	Visual Anthropology: Introduction to Ethnographic Film (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 336	Anthropology of Sex, Sexuality and Gender (3)
ANTH 341	Introduction to Linguistics (3)
ANTH 480	Honors Physical Anthropology (3)
ANTH 481	Honors Cultural Anthropology (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 and Toddler 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	Psychology Applied to Modern Life (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)
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 415	Studying in London: Psychological Elements of British Life and Culture (3)
PSYC 480	Honors General Principles (3)
PSYC 481	Honors Abnormal Behavior (3)
SOC 300	Introductory Sociology (3)
SOC 301	Social Problems (3)
SOC 309	Self and Society (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)
SOC 480	Introductory Sociology - Honors (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

This certificate is designed for students planning to transfer to a California State University (CSU) campus. Completion of this certificate ensures that the student has met the lower division General Education requirements for all CSU campuses.

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

This certificate is designed for students planning to transfer to a California State University (CSU) or University of California (UC) campus. It ensures that the student has met the lower division General Education/Breadth requirements for all CSU and UC campuses.

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 34 - 37 Units

A minimum of 34-37 units from the following:34-37
Students must complete a minimum of 34 - 37 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 (ARC) 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 15 units of approved Honors coursework. A maximum of 6 units of Honors coursework may be transferred from other colleges. Some courses may need to be petitioned. A total of 12 units of degree-applicable coursework must be earned at ARC to meet residency requirements. Most courses in the certificate fulfill requirements for the ARC A.A., A.S., A.A.-T., A.S.-T. degrees, the Intersegmental General Education Transfer Curriculum (IGETC), and the CSU General Education Certification Pattern. Check with an ARC counselor for exceptions. 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

ANTH 480	Honors Physical Anthropology (3)
ANTH 481	Honors Cultural Anthropology (3)
BIOL 482	Honors Marine Biology (4)
CISP 480	Honors Introduction to Structured Programming (5)
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)
NUTRI 481	Honors - Cultural Foods of the World (3)
POLS 481	Introduction to Government: United States - Honors (3)
PSYC 480	Honors General Principles (3)
PSYC 481	Honors Abnormal Behavior (3)
SOC 480	Introductory Sociology - Honors (3)

Interdisciplinary Studies

INDIS 320 Introduction to Tutor Training 1 Unit

Advisory: Eligible for ENGRD 116 AND ENGWR 102;

OR ESLR 320 AND ESLW 320.

Course Transferable to CSU

Hours: 18 hours LEC

This course is offered in coordination with the Learning Resource Center Tutorial Services Program. It is designed to introduce the role of a tutor and the methods of effective tutoring. It covers establishing goals and objectives, implementing a tutorial plan, applying effective learning skills, developing effective communication and listening skills, and fostering critical thinking.

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.

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

Degree: A.A. - Interior Planning and Design
 Certificates: Interior Retail Merchandising
 Para Professional Interior Planning
 and Design

<http://www.arc.losrios.edu/Interior-Design>

Department Certificates:
 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 in the expanding field of interior design. Topics include space planning, building and Life-Safety codes, and the Americans with Disabilities Act (ADA). Additionally, it covers a variety of subjects ranging from architectural and furniture history to reading construction documents.

Student Learning Outcomes

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

- incorporate the appropriate finishes and materials for commercial and residential interiors.
- examine building types and occupancy classifications.
- create construction and presentation drawings that meet California building codes.
- assess client's needs and plans with the Americans with Disabilities Act (ADA), Life-Safety Codes and Universal/Barrier-Free Design.
- analyze interiors to reflect the needs of the end user.
- design spaces that are aesthetically pleasing and incorporate sound design principles.

Career Opportunities

The field of interior design offers a variety of career options, including residential design by itself, or with a specialty such as Universal Design, Green/Sustainable, smart-home, home office, and home theater design. It also offers commercial design, which can include ADA compliance, hospitality (restaurant, hotel, cruise ship) design, set design, and contract space planning. Additional career opportunities are available in product design, retailer, buyer/purchaser, manufacturers' representative, and facilities management.

Requirements for Degree	40-43 Units
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	Portfolio and Presentation in Interior Design .....3
IDES 334	Interior Environment and Space Planning .....3
IDES 340	Beginning CADD for Interior Design (3).....3
or DESGN 100	Introduction to Computer Aided Drafting and Design (CADD) (3)
IDES 341	Intermediate CADD for Interior Design (3) .....3
or DESGN 320	Three Dimensional Graphics and Design (3)
IDES 350	Codes and Universal Access for Interior Design.....2
IDES 351	Codes and Universal Access Lab.....1
WEXP 498	Work Experience in (Subject).....1 - 4

And a minimum of 3 units from the following: 3

ART 300	Drawing and Composition I (3)
ART 320	Design: Fundamentals (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)
FASHN 320	Textiles (3)
IDES 110	Estimating and Calculating for Interior Design (3)

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.

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.

See losrios.edu/gainful-emp-info/gedt.php?major=011306C01 for Gainful Employment Disclosure.

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. It focuses on the fundamentals of both residential and commercial design. A variety of topics taught for this certificate include space planning, building and Life-Safety codes, the Americans with Disabilities Act (ADA), and architectural and furniture history. This certificate includes an internship within the interior design industry.

Student Learning Outcomes

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

- categorize building types and occupancy classifications.
- create construction and presentation drawings that meet California building codes.
- appraise the client's needs and plans with the Americans with Disabilities Act (ADA), Life-Safety codes and Universal/Barrier-Free Design.
- distinguish historical periods and styles of architecture and interior design.
- identify sales proposals.
- select textiles for the appropriate end use.

Career Opportunities

This certificate offers a variety of career options, including residential design by itself or with a specialty of home office and home theater design. It also offers commercial design opportunities, which include space planning, hospitality (restaurant, hotel, cruise ship) design, set design, and historical and adaptive re-use design. Additional career opportunities are available as product designers, retailers, buyers, manufacturers' representatives, and facilities managers.

See losrios.edu/gainful-emp-info/gedt.php?major=011307C01 for Gainful Employment Disclosure.

<u>Requirements for Certificate</u>	<u>40 - 43 Units</u>
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	Portfolio and Presentation in Interior Design .....3
IDES 334	Interior Environment and Space Planning .....3
IDES 340	Beginning CADD for Interior Design (3) .....3
or DESGN 100	Introduction to Computer Aided Drafting and Design (CADD) (3)
IDES 341	Intermediate CADD for Interior Design (3) .....3
or DESGN 320	Three Dimensional Graphics and Design (3)
IDES 350	Codes and Universal Access for Interior Design.....2
IDES 351	Codes and Universal Access Lab.....1
WEXP 498	Work Experience in (Subject) .....1 - 4
And a minimum of 3 units from the following: 3	
ART 300	Drawing and Composition I (3)
ART 320	Design: Fundamentals (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)
FASHN 320	Textiles (3)
IDES 326	Interior Design Sales (3)

DEPARTMENT CERTIFICATES

Designed 4 Life Certificate

This certificate provides training in designing quality living environments. It includes various courses in Gerontology and Interior Design and covers how to successfully, safely, effectively, and aesthetically design interiors for all ages and abilities.

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.

<u>Requirements for Certificate</u>	<u>9 Units</u>
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.

<u>Requirements for Certificate</u>	<u>9 Units</u>
IDES 300	Fundamentals of Interior Design .....3
IDES 302	Introduction to Green Building and Sustainable Design in Interiors.....3
IDES 381	Lighting and Electrical for Green and Sustainable Interiors.....3

Interior Design

IDES 110 Estimating and Calculating for Interior Design 3 Units

*Advisory: MATH 25 or 41
Hours: 54 hours LEC*

This course includes techniques for accurately calculating yardage and materials of interior products for residential and commercial installations. Field trips may be required.

IDES 300 Fundamentals of Interior Design 3 Units

*Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
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 may be 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) and focuses on applications in the practice of commercial or residential interior space planning and design. It includes a historic perspective and the appropriate application of these principles in the profession and also introduces the requirements for Leadership in Energy and Environmental Design (LEED) certification. Field trips may be required.

IDES 310 History of Interior Architecture and Furnishings I 3 Units

*Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
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 Victorian. Emphasis is placed on identification of specific furniture styles and architectural features. Field trips may be required.

IDES 312 History of Interior Architecture and Furnishings II 3 Units

*Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
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 also included.

IDES 322 Materials of Interior Design 3 Units

*Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
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, and lighting are included. Field trips may be required.

IDES 324 Interior Design Business Practices 3 Units

*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' budgets, estimating costs, purchasing, billing, marketing, and sales. Field trips may be required.

IDES 326 Interior Design Sales 3 Units

*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 may be required.

IDES 330 Beginning Interior Design Studio 3 Units

*Advisory: MATH 25 or 41 with a grade of "C" or better
Course Transferable to CSU
Hours: 54 hours LEC*

This course covers basic construction, layouts, products, and materials. Topics include floor plans, structural elements, and interior space planning. Presentation methods are explored. Field trips may be required.

IDES 332 Portfolio and Presentation in Interior Design 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 presentations in interior design. It includes methods of visually communicating with clients. It also covers both traditional and technology-based portfolio preparation.

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

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course employs beginning computer-aided drafting and design (CADD) for interior design projects. Floor plans, space planning, elevations, and perspectives are created. Field trips may be required.

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.

IDES 350 Codes and Universal Access for Interior Design 2 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

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 330 with a grade of "C" or better

Corequisite: IDES 350

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

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

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

Course Transferable to CSU

Hours: 54 hours LEC

This course covers the successful design of residences for a variety of users, regardless of their age, size, physical abilities, or limitations. It also encompasses specialty and adaptive appliances, plumbing fixtures, cabinetry, appropriate finish materials, space planning, and furnishings. Field trips may be required.

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 495 Independent Studies in Interior Design 1-3 Units

Course Transferable to CSU

Hours: 162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

**IDES 498 Work Experience
in Interior Design****1-4 Units**

*Advisory: Eligible for ENGRD 310 or ENGRD 312 AND
ENGWR 300; OR ESLR 340 AND ESLW 340.*

*Enrollment Limitation: Students must be in a paid or unpaid internship,
volunteer position, or job related to interior design with a cooperating
site supervisor. Students are advised to consult with the Interior Design
Department faculty to review specific certificate and degree work
experience requirements.*

General Education: AA/AS Area III(b)

Course Transferable to CSU

Hours: 60-300 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 Title 5 required forms which document the student's progress and hours spent at the work site, and developing workplace skills and competencies. During the semester, the student is required to 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. First-time participants are required to attend a weekly orientation and a final meeting. Returning participants are required to attend the first class meeting, a mid-semester meeting, and a final meeting and may meet individually with the instructor as needed to complete a work site observation and all program forms, receive updates, and assignments. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Area: Humanities
 Dean: Kate Jaques
 Phone: (916) 484-8653
 Counseling: (916) 484-8572

Degree: A.A. - Journalism and Mass Communication
 A.A. for Transfer - Journalism and Mass Communications

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
JOUR 410 College Media Production I.....	3
JOUR 411 College Media Production II.....	3
JOUR 412 College Media Production III.....	3
A minimum of 2 units from the following:	2
JOUR 420 College Media Production Lab I (0.5 - 3)	
JOUR 421 College Media Production Lab II (0.5 - 3)	

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 and Mass Communication A.A. for Transfer Degree

This degree provides students with a major that fulfills the general requirements of the California State University for transfer. Students with this degree will receive priority admission with junior status to the California State University system.

The Associate in Arts in Journalism for Transfer (A.A.-T) may be obtained by the completion of 60 transferable, semester units with a minimum of a 2.0 GPA, including (a) the major or area of emphasis described in the Required Program outlined below (earning a C or better in these courses), and (b) the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

Students interested in transferring to a CSU campus to pursue a bachelor's degree in Journalism should meet with a counselor to confirm the courses required for lower division preparation in the major.

Student Learning Outcomes

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

- analyze content of newspapers, magazines, and online media.
- demonstrate an understanding of basic news, feature writing, and reporting in print and on-line media.
- critique his or her own journalistic work and the work of others.
- apply knowledge of grammar and AP style to create mass media products that conform to journalistic conventions.
- produce news and feature articles and/or news and feature photographs for publication in a newspaper or on-line publication.
- apply principles of audience and journalistic ethics to writing and photography, especially as the student's journalistic work relates to gender, ethnicities, and culture.
- demonstrate understanding of the fundamentals of mass media theories, concepts, and practices as they relate to gender, ethnicity, and cultural constructs.

Career Opportunities

The Journalism AA-T degree prepares students for careers in print, broadcast, and online news media.

Requirements for Degree	18 Units
JOUR 300 Newswriting and Reporting	3
JOUR 310 Mass Media and Society	3
JOUR 410 College Media Production I.....	3

(continued on next page)

(Journalism and Mass Communication A.A. for Transfer Degree continued)

- A minimum of 3 units from the following:**..... 3
- JOUR 301 Advanced Newswriting and Reporting (3)
 - JOUR 351 Public Relations Writing and Media Techniques (3)
 - JOUR 360 Photojournalism (3)
 - JOUR 361 Multimedia Journalism (3)
 - JOUR 411 College Media Production II (3)
- A minimum of 6 units from the following:**..... 6
- ARTPH 300 Basic Art Photography (3)
 - ECON 304 Principles of Microeconomics (3)
 - or ECON 302 Principles of Macroeconomics (3)
 - ENGWR 482 Honors Advanced Composition and Critical Thinking (3)
 - or ENGWR 302 Advanced Composition and Critical Thinking (3)
 - JOUR 320 Race and Gender in the Media (3)
 - JOUR 350 Writing for Broadcasting (3)
 - POLS 481 Introduction to Government: United States - Honors (3)
 - or POLS 301 Introduction to Government: United States (3)
 - PSYC 330 Introductory Statistics for the Behavioral Sciences (3)
 - SPEECH 311 Argumentation and Debate (3)
 - SPEECH 361 The Communication Experience (3)
 - STAT 305 Statway, Part II (6)
 - or STAT 300 Introduction to Probability and Statistics (4)

Associate in Arts for Transfer Degree Requirements: The Associate in Arts in Journalism and Mass Communications for Transfer (AA-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

Journalism

JOUR 300 Newswriting and Reporting 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.

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. (C-ID JOUR 110)

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. (C-ID JOUR 210)

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. (C-ID JOUR 100)

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 340 Writing for Publication 3 Units

Advisory: Eligibility for ENGWR 300 or ESLW 340

Course Transferable to CSU

Hours: 54 hours LEC

This course introduces writing non-fiction for publication. Emphasis is on analyzing magazines; finding ideas; writing a query letter; developing a saleable magazine idea and article; researching and interviewing; as well as organizing, writing and marketing an article. Field trips may be required.

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. (C-ID JOUR 150)

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. (C-ID JOUR 160)

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. (C-ID JOUR 120)

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. (C-ID JOUR 130)

JOUR 404 Editing and Production 3 Units

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

Corequisite: JOUR 404
Advisory: JOUR 300
Course Transferable to CSU
Hours: 27-162 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.

JOUR 410 College Media Production I 3 Units

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

This course offers hands-on experience in reporting, writing, photography, layout, and online production skills. This course provides preparation for transfer work in journalism or entry-level jobs in the field. (C-ID JOUR 130)

JOUR 411 College Media Production II 3 Units

Prerequisite: JOUR 410 with a grade of "C" or better
Course Transferable to CSU
Hours: 36 hours LEC; 54 hours LAB

This course builds on experience gained in JOUR 410. It focuses on intermediate writing and production skills, using the school newspaper The American River Current and its online companion www.arcurent.com, as a practical laboratory. The course provides the opportunity to work in at least two of the following areas: researching, writing, and editing articles for the two publications; taking photographs and creating graphic illustrations; developing multimedia stories; or designing pages. Ethical and legal aspects of communication are also covered. (C-ID JOUR 131)

JOUR 412 College Media Production III 3 Units

Prerequisite: JOUR 411 with a grade of "C" or better
Course Transferable to CSU
Hours: 36 hours LEC; 54 hours LAB

This course builds on the experience gained in JOUR 411. It focuses on advanced intermediate writing and production skills, using the school newspaper The American River Current and its online companion www.arcurent.com, as a practical laboratory. The course provides the opportunity to work in at least three of the following areas: researching, writing, and editing articles for the two publications; taking photographs and creating graphic illustrations; developing multimedia stories; or designing pages. Ethical and legal aspects of communication are also covered.

JOUR 413 College Media Production IV 3 Units

Prerequisite: JOUR 412 with a grade of "C" or better
Course Transferable to CSU
Hours: 36 hours LEC; 54 hours LAB

This course builds on the experience gained in JOUR 412. It focuses on advanced writing and production skills, using the school newspaper The American River Current and its online companion www.arcurent.com, as a practical laboratory. It provides the opportunity to produce work in each of the following areas: researching, writing, and editing advanced and in-depth articles for the two publications; taking photographs and creating graphic illustrations; developing multimedia stories; and designing pages. Ethical and legal aspects of communication and media leadership/management are also covered and students are expected to serve in leadership roles.

JOUR 420 College Media Production Lab I .5-3 Units

Corequisite: JOUR 404 or 410
Course Transferable to CSU
Hours: 27-162 hours LAB

This lab course provides inexperienced journalism students with hands-on instruction in writing, editing, photography, design and computer-based publication. This includes one-on-one and small-group instruction in publication software, such as Adobe Creative Suite programs, and Web content management systems.

JOUR 421 College Media Production Lab II .5-3 Units

Prerequisite: JOUR 420 with a grade of "C" or better
Corequisite: JOUR 404 or 411
Course Transferable to CSU
Hours: 27-162 hours LAB

This lab course provides experienced journalism students with hands-on instruction in writing, editing, photography, design and computer-based publication, as well as instruction in newsroom management and leadership. This includes advanced lessons in publication software, such as Adobe Creative Suite programs, and Web content management systems.

**JOUR 495 Independent Studies
in Journalism****1-3 Units***Course Transferable to CSU**Hours: 54-162 hours LAB*

Independent Study is an opportunity for the student to extend classroom experience in journalism, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in journalism and secure approval. Only one independent study for each catalog course will be allowed.

Area: Kinesiology and Athletics
 Dean: Greg Warzecka
 Phone: (916) 484-8201
 Counseling: (916) 484-8572

Degrees: A.A. for Transfer - Kinesiology
 A.A. Dance
 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. DANCE, FITNS, PACT, and TMACT classes may be taken one time for credit. SPORT classes may be taken four times for credit. The prefixes “ADAPT, DANCE, FITNS, PACT, TMACT, and SPORT” refer to courses used to satisfy the one-unit physical education graduation requirement.

Courses which are designated with a KINES prefix are theory-oriented rather than activity-oriented and DO NOT satisfy the physical education activity requirement.

DEGREES AND CERTIFICATES

Kinesiology A.A. for Transfer Degree

This Associate in Arts in Kinesiology for Transfer provides a path to students who wish to transfer to a CSU campus in Kinesiology and serves the diverse needs of students who wish to obtain a broad and an in-depth understanding of the field. Additionally, this degree allows students to learn the fundamental principles and practices of Kinesiology in order to create a solid foundation for their future personal and academic endeavors.

The Associate in Arts in Kinesiology for Transfer provides students with a major that fulfills the general requirements of the California State University for transfer. Students with this degree will receive priority admission with junior status to the California State University system.

The Associate in Arts in Kinesiology for Transfer (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:

- recount the historical evolution of physical education/kinesiology.
- evaluate current theories, philosophies, and trends in the field of kinesiology.

- identify key aspects of personal fitness as it relates to physical fitness programs.
- construct a philosophy of kinesiology that includes goals for lifetime fitness.
- discuss how sociological, historical, and philosophical factors influence the field of kinesiology.
- outline the basic principles of current accepted nutritional standards for physically active individuals.
- describe the basic structure of the human body and how its various systems respond to exercise.

Career Opportunities

This degree is designed to prepare students for transfer to a four-year college or university in Kinesiology. Career opportunities include, but are not limited to, kinesiology instructor, exercise physiologist, athletic trainer, strength and conditioning coach, athletic coach, personal trainer, physical educator and corporate fitness director.

Requirements for Degree 23 Units

BIOL 430	Anatomy and Physiology.....	5
BIOL 431	Anatomy and Physiology.....	5
KINES 300	Introduction to Kinesiology,	3

A minimum of 7 units from the following:..... 7

BIOL 310	General Biology (4)	
CHEM 400	General Chemistry (5)	
or CHEM 305	Introduction to Chemistry (5)	
or CHEM 309	Integrated General, Organic, and Biological Chemistry (5)	
PHYS 410	Mechanics of Solids and Fluids (5)	
or PHYS 350	General Physics (4)	
STAT 300	Introduction to Probability and Statistics (4)	
or PSYC 330	Introductory Statistics for the Behavioral Sciences (3)	

A minimum of 3 units from the following:..... 3

Select three courses, each from a different category listed below.

Dance:

DANCE 300	Diverse Cultures in Dance (1)	
DANCE 301	Belly Dancing (1)	
DANCE 302	African Dance (1)	
DANCE 304	Polynesian Dance I (1)	
DANCE 305	Hawaiian Dance I (1)	
DANCE 307	Hawaiian Dance II (1)	
DANCE 310	Jazz Dance I (1)	
DANCE 313	Jazz Dance III (1)	
DANCE 314	Jazz Dance IV (1)	
DANCE 315	Jazz Dance V (1)	
DANCE 316	Jazz Dance VI: African Jazz (1)	
DANCE 317	Jazz Dance VII: Lyrical Jazz (1)	
DANCE 320	Ballet I (1)	
DANCE 322	Ballet III (1)	
DANCE 323	Ballet IV (1)	
DANCE 324	Ballet V (1)	
DANCE 325	Ballet VI (1)	
DANCE 330	Modern Dance I (1)	

(continued on next page)

(Kinesiology A.A. for Transfer Degree continued)

- DANCE 333 Modern Dance III (1)
- DANCE 334 Modern Dance IV (1)
- DANCE 335 Modern Dance V (1)
- DANCE 340 Ballroom Dance (1)
- DANCE 341 Ballroom Dance II (1)
- DANCE 342 Ballroom Dance III: Club Dancing (1)
- DANCE 343 Ballroom Dance IV: Latin (1)
- DANCE 344 Ballroom Dance V: Swing (1)
- DANCE 345 Ballroom Dance VI: Tango (1)
- DANCE 348 Ballroom Challenge: Competition and Performance (1)
- DANCE 351 Urban Hip Hop I (1)
- DANCE 352 Urban Hip Hop II (1)
- DANCE 353 Urban Hip Hop III (1)
- DANCE 354 Urban Hip Hop IV (1)
- DANCE 360 Tap Dance I (1)

Fitness:

- FITNS 305 Hip Hop Aerobics (1)
- FITNS 306 Aerobics: Cardio-Kickboxing (1)
- FITNS 307 Aerobic Mix (1)
- FITNS 308 Step Aerobics (1)
- FITNS 325 Pilates (1)
- FITNS 380 Circuit Weight Training (1)
- FITNS 381 Weight Training (1)
- FITNS 392 Yoga (1)
- FITNS 400 Body Fitness (Walking or Jogging) (1)
- FITNS 414 Tai Chi (1)
- FITNS 450 Personal Safety (1)

Aquatics:

- FITNS 310 Aquatic Fitness I (1)
- FITNS 316 Lap Swimming (1)
- FITNS 440 Swimming I (1)
- FITNS 441 Swimming II (1)
- FITNS 442 Swimming III (1)
- FITNS 443 Swimming IV (1)

Combatives:

- FITNS 412 Martial Arts: Taekwondo (1)

Individual Sports:

- PACT 300 Archery I (1)
- PACT 310 Badminton I (1)
- PACT 311 Badminton II (1)
- PACT 350 Golf I (1)
- PACT 351 Golf II (1)
- PACT 352 Golf III (1)
- PACT 390 Tennis I (1)
- PACT 394 Tennis, Doubles (1)

Team Sports:

- TMACT 300 Soccer, Indoor (1)
- TMACT 301 Indoor Soccer II (1)
- TMACT 302 Soccer - Outdoor (1)
- TMACT 303 Outdoor Soccer II (1)
- TMACT 304 Outdoor Soccer III (1)
- TMACT 320 Basketball (1)
- TMACT 330 Volleyball (1)
- TMACT 331 Volleyball II (1)
- TMACT 333 Volleyball III (1)
- TMACT 340 Football (1)
- TMACT 350 Softball, Fast Pitch (1)
- TMACT 352 Softball, Slow Pitch (1)
- TMACT 370 Water Polo (1)

Associate in Arts for Transfer Degree Requirements:

The Associate in Arts in Kinesiology for Transfer (AA-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

Dance Degree

This degree provides an educational and practical foundation for students pursuing a professional career in dance. It is designed to create avenues toward further study and employment in educational dance, choreography, cultural dance, and dance performance. Topics include cultural dance forms, intermediate dance technique, performance studies, and nutrition. Students interested in transferring to a four-year college should meet with a counselor to determine the appropriate coursework.

Student Learning Outcomes

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

- describe the basic structure of the human body and its potential for movement
- recount the historical and personal significance of cultural dance
- list the educational requirements for employment as a dance educator
- compare the standards of class etiquette required for participation in ballroom, urban Hip Hop, modern, and ballet dance courses
- discuss the level of training and commitment required for a concentration in dance performance
- evaluate current trends, philosophies, and companies in professional dance
- examine twelve areas for improvement in performance level
- justify the importance of visualization, creativity, and critical feedback in dance education
- demonstrate the necessary technique and performance skill for audition into a four-year institution or application to entry level employment in a professional dance setting
- notate choreography and transpose from video into movement

Career Opportunities

This degree is designed for those pursuing a career in professional dance. It prepares dancers for entry-level positions and for transfer to four-year colleges and universities.

Requirements for Degree 18 Units

Cultural:

A minimum of 2 units from the following:.....2

- DANCE 300 Diverse Cultures in Dance (1)
- DANCE 301 Belly Dancing (1)
- DANCE 302 African Dance (1)
- DANCE 304 Polynesian Dance I (1)
- DANCE 305 Hawaiian Dance I (1)
- DANCE 306 Polynesian Dance II (1)
- DANCE 307 Hawaiian Dance II (1)
- DANCE 326 Ballet: Variations and Combinations (2)
- DANCE 352 Urban Hip Hop II (1)
- DANCE 353 Urban Hip Hop III (1)
- DANCE 360 Tap Dance I (1)

Technique:

A minimum of 8 units from the following:.....8

- DANCE 312 Jazz Dance II (1)
- DANCE 313 Jazz Dance III (1)
- DANCE 314 Jazz Dance IV (1)
- DANCE 315 Jazz Dance V (1)
- DANCE 316 Jazz Dance VI: African Jazz (1)
- DANCE 321 Ballet II (1)

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(Dance Degree continued)

DANCE 322	Ballet III (1)
DANCE 323	Ballet IV (1)
DANCE 324	Ballet V (1)
DANCE 325	Ballet VI (1)
DANCE 332	Modern Dance II (1)
DANCE 333	Modern Dance III (1)
DANCE 334	Modern Dance IV (1)
DANCE 335	Modern Dance V (1)
DANCE 336	Modern Dance VI (1)
DANCE 341	Ballroom Dance II (1)
DANCE 342	Ballroom Dance III: Club Dancing (1)
DANCE 343	Ballroom Dance IV: Latin (1)
DANCE 344	Ballroom Dance V: Swing (1)
DANCE 345	Ballroom Dance VI: Tango (1)
DANCE 361	Tap Dance II (1)
DANCE 362	Tap Dance III (1)
DANCE 363	Tap Dance IV (1)
DANCE 365	Tap Dance VI: Rhythm Tap (1)
DANCE 377	Musical Theatre Dance I (2)
DANCE 390	Contemporary Dance I (1)
DANCE 400	Floor Barre (1)
DANCE 401	Pre-Pointe and Conditioning (1)

Choreography:

A minimum of 2 units from the following:.....2

DANCE 402	Elements of Choreography (1)
DANCE 403	Choreographic Studies (2)

Production:

A minimum of 3 units from the following:.....3

DANCE 415	Dance Production: Rehearsal and Backstage Organization (3)
DANCE 416	Dance Production: Choreography and Costumes (3)
DANCE 417	Dance Production: Studio and Stage (3)

Performance:

A minimum of 3 units from the following:.....3

DANCE 430	Jazz Dance Performance Group (3)
DANCE 431	Performance Group: Master Hip Hop Crew (3)
DANCE 432	Dance Performance: Contemporary Dance Alliance (3)

Associate Degree Requirements: The Dance Associate in Arts (A.A.) Degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

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 300	Introduction to Kinesiology	3
KINES 330	Care and Prevention of Athletic Injuries.....	3
PSYC 300	General Principles (3).....	3
or PSYC 305	Psychology Applied to Modern Life (3)	
A minimum of 3 units from the following:		3
DANCE 330	Modern Dance I (1)	
FITNS 302	Latin Aerobics (1)	
FITNS 380	Circuit Weight Training (1)	
FITNS 381	Weight Training (1)	
HEED 300	Health Science (3)	
PACT 350	Golf I (1)	
PACT 390	Tennis I (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.

(continued on next page)

(Sports Medicine Degree continued)

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)	
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 program prepares students for employment in the health and fitness industry and equips them with the knowledge and hands-on experience necessary to begin a career in the dynamic field of fitness. Upon completion of this certificate, the students are prepared to take national certification exams such as the National Academy of Sports Medicine (NASM), American College of Sports Medicine (ACSM), or the American Council of Exercise (ACE).

Student Learning Outcomes

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

- design, implement, and analyze fitness programs for a diverse population.
- critique and explore various health and fitness job opportunities.
- demonstrate knowledge and skills necessary to pass national certification exams such as NASM, ACSM, and ACE.

Career 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.

See losrios.edu/gainful-emp-info/gedt.php?major=011567C01 for Gainful Employment Disclosure.

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)	
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 PE

ADAPT 310 Adapted Lifetime Sports 1 Unit

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.

ADAPT 314 Wheelchair Sports and Games 1 Unit

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 is designed for individuals with physical disabilities who use a wheelchair for mobility or who are ambulatory, but more successful in sports when using a wheelchair. Sports include, but are not limited to, basketball, quad rugby, volleyball, badminton, and tennis.

ADAPT 316 Adapted Personal Safety 1 Unit

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 is designed for students who are unable to participate in a general personal safety course. It includes the skills, knowledge, and attitude which are important in avoiding or defending a physical attack. Topics include awareness and prevention of dangerous situations. Defensive strategies for protection while in the home, in the community, and on mass transit are also covered.

ADAPT 330 Adapted Weight Training and Fitness 1 Unit

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 is designed for students who are unable to participate in a general physical education activity course. It includes individualized physical fitness programs including activities to develop muscular strength, flexibility, and cardiovascular endurance.

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

This is an individualized swimming, water safety, and fitness course designed for individuals with disabilities. It focuses on cardiovascular endurance, range of motion, mobility, muscular strength, and muscular endurance.

ADAPT 337 Adapted Walk and Wheel 1 Unit

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 is designed for students who are unable to participate in a general physical education activity course. Individualized walking or wheeling programs are designed to enhance cardiorespiratory endurance. The course also includes specific exercises for muscular strength, muscular endurance, and flexibility. Small group games and activities are included to promote fitness and fun.

ADAPT 338 Adapted Aerobic Activity 1 Unit

Advisory: Eligible for ENGRD 310 or 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
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 students with a disability who are unable to participate in a general physical education activity course. It includes group activities as well as individualized activities. Indoor and outdoor workouts are used to enhance cardiovascular endurance and affect body composition. Activities may include walking and jogging, aerobic dance, cardio-kickboxing, step aerobics, chair aerobics, circuit training and cardio equipment workouts.

ADAPT 495 Independent Studies in Adapted Physical Education 1-3 Units

Course Transferable to CSU
Hours: 54-162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

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.

DANCE 301 Belly Dancing 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 movements, cultural values, and history of Danse Orientale, more commonly known as Belly Dance. It consists of warm ups, movement across the floor, center floor work, combinations, dances, and performance technique. Musical instruments, rhythms, costumes, and choreography are discussed.

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.

DANCE 304 Polynesian Dance I 1 Unit

Course Family: Cultural Dance (see page 34 - limitation on active participatory courses)
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. Topics include: warm ups, center dances, and cultural vocabulary. The origin, history, and cultural importance of Polynesian dance is presented. No dance experience is necessary for this course.

DANCE 305 Hawaiian Dance I 1 Unit

Course Family: Cultural Dance (see page 34 - limitation on active participatory courses)
General Education: AA/AS Area III(a); CSU Area E2
Course Transferable to UC/CSU
Hours: 54 hours LAB

This course covers the basic components of Hawaiian dance within its traditional context. It provides an opportunity to study the history, origin, and cultural importance of hula. Topics include: basic Hawaiian vocabulary for dance and the creation of floral adornments. This course is for students with little or no experience in Hawaiian dance.

DANCE 306 Polynesian Dance II 1 Unit

Course Family: Cultural Dance (see page 34 - limitation on active participatory courses)

Enrollment Limitation: DANCE 304 with a grade of "C" or better or by audition.

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to CSU

Hours: 54 hours LAB

This course offers further study of Polynesian dance within its traditional context. It continues the basic technique of Polynesian dance begun in DANCE 304 with a more rigorous training approach by adding faster tempos and more complex components. This course includes more intricate rhythms, timing, and footwork, with the original meanings and historical content intact. The origin, history, and vocabulary of Polynesian dances are explored with an emphasis on the current cultural importance of Polynesian dance within a changing society. This course is for students with previous training in Polynesian dance.

DANCE 307 Hawaiian Dance II 1 Unit

Course Family: Cultural Dance (see page 34 - limitation on active participatory courses)

Enrollment Limitation: DANCE 305 with a grade of "C" or better or by audition.

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

This course offers further study of Hawaiian dance within its traditional context. It continues the basic hula technique begun in DANCE 305 with a more rigorous training approach by adding faster tempos and more complex components. This course includes more intricate footwork, timing, and communication of the steps with the original meanings and historical content intact. The origin, history, and vocabulary of Hawaiian dances are explored with an emphasis on the current cultural importance of hula in a changing Hawaiian population. This course is for students with previous training in Hawaiian dance.

DANCE 310 Jazz Dance I 1 Unit

Course Family: Jazz Dance Technique (see page 34 - limitation on active participatory courses)

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

This course covers the concepts of beginning alignment, simple balance, single turns, and basic technique for jazz dance. It provides a foundation in the basic steps, vocabulary, history, and traditions of various jazz dance styles. The focus is on small group dances that use space in a full-out and presentational style. This course is for students without previous dance training.

DANCE 312 Jazz Dance II 1 Unit

Course Family: Jazz Dance Technique (see page 34 - limitation on active participatory courses)

Enrollment Limitation: DANCE 310 with a grade of "C" or better or by audition.

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

This course continues to refine the basic skills begun in DANCE 310 and further instills proper alignment and technique for jazz dance. This course offers students an opportunity to explore new learning styles through the continued study of jazz dance with more complex rhythms, new vocabulary, varied methods of counting, and new spatial problems to be solved. This course is for students with some previous jazz dance training.

DANCE 313 Jazz Dance III 1 Unit

Course Family: Jazz Dance Technique (see page 34 - limitation on active participatory courses)

Enrollment Limitation: DANCE 312 with a grade of "C" or better or by audition.

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

This course continues the foundation of basic steps and turns begun in DANCE 312 and further instills proper alignment and technique. It introduces more complex combinations in center, a greater vocabulary of movement across the floor, and a better understanding of technique for multiple jazz turns. This course is for students with previous jazz dance training.

DANCE 314 Jazz Dance IV 1 Unit

Course Family: Jazz Dance Technique (see page 34 - limitation on active participatory courses)

Enrollment Limitation: DANCE 313 with a grade of "C" or better or by audition.

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

This course continues the study of jazz dance focusing on allegro movement studies with quicker, more complex combinations in center, a more difficult vocabulary of movement across the floor, and progressive technique for multiple jazz turns. It emphasizes changes of directions, dynamics, and levels. This course is for students with previous jazz dance training.

DANCE 315 Jazz Dance V 1 Unit

Course Family: Jazz Dance Technique (see page 34 - limitation on active participatory courses)

Enrollment Limitation: DANCE 314 with a grade of "C" or better or by audition.

General Education: AA/AS Area III(a)

Course Transferable to UC/CSU

Hours: 54 hours LAB

This course continues the study of jazz dance with rigorous emphasis on allegro movement, jumps, leaps, and technique for multiple turns. Topics include the propensity of jazz dance to absorb the movements of many cultures and to utilize the current social climate in reflecting the era in dance. This course is for students with previous jazz dance training.

DANCE 316 Jazz Dance VI: African Jazz 1 Unit

Course Family: Jazz Dance Technique (see page 34 - limitation on active participatory courses)

Enrollment Limitation: DANCE 302 and DANCE 315 with a grade of "C" or better or by audition.

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

This course combines the elements of jazz dance begun in DANCE 315 with the foundation of African movement presented in DANCE 302. The allegro jumps, turns, and isolations of African dance, mixed with the extensions, turns, footwork, and American-style showmanship of jazz dance technique creates a powerful fusion style of dance that serves as a gateway to Dunham dance technique. This course requires prior African dance and jazz dance technique training.

DANCE 317 Jazz Dance VII: Lyrical Jazz 1 Unit

Course Family: Jazz Dance Technique (see page 34 - limitation on active participatory courses)

Enrollment Limitation: DANCE 315 and DANCE 321 with a grade of "C" or better or by audition.

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

This course combines the technique of jazz dance studied in DANCE 315 with the ballet technique from DANCE 321. The emphasis is on a fusion of styles that includes percussive and sustained qualities, utilizing both in order to achieve control in on-balance movement and relinquishing control in off-balance, falling, and dynamic loss of balance movement. Technique for controlled slipping to the floor and sustained support movement from the floor are developed and reinforced through imagery and strength building. Fulcrum and momentum theories for balance are also explored. This course requires prior jazz dance and ballet training.

DANCE 320 Ballet I 1 Unit

Course Family: Ballet Technique (see page 34 - limitation on active participatory courses)

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

This course covers the basic alignment, steps, and technique suitable for beginners in ballet. It provides a foundation in the etiquette, vocabulary, and traditions of classical ballet and allows for certain physical modifications to the turnout that is required in more advanced coursework. Included is a progression of barre exercises designed to develop alignment, strength, range of motion, and balance. This course is for students with little or no ballet training.

DANCE 321 Ballet II 1 Unit

Course Family: Ballet Technique (see page 34 - limitation on active participatory courses)

Enrollment Limitation: DANCE 320 with a grade of "C" or better or by audition.

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

This course reinforces the foundation begun in DANCE 320 and offers an opportunity to perfect basic steps while introducing new combinations at the barre. The origins and purpose of ballet are introduced, along with new vocabulary words, more complex barre combinations and more intricate steps across the floor. The emphasis is on balance, using plie, and extending range of motion. This course is for students with some basic ballet training.

DANCE 322 Ballet III 1 Unit

Course Family: Ballet Technique (see page 34 - limitation on active participatory courses)

Enrollment Limitation: DANCE 321 with a grade of "C" or better or by audition.

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

This course refines the technique begun in DANCE 321 and introduces more complex steps, new vocabulary, and longer, more difficult combinations. The emphasis is on technique for vertical jumps, multiple turns, and higher extensions with focus also on the continued development of strength. This course is for students with previous ballet training.

DANCE 323 Ballet IV 1 Unit

Course Family: Ballet Technique (see page 34 - limitation on active participatory courses)

Enrollment Limitation: DANCE 322 with a grade of "C" or better or by audition.

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

This course continues the study of ballet begun in DANCE 322, focusing on concepts for improved technique, better balance, and stronger placement for the upper body. Allegro and adagio combinations are introduced and warm ups are designed to prepare for more difficult center work. This course is for students with previous ballet training.

DANCE 324 Ballet V 1 Unit

Course Family: Ballet Technique (see page 34 - limitation on active participatory courses)

Enrollment Limitation: DANCE 323 with a grade of "C" or better or by audition.

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

This course continues the study of ballet technique begun in DANCE 323 and promotes greater learning by offering a wider variety of steps, new vocabulary, more difficult barre, turns, leaps, historical information, and the introduction of basic partner dances. This course is designed for students with previous ballet technique and experience.

DANCE 325 Ballet VI 1 Unit

Course Family: Ballet Technique (see page 34 - limitation on active participatory courses)

Enrollment Limitation: DANCE 324 with a grade of "C" or better or by audition.

General Education: AA/AS Area III(a) (effective Summer 2103);

CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

This course continues the study of ballet and builds upon the foundation of skills begun in DANCE 324. It includes new vocabulary words and barre exercises that prepare for partner work and pas de deux movement. Allegro movement, multiple turns, and adagio in center are the emphasis. This course is for students with previous ballet training.

DANCE 326 Ballet: Variations and Combinations 2 Units

Course Family: Ballet Technique (see page 34 - limitation on active participatory courses)

Enrollment Limitation: DANCE 324 or DANCE 325 or by audition.

General Education: AA/AS Area III(a) (effective Spring 2014);

CSU Area E2 (effective Spring 2014)

Course Transferable to CSU

Hours: 18 hours LEC; 54 hours LAB

This course utilizes technique and history covered in all previous ballet courses and initiates the process of studying and interpreting ballet variations and combinations. Combinations are newly created and appropriate for each dancer, while performance of variations, traditionally given as a reward for hard work, will be assigned by individual merit and group ability. New vocabulary, variation details, shocking dance history, famous performances, and the ballets that they sprang from are covered. This course may only be taken en pointe by permission and is designed for more experienced dancers.

DANCE 330 Modern Dance I 1 Unit

Course Family: Modern Dance Technique (see page 34 - limitation on active participatory courses)

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

This course provides a solid foundation in technique, alignment, and vocabulary for modern dance. It offers study in the history and traditions of modern dance and an appreciation for its importance in American dance. Individual expression and creativity are encouraged with an emphasis on problem solving and techniques for dealing with basic design, time, shape, and energy concepts for modern dance movement. This course is for students with little or no modern dance training.

DANCE 332 Modern Dance II 1 Unit

Course Family: Modern Dance Technique (see page 34 - limitation on active participatory courses)

Enrollment Limitation: DANCE 330 with a grade of "C" or better or by audition.

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to CSU

Hours: 54 hours LAB

This course furthers the study of modern dance begun in DANCE 330 and continues the emphasis on organic movement that fills space with dynamic movements and an energetic flow of the body. Momentum and extension from the core of the body are introduced as well as explorations in space and energy. This course is designed for students with some experience in modern dance technique.

DANCE 333 Modern Dance III 1 Unit

Course Family: Modern Dance Technique (see page 34 - limitation on active participatory courses)

Enrollment Limitation: DANCE 332 with a grade of "C" or better or audition.

General Education: AA/AS Area III(a) (effective Summer 2014);

CSU Area E2 (effective Summer 2014)

Course Transferable to CSU

Hours: 54 hours LAB

This course furthers the technical study of modern dance that was begun in DANCE 332 and extends the technique to include studies of time and distance. It encourages technique that results in full out movement, better alignment for strength and balance, and concepts for hopping, jumping, and leaving the ground. The study of modern dance innovators is included. This course is for students with some experience in modern dance technique.

DANCE 334 Modern Dance IV 1 Unit

Course Family: Modern Dance Technique (see page 34 - limitation on active participatory courses)

Enrollment Limitation: DANCE 333 with a grade of "C" or better or by audition.

General Education: AA/AS Area III(a) (effective Summer 2014);

CSU Area E2 (effective Summer 2014)

Course Transferable to CSU

Hours: 54 hours LAB

This course furthers the technique of modern dance studied in DANCE 333 and places the emphasis on explorations of percussive, sustained, and suspended movement qualities with time and effort changes. Utilizing exact repetition, gradual changes, and the human breath, exercises to maintain technique are developed for strength training and imagery as well as inspiration for choreography. This course requires prior modern dance training.

DANCE 335 Modern Dance V 1 Unit

Course Family: Modern Dance Technique (see page 34 - limitation on active participatory courses)

Enrollment Limitation: DANCE 334 with a grade of "C" or better or by audition.

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to CSU

Hours: 54 hours LAB

This course furthers the concepts and technique used in DANCE 334 and places the emphasis on explorations of percussive, sustained, and suspended movement qualities with time and effort changes. Utilizing exact repetition, gradual changes, and the human breath, exercises to maintain technique are developed for strength training and imagery as well as inspiration for choreography. This course requires prior modern dance training.

DANCE 336 Modern Dance VI 1 Unit

Course Family: Modern Dance Technique (see page 34 - limitation on active participatory courses)

Enrollment Limitation: DANCE 335 with a grade of "C" or better or by audition.

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to CSU

Hours: 54 hours LAB

This course continues the technique covered in DANCE 335 and introduces new vocabulary and explorations for essence, time, and reversing time. Retrograde, slow motion, and high-speed movements are studied and used as a springboard to choreography. This course is designed for dancers with experience in modern dance technique.

DANCE 340 Ballroom Dance 1 Unit

Course Family: Ballroom Dance Technique (see page 34 - limitation on active participatory courses)

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

This course provides a foundation for ballroom dance that includes the etiquette, vocabulary, history, and traditions of ballroom dance. The emphasis is on thoughtful partner work, basic ballroom technique, and basic dances. This course is for students with little or no experience in ballroom dance.

DANCE 341 Ballroom Dance II 1 Unit

Course Family: Ballroom Dance Technique (see page 34 - limitation on active participatory courses)

Enrollment Limitation: DANCE 340 with a grade of "C" or better or by audition.

General Education: AA/AS Area III(a); CSU Area E2 (effective Fall 2013)

Course Transferable to UC/CSU

Hours: 54 hours LAB

This course furthers the study of ballroom dance technique begun in DANCE 340 and emphasizes swift execution and new partnering concepts. It includes more complex movement and introduces the potential for improvisation. It also refines the basic skills and builds on them to allow for a greater understanding of ballroom dance forms. This course is designed for students with some experience in ballroom dance.

DANCE 342 Ballroom Dance III: Club Dancing 1 Unit

Course Family: Ballroom Dance Technique (see page 34 - limitation on active participatory courses)

Enrollment Limitation: DANCE 341 with a grade of "C" or better or by audition.

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

This course continues the foundation in alignment, etiquette, and ballroom dance styles begun in DANCE 341. It allows for more advanced study and builds confidence and ability in competitive forms of ballroom. The focus is on the execution of those dances known as Club Dances in the competitive ballroom field. These dances introduce showmanship and require more skill, better timing, and specific use of non-verbal communication. This course is designed for students with ballroom dance experience.

DANCE 343 Ballroom Dance IV: Latin 1 Unit

Course Family: Ballroom Dance Technique (see page 34 - limitation on active participatory courses)

Enrollment Limitation: DANCE 341 with a grade of "C" or better or by audition.

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

This course continues the foundation in alignment, etiquette, and technique that was begun in DANCE 341. It allows for more advanced study specifically in Latin styles of dance. These dances introduce professional showmanship and fluent use of non-verbal communication with a focus on more complicated rhythms. This course is designed for those students with experience in ballroom dance technique.

DANCE 344 Ballroom Dance V: Swing 1 Unit

Course Family: Ballroom Dance Technique (see page 34 - limitation on active participatory courses)

Enrollment Limitation: DANCE 342 with a grade of "C" or better or by audition.

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

This course maintains the foundation of alignment, etiquette, and basic steps begun in DANCE 342 and furthers the technique and execution with a new vocabulary of steps, and intricate partnering technique. It includes more strenuous movement and introduces the potential for tricks, turns, and more advanced dance sections that connect the basic steps. This course is designed for students with previous ballroom dance experience.

DANCE 345 Ballroom Dance VI: Tango 1 Unit

Course Family: Ballroom Dance Technique (see page 34 - limitation on active participatory courses)

Enrollment Limitation: DANCE 343 with a grade of "C" or better or by audition.

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

This course builds on the foundation of DANCE 343. It challenges the student to master difficult forms of tango and requires a comprehensive effort to perfect quick-study, execution, balance, and technical ability. The emphasis is on complex steps that require keen timing, focus, showmanship and partnering skills. This course is designed for students with previous ballroom dance training.

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.

DANCE 351 Urban Hip Hop I 1 Unit

Course Family: Hip Hop Technique and Competition (see page 34 - limitation on active participatory courses)

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 with rapid level changes and strong floor work. Choreography is provided on a bare bones theme and developed according to individual style, ability, and personal interpretation. The history of this genre and the traditional competitive elements of Hip Hop dance are examined, as well as the role of dance in Hip Hop culture. An opportunity for exploration of Freestyle, Old Style, Poppin', Lockin', and Dance Poetry is offered. This course is for students with little or no experience in Hip Hop dance technique.

DANCE 352 Urban Hip Hop II 1 Unit

Course Family: Hip Hop Technique and Competition (see page 34 - limitation on active participatory courses)

Enrollment Limitation: DANCE 351 with a grade of "C" or better or by audition.

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

This course continues the technique and alignment begun in DANCE 351 on a more comprehensive level. It presents rigorous exercises for the development of strength and kinesthetic awareness. It also uses a vocabulary of intricate steps. The focus is on locomotor movements across the floor to improve smooth execution and center combinations to develop hard-hitting percussive styles. This course is for students with some previous urban Hip Hop dance training.

DANCE 353 Urban Hip Hop III 1 Unit

Course Family: Hip Hop Technique and Competition (see page 34 - limitation on active participatory courses)

Enrollment Limitation: DANCE 352 with a grade of "C" or better or by audition.

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

This course builds on the styles and technique studied in DANCE 352. The emphasis is on exercises to encourage strength and agility, developing a dance persona, and on combinations that introduce new styles and increase the degree of difficulty with floor work. This course is for dancers with previous urban Hip Hop dance training.

DANCE 354 Urban Hip Hop IV 1 Unit

Course Family: Hip Hop Technique and Competition (see page 34 - limitation on active participatory courses)

Enrollment Limitation: DANCE 353 with a grade of "C" or better or by audition.

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

This course builds on the foundation provided in DANCE 353. The focus is on improvisation, Freestyle, Cyphering, and battling. Musicality and storytelling are explored along with floor work, rapid tempos, and building upper body strength. This course is for students with previous urban Hip Hop dance training.

DANCE 360 Tap Dance I 1 Unit

Course Family: Tap Dance Technique (see page 34 - limitation on active participatory courses)

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

This course introduces the basic rhythms, walks, technique, alignment, and footwork of tap dance. It provides a foundation in the history, etiquette, and traditions of tap dance and uses tap dance vocabulary words to focus on step and riff names, their origins and meaning. This course is for students with little or no tap dance training.

DANCE 361 Tap Dance II 1 Unit

Course Family: Tap Dance Technique (see page 34 - limitation on active participatory courses)

Enrollment Limitation: DANCE 360 with a grade of "C" or better or by audition.

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

This course offers an opportunity to continue the study of tap dance with more complex rhythms, new vocabulary, and varied methods of counting. It furthers the basic technique begun in DANCE 360 and instills tap rhythms, walks, alignment for balance, counts, and footwork. This course is for students with some previous tap dance training.

DANCE 362 Tap Dance III 1 Unit

Course Family: Tap Dance Technique (see page 34 - limitation on active participatory courses)

Enrollment Limitation: DANCE 361 with a grade of "C" or better or by audition.

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

This course builds on technique studied in DANCE 361 and includes new vocabulary and steps that refine the ability for quick heel or toe balances as well as new exercises for progress in speed and intricacy of taps. Clarity of sounds and timing will be emphasized. This course requires previous experience in tap dance technique.

DANCE 363 Tap Dance V 1 Unit

Course Family: Tap Dance Technique (see page 34 - limitation on active participatory courses)

Enrollment Limitation: DANCE 362 with a grade of "C" or better or by audition.

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

This course continues the study of tap dance technique provided in DANCE 362. It furthers instruction with more sounds to each step and introduces the concepts of origin for tap dance. The emphasis is on Irish-based tap and the relaxation of the upper body during performance. This course is designed for students with a background in tap dance technique.

DANCE 364 Tap Dance V 1 Unit

Course Family: Tap Dance Technique (see page 34 - limitation on active participatory courses)

Enrollment Limitation: DANCE 363 with a grade of "C" or better or by audition.

General Education: AA/AS Area III(a) (effective Spring 2014);

CSU Area E2 (effective Spring 2014)

Course Transferable to CSU

Hours: 54 hours LAB

This course combines the elements of tap dance begun in DANCE 363 with the foundation of Shuffle Stride or rhythm tap dance styles of the Harlem Renaissance. The taps sounds are completed very close or into the ground. Along with theatrical jumps, turns, and isolations, steps from an African American Vaudeville dance heritage are included. This course requires previous tap dance training.

DANCE 365 Tap Dance VI: Rhythm Tap 1 Unit

Course Family: Tap Dance Technique (see page 34 - limitation on active participatory courses)

Enrollment Limitation: Completion of DANCE 364 with a grade of "C" or better or by audition.

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

This course furthers the study of tap dance found in DANCE 364 with an emphasis on perfecting execution for rhythm-style tap dance. Combinations with faster tempos, changing tempos, a' Capella tap, and call-and-response formats are included. This course is for students with a strong foundation in tap dance.

DANCE 377 Musical Theatre Dance I 2 Units

Course Family: Musical Theatre Dance (see page 34 - limitation on active participatory courses)

Enrollment Limitation: Completion of DANCE 310, 320, 330, 340, or 360, with a grade of "C" or better or by audition.

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 18 hours LEC; 54 hours LAB

This course provides an opportunity to explore dance for musical theatre and builds on the basic technique covered in DANCE 310, 320, 330, 340, or 360. This course begins with a mock audition and relies upon many basic dance styles in order to provide preparation for dancing in theatrical productions. Choreographed routines and production numbers are utilized, along with monologues, audition technique, vocabulary, and guides for singing while dancing. The emphasis is on authentic era dance styles, basic partnering, and using dance to shape and define a character. This course is designed for students with some previous dance experience.

DANCE 390 Contemporary Dance I 1 Unit

Course Family: Contemporary Dance Technique (see page 34 - limitation on active participatory courses)

Enrollment Limitation: DANCE 310, 320, and 330 with a grade of "C" or better, or audition.

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to CSU

Hours: 54 hours LAB

This course builds upon the technique covered in DANCE 310, 320, and 330. Abilities drawn from jazz, ballet, and modern dance are required to pursue this new integrated style. Dancers select and merge three dance techniques and incorporate the vocabulary of gestural movement and non-verbal communication. Development of smooth transitions and learning to use dance steps and elements to communicate an emotional state or story line. This course is intended for students with a knowledge of ballet, modern, and jazz dance technique.

DANCE 400 Floor Barre 1 Unit

Course Family: Foundations of Dance (see page 34 - limitation on active participatory courses)

Enrollment Limitation: DANCE 312, 321, or 330 with a grade of "C" or better, or audition.

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to CSU

Hours: 54 hours LAB

This course builds on the technique for all genres of dance. An understanding of the major muscle groups and their role in dance movement is offered and efficient use of smaller muscles that are heavily relied upon for extension, turn out, and off the ground positions is examined. Dancers are exposed to movement theories, anti-gravity exercises, and imagery explorations that reveal problems of balance, focus, weight distribution, anxiety, and muscle tension. Developing a new sense of relaxed readiness, dance identity, and self image are key areas to be explored. Technique from DANCE 312, 321, and 330 is re-enforced. This course is designed for dancers who are not only willing to address their individual movement problems, but to re-evaluate their physical abilities and goals in dance. Previous dance technique is required.

DANCE 401 Pre-Pointe and Conditioning 1 Unit

Course Family: Foundations of Dance (see page 34 - limitation on active participatory courses)

Enrollment Limitation: DANCE 321, 322, 323, 324, or 325, with a grade of "C" or better, or audition.

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to CSU

Hours: 54 hours LAB

This course covers the technique and conditioning for dancing on pointe and combined with DANCE 322, 323, 324, or 325, builds the strength needed for pointe work. The emphasis is on insuring that the strength and structure of the body is appropriate for pointe work. The course can be taken on flat to increase balance, strength, and alignment for ballet. It is designed for serious students of ballet with previous and on-going ballet training.

DANCE 402 Elements of Choreography 1 Unit

Course Family: Foundations of Dance (see page 34 - limitation on active participatory courses)

Enrollment Limitation: Completion of DANCE 310, 320, 330, 340, 351, or 360 with a grade of "C" or better or by audition.

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

This course covers the basic elements of choreography and provides an opportunity to explore basic choreographic structure. Choreographic concepts are introduced, developed, applied, and adapted to various dance styles in a manner appropriate for most styles and levels of dance. The emphasis is on the choreographic process. This course is for students with some dance background.

DANCE 403 Choreographic Studies 2 Units

Course Family: Foundations of Dance (see page 34 - limitation on active participatory courses)

Enrollment Limitation: DANCE 402 with a grade of "C" or better or by audition.

General Education: AA/AS Area III(a); CSU Area C1; CSU Area E2

Course Transferable to UC/CSU

Hours: 18 hours LEC; 54 hours LAB

This course furthers the study of choreographic elements begun in DANCE 402. It allows for the study of choreography from an artistic, historical, and personal perspective and encourages students of choreography to mature by providing deeper source materials and less predictable solutions. The emphasis is on imitation and exploration that may uncover inner layers of untapped movement and gesture, including the study of selected influential choreographers and their work. This course is for students with previous dance and choreography training.

DANCE 406 Introduction to Improvisation 2 Units

Course Family: Foundations of Dance (see page 34 - limitation on active participatory courses)

Enrollment Limitation: DANCE 312, 320, or 330 with a grade of "C" or better, or audition.

Course Transferable to CSU

Hours: 18 hours LEC; 54 hours LAB

This course builds on the technique covered in DANCE 312, DANCE 320, and DANCE 330. It introduces strategies for achieving improvisation without self auditing and utilizes concepts for initiating the impulse to move in any dance style. Dancers work through menus and pre-planned improvisational spring boards towards the complete freedom of dancing in a way that is not preconceived. Confidence is developed through repetition, encouragement, facing the emotional risk, and finding a sense of joy by dancing in the moment. This course is designed for students with a background in dance.

DANCE 415 Dance Production: Rehearsal and Backstage Organization 3 Units

Course Family: Dance Composition and Production (see page 34 - limitation on active participatory courses)

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 provides an opportunity to perform with a focus on the rehearsal period and the importance of backstage organization. It includes lecture, choreography, rehearsal and performance, with an emphasis on production technique and nomenclature for dance. Production technique is presented through a study of the theatre areas and the choreographic necessity they present. Production problems are studied for multiple solutions and organizational requirements for safe rehearsals and performances are explored. Field trips may be required.

DANCE 416 Dance Production: Choreography and Costumes 3 Units

Course Family: Dance Composition and Production (see page 34 - limitation on active participatory courses)

Enrollment Limitation: Audition.

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course provides an opportunity to perform with an emphasis on production technique for dance. Choreography for production and costuming for the choreography are covered as well as how to communicate choreographic ideas and costuming goals. Technique is presented through historical study and choreographic necessity. Production problems in choreography are analyzed for multiple solutions, and safe rehearsals, and performances. Field trips may be required.

DANCE 417 Dance Production: Studio and Stage 3 Units

Course Family: Dance Composition and Production (see page 34 - limitation on active participatory courses)

Enrollment Limitation: Audition

General Education: AA/AS Area III(a)

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course is a lecture-demo and production group and is designed for dancers with performance proficiency in several styles of dance. There is an emphasis on public contact with several different performance space configurations and settings. It provides for an opportunity to choreograph, perform, and convert a dance production into three or more different kinds of space configurations. Field trips may be required.

DANCE 430 Jazz Dance Performance Group 3 Units

Course Family: Dance Performance Group (see page 34 - limitation on active participatory courses)

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 lecture-demo and performance group and is designed for dancers with performance proficiency in several styles of dance. There is an emphasis on public contact, community outreach, dance demonstrations, and a concert performance. The history of jazz dance is covered and ethnic styles are compared. An opportunity to choreograph is offered as well. Field trips may be required.

DANCE 431 Performance Group: Master Hip Hop Crew 3 Units

Course Family: Dance Performance Group (see page 34 - limitation on active participatory courses)

Advisory: DANCE 352 or 353

Enrollment Limitation: By audition. Student must be able to do a toe stand, wave, kick at least 90 degrees, exhibit floor work, jump three feet up landing in proper progression, and execute double turns with a bent knee.

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 36 hours LEC; 54 hours LAB

This course furthers the dance technique offered in DANCE 315 and DANCE 353 by providing an opportunity for performing these dance styles in a theatre setting. It presents performance technique as a situational learning experience in a non-competitive venue. Creating a showcase for Hip Hop, Freestyle, African jazz and other dance crew styles, this course facilitates performance technique using both improvised and choreographed material. The focus is on commitment to performance training for presentational dance and includes basic injury prevention, planning for success, and how to handle errors on stage as they happen. Topics include strict focus, professional attitudes, and theatre etiquette. This course is designed for students with considerable backgrounds in Hip Hop, jazz, African jazz or other cultural dance technique.

DANCE 432 Dance Performance: Contemporary Dance Alliance 3 Units

Course Family: Dance Performance Group (see page 34 - limitation on active participatory courses)

Enrollment Limitation: Audition

General Education: AA/AS Area III(a)

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course provides technique and performance opportunities in contemporary dance. It emphasizes public performance using the strategies, rules, and language of contemporary dance. Small group works are developed using subtext, gestural movements, abstract story lines, and movement for movement's sake. Creating complex contemporary dance steps and building short dance pieces to be performed in several public venues develops better performance abilities. Individual portfolios are included and field trips may be required.

DANCE 495 Independent Studies in Dance 1-3 Units

General Education: AA/AS Area III(a)

Course Transferable to CSU

Hours: 54-162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

DANCE 498 Work Experience in Dance 1-4 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position, or job related to dance with a cooperating site supervisor. 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: 60-300 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 Title 5 required forms which document the student's progress and hours spent at the work site, and developing workplace skills and competencies. During the semester, the student is required to 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. First-time participants are required to attend a weekly orientation and a final meeting. Returning participants are required to attend the first class meeting, a mid-semester meeting, and a final meeting and may meet individually with the instructor as needed to complete a work site observation and all program forms, receive updates, and assignments. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Fitness

FITNS 100 Utility Workforce Wellness 1 Unit

Corequisite: PREAP 122

General Education: AA/AS Area III(a)

Hours: 9 hours LEC; 27 hours LAB

This course covers health and physical fitness related to utility worker occupations. Exercise programs are designed to improve specific muscle groups impacted in the occupational setting.

FITNS 101 Green Technology Workforce Wellness 1 Unit

Corequisite: PREAP 141

General Education: AA/AS Area III(a)

Hours: 9 hours LEC; 27 hours LAB

This course covers health and physical fitness related to green technology workforce occupations. Exercise programs are designed to improve specific muscle groups impacted in the occupational setting.

FITNS 102 Infrastructure Workforce Wellness 1 Unit

Corequisite: PREAP 111

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.

FITNS 302 Latin Aerobics 1 Unit

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

General Education: AA/AS Area III(a)

Course Transferable to CSU

Hours: 54 hours LAB

This course combines a variety of rhythmic Latin-style dance movements into a form of cardiorespiratory training of low to moderate impact. It improves cardiorespiratory endurance, muscular strength and endurance, flexibility, and body composition.

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.

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.

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.

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.

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.

FITNS 310 Aquatic Fitness I 1 Unit

Course Family: Aerobic Water Fitness (see page 34 - limitation on active participatory courses)

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.

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.

FITNS 314 Aquatic Fitness III – Deep Water Jogging 1 Unit

Course Family: Aerobic Water Fitness (see page 34 - limitation on active participatory courses)

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

This course uses the resistance of water for non-weight-bearing exercises. Emphasis is on cardiovascular fitness, muscular endurance, strength, and flexibility. Progress is monitored through appropriate fitness testing. No swimming skills are needed. An optional flotation belt is provided.

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.

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.

FITNS 325 Pilates 1 Unit

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.

FITNS 331 Boot Camp Fitness 1 Unit

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

This is an intense boot camp fitness course conducted on and off campus using indoor and outdoor facilities. It includes aerobic and anaerobic conditioning, strength and endurance training, and individual and team fitness concepts.

FITNS 332 Off Season Conditioning .5-1 Units

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 27-54 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 three times for credit.

FITNS 339 Multi Sport Training for Fitness 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.

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.

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.

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.

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.

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.

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.

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 physical activity, including but not limited to walking and jogging, to increase cardiovascular fitness, produce stress reduction, and encourage weight control. Attention is given to increasing cardiovascular efficiency, muscular strength, and endurance.

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. Field trips may be required.

FITNS 414 Tai Chi**1 Unit***General Education: AA/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.

FITNS 440 Swimming I**1 Unit***Course Family: Swimming (see page 34 - limitation on active participatory courses)**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.

FITNS 441 Swimming II**1 Unit***Course Family: Swimming (see page 34 - limitation on active participatory courses)**Advisory: Student must demonstrate comfort and confidence in the water and in their ability to demonstrate submersion, front float, and back float. This course is taught in deep water.**General Education: AA/AS Area III(a); CSU Area E2**Course Transferable to UC/CSU**Hours: 54 hours LAB*

This course is designed for beginning swimmers with limited skills. Topics include mastery of basic water adjustment skills, floats, glides, streamline, freestyle, and backstroke techniques. This course is appropriate for those who are uncomfortable in deep water or those who need to refine their ability to swim 25 yards without stopping.

FITNS 442 Swimming III**1 Unit***Course Family: Swimming (see page 34 - limitation on active participatory courses)**Prerequisite: FITNS 441 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 skills for intermediate swimmers; water safety, and basic swimming skills, swim training protocols and technique, further refinement of stroke development, proper starts and turns technique, and development of cardiovascular capacity. It includes stroke technique in freestyle, backstroke, and breaststroke, as well as turns for freestyle, backstroke and breaststroke.

FITNS 443 Swimming IV**1 Unit**

Course Family: Swimming (see page 34 - limitation on active participatory courses)

Prerequisite: FITNS 442 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 for advanced swimmers (those who have mastered intermediate swimming skills) covers proper technique specific to the four competitive strokes, proper training protocols, and training design. It emphasizes proper stroke technique of freestyle, backstroke, breaststroke, and butterfly, as well as underwater efficiency in diving, turns, and breakouts for all competitive strokes. It also introduces more advanced swim training protocols, drills, and workout designs.

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.

FITNS 495 Independent Studies in Fitness**1-3 Units**

General Education: AA/AS Area III(a)

Course Transferable to CSU

Hours: 54-162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

Kinesiology

KINES 300 Introduction to Kinesiology**3 Units**

General Education: AA/AS Area III(b) (effective Summer 2015)

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course provides an introduction to the interdisciplinary approach to the study of human movement. It provides an orientation to various educational pathways, requirements, and career opportunities in kinesiology in the areas of teaching, coaching, allied health, and fitness professions. Basic concepts of the kinesiology discipline and the importance of the sub-disciplines are discussed.

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 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

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.

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 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.

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: 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

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 495 Independent Studies
in Physical Education Theory 1-3 Units**

*Course Transferable to CSU
Hours: 54-162 hours LAB*

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

**KINES 498 Work Experience
in Physical Education 1-4 Units**

*Advisory: Eligible for ENGRD 310 or ENGRD 312 AND
ENGWR 300; OR ESLR 340 AND ESLW 340.*

Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position, or job related to physical education with a cooperating site supervisor. Students are advised to consult with the Physical Education Department faculty to review specific certificate and degree work experience requirements.

General Education: AA/AS Area III(a)

Course Transferable to CSU

Hours: 60-300 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 Title 5 required forms which document the student's progress and hours spent at the work site, and developing workplace skills and competencies. During the semester, the student is required to 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. First-time participants are required to attend a weekly orientation and a final meeting. Returning participants are required to attend the first class meeting, a mid-semester meeting, and a final meeting and may meet individually with the instructor as needed to complete a work site observation and all program forms, receive updates, and assignments. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Personal Activity**PACT 300 Archery I 1 Unit**

Course Family: Archery (see page 34 - limitation on active participatory courses)

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.

PACT 310 Badminton I 1 Unit

Course Family: Badminton (see page 34 - limitation on active participatory courses)

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.

PACT 311 Badminton II 1 Unit

Course Family: Badminton (see page 34 - limitation on active participatory courses)

Prerequisite: PACT 310 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 in intermediate skills, techniques, and rules of badminton. It emphasizes skill and technique development beyond that of a beginning player, as well as intermediate strategies for singles and doubles.

PACT 350 Golf I 1 Unit

Course Family: Golf (see page 34 - limitation on active participatory courses)

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

This beginning golf course introduces the basic skills and knowledge necessary to play the game of golf. It focuses on the fundamental skills necessary to strike and putt the ball. It introduces the rules and etiquette necessary to play the game. Some sections of this course may be held on regulation golf courses to which students must bring their own golf clubs and pay for range and/or greens fees.

PACT 351 Golf II 1 Unit

Course Family: Golf (see page 34 - limitation on active participatory courses)

Enrollment Limitation: PACT 350 with a grade of "C" or better; or the ability to perform a golf swing correctly and demonstrate the basic skills and etiquette needed to play golf on a course.

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

This course covers the intermediate skills and knowledge necessary to play the game of golf. It focuses on swing evaluation necessary to improve ball striking, the rules and etiquette necessary to play on a public course, and course management strategies in order to negotiate a golf course. Some sections of this course may be held on area regulation golf courses in which students must bring their own golf clubs and pay range costs and/or greens fees.

PACT 352 Golf III**1 Unit**

Course Family: Golf (see page 34 - limitation on active participatory courses)

Enrollment Limitation: PACT 351 (Golf II) or experience playing on a golf course.

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

This course covers advanced skills and knowledge necessary to excel at the game of golf. It focuses on improving the swing, special shot-making techniques, course management strategies for the advanced golfer, and clarification of rules and etiquette necessary to play the game at an advanced level. Different tournament formats are explored. This course is held on area regulation golf courses in which students must bring their own golf clubs, pay greens fees, and/or range costs.

PACT 390 Tennis I**1 Unit**

Course Family: Tennis (see page 34 - limitation on active participatory courses)

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.

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.

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.

PACT 495 Independent Studies in Personal Activity**1-3 Units**

Course Transferable to CSU

Hours: 54-162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

Sport**SPORT 300 Baseball, Intercollegiate-Men 3 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: 175 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 four times for credit.

SPORT 301 Off Season Conditioning for Baseball .5-3 Units

Enrollment Limitation: Tryout

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 27-162 hours LAB

This course is designed to optimize sports performance and reduce risk of injury for the off-season intercollegiate athlete in the sport of baseball. Course content includes sport-specific skill development, sport-specific strength training, cardiovascular conditioning, agility work, plyometrics, speed training, and flexibility exercises. This course may be taken up to four times for credit.

SPORT 303 Pre-Season Conditioning for Baseball .5-3 Units

Course Transferable to CSU

Hours: 27-162 hours LAB

This course is designed to optimize sports performance and reduce risk of injury for the pre-season intercollegiate athlete in the sport of baseball. Course content includes sport-specific skill development, sport-specific strength training, cardiovascular conditioning, agility work, plyometrics, speed training, and flexibility exercises. This course may be taken up to four times for credit.

SPORT 311 Basketball, Intercollegiate – Men, Fall 1.5 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; OR placement through assessment process.

Enrollment Limitation: Tryout

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 87 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 1.5 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; OR placement through assessment process.

Enrollment Limitation: Tryout

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 87 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 313 Off Season Conditioning for Basketball .5-3 Units*Enrollment Limitation: Tryout.**General Education: AA/AS Area III(a); CSU Area E2**Course Transferable to UC/CSU**Hours: 27-162 hours LAB*

This course is designed to optimize sports performance and reduce risk of injury for the off-season intercollegiate athlete in the sport of basketball. Topics include college-level basketball-specific skill development, sport specific strength training, agility work, plyometrics, speed training, and flexibility exercises. This course may be taken up to four times for credit.

SPORT 314 Pre-Season Conditioning for Men's Basketball .5-3 Units*General Education: AA/AS Area III(a) (effective Summer 2015)**Course Transferable to CSU**Hours: 27-162 hours LAB*

This course is designed to increase sport performance and overall understanding of men's intercollegiate basketball concepts and strategic philosophies. Topics include collegiate level basketball-specific skill development, collegiate level offensive and defensive concepts, team-specific basketball fundamentals, team-specific drills for individual improvement and sport-specific agility drills, plyometrics, and speed training. This course may be taken up to 4 times for credit.

SPORT 316 Basketball, Intercollegiate – Women, Fall 1.5 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; OR placement through assessment process.

*Enrollment Limitation: Tryout**General Education: AA/AS Area III(a); CSU Area E2**Course Transferable to UC/CSU**Hours: 87 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 1.5 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; OR placement through assessment process.

*Enrollment Limitation: Tryout**General Education: AA/AS Area III(a); CSU Area E2**Course Transferable to UC/CSU**Hours: 87 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 3 Units*Enrollment Limitation: Tryout**General Education: AA/AS Area III(a); CSU Area E2**Course Transferable to UC/CSU**Hours: 175 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 four times for credit.

SPORT 325 Cross Country, Intercollegiate – Women 3 Units*Enrollment Limitation: Tryout**General Education: AA/AS Area III(a); CSU Area E2**Course Transferable to UC/CSU**Hours: 175 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 four times for credit.

SPORT 330 Football, Intercollegiate – Men 3 Units*Enrollment Limitation: Tryout**General Education: AA/AS Area III(a); CSU Area E2**Course Transferable to UC/CSU**Hours: 175 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 four times for credit.

SPORT 331 Off Season Conditioning for Football .5-3 Units*Enrollment Limitation: Tryout**General Education: AA/AS Area III(a); CSU Area E2 (effective Summer 2103)**Course Transferable to UC/CSU**Hours: 27-162 hours LAB*

This course involves training and technical skill development specific to the sport of football for off-season student athletes. Topics include skill development, strength training, speed development, agility training, plyometric drills, cardiovascular conditioning, and increased flexibility. This course may be taken up to four times for credit.

SPORT 332 Pre-Season Conditioning for Football .5-3 Units*General Education: AA/AS Area III(a)**Course Transferable to CSU**Hours: 27-162 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. Strength and conditioning drills are included to enhance football skills. This course may be taken up to four times for credit.

SPORT 340 Golf, Intercollegiate – Men 3 Units*Enrollment Limitation: Tryout**General Education: AA/AS Area III(a); CSU Area E2**Course Transferable to UC/CSU**Hours: 175 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 four times for credit.

SPORT 341 Off Season Conditioning for Golf .5-3 Units

Enrollment Limitation: Tryout
General Education: AA/AS Area III(a); CSU Area E2
Course Transferable to UC/CSU
Hours: 27-162 hours LAB

This course involves a combination of fundamental skills and strategy with an emphasis on a fitness component for the sport of golf. It offers a mental training component for peak performance. This course is designed to prepare students for intercollegiate golf competition. This course may be taken up to four times for credit.

SPORT 345 Golf, Intercollegiate – Women 3 Units

Enrollment Limitation: Tryout
General Education: AA/AS Area III(a); CSU Area E2
Course Transferable to UC/CSU
Hours: 175 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.

SPORT 350 Soccer, Intercollegiate – Men 3 Units

Enrollment Limitation: Tryout
General Education: AA/AS Area III(a); CSU Area E2
Course Transferable to UC/CSU
Hours: 175 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 four times for credit.

SPORT 351 Off-Season Conditioning for Soccer .5-3 Units

Enrollment Limitation: Tryout.
General Education: AA/AS Area III(a); CSU Area E2
Course Transferable to UC/CSU
Hours: 27-162 hours LAB

This course covers off-season training and conditioning skills and techniques specific for intercollegiate soccer. Topics include skill development, strength training, cardiovascular conditioning, and speed training. This course may be taken up to four times for credit.

SPORT 355 Soccer, Intercollegiate – Women 3 Units

Enrollment Limitation: Tryout
General Education: AA/AS Area III(a); CSU Area E2
Course Transferable to UC/CSU
Hours: 175 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 four times for credit.

SPORT 356 Off Season Conditioning for Women's Soccer 1-3 Units

Enrollment Limitation: Tryout.
General Education: AA/AS Area III(a); CSU Area E2
Course Transferable to UC/CSU
Hours: 54-162 hours LAB

This physical education course covers training and conditioning skills and techniques specific for intercollegiate soccer. It focuses on basic concepts and skills with emphasis on conditioning. This course may be taken up to four times for credit.

SPORT 358 Pre-Season Conditioning for Men's Soccer .5-3 Units

Course Transferable to CSU
Hours: 27-162 hours LAB

This course increases sport performance and the overall understanding of intercollegiate soccer concepts and strategic philosophies. Topics include collegiate-level soccer-specific skill development, collegiate-level offensive and defensive concepts, team-specific soccer fundamentals, team-specific drills for individual improvement and sport specific agility work, plyometrics, and speed training.

SPORT 365 Softball, Intercollegiate – Women 3 Units

Enrollment Limitation: Tryouts
General Education: AA/AS Area III(a); CSU Area E2
Course Transferable to UC/CSU
Hours: 175 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 four times for credit.

SPORT 366 Off Season Conditioning for Softball 1-3 Units

Enrollment Limitation: Tryout.
General Education: AA/AS Area III(a); CSU Area E2
Course Transferable to UC/CSU
Hours: 54-175 hours LAB

This course covers basic fundamental skills and strategy tactics with an emphasis on a fitness component for intercollegiate athletics in the sport of softball. It offers a mental training component for peak performance. This course may be taken up to four times for credit.

SPORT 368 Pre-Season Conditioning for Softball .5 Units

Course Transferable to CSU
Hours: 27 hours LAB

This course is designed to optimize sports performance and reduce the risk of injury for the pre-season intercollegiate athlete in the sport of softball. Course content includes softball fundamental skills development, strength training, cardiovascular conditioning, agility, plyometric, speed training, and flexibility exercises. This course may be taken up to four times for credit.

SPORT 370 Swimming and Diving, Intercollegiate – Men 3 Units

Enrollment Limitation: Tryout
General Education: AA/AS Area III(a); CSU Area E2
Course Transferable to UC/CSU
Hours: 175 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 four times for credit.

SPORT 375 Swimming and Diving, Intercollegiate – Women 3 Units

Enrollment Limitation: Tryout
General Education: AA/AS Area III(a); CSU Area E2
Course Transferable to UC/CSU
Hours: 162 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 up to four times for credit.

SPORT 376 Off Season Swim & Dive .5-3 Units

Enrollment Limitation: Try out. This course is designed for athletes on the swim and dive team.
General Education: AA/AS Area III(a); CSU Area E2
Course Transferable to UC/CSU
Hours: 27-162 hours LAB

This course combines basic skills and stroke technique with an emphasis on a fitness component for the sport of swim and dive. It also offers a dry-land training component for peak performance. This course is designed to prepare students for intercollegiate swim and dive competition. This course may be taken up to four times for credit.

SPORT 377 Pre-Season Conditioning Swim & Dive .5-3 Units

Enrollment Limitation: Try out
General Education: AA/AS Area III(a)
Course Transferable to CSU
Hours: 27-162 hours LAB

This course combines basic skills and stroke technique with an emphasis on a fitness component for the sport of swim and dive. It also offers a dry-land training component for peak performance. This course is designed to prepare students for intercollegiate swim and dive competition. It may be taken up to four times for credit.

SPORT 380 Tennis, Intercollegiate – Men 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.
Enrollment Limitation: Tryout
General Education: AA/AS Area III(a); CSU Area E2
Course Transferable to UC/CSU
Hours: 175 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 four times for credit.

SPORT 385 Tennis, Intercollegiate – Women 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.
Enrollment Limitation: Tryout
General Education: AA/AS Area III(a); CSU Area E2
Course Transferable to UC/CSU
Hours: 175 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 four times for credit.

SPORT 386 Off Season Conditioning for Tennis .5-3 Units

Enrollment Limitation: Two years of varsity high school experience or equivalent. Tryout required.
General Education: AA/AS Area III(a); CSU Area E2
Course Transferable to UC/CSU
Hours: 27-162 hours LAB

This course prepares the intercollegiate tennis player for the competitive season and reduces risk of injury. Course content includes collegiate level tennis-specific skill development, a solid aerobic conditioning plan, sport-specific strength training, agility work, plyometrics, speed training, flexibility exercises and other activities designed to prepare the athlete both physically and mentally. This course may be taken up to four times for credit.

SPORT 390 Track and Field, Intercollegiate – Men 3 Units

Enrollment Limitation: Tryout
General Education: AA/AS Area III(a); CSU Area E2
Course Transferable to UC/CSU
Hours: 175 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 four times for credit.

SPORT 395 Track and Field, Intercollegiate – Women 3 Units

Enrollment Limitation: Tryout
General Education: AA/AS Area III(a); CSU Area E2
Course Transferable to UC/CSU
Hours: 175 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 four times for credit.

SPORT 396 Off Season Conditioning for Track and Field .5-3 Units

Enrollment Limitation: Try out required.
General Education: AA/AS Area III(a); CSU Area E2
Course Transferable to UC/CSU
Hours: 27-162 hours LAB

This course includes sport-specific training, conditioning, and technical skill development specific to the sport of track and field for the off-season student athlete. Course content includes sport-specific skill development, event-specific strength training, cardiovascular conditioning, agility training, plyometric drills, anaerobic speed development, and enhancement of flexibility. This course may be taken up to four times for credit.

SPORT 405 Volleyball, Intercollegiate – Women 3 Units

Enrollment Limitation: Tryout
General Education: AA/AS Area III(a); CSU Area E2
Course Transferable to UC/CSU
Hours: 175 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 four times for credit.

SPORT 406 Off Season Conditioning for Volleyball .5-3 Units

Enrollment Limitation: Tryout.

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 27-162 hours LAB

This course provides training and technical skill development specific to the sport of volleyball for off-season student-athletes. Topics include skill development, strength training, cardiovascular conditioning, agility work, plyometrics, speed training, and flexibility exercises. This course may be taken up to four times for credit.

SPORT 410 Water Polo, Intercollegiate – Men 3 Units

Advisory: ENGRD 116, ENGWR 102, ENGWR 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: 175 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 four times for credit.

SPORT 415 Water Polo, Intercollegiate – Women 3 Units

Enrollment Limitation: Tryout

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 162 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 up to four times for credit.

SPORT 416 Off Season Water Polo .5-3 Units

Enrollment Limitation: Try out.

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 162 hours LAB

This course combines basic skills and strategy tactics with an emphasis on a fitness component for the sport of water polo. It also offers a dry-land training component for peak performance. This course is designed to prepare students for intercollegiate water polo competition. This course may be taken up to four times for credit.

SPORT 417 Pre-Season Conditioning for Water Polo .5-3 Units

Enrollment Limitation: Try out.

General Education: AA/AS Area III(a)

Course Transferable to CSU

Hours: 27-162 hours LAB

This course is designed for student athletes involved in or trying out for the collegiate water polo team. It combines basic skills and strategy tactics with an emphasis on a fitness component for the sport of water polo. It also offers a dry-land training component for peak performance. This course is designed to prepare students for intercollegiate water polo competition.

SPORT 495 Independent Studies in Sport 1-3 Units

Course Transferable to CSU

Hours: 54-162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

Team Activities**TMACT 300 Indoor Soccer I 1 Unit**

Course Family: Soccer (see page 34 - limitation on active participatory courses)

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

This course covers the beginning-level knowledge and skills needed to play indoor soccer. It also covers the differences between indoor and outdoor soccer as well as the history, techniques, rules, and strategies of the game with an emphasis on improvement of their physical fitness and skills.

TMACT 301 Indoor Soccer II 1 Unit

Course Family: Soccer (see page 34 - limitation on active participatory courses)

Prerequisite: TMACT 300 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 the intermediate-level player knowledge and skills needed to play indoor soccer, with an emphasis in defending, attacking, and technical ability. It also covers the skills, strategy, and rules that govern the play of indoor soccer.

TMACT 302 Outdoor Soccer I 1 Unit

Course Family: Soccer (see page 34 - limitation on active participatory courses)

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

This course covers the beginning-level knowledge and skills needed to play outdoor soccer, emphasizing defense, offense, passing, ball control, heading, and shooting. It also covers the skills, strategy, and rules that govern the play of outdoor soccer.

TMACT 303 Outdoor Soccer II 1 Unit

Course Family: Soccer (see page 34 - limitation on active participatory courses)

Prerequisite: TMACT 302 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 the intermediate-level player environment to challenge and improve the player's knowledge and skills needed to play outdoor soccer, emphasizing defending, attacking, and technical ability. It covers the skills, strategy, and rules that govern the play of outdoor soccer. This class is not designed for beginning soccer players.

TMACT 304 Outdoor Soccer III**1 Unit**

Course Family: Soccer (see page 34 - limitation on active participatory courses)

Prerequisite: TMACT 303 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 an advanced level knowledge and skills needed to play outdoor soccer, emphasizing technical and conditioning drills, game preparations, match analysis, and tactical knowledge, as well as defensive and offensive drills of advanced level play. It also introduces basic coaching techniques.

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**

Course Family: Basketball (see page 34 - limitation on active participatory courses)

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.

TMACT 330 Volleyball I**1 Unit**

Course Family: Volleyball (see page 34 - limitation on active participatory courses)

General Education: AA/AS Area III(a); CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

This beginning volleyball course covers the basic techniques of passing, setting, serving, and attacking, as well as rules and simple strategies of play.

TMACT 331 Volleyball II**1 Unit**

Course Family: Volleyball (see page 34 - limitation on active participatory courses)

Prerequisite: TMACT 330 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 intermediate course focuses on refining basic skills of serving, passing, and setting as well as further developing skills in serve-serve, defense, spiking, blocking, and digging. It also covers challenging techniques and strategies that follow NCAA collegiate rules and etiquette.

TMACT 333 Volleyball III**1 Unit**

Course Family: Volleyball (see page 34 - limitation on active participatory courses)

Prerequisite: TMACT 331 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 advanced volleyball class focuses on more complicated skills and techniques of the sport. Competitive play takes a higher priority. Topics include a variety of offensive and defensive systems, and how to apply them in a game-like setting.

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.

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.

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 base running.

TMACT 370 Water Polo**1 Unit**

Prerequisite: Participants must be able to swim 300 yards freestyle without stopping and have sufficient egg beater and breast-stroke kicks to tread water for 5 minutes.

General Education: CSU Area E2

Course Transferable to UC/CSU

Hours: 54 hours LAB

This course features tournament-style scrimmage play to improve offensive, defensive, and team skills in water polo.

**TMACT 495 Independent Studies
in Team Activities****1-3 Units**

Course Transferable to CSU

Hours: 54-162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

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

Degree: A.A. - Legal Assisting
 Certificates: Legal Assisting
 Law Office Clerical Assistant

The Legal Assisting program at American River College is approved by the American Bar Association. ARC's Legal Assisting program has been preparing students for entry-level positions in this profession for over 30 years.

'Legal assistant' and 'paralegal' are synonymous terms according to California Business & Professions Code (B & P Code) sections 6450-6456. Section 6450 defines a legal assistant as "...a person qualified by education, training,...is employed by an attorney,...or other entity, and who performs substantial legal work under the direction and supervision of an active member of the State Bar of California...". Legal assistants do not provide legal advice. It is unlawful for anyone not currently licensed to practice law in California to give legal advice.

DEGREES AND CERTIFICATES

Legal Assisting Degree

This degree prepares students to work in the legal field as an entry-level legal assistant. It covers basic substantive and procedural areas including civil litigation, legal research and legal writing, contracts, and torts in addition to being approved by the American Bar Association. This degree is in full compliance with California Business and Professions Code section 6450 regarding preparation for work in this field.

The American Bar Association (ABA) has specific requirements for 18 units of additional non-legal-assisting coursework (ABA Breadth). Students are encouraged to consult a counselor or the department chair for courses that satisfy the ABA Breadth requirements.

Student Learning Outcomes

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

- incorporate basic legal theories in various substantive areas of law as required by supervising attorney.
- define and use legal terminology accurately and appropriately.
- differentiate between relevant and irrelevant information and evidence.
- research relevant legal authority.
- verify the currency of relevant legal authority.
- draft correspondence to be sent to clients or opposing counsel and others.
- prepare basic legal documents for signature and submission to court by the supervising attorney.
- organize professional assignments efficiently.
- support the supervising attorney in all phases of legal practice.
- demonstrate ethical behavior in the legal setting.
- recognize acts that may constitute the unlicensed practice of law.
- express their thoughts effectively, both orally and in writing, with attorneys and clients.

Career Opportunities

Career opportunities for Legal Assistants have an excellent outlook. According to the US Department of Labor's Job Outlook, employment of legal assistants is projected to grow 17 percent from 2012 to 2022, faster than the average for all occupations.

Legal assistants find employment in both the State and Federal government as well as private practice and corporate settings.

See losrios.edu/gainful-emp-info/gedt.php?major=011166C01 for Gainful Employment Disclosure.

Requirements for Degree 48 Units

LA 300	Introduction to Law and the American Legal System.....	3
LA 310	Civil Procedures and Litigation	3
LA 312	Torts and Personal Injury	3
LA 314	Contract Law for Legal Assistants	3
LA 320	Legal Research	3
LA 321	Legal Writing	3
LA 350	Law Office Management	3

And a minimum of 9 units from the following:9

LA 322	Advanced Legal Research and Writing (3)	
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 495	Independent Studies in Legal Assisting (1 - 3)	
LA 498	Work Experience in Legal Assisting (1 - 4)	

And a minimum of 18 units from the following:18

ABA Breadth: Courses from at least three different areas of Areas 1-5B of the Intersegmental General Education Transfer Curriculum (IGETC), excluding performance courses, activity courses, administration of justice courses, and the lab component of science courses.

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

Students 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. This certificate 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, employment of legal assistants is projected to grow 17 percent from 2012 to 2022, faster than the average for all occupations.

Legal Assistants find employment in both the State and Federal government as well as private practice and corporate settings.

Requirements for Certificate 30 Units

LA 300	Introduction to Law and the American Legal System	3
LA 310	Civil Procedures and Litigation	3
LA 312	Torts and Personal Injury	3
LA 314	Contract Law for Legal Assistants	3
LA 320	Legal Research	3
LA 321	Legal Writing	3
LA 350	Law Office Management	3

And a minimum of 9 units from the following:9

LA 322	Advanced Legal Research and Writing (3)
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 495	Independent Studies in Legal Assisting (1 - 3)
LA 498	Work Experience in Legal Assisting (1 - 4)

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 non-attorney positions in a law office. In order to earn an A.A. or a Certificate to become a Legal Assistant/Paralegal, see the Legal Assisting Program requirements in the Behavior and Social Sciences Division.

Requirements for Certificate 15 Units

BUS 312	Workplace Behavior and Ethics	3
BUSTEC 100.1	Keyboarding Skills: Beginning (1)	1
or BUSTEC 300.1	Keyboarding/Applications: Beginning (1)	
BUSTEC 100.2	Keyboarding Skills: Intermediate (1)	1
or BUSTEC 300.2	Keyboarding/Applications: Document Formatting (1)	
BUSTEC 305	Business Technology Essentials.....	1
BUSTEC 310	Introduction to Word/Information Processing.....	3
LA 300	Introduction to Law and the American Legal System.....	3
LA 350	Law Office Management.....	3

Legal Assisting

LA 300 Introduction to Law and the American Legal System 3 Units

Prerequisite: ENGWR 300 or ESLW 340 with a grade of "C" or better
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 322 Advanced Legal Research and Writing 3 Units

Prerequisite: LA 321 with a grade of "C" or better
Course Transferable to CSU
Hours: 54 hours LEC

This course builds on the research and writing skills covered in LA 320 and LA 321. It focuses on refining legal research, analytical, and writing skills with an emphasis on researching and applying most current codes, rules, and practices pertaining to e-discovery, meta data mining, and other technical issues; it also covers drafting various discovery requests/responses and discovery motions/oppositions and/or other documents filed in Law and Motion departments relative to electronically stored information. Extensive use of computers and the internet is required.

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 495 Independent Studies in Legal Assisting**1-3 Units**

Course Transferable to CSU
Hours: 54-162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

LA 498 Work Experience in Legal Assisting**1-4 Units**

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position, or job related to legal assisting with a cooperating site supervisor. Students are advised to consult with the Legal Assisting Department faculty to review specific certificate and degree work experience requirements.

General Education: AA/AS Area III(b)

Course Transferable to CSU

Hours: 60-300 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 Title 5 required forms which document the student's progress and hours spent at the work site, and developing workplace skills and competencies. During the semester, the student is required to 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. First-time participants are required to attend a weekly orientation and a final meeting. Returning participants are required to attend the first class meeting, a mid-semester meeting, and a final meeting and may meet individually with the instructor as needed to complete a work site observation and all program forms, receive updates, and assignments. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Area: Instruction and Learning Resources
 Associate Vice President:
 Dr. Tammy Montgomery
 Phone: (916) 484-8407
 Counseling: (916) 484-8572

The American River College Library courses teach vital research skills that enable students to achieve success in their college classes, their careers, and their day-to-day lives. Students will learn research skills to cope with the information-rich environment in which they live. In particular, students will learn how to find and critically evaluate information from a wide variety of sources to meet their information needs.

Library

LIBR 102 Introduction to Library Resources 1 Unit

Hours: 18 hours LEC

This course introduces basic library services and resources. It covers the services and functions of an academic library and includes the skills needed to retrieve information from print and electronic resources using the library catalog, online databases, and the Internet. Access to and use of an academic library are required.

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: ENGWR 102 and ENGRD 116; OR ESLR 320 and ESLW 320; and CISC 300 with a C or better.

General Education: AA/AS Area III(b)

Course Transferable to UC/CSU

Hours: 18 hours LEC

This course provides the information literacy skills necessary to conduct academic or personal research. It offers a step-by-step guide to the research process that is applicable to research papers, course work, and life-long learning. Emphasis is placed on learning effective search strategies, selecting information tools, locating and retrieving information sources, analyzing and critically evaluating information, and using the information in an ethical manner.

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: CISC 300; and eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

General Education: AA/AS Area III(b)

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course surveys the content, use, and evaluation of electronic information sources. Emphasis is placed on the effective use of the Internet as a research tool. It covers Internet resources including the deep Web, Web portals, online databases, and library catalogs. Communication services such as email, newsgroups, listservs, blogs, and social networks are also studied as are Web 2.0 and other emerging technologies. Database search strategies, techniques, and critical evaluation of information are covered. Historical and social issues surrounding the Internet are also discussed.

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
 Department Certificates:
 Conflict Management
 Leadership in Action: Organizational Learning
 Leadership in Action: Organizational Systems
 Leadership in Action: Organizational Teams
 Leadership in Action: Organizational Variation
 Project Management

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.

(continued on next page)

(Leadership Degree continued)

- analyze the relationship between leading and managing with an understanding of leadership styles and issues.
- develop team-centered corporate cultures to enhance organizational success.
- measure the importance of operations management in relationship to designing effective control procedures that evolve into a continual improvement approach to 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.

See losrios.edu/gainful-emp-info/gedt.php?major=011173C01 for Gainful Employment Disclosure.

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

DEPARTMENT CERTIFICATES**Conflict Management Certificate**

This certificate focuses on identifying and understanding the underlying causes of workplace conflict and strategies for managing conflict effectively. It explores the impact of conflict on workplace communication, decision-making, and leadership. It covers practical and strategic skills to prevent escalation of conflict and defuse disruptive behaviors.

Student Learning Outcomes

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

- explain and assess the role personality and negotiating temperament play in workplace conflict management.
- analyze the negotiation process, strategies, and techniques for effective conflict resolution in the workplace.
- apply a situational approach to workplace conflict resolution.
- evaluate the benefits and drawbacks of various conflict management strategies in the context of the workplace.
- explain the key challenges to personnel and human resource management in developing the flexible and skilled workforce needed in governmental and private organizations.
- describe the effective philosophies of human behavior at work.
- define culture within the context of the United States workplace.

Requirements for Certificate	12 Units
BUS 317	Managing Workplace Conflict .....3
BUS 330	Managing Diversity in the Workplace .....3
MGMT 308	Personnel and Human Resources Management.....3
MGMT 372	Human Relations and Organizational Behavior .....3

Leadership in Action: Organizational Learning Certificate

This certificate centers on the basic business systems and the practical application of the tools of systems thinking. It focuses on the principles of Profound Knowledge as it relates to the planning processes of organizations, the manager's ability to design and implement effective systems to the prediction of the strategic plans, and the measurement of the output and outcomes on overall effectiveness.

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: Organizational Systems Certificate

This certificate focuses on the holistic nature of life and examines organizations from this foundational perspective. It centers on the design, implementation and measurement of systems that carry out predefined actions as a result of anticipated events, identifies the nature of imperfect implementation technology and describes how system limitations complicate organizational progress.

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: Organizational Teams Certificate

This certificate centers around the elements of human psychology as it relates to organizational groups, work teams and self-managed teams. It provides a framework of individual self-study as it relates to interacting with others. Furthermore, it includes the design, development and implementation of high performance teams to maximize organizational success.

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: Organizational Variation Certificate

This certificate centers on the importance of statistical knowledge of variation, variation patterns and the methodology and use of statistical tools to assist managers with the measurement and improvement of organizational processes. It emphasizes the practical application of statistical tools in the workplace.

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

Project Management Certificate

This certificate covers the responsibilities of a project manager. It includes the knowledge needed to manage a project, control costs, and schedule resources. It also introduces the use of project management software to track project resources, tasks, and milestones. Included in the program are basic business and management theory, as well as accounting principles.

Student Learning Outcomes

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

- construct a basic plan of action utilizing project management software.
- compare and contrast various theories of leadership and motivation.
- explain the principles of project management with regard to case studies.
- demonstrate the ability to formulate a project plan, given specific scenarios.
- assess the inherent advantages and shortcomings in various software packages.
- interpret the basic elements of financial statements.
- apply the basic functions of management, such as planning and control functions.

Career Opportunities

Organizations need employees who understand basic business and management theory and can manage a project from inception to completion. Employment outlook for the 2012-2022 period projects over 40,000 job openings nationally for Project Managers, in a variety of industries, as a “new and emerging” occupation.

Requirements for Certificate		12 -13 Units
ACCT 101	Fundamentals of College Accounting (3)	3 - 4
or ACCT 301	Financial Accounting (4)	
BUS 300	Introduction to Business	3
MGMT 142	Project Management Techniques and Software (3)	3
or CISA 160	Project Management Techniques and Software (3)	
MGMT 304	Introduction to Management Functions	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 295 Independent Studies in Management 1-3 Units

Hours: 54-162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

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	Business Technology Essentials (1)	
BUSTEC 310	Introduction to Word/Information Processing (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.

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(Retail Management (WAFC) Certificate continued)

See losrios.edu/gainful-emp-info/gedt.php?major=011322C01 for Gainful Employment Disclosure.

Requirements for Certificate	31-32 Units
ACCT 101 Fundamentals of College Accounting (3)	3 - 4
or ACCT 301 Financial Accounting (4)	
BUS 100 English for the Professional (3)	3
or BUS 310 Business Communications (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 Public Speaking (3)	3
or SPEECH 321 Interpersonal Communication (3)	

Marketing

MKT 295 Independent Studies in Marketing **1-3 Units**

Hours: 54-162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

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 330 Internet Marketing **3 Units**

*Course Transferable to CSU
Hours: 54 hours LEC*

This course introduces the use of social media and other Internet technologies, with an emphasis on the theory and practice of marketing in an electronic environment. Topics include the personalization and interactivity of the Internet to build strong customer relationships. These concepts are applied to traditional brick and mortar as well as exclusively online businesses.

MKT 495 Independent Studies in Marketing **1-3 Units**

*Course Transferable to CSU
Hours: 54-162 hours LAB*

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

Area: Mathematics
 Dean: Nancy Reitz, Interim
 Phone: (916) 484-8215
 Counseling: (916) 484-8572

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

It is highly recommended that you review the prerequisite course material to enhance your chance of success. See the Mathematics Department website for suggested resources:
www.arc.losrios.edu/Programs_of_Study/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 degree provides a broad study in the fields of physical science and mathematics. It is a good foundation for transfer to a four-year program in science, technology, engineering, or mathematics (STEM).

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
A minimum of 18 units from the following:		18
ASTR	300, 310, 320, 330, 400, 480, 481, 495, 499	
CHEM	305, 306, 309, 310, 311, 334, 400, 401, 420, 421, 423, 495, 499	
ENGR	300, 305, 310, 312, 320, 401, 413, 420, 430, 495, 499	
GEOG	300, 301, 305, 306, 307, 308, 309, 390, 495, 499	
GEOL	300, 301, 305, 306, 310, 311, 320, 325, 330, 331, 342, 345, 390, 495, 499	
MATH	300, 310, 320, 325, 330, 336, 340, 342, 350, 351, 355, 356, 370, 400, 401, 402, 410, 420, 480, 495, 499	
PHYS	310, 311, 312, 350, 360, 410, 421, 431, 495, 499	
PS	300, 301, 495, 499	
STAT	300, 305, 495, 499	

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) or the California State University General Education Breadth Requirements.

Student Learning Outcomes

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

- evaluate, describe, and apply single variable calculus including various forms of derivatives and integrals, to analyze and solve problems.
- evaluate, describe, and apply multivariate calculus, linear algebra, and differential equations to analyze and solve problems.
- prepare logical arguments and use them to prove basic mathematical theorems.
- solve real-world application problems using appropriate mathematical problem-solving skills.

Career 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 recognize common misconceptions of mathematics, overcome math anxiety, and build confidence in math. Topics include relaxation techniques, study habits, and problem solving strategies. This course is also useful for tutors, counselors, and teachers interested in helping others overcome their math anxiety. Pass/No Pass only.

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: Placement through the math assessment process.
Hours: 54 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, decimals, problem solving, and applications.

MATH 32 Pre-Algebra 3 Units

Prerequisite: MATH 24, 25, or 41 with a grade of "C" or better; or placement through the assessment process.
Hours: 54 hours LEC

This course briefly reviews the fundamentals of arithmetic, including fractions, decimals, and order of operations. Course content includes signed numbers, ratios, proportions, percent, concepts of variables, area/perimeter/volume of geometric figures, and solving basic linear equations.

MATH 38 Pre-Algebra - Part I 2 Units

Prerequisite: MATH 24, 25, or 41 with a grade of "C" or better; or placement through the assessment process.
Hours: 36 hours LEC

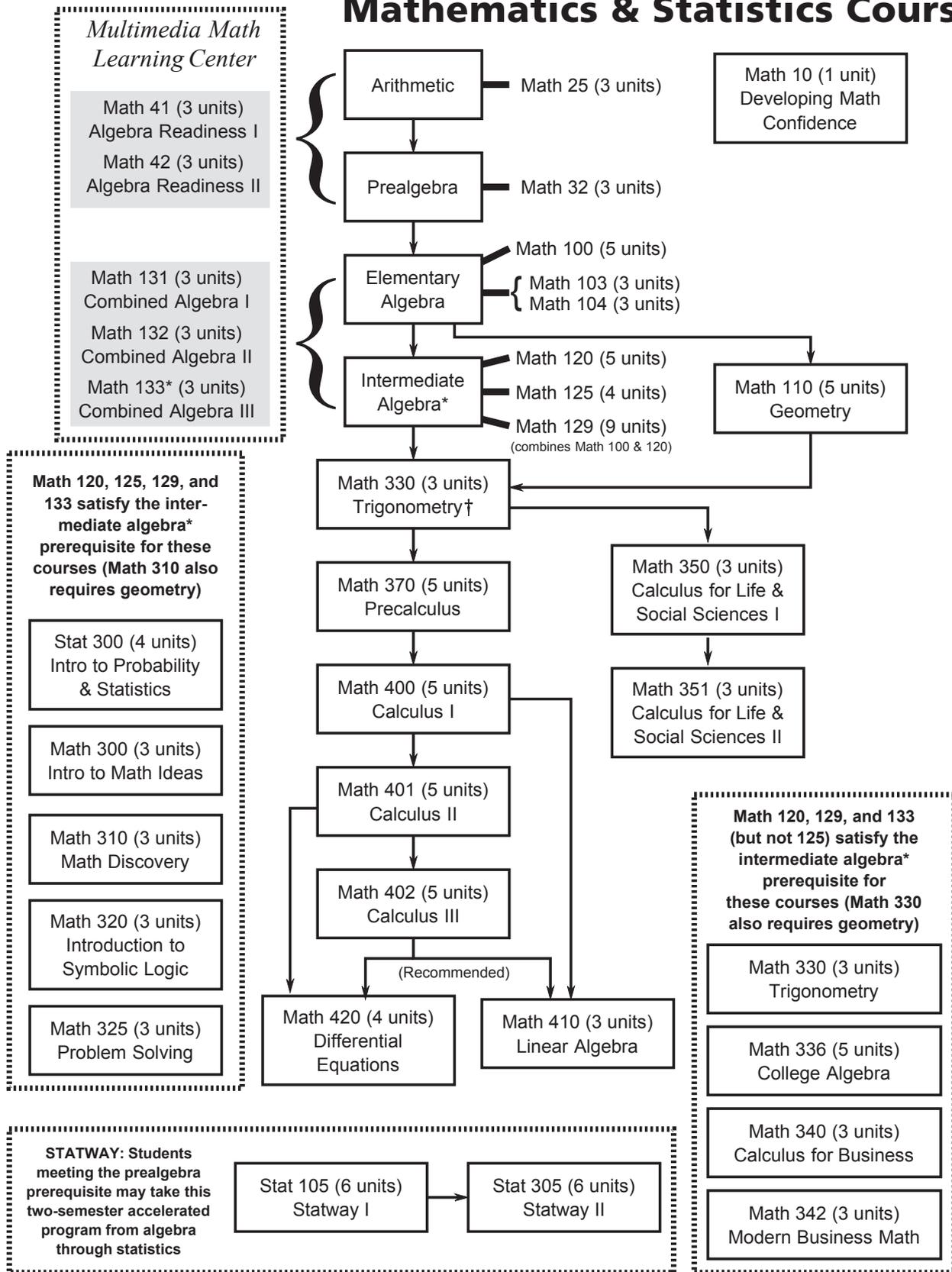
This course introduces material that is essential for success in algebra. Topics include order of operations, signed numbers, application problems, concepts of variables, exponents, and solving equations. In addition, the fundamentals of arithmetic are briefly reviewed, including operations on whole 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.

Mathematics & Statistics Courses



Note: An arrow connects a prerequisite to the next course.

*Math 120, Math 129, and Math 133 each satisfy the intermediate algebra prerequisite for any course.

Math 125 satisfies the intermediate algebra prerequisite only where indicated.

†Trigonometry has *two* mathematical prerequisites: intermediate algebra and geometry.

MATH 41 Algebra Readiness - Part I 3 Units

Advisory: CISC 100, CISC 300, or CISC 305 with a grade of "C" or better, AND ENGRD 116 or ESLR 320 with a grade of "C" or better.

Placement through the math assessment process.

Hours: 54 hours LEC

This course is the first of two parts covering algebra readiness in a mastery-based learning environment. The fundamentals of arithmetic are introduced, with an emphasis on problem solving and computational skills. Topics include whole numbers, exponents, order of operations, factors, fractions, decimals, proportion, ratios, rates, problem solving, and applications. The course is offered through the Multimedia Math Learning Center (MMLC), using an independent study approach under the direction of an instructor. Computer-based instruction via the Internet is an integral part of the course. Students are required to purchase a workbook that is bundled with the on-line video and math content system. One set of materials can be used for multiple MMLC courses, if completed in consecutive semesters. The content in the course is organized into various modules. Each module must be completed at a mastery level before the student moves on to the next. Students will demonstrate mastery by successfully completing assignments and then earning at least 80% on the module exam that is taken on-line in the MMLC. If necessary students will repeat the exam until mastery is achieved. All modules must be completed before the student takes the final exam, a comprehensive test on paper that is taken once and determines the majority of the course grade. Regular class attendance is required throughout the semester, including the mandatory orientation during the first class meeting. Students may also visit the MMLC during other hours of operation to receive tutoring, complete assignments, and take exams. This course may be completed as quickly as possible but no later than the end of the semester. Students who complete this course during the first half of the semester may sign up immediately for MATH 42. For the most updated information, please visit the MMLC web page on the ARC website. Completion of MATH 41 with a grade of "C" or better meets the prerequisite for MATH 42 and MATH 32.

MATH 42 Algebra Readiness - Part II 3 Units

Prerequisite: MATH 41 with a grade of "C" or better

Hours: 54 hours LEC

This course is the second of two parts covering algebra readiness in a mastery-based learning environment. The fundamentals of pre-algebra are introduced, with an emphasis on problem solving skills. Topics include order of operations, signed numbers, application problems, concepts of variables, exponents, operations on signed fractions, percent problems, solving algebraic equations, the rectangular coordinate system, introduction to graphing linear equations, applications of equations, and area/perimeter of geometric figures. The course is offered through the Multimedia Math Learning Center (MMLC), using an independent study approach under the direction of an instructor. Details about the program can be found in the catalog description for MATH 41. This course may be completed as quickly as possible but no later than the end of the semester. Students who complete this course during the first half of the semester may sign up immediately for MATH 131. For the most updated information, please visit the MMLC web page on the ARC website. Completion of MATH 41 AND MATH 42 with grades of "C" or better meets the prerequisite for MATH 131, MATH 100, MATH 103, MATH 129, and STAT 105.

MATH 100 Elementary Algebra 5 Units

Prerequisite: MATH 32, 39, or 42 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 and incorporates problem-solving skills. Topics include properties of real numbers, linear equations and inequalities, integer exponents, polynomials, and factoring polynomials. Other topics include rational and radical expressions, rational and radical equations, graphing and finding equations of lines, graphing and solving systems of linear equations, and graphing and solving quadratic equations.

MATH 103 Elementary Algebra, Part I 3 Units

Prerequisite: MATH 32, 39, or 42 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 or 131 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, 104, or 132 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 geometric terms and definitions, properties of parallel lines and parallelograms, congruent and similar triangles, properties of triangles, right triangles, basic trigonometry, properties of circles, geometric constructions, areas, and volumes. The course also emphasizes problem-solving strategies, elementary logic, and writing proofs.

MATH 120 Intermediate Algebra 5 Units

Prerequisite: MATH 100, 104, or 132 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 extends and reviews the concepts of elementary algebra while incorporating applications and problem-solving skills. Reviewed and extended topics include linear and quadratic equations and their graphs, linear inequalities, systems of linear equations, exponents, factoring polynomials, rational expressions, and radicals. New topics include absolute value equations and inequalities, graphs of absolute value functions, equations of parallel and perpendicular lines, graphs of linear inequalities, graphs of systems of linear inequalities, functions, function notation, domain and range, inverse functions, exponential and logarithmic functions and their graphs, quadratic and polynomial functions and their graphs, an introduction to the complex number system, finding the real and complex solutions for a variety of equations, an introduction to conic sections, and nonlinear systems of equations and their graphs.

MATH 123 Intermediate Algebra, Part I 3 Units

Prerequisite: MATH 100, 104, or 132 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, 104, or 132 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, 39, or 42 with a grade of "C" or better; or placement through the assessment process.
General Education: AA/AS Area II(b)
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 131 Combined Algebra - Part I 3 Units

Prerequisite: MATH 32, 39, or 42 with a grade of "C" or better; or placement through the assessment process.
Advisory: CISC 100, CISC 300, or CISC 305 with a grade of "C" or better, AND ENGRD 116 or ESLR 320 with a grade of "C" or better.
Hours: 54 hours LEC

This course is the first of three parts covering combined algebra in a mastery-based learning environment. Problem-solving skills are emphasized throughout the course. Topics include linear equations and inequalities, integer exponents, polynomials, systems of linear equations, the rectangular coordinate system, graphs and equations of lines, and related applications. The course is offered through the Multimedia Math Learning Center (MMLC), using an independent study approach under the direction of an instructor. Computer-based instruction via the Internet is an integral part of the course. Students are required to purchase a workbook that is bundled with the on-line video and math content system. One set of materials can be used for multiple MMLC courses, if completed in consecutive semesters. The content in the course is organized into various modules. Each module must be completed at a mastery level before the student moves on to the next. Students will demonstrate mastery by successfully completing assignments and then earning at least 80% on the module exam that is taken on-line in the MMLC. If necessary students will repeat the exam until mastery is achieved. All modules must be completed before the student takes the final exam, a comprehensive test on paper that is taken once and determines the majority of the course grade. Regular class attendance is required throughout the semester, including the mandatory orientation during the first class meeting. Students may also visit the MMLC during other hours of operation to receive tutoring, complete assignments, and take exams. This course may be completed as quickly as possible but no later than the end of the semester. Students who complete this course during the first half of the semester may sign up immediately for MATH 132. For the most updated information, please visit the MMLC web page on the ARC website. Completion of MATH 131 AND MATH 132 with grades of "C" or better meets the prerequisite for MATH 133, MATH 110, MATH 120, and MATH 125.

MATH 132 Combined Algebra - Part II 3 Units

Prerequisite: MATH 131 with a grade of "C" or better
Hours: 54 hours LEC

This course is the second of three parts covering combined algebra in a mastery-based learning environment. Problem-solving skills are emphasized throughout the course. Topics include polynomial factorization, rational expressions and equations, radical expressions and equations, rational exponents, and related applications. The course is offered through the Multimedia Math Learning Center (MMLC), using an independent study approach under the direction of an instructor. Details about the program can be found in the catalog description for MATH 131. This course may be completed as quickly as possible but no later than the end of the semester. Students who complete this course during the first half of the semester may sign up immediately for MATH 133. For the most updated information, please visit the MMLC web page on the ARC website. Completion of MATH 131 AND MATH 132 with grades of "C" or better meets the prerequisite for MATH 133, MATH 110, MATH 120, and MATH 125.

MATH 133 Combined Algebra - Part III 3 Units

*Prerequisite: MATH 132 with a grade of "C" or better
General Education: AA/AS Area II(b) (effective Summer 2013)
Hours: 54 hours LEC*

This course is the third of three parts covering combined algebra in a mastery-based learning environment. Problem-solving skills are emphasized throughout the course. Topics include function evaluation and notation, inverse functions, solving quadratic equations, complex numbers, graphs of quadratic functions, exponential and logarithmic functions, properties of logarithms, conic sections, and related applications. The course is offered through the Multimedia Math Learning Center (MMLC), using an independent study approach under the direction of an instructor. Details about the program can be found in the catalog description for MATH 131. This course may be completed as quickly as possible but no later than the end of the semester. For the most updated information, please visit the MMLC web page on the ARC website. Completion of MATH 131, MATH 132, AND MATH 133 with grades of "C" or better is equivalent to the completion of MATH 120 or MATH 125 or MATH 129.

MATH 145 Mathematics for the Trades 1.5 Units

Hours: 23 hours LEC; 12 hours LAB

This course introduces mathematics applicable to technical programs of study. Topics include the use of mathematical operators on whole numbers, fractions, and decimals. Additional content includes fundamentals of algebra, basic geometry, and triangle trigonometry. This course is intended for those in Pre-Apprenticeship Programs or other technical educational programs, such as Electronics Technology or Automotive Technology.

MATH 295 Independent Studies in Mathematics 1-3 Units

Hours: 54-162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

MATH 300 Introduction to Mathematical Ideas 3 Units

*Prerequisite: MATH 120, 124, 125, 129, or 133 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 makes fundamental concepts and processes more meaningful for non-mathematics majors through a study of several mathematical topics, including the history of mathematics, numeration systems, logic, geometry, algebraic modeling, combinatorics, probability, statistics, sets, matrices, consumer mathematics, equations and inequalities, functions and graphs, problem solving, graph theory, voting and apportionment, and number theory. This course is not recommended for students entering elementary school teaching or business administration majors.

MATH 310 Mathematical Discovery 3 Units

*Prerequisite: MATH 110 with a grade of "C" or better or successful completion of high school geometry, AND MATH 120, 124, 125, 129, or 133 with a "C" or better, or placement through the assessment process.
Geometry is the only high school course that can be used to meet the prerequisite.*

*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 as well as the formulation and proof of conjectures. Topics from number theory, probability and statistics, and geometry are investigated. This course is recommended for students interested in a degree in education.

MATH 320 Symbolic Logic 3 Units

*Same As: PHIL 324
Prerequisite: MATH 120, 124, 125, 129, or 133 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, 129, or 133 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, AND any one of MATH 120, 124, 129, or 133 with a C or better. Successful completion of a high school Geometry course will meet the requirement for MATH 110. High school courses cannot be used to meet the other part of the prerequisite. Students can also meet the prerequisites through the assessment process.
General Education: AA/AS Area II(b); CSU Area B4
Course Transferable to CSU
Hours: 54 hours LEC*

This course covers the fundamentals of trigonometry and its applications. Topics include degree and radian measurements of angles, right triangle trigonometry, unit circle trigonometry, graphs of trigonometric functions, algebraic manipulation and proof of trigonometric identities, inverse trigonometric functions, solving trigonometric equations, the Laws of Sines and Cosines, vectors, the polar coordinate system, and roots and powers of complex numbers (De Moivre's Theorem). (C-ID MATH 851)

MATH 336 College Algebra 5 Units

Prerequisite: MATH 120, 124, 129, or 133 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: 90 hours LEC

This course reviews and covers topics beyond those studied in intermediate algebra, including functions, matrices, The Rational Root Theorem, partial fractions, sequences and series, mathematical induction, and The Binomial Theorem. It focuses on applications and graphing of polynomial, logarithmic, and exponential functions, as well as solving systems of linear and non-linear equations and inequalities. It also covers analytic geometry, including straight lines, conic sections, and curve sketching. (C-ID MATH 150)

MATH 340 Calculus for Business and Economics 3 Units

Prerequisite: MATH 120, 124, 129, or 133 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 introduces how differential calculus and integral calculus are used in the fields of business, economics, social science, and biological science. Topics include finding limits, applying various rules to find derivatives of polynomial, rational, exponential, and logarithmic functions, as well as using derivatives to analyze marginal cost, revenue, and profit. It is not recommended for mathematics and physical science majors.

MATH 342 Modern Business Mathematics 3 Units

Prerequisite: MATH 120, 124, 129, or 133 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 350 Calculus for the Life and Social Sciences I 3 Units

Prerequisite: MATH 330 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 covers functions, limits, and derivatives, and introduces antiderivatives. Topics include rates of change, optimization, and definite integration, as well as applications from life, 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 additional topics in single-variable integral calculus and extends integration and differentiation to functions of more than one variable. Elementary differential equations and power series are introduced. Applications are drawn from the life and social sciences. It is not recommended for math or engineering majors.

MATH 355 Calculus for Biology and Medicine I 4 Units

Prerequisite: MATH 330 with a grade of "C" or better; or placement through the assessment process.

General Education: AA/AS Area II(b) (effective Summer 2014);

CSU Area B4

Course Transferable to CSU

Hours: 72 hours LEC

This course is an introduction to differential calculus and elementary differential equations via applications in biology and medicine. It covers limits, derivatives of polynomials, trigonometric, and exponential functions, graphing, and applications of the derivative to biology and medicine. Among the topics included are the Fundamental Theorem of Calculus and techniques of integration, including integral tables and numerical methods. This course is a superset of MATH 350, adding topics to the latter and treating topics in more depth.

MATH 356 Calculus for Biology and Medicine II 4 Units

Prerequisite: MATH 355 with a grade of "C" or better

General Education: AA/AS Area II(b); CSU Area B4

Course Transferable to CSU

Hours: 72 hours LEC

This course covers matrix algebra with eigenvalues and eigenvectors, systems of linear equations, functions of several variables, partial derivatives, systems of differential equations, and applications to biology and medicine. This course is a superset of MATH 351, treating additional topics and covering them in more depth.

MATH 370 Pre-Calculus Mathematics 5 Units

Prerequisite: MATH 330 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: 90 hours LEC

This course provides foundational mathematics and problems that require critical thinking in preparation for the calculus sequence for science, technology, engineering, and mathematics (STEM) majors. Topics include rigorous treatment of polynomial, rational, logarithmic, exponential and trigonometric functions, including graphing and applications, as well as systems of linear and non-linear equations and inequalities. The course also covers analytic geometry, conic sections, vectors, parametric equations, and polar equations.

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. (C-ID MATH 210)

MATH 401 Calculus II

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. (C-ID MATH 220)

5 Units

MATH 402 Calculus III

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 multivariate functions. The topics include multivariate functions, partial derivatives, extrema of multivariate functions, iterated integrals, development of vector calculus, line integrals, three-dimensional analytic geometry, and Green's, Gauss' (Divergence), and Stokes' Theorems. Many applications of calculus are also covered.

5 Units

MATH 410 Introduction to Linear Algebra

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: 54 hours LEC

This course provides an introduction to linear algebra including matrices, determinants, vector spaces, inner product spaces, linear transformations, and eigenvectors. It is intended for majors in mathematics, engineering, economics, science, and related fields. This course emphasizes cogent reasoning, mathematical proof, and problem solving. (C-ID MATH 250)

3 Units

MATH 420 Differential Equations

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. (C-ID MATH 240)

4 Units

MATH 480 Honors Seminar in Mathematics

Prerequisite: MATH 370 with a grade of "C" or better
Course Transferable to UC/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.

1 Unit

MATH 495 Independent Studies in Mathematics

Course Transferable to CSU
Hours: 54-162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

1-3 Units

Statistics

STAT 105 Statway, Part I

Prerequisite: MATH 32, 39, or 42 with a grade of "C" or better; or placement through the COMPASS 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.

6 Units

STAT 300 Introduction to Probability and Statistics

Prerequisite: MATH 120, 124, 125, 129, or 133 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). Applications use data from various disciplines including business, social sciences, psychology, life and health sciences, and education. Statistical analysis using a computer statistics package or graphing calculator is required.

4 Units

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 UC/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.

STAT 495 Independent Studies in Statistics 1-3 Units

Course Transferable to CSU

Hours: 54-162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

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

Degrees: A.A. - Music
 A.A. for Transfer Degree - Music
 A.A. - Jazz Studies
 A.A. - Commercial Music: Business
 A.A. - Commercial Music: Recording
 Certificates: Commercial Music: Business
 Commercial Music: Recording
 Department Certificates:
 Digital Audio Production
 Music Management and Promotion
 Studio Jazz/Pop Voice Instructor
 Studio Voice Instructor

The Music Degree program is designed to provide students with a rich foundation and core curriculum for the development of the professional musician through music theory, history, performance, and production. Associate of Arts degrees are offered in both traditional and jazz studies with an emphasis in either instrumental or vocal performance.

The Commercial Music program is designed to serve as a springboard for a career in the music business. The program offers Associate of Arts degrees and certificates in audio recording or music business. Students study with industry professionals and learn in ARC's state-of-the-art equipped recording studios and facilities.

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/Composers 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	Concert Choir I (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
And a minimum of 8 units from the following:		8
MUP 350	Concert Choir I (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.

This transfer degree can only be awarded using the IGETC pattern:

Music A.A. for Transfer Degree

Completion of this degree provides a foundation in music. Program offerings include course work in music theory and aural skills, applied composition, instrumental and vocal instruction, and ensemble performance.

The Associate in Arts in Music for Transfer provides students with a major that fulfills the general requirements of the California State University for transfer. Students with this degree will receive priority admission with junior status to the California State University system.

The Associate in Arts in Music for Transfer (A.A.-T) may be obtained by the completion of 60 transferable, semester units with a minimum of a 2.0 GPA, including (a) the major or area of emphasis described in the Required Program outlined below (earning a C or better in these courses), and (b) the Intersegmental General Education Transfer Curriculum (IGETC) Requirements.

Student Learning Outcomes

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

- analyze musical scores and compositions
- critique personal music performances and those of other musicians
- analyze and perform the elements of music (rhythm, melody, harmony, and form)
- create derivative or original music at a level appropriate to the area of specialization

Career Opportunities

Individuals with four-year degrees in music may be placed in the K-12 educational field as well as performers in professional music ensembles, directors for religious and community music groups, private music studio instructors, composers for media and publishing, music therapists, and administrative staff for music organizations. Advanced degrees in music may lead to careers as educators at the college or university level, performers, music directors, and music editors and journalists.

Core Requirements for Degree		20 Units
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/Composers		28 Units
Core Requirements		20

And a minimum of 8 units from the following:8

MUP 310	Orchestra (2)
MUP 311	Advanced Orchestra (1 - 2)
MUP 320	Jazz Band (2)
MUP 321	Advanced Jazz Band (1 - 2)
MUP 330	Concert Band (2)
MUP 331	Advanced Concert Band (1 - 2)
MUP 340	Symphonic Band (2)
MUP 341	Advanced Symphonic Band (1 - 2)
MUP 350	Concert Choir I (2)
MUP 352	Advanced Concert Choir (2)
MUP 360	Chamber Singers (2)
MUP 361	Advanced Chamber Singers (2)
MUP 400	Vocal Jazz Ensemble (2)
MUP 401	Advanced Vocal Jazz Ensemble (1 - 2)

Instrumentalists **28 Units**

Core Requirements	20
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And a minimum of 8 units from the following:8

MUP 310	Orchestra (2)
MUP 311	Advanced Orchestra (1 - 2)
MUP 320	Jazz Band (2)
MUP 321	Advanced Jazz Band (1 - 2)
MUP 330	Concert Band (2)
MUP 331	Advanced Concert Band (1 - 2)
MUP 340	Symphonic Band (2)
MUP 341	Advanced Symphonic Band (1 - 2)

Vocalists **28 Units**

Core Requirements	20
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And a minimum of 8 units from the following:8

MUP 350	Concert Choir I (2)
MUP 352	Advanced Concert Choir (2)
MUP 360	Chamber Singers (2)
MUP 361	Advanced Chamber Singers (2)
MUP 400	Vocal Jazz Ensemble (2)
MUP 401	Advanced Vocal Jazz Ensemble (1 - 2)

Associate in Arts for Transfer Degree Requirements: The Associate in Arts in Music for Transfer (AA-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) the Intersegmental General Education Transfer Curriculum (IGETC) 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

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(Jazz Studies Degree continued)

Career Opportunities

This degree 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.

<u>Requirements for Degree</u>	<u>33 Units</u>
MUFHL 315 Jazz History	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 Jazz and Popular Vocal Styles and Improvisation I (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
And a minimum of 8 units from the following:	8
MUP 320 Jazz Band (2)	
MUP 323 Latin Jazz Ensemble (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, recording contracts, publishing agreements, artist management, promotion, and marketing.

Student Learning Outcomes

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

- create a music business and marketing plan
- organize an artist tour, assemble a promotional packet, create a publicity campaign, and develop media, industry, and fan lists
- evaluate and implement recordkeeping systems for financial, employment, and tax records
- demonstrate a basic knowledge of music fundamentals, cross-cultural influences from diverse geographical regions, and song composition/arranging techniques
- analyze case problems and apply legal principles to interpret regulations, laws, and statutes related to the music industry
- compare the job descriptions and duties of attorneys, publishers, merchandisers, record company personnel, agents, managers, and producers
- assess record contract points, publisher-writer exclusive agreements, attorney-client contracts, as well as management and touring agreements

Career 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.

See losrios.edu/gainful-emp-info/gedt.php?major=011514C01 for Gainful Employment Disclosure.

<u>Requirements for Degree or Certificate</u>	<u>33 Units</u>
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.

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 and understand the operation of electrical components found in a typical recording studio
- set up and employ the use of mixing consoles, multi-track recorders, Digital Audio Workstations (DAWs), and sound reinforcement systems
- select and set up outboard signal processing hardware and software plug-ins for audio enhancement
- explain music fundamentals, cross-cultural influences from diverse geographical regions, and song composition/arranging techniques
- create Musical Instrument Digital Interface (MIDI) sequencing and notation projects utilizing music keyboard input devices and various software packages
- design and equip a fully-functioning and acoustically-sound recording studio
- formulate and implement effective musical and technical recording session techniques

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(Commercial Music: Recording Degree and Certificate continued)

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.

See losrios.edu/gainful-emp-info/gedt.php?major=011519C01 for Gainful Employment Disclosure.

Requirements for Degree or Certificate		37 Units
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
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 IV	3
MUSM 356	Pro Tools 101, Introduction to Pro Tools	1.5
MUSM 357	Pro Tools 110 Intermediate Pro Tools.....	1.5

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.

DEPARTMENT CERTIFICATES

Digital Audio Production Certificate

This certificate is intended to provide a practical foundation in audio production skills, provide suitable preparation to begin work in the recording and sound production industry, or to serve as a foundation for further study. It also enables people currently employed in the field of audio recording and other associated fields a means to upgrade and expand their skills.

Career Opportunities

Typical career paths include post-production audio, broadcast engineer, sound effects editor, multimedia/Internet audio, professional recording studio engineer, and owner/engineer of a smaller demo production studio.

Student Learning Outcomes

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

- create, arrange, and notate music using standard Musical Instrument Digital Interface (MIDI) software
- produce audio recordings, music mixes, and audio post-production projects using a Digital Audio Workstation (DAW)
- evaluate various formats and platforms of digital audio recording hardware and software
- integrate outboard signal processing equipment and plug-ins into the audio signal path for audio enhancement
- formulate and implement effective recording session techniques
- analyze the fundamental process and sequence involved in the production of digital audio

Requirements for Certificate **12.5 - 14 Units**

MUSM 334	Introduction to Musical Instrument Digital Interface (MIDI)	2
MUSM 342	Recording Studio Techniques.....	3
MUSM 344	Recording Studio Techniques.....	3
MUSM 356	Pro Tools 101, Introduction to Pro Tools	1.5
MUSM 357	Pro Tools 110 Intermediate Pro Tools.....	1.5
MUSM 366	Pro Tools 201, Advanced Pro Tools (1.5)	1.5 - 3
or MUSM 350	Recording Studio Techniques (3)	

Music Management and Promotion Certificate

This certificate offers an overview of the core skills essential to enter the music industry in careers such as artist and music facility management, concert promotion, marketing, and publishing. It also assists those who wish to pursue a career as an independent artist, set up their own record label, or manage their own career.

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.

Student Learning Outcomes

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

- evaluate and critique recording, management, publishing, and other music industry contracts
- propose and employ networking skills and tools to develop contacts in the music industry
- compare and contrast traditional and alternative music distribution channels
- research merchandising considerations including design, pricing, manufacturing, and distribution
- create marketing and business plans
- describe emerging trends, models, and entrepreneurial opportunities in the music industry
- assess promotion tools such as radio, television, and new media, such as YouTube, social networking, and viral campaigns

Requirements for Certificate **12 Units**

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

Studio Jazz/Pop Voice Instructor Certificate

This certificate offers an overview of the skills essential to enter the studio jazz/pop voice teaching profession as either a member of a retail studio or as an independent voice instructor, coach, consultant, or tutor.

Career Opportunities

Typical career options include employment as owner or employee of a private voice studio and vocal consultant to local recording studios, bands, and music troupes.

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(Studio Jazz/Pop Voice Instructor Certificate)

Student Learning Outcomes

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

- diagnose poor vocal habits.
- formulate a pedagogical plan to resolve poor vocal habits.
- evaluate a voice student’s vocal skills.
- devise a pedagogical plan to develop or improve basic vocal skills.
- devise a pedagogical plan to develop or improve jazz/pop style.
- assess a vocalist’s ability to maintain independence in a harmonic setting.
- devise and implement a pedagogical plan to develop or improve a vocalist’s ability to maintain independence in a harmonic setting.
- demonstrate the basic skills necessary to sing with appropriate breath support and jazz/pop tone quality.
- demonstrate the basic skills necessary to expand the vocal range and flexibility.

Requirements for Certificate 12 - 13 Units

MUIVI 310	Voice Class I	2
MUIVI 311	Voice Class II	2
MUIVI 390	Jazz and Popular Vocal Styles and Improvisation I	2
MUIVI 391	Jazz and Popular Vocal Styles and Improvisation II	2
MUP 400	Vocal Jazz Ensemble.....	2
MUFHL 321	Basic Musicianship (3)	2 - 3
or MUIVI 340	Beginning Piano (2)	
or MUIVI 385	Jazz Styles and Improvisation (2)	
or MUIVI 400	Beginning Jazz Piano (2)	
or MUIVI 370	Beginning Guitar (2)	

Studio Voice Instructor Certificate

This certificate offers an overview of the skills essential to enter the studio voice teaching profession as either a member of a retail studio or as an independent voice instructor, coach, consultant, or tutor.

Career Opportunities

The Studio Voice Instructor will find employment as owner or employee of a private voice studio. This position will include coaching students/clients in basic vocal technique with an emphasis on traditional vocal pedagogy.

Student Learning Outcomes

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

- diagnose poor vocal habits.
- formulate a pedagogical plan to resolve poor vocal habits.
- evaluate a voice student’s vocal skills.
- devise a pedagogical plan to develop or improve basic vocal skills.
- classify voice types based upon range.
- assess a vocalist’s ability to maintain independence in a harmonic setting.
- devise and implement a pedagogical plan to develop or improve a vocalist’s ability to maintain independence in a harmonic setting.
- demonstrate the basic skills necessary to sing with appropriate breath support and tone quality.
- demonstrate the basic skills necessary to expand the vocal range and flexibility.

Requirements for Certificate 12 - 13 Units

MUIVI 310	Voice Class I	2
MUIVI 311	Voice Class II	2
MUIVI 320	Voice Class III	2
MUIVI 321	Voice Class IV.....	2
MUFHL 321	Basic Musicianship (3)	2 - 3
or MUIVI 340	Beginning Piano (2)	
or MUIVI 370	Beginning Guitar (2)	
MUP 350	Concert Choir I (2).....	2
or MUP 360	Chamber Singers (2)	
or MUP 400	Vocal Jazz Ensemble (2)	

Music Fundamentals, History and Literature

MUFHL 300 Introduction to Music 3 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

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 apply the various elements of music to heighten the expressive impact of a composition. Aspects of melody, rhythm, harmony, tone, and structure are studied through focused listening of works from the Renaissance to contemporary styles of avant-garde and popular music. This course requires no previous musical study. (C-ID MUS 100)

MUFHL 308 Introduction to Music: Rock & Roll 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

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: MUFHL 321 and 400 ; AND eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

General Education: AA/AS Area I; CSU Area C1; IGETC Area 3A

Course Transferable to UC/CSU

Hours: 54 hours LEC

This is part of a two-course series that offers a survey of the history of music, including the most significant composers and works from antiquity to 1750. It provides background on medieval, renaissance, and baroque music, thus increasing understanding of modern styles derived from these early periods of music.

MUFHL 311 Survey of Music History and Literature 3 Units

Advisory: MUFHL 321 and 400 ; Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

General Education: AA/AS Area I; CSU Area C1; IGETC Area 3A

Course Transferable to UC/CSU

Hours: 54 hours LEC

This is part of a two-course series that offers a survey of the history of music including the most significant composers and works from the Classical period to the present. It provides background on Classical, Romantic, Impressionistic, and 20th century music, thus increasing understanding of modern styles derived from these periods of music.

MUFHL 315 Jazz History 3 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

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 introduces the history of jazz. Topics include ethnicity, ethnocentrism, racism, ageism, class differences, and gender issues. Guided listening presentations show how African and early African American musical traditions have led to the development of various improvisational forms and styles including ragtime, swing, bebop, free jazz, fusion, and acid jazz.

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 introduces the elements of music including scales, chords, aural skills, harmonic progression, form, notation, and composition. No previous musical study is required. (C-ID MUS 110)

MUFHL 330 World Music 3 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

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, India, Europe, and the Middle East are compared. No previous musical experience is required.

MUFHL 400 Music Theory 4 Units

Advisory: MUIVI 340 (Beginning Piano) or knowledge of musical notation

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 experience in the application of materials learned in class. It includes analysis and composition and is required for music majors. (C-ID MUS 125; C-ID MUS 120)

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, diatonic harmonies, part writing, rhythms, sight singing, ear training, dictation, form, history, and performance. It also includes the study of harmonic progression, dominant and non-dominant seventh chords, modulation, secondary function chords, and binary and ternary form. It includes analysis and composition and is required for music majors. (C-ID MUS 130; C-ID MUS 135)

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. (C-ID MUS 140; C-ID MUS 145)

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 19th- and 20th-century writing techniques including: 9th, 11th and 13th chords; altered dominants; chromatic harmony; dodecaphony; set theory; aleatory; minimalism; and analysis techniques. It includes practice in rhythmic, melodic, harmonic and contrapuntal sight-singing, ear-training and dictation. This course is required for music majors. (C-ID MUS 150; C-ID MUS 155)

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 elements of the jazz idiom. It includes analysis and composition and is required for jazz majors.

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. It emphasizes 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.

MUFHL 495 Independent Studies in Music Fundamental/History and Literature **1-3 Units**

Course Transferable to CSU
Hours: 54-162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

Instrumental/Voice Instruction

MUIVI 310 Voice Class I **2 Units**

Advisory: MUFHL 321
General Education: CSU Area C1
Course Transferable to UC/CSU
Hours: 36 hours LEC; 18 hours LAB

This course is the study of solo singing. Topics include basic vocal technique, breathing, mouth position, and solo repertoire.

MUIVI 311 Voice Class II **2 Units**

Prerequisite: MUIVI 310 with a grade of "C" or better
Advisory: MUFHL 321
Course Transferable to UC/CSU
Hours: 36 hours LEC; 18 hours LAB

This course is the continued study of solo singing. Topics include vocal technique, breathing, mouth positions and vowel formation, the International Phonetic Alphabet, and solo repertoire.

MUIVI 320 Voice Class III **2 Units**

Prerequisite: MUIVI 311 with a grade of "C" or better
Advisory: MUFHL 321
Course Transferable to UC/CSU
Hours: 36 hours LEC; 18 hours LAB

This course is the continued study of solo singing. Topics include tone placement, register balance, vocal health, and solo repertoire.

MUIVI 321 Voice Class IV **2 Units**

Prerequisite: MUIVI 320 with a grade of "C" or better
Advisory: MUFHL 321
Course Transferable to UC/CSU
Hours: 36 hours LEC; 18 hours LAB

This course is the continued study of solo singing. Topics include bel canto technique, Italian and German solo repertoire, tone placement, register balance, and vocal health.

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 introduces piano/keyboard skills. Beginning concepts of music theory, music notation, and harmonizing simple melodies are presented. This course is open to all students and is recommended for music majors who do not demonstrate equivalent piano proficiency.

MUIVI 341 Piano II **2 Units**

Prerequisite: MUIVI 340 with a grade of "C" or better
Course Transferable to UC/CSU
Hours: 36 hours LEC; 18 hours LAB

This continuation of MUIVI 340 is designed for students interested in piano as a medium of expression and enjoyment, as well as for prospective preschool, kindergarten and elementary-school teachers. This course covers major and minor scales and chords, bass styles, chromatic scales, and literature with greater rhythmic and harmonic complexity. It is the second semester of a four-semester sequence for music majors who need to demonstrate piano proficiency.

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, F, 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 Piano IV **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, basic technique and skills in note reading, improvisation, accompanying, and development of personal style.

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**

Advisory: MUFHL 400
Enrollment Limitation: Ability to play a melodic instrument or ability to sight sing; ability to read music in the treble or bass clef.
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. It includes analysis and composition and is required for jazz studies majors.

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. It includes analysis and is a continuation of the concepts covered in MUIVI 385.

MUIVI 390 Jazz and Popular Vocal Styles and Improvisation I 2 Units

Prerequisite: MUIVI 310 with a grade of "C" or better
Advisory: MUFHL 321 and MUIVI 310
Course Transferable to CSU
Hours: 36 hours LEC; 18 hours LAB

This course is a study of popular and jazz solo singing styles and improvisation. Topics include jazz and pop styles, microphone technique, basic improvisation, and vocal technique. (C-ID MUS 160)

MUIVI 391 Jazz and Popular Vocal Styles and Improvisation II 2 Units

Prerequisite: MUIVI 390 with a grade of "C" or better
Advisory: MUIVI 311
Course Transferable to CSU
Hours: 36 hours LEC; 18 hours LAB

This course is the continued study of popular and jazz singing styles and improvisation. Topics include rhythm section rehearsal techniques for singers, funk styles, pentatonic scales, Lydian dominant improvisation, and transposition. (C-ID MUS 160)

MUIVI 400 Beginning Jazz Piano 2 Units

Prerequisite: MUIVI 340 with a grade of "C" or better
Advisory: MUFHL 400, MUFHL 420, or 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.

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.

MUIVI 420 Applied Music 1 Unit

Corequisite: Enrolled in one of the following: MUP 310, 320, 330, 340, 350, 360, or 400; AND enrolled in one of the following: MUFHL 400, 401, 410, 411, 420 or 421.
Enrollment Limitation: Audition
Course Transferable to UC/CSU
Hours: 7 hours LEC; 33 hours LAB

This is the first course in a four-part series which focuses on the development of individual performance skills and solo and ensemble repertoire. It includes one-on-one or small group instrumental, composition, or vocal instruction seven hours per semester. It also includes seven hours per semester of solo performance, recital attendance, masterclasses, and a final juried performance. It also includes one and one-half hours monitored practice time per week. This course is required for all traditional performance and jazz music majors. Students must be concurrently enrolled in a large performance ensemble and a music theory course. (C-ID MUS 160)

MUIVI 421 Applied Music II 1 Unit

Prerequisite: MUIVI 420 with a grade of "C" or better
Corequisite: Enrolled in one of the following: MUP 310, 320, 330, 340, 350, 360, or 400; AND enrolled in one of the following: MUFHL 400, 401, 410, 411, 420 or 421.
Enrollment Limitation: Audition
Course Transferable to UC/CSU
Hours: 7 hours LEC; 33 hours LAB

This is the second course in a four-part series which focuses on the development of individual performance skills and solo and ensemble repertoire. It includes one-on-one or small group instrumental, composition, or vocal instruction seven hours per semester. It also includes seven hours per semester of solo performance, recital attendance, masterclasses, and a final juried performance. It also includes one and one-half hours monitored practice time per week. This course is required for all traditional performance and jazz music majors. Students must be concurrently enrolled in a large performance ensemble and a music theory course. (C-ID MUS 160)

MUIVI 422 Applied Music III 1 Unit

Prerequisite: MUIVI 421 with a grade of "C" or better
Corequisite: Enrolled in one of the following: MUP 310, 320, 330, 340, 350, 360, or 400; AND enrolled in one of the following: MUFHL 400, 401, 410, or 411
Enrollment Limitation: Audition
Course Transferable to UC/CSU
Hours: 7 hours LEC; 33 hours LAB

This is the third course in a four-part series which focuses on the development of individual performance skills and solo and ensemble repertoire. It includes one-on-one or small group instrumental, composition, or vocal instruction seven hours per semester. It also includes seven hours per semester of solo performance, recital attendance, masterclasses, and a final juried performance. It also includes one and one-half hours monitored practice time per week. This course is required for all traditional performance and jazz music majors. Students must be concurrently enrolled in a large performance ensemble and a music theory course. (C-ID MUS 160)

MUIVI 423 Applied Music IV 1 Unit

Prerequisite: MUIVI 422 with a grade of "C" or better
Corequisite: Enrolled in one of the following: MUP 310, 320, 330, 340, 350, 360, or 400; AND enrolled in one of the following: MUFHL 400, 401, 410, or 411
Enrollment Limitation: Audition
Course Transferable to UC/CSU
Hours: 7 hours LEC; 33 hours LAB

This is the final course in a four-part series which focuses on the development of individual performance skills and solo and ensemble repertoire. It includes one-on-one or small group instrumental, composition, or vocal instruction seven hours per semester. It also includes seven hours per semester of solo performance, recital attendance, masterclasses, and a final juried performance. It also includes one and one-half hours monitored practice time per week. This course is required for all traditional performance and jazz music majors. Students must be concurrently enrolled in a large performance ensemble and a music theory course. (C-ID MUS 160)

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; 33 hours LAB

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; 33 hours LAB

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 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.

MUIVI 444 Woodwind Instruction 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 provides specialized instruction in aspects of applied literature and performance on a woodwind instrument.

MUIVI 495 Independent Studies in Music Instrumental/Voice Instruction 1-3 Units

Course Transferable to CSU
Hours: 54-162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

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 up to four times for credit. (C-ID MUS 180)

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: 9-18 hours LEC; 27-54 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 up to four times for credit. (C-ID MUS 180)

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 encompassing a wide variety of music in the jazz style. Public performances and field trips are required. This course may be taken four times for credit. (C-ID MUS 180)

MUP 321 Advanced Jazz Band 1-2 Units

Prerequisite: Completion of 8 units of MUP 320 with a grade of "C" or better
Course Transferable to CSU
Hours: 9-18 hours LEC; 27-54 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 performances, recording sessions, and field trips may be required. This course may be taken four times for credit. (C-ID MUS 180)

MUP 323 Latin Jazz Ensemble 2 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 study and performance of Latin jazz repertoire encompassing a wide variety of Latin American and Afro-Cuban jazz styles. Public performance and field trips are required. This course may be taken up to four times for credit. (C-ID MUS 180)

MUP 324 Advanced Latin Jazz Ensemble 1-2 Units

Prerequisite: Completion of 8 units of MUP 323 with a grade of "C" or better
Course Transferable to CSU
Hours: 9-18 hours LEC; 27-54 hours LAB

This course is the further study and performance of Latin jazz repertoire encompassing a wide variety of Latin American and Afro-Cuban jazz styles. Public performance and field trips are required. This course may be taken up to four times for credit. (C-ID MUS 180)

MUP 327 Chamber Jazz Ensemble 2 Units

Enrollment Limitation: 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. (C-ID MUS 180)

MUP 328 Advanced Chamber Jazz Ensemble 2 Units

Prerequisite: Completion of 8 units of MUP 327 with a grade of "C" or better

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. (C-ID MUS 180)

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. (C-ID MUS 180)

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: 9-18 hours LEC; 27-54 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. (C-ID MUS 180)

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. (C-ID MUS 180)

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: 9-18 hours LEC; 27-54 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. (C-ID MUS 180)

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 Concert Choir I 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 may be required. This course may be taken up to four times for credit.

MUP 352 Advanced Concert Choir 2 Units

Prerequisite: MUP 350 with a grade of "C" or better

Course Transferable to CSU

Hours: 18 hours LEC; 54 hours LAB

This course provides continued study and performance of advanced choir literature including classical works, contemporary pieces, and music of many diverse cultures. Advanced ensemble members may conduct pieces and lead sectionals. Public performances, festivals, and field trips are required. This course may be taken four times for credit. (C-ID MUS 180)

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. Audition required. Public performances, festivals, and field trips may be required. This course may be taken up to four times for credit. (C-ID MUS 180)

MUP 361 Advanced Chamber Singers 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. (C-ID MUS 180)

MUP 370 Rehearsal and Performance – Musical Ensemble 5-3 Units

Same As: TA 466

Enrollment Limitation: Audition

Course Transferable to UC/CSU

Hours: 54-162 hours LAB

This course explores the development of a musical theater production presented before the campus and community. A different production will be presented each semester the course is offered. 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 up to four times for credit. (C-ID MUS 180)

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: 9-18 hours LEC; 27-54 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 up to four times for credit. (C-ID MUS 180)

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.

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.

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.

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.

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.

MUP 420 Special Ensemble Participation 1-2 Units

Enrollment Limitation: Audition

Course Transferable to UC/CSU

Hours: 9-18 hours LEC; 27-54 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 field trips are required. This course may be taken up to four times for credit.

MUP 495 Independent Studies in Music Performance 1-3 Units

Course Transferable to CSU

Hours: 54-162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

Specializations in Music**MUSM 110 The Business of Music 3 Units**

Hours: 54 hours LEC

This course gives an overview of the processes of the music industry. This includes record contracts as well as the duties and responsibilities of record producers, agents, managers, and performing artists.

MUSM 111 The Business of Music 3 Units

Prerequisite: MUSM 110 with a grade of "C" or better

Hours: 54 hours LEC

The course gives an in-depth view of the fundamentals and organization of the music business. This includes the duties of attorneys, publishers, and radio stations regarding musical and financial matters. The course also defines and analyzes publishing agreements, merchandising contracts, trademark, and service mark points.

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. This course also discusses current Internet strategies and new technologies developed for promotion. In addition, a campaign for album release and distribution is discussed and planned. Field trips may be required.

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 295 Independent Studies in Music Specializations in Music 1-3 Units*Hours: 54-162 hours LAB*

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

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 356 Pro Tools 101, Introduction to Pro Tools 1.5 Units*Prerequisite: MUSM 342 with a grade of "C" or better**Course Transferable to CSU**Hours: 27 hours LEC*

This course is an introduction to Avid's Pro Tools digital audio workstation software application. Basic Pro Tools principles, including how to complete a Pro Tools project from initial set up to final mixdown are covered. Topics also include how to record, edit, and mix music and Musical Instrument Digital Interface (MIDI) tracks within the Pro Tools application. This course is the first in a series of courses leading to multiple Avid Pro Tools certifications.

**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-level course in Avid's Pro Tools digital audio workstation hardware and software application. Concepts and skills needed to operate large sessions in a project studio environment are covered. Topics also include managing large track counts, multiple channels of simultaneous inputs and outputs, and the use of specialized plug-ins for specific music and post-production tasks. This course is the second in a series of courses leading to multiple Avid Pro Tools certifications.

**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-level course in Avid's Pro Tools digital audio workstation hardware and software application. Topics include the core concepts and skills needed to operate a Pro Tools HD system in a professional studio environment. Advanced recording, editing, and mixing techniques are presented. This course is the third in a series of courses leading to multiple Avid Pro Tools certifications.

**MUSM 495 Independent Studies in Music
Specializations in Music 1-3 Units**

Course Transferable to CSU
Hours: 54-162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

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
 Department Certificates:
 Environmental Conservation Technician:
 Conservation/Restoration
 Fisheries
 Forest/Rangeland
 Sustainability
 Vegetation
 Water Resources
 Wildlife

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.

Student Learning Outcomes

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

- apply scientific methodologies and critical analysis to environmental investigations
- evaluate natural resource systems, including their past and present use and management, and future sustainability
- analyze social, ethical, and biological implications of environmental management alternatives
- identify ecological phenomena in one's everyday experiences and apply ecological principles to understand local, national and global environmental issues
- assess the relationships of plants and animals to their environment and to each other
- measure, analyze, and monitor biological and physical components of the environment
- evaluate basic land survey, water quality, soils, vegetation, and wildlife data
- examine the significance of biodiversity conservation

Career 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.

Requirements for Degree 31 - 33 Units

BIOL 300	The Foundations of Biology (3).....	3 - 5
or BIOL 301	Evolution (3)	
or BIOL 303	Survey of Biology (4)	
or BIOL 310	General Biology (4)	
or BIOL 400	Principles of Biology (5)	
NATR 300	Introduction to Natural Resource Conservation and Policy	4
NATR 310	Study Design and Field Methods	4
NATR 320	Principles of Ecology.....	4
A minimum of 16 units from the following:..... 16¹		
BIOL 305	Natural History (4)	
BIOL 332	Introduction to Ornithology (3)	
BIOL 352	Conservation Biology (3)	
BIOL 370	Marine Biology (4)	
GEOG 300	Physical Geography: Exploring Earth's Environmental Systems (3)	
GEOG 330	Introduction to Geographic Information Systems (3)	
GEOL 300	Physical Geology (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)	
NATR 346	Water Resources and Conservation (3)	
NATR 498	Work Experience in Natural Resources (1 - 4)	

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.

Student Learning Outcomes

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

- apply scientific methodologies and critical analysis to environmental investigations
- evaluate natural resource systems, including their past and present use and management, and future sustainability
- analyze social, ethical, and biological implications of environmental management alternatives
- identify ecological phenomena in one's everyday experiences and apply ecological principles to understand local, national and global environmental issues
- assess the relationships of plants and animals to their environment and to each other
- measure, analyze, and monitor biological and physical components of the environment
- evaluate basic land survey, water quality, soils, vegetation, and wildlife data
- examine the significance of biodiversity conservation

Career 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.

See losrios.edu/gainful-emp-info/gedt.php?major=011131C01 for Gainful Employment Disclosure.

Requirements for Certificate		22 Units
NATR 300	Introduction to Natural Resource Conservation and Policy.....	4
NATR 310	Study Design and Field Methods	4
NATR 320	Principles of Ecology.....	4

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)	
NATR 346	Water Resources and Conservation (3)	
NATR 498	Work Experience in Natural Resources (1 - 4)	

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: 18¹

Physical Science Courses:

ASTR	300, 310, 320, 330, 400, 481, 495, 499
CHEM	305, 306, 309, 310, 311, 400, 401, 420, 421, 423, 495, 499
GEOG	300, 301, 305, 306, 307, 308, 309, 390, 495, 499
GEOL	300, 301, 305, 306, 310, 311, 320, 325, 330, 331, 342, 345, 390, 495, 499
PHYS	310, 311, 312, 350, 360, 410, 421, 431, 495, 499
PS	300, 301, 495, 499

Biological Science Courses:

ANTH	300, 301, 303, 370, 372, 480, 495, 499
BIOL	300, 301, 303, 305, 310, 322, 332, 342, 352, 370, 390, 400, 410, 415, 420, 430, 431, 440, 442, 482, 490, 491, 495, 499
BIOT	301, 305, 307, 308, 311, 312, 499
NATR	300, 302, 303, 304, 305, 306, 307, 310, 320, 322, 330, 332, 340, 346, 495, 499
PSYC	310, 311, 495, 499

¹must be transfer-level and must include one laboratory course in a physical science and one laboratory course in a biological science

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.

DEPARTMENT CERTIFICATES

Environmental Conservation Technician: Conservation/Restoration Certificate

This certificate advances the understanding of ecological systems and their interrelationships, including those with human society. It focuses on ecology, field methods and study design, and conservation and management of ecosystems and natural resources, with an emphasis on environmental restoration theory and practice and global and emerging environmental and conservation issues. Topics include both the causes of ecological degradation and biodiversity loss, as well as the science of development, management, monitoring, and sustainability of restored environments. Conservation priorities and emerging environmental concerns are investigated, such as climate change, energy production, socioeconomic systems, human population, disease dynamics, species extinctions, invasive species, stresses on water resources and food-producing systems, and over-exploitation of natural resources. Emphasis is placed on development of strategies for the establishment of protected areas, monitoring and adaptive management, and conservation outside of protected areas, as well as an understanding of biodiversity at genetic, species, and community/ecosystem levels.

Student Learning Outcomes

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

- apply the scientific method and critical analysis to environmental investigations
- evaluate natural resource systems, including their past and present use and management and future sustainability
- analyze social, ethical, and biological implications of environmental management alternatives
- identify ecological phenomena in one's everyday experiences and apply ecological principles to understand local, national and global environmental issues
- assess the relationships of plants and animals to their environment and to each other
- measure and analyze the physical environment of plant and animal populations
- evaluate basic land survey, water quality, vegetation, and vertebrate wildlife data
- investigate restoration ecology theory and assess and apply restoration practices to real-world environmental restoration problems
- identify global and emerging environmental issues and evaluate potential impacts and possible solutions
- examine biodiversity in terms of biological structure, composition, and function at the genetic, species, ecosystem and landscape levels
- apply fundamental biological and ecological concepts to the examination of critical biological conservation issues

Career Opportunities

This program prepares students for entry-level conservation/restoration aide/technician positions in a variety of industries and settings, including private firms, nonprofit organizations, educational institutions, and government agencies at the local, state, and federal levels. Students receive not only rigorous instruction in the theory and

application of environmental sciences but also unique hands-on training in conservation and restoration. Potential job opportunities include work in the areas of survey/monitoring of threatened and endangered species and habitats, planning and execution of restoration projects, climate change adaptation for human communities, conservation advocacy, and other fields.

Requirements for Certificate		17 Units
BIOL 352	Conservation Biology.....	3
NATR 300	Introduction to Natural Resource Conservation and Policy.....	4
NATR 310	Study Design and Field Methods.....	4
NATR 320	Principles of Ecology.....	4
NATR 322	Environmental Restoration.....	2

Environmental Conservation Technician: Fisheries Certificate

This certificate advances the understanding of ecological systems and their interrelationships, including those with human society. It focuses on ecology, field methods and study design, and conservation and management of ecosystems and natural resources, with an emphasis on fish evolution, ecology, conservation and management. Marine and freshwater fisheries, their impacts on society and the environment, and sustainability issues are investigated, including environmental, ecological, economic, and social aspects. Commercial and recreational fisheries management and aquaculture are also explored.

Student Learning Outcomes

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

- apply the scientific method and critical analysis to environmental investigations
- evaluate natural resource systems, including their past and present use and management and future sustainability
- analyze social, ethical, and biological implications of environmental management alternatives
- identify ecological phenomena in one's everyday experiences and apply ecological principles to understand local, national and global environmental issues
- assess the relationships of plants and animals to their environment and to each other
- measure and analyze the physical environment of plant and animal populations
- evaluate basic land survey, water quality, vegetation, and wildlife data
- examine the significance of biodiversity conservation
- analyze aspects of fish evolution and ecology important to their management and synthesize basic parameters of fish population dynamics in terms of rate functions and limiting factors
- analyze function and dynamics of freshwater and marine communities, emphasizing those in temperate North America, and their associated fisheries management issues
- interpret fisheries management data, define management problems and stakeholders involved, and suggest appropriate strategies to reach management objectives

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(Environmental Conservation Technician: Fisheries Certificate continued)

Career Opportunities

This program prepares students for entry-level fisheries ecologist aide/technician positions in a variety of industries and settings, including private firms, nonprofit organizations, educational institutions, and government agencies at the local, state, and federal levels. Students receive not only rigorous instruction in the theory and application of environmental sciences but also unique hands-on training in fisheries ecology, conservation, and management. Students prepare for positions in areas such as fisheries conservation and management, basic fish biology research, and aquatic habitat restoration.

Requirements for Certificate		16 Units
NATR 300	Introduction to Natural Resource Conservation and Policy.....	4
NATR 305	Fisheries Ecology and Management.....	4
NATR 310	Study Design and Field Methods	4
NATR 320	Principles of Ecology.....	4

Environmental Conservation Technician: Forest/Rangeland Certificate

This certificate advances the understanding of ecological systems and their interrelationships, including those with human society. It focuses on ecology, field methods and study design, and conservation and management of ecosystems and natural resources, with an emphasis on forests and rangelands. Basic biological and physical science concepts important to a general understanding of forest and rangeland/grassland ecology, forestry, and grazing by native herbivores and livestock are investigated. History of use and management, taxonomy and ecology of plant communities, soils, pests and diseases, and disturbance regimes of forested landscapes and rangelands are explored. Classes assess current policies, multiple-use management, and emerging threats related to forest and rangeland conservation.

Student Learning Outcomes

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

- apply the scientific method and critical analysis to environmental investigations
- evaluate natural resource systems, including their past and present use and management and future sustainability
- analyze social, ethical, and biological implications of environmental management alternatives
- identify ecological phenomena in one’s everyday experiences and apply ecological principles to understand local, national and global environmental issues
- assess the relationships of plants and animals to their environment and to each other
- measure and analyze the physical environment of plant and animal populations
- evaluate basic land survey, water quality, vegetation, and wildlife data
- examine the significance of biodiversity conservation
- analyze important characteristics, processes, and stressors of population, community, and ecosystem dynamics of forest/ rangeland environments

- evaluate social, ethical, and biological implications of forest/ rangeland conservation and management alternatives, including impacts of grazing and forestry

Career Opportunities

This program prepares students for entry-level forest/ rangeland ecologist aide/technician positions in a variety of industries and settings, including private firms, nonprofit organizations, educational institutions, and government agencies at the local, state, and federal levels. Students receive not only rigorous instruction in the theory and application of environmental sciences but also unique hands-on training in forest/rangeland ecology, conservation, and management. This program prepares students for work in forestry, conservation, land management, grassland and forest ecological research, and other fields.

Requirements for Certificate		15 Units
NATR 300	Introduction to Natural Resource Conservation and Policy.....	4
NATR 304 or NATR 306	The Forest Environment (3) Introduction to Rangeland Ecology and Management (3)	3
NATR 310	Study Design and Field Methods	4
NATR 320	Principles of Ecology.....	4

Environmental Conservation Technician: Sustainability

This certificate advances the understanding of ecological systems and their interrelationships, including those with human society. It focuses on ecology, field methods and study design, and conservation and management of ecosystems and natural resources, with an emphasis on sustainability. Theoretical and practical aspects of sustainability are explored including social, economic, and environmental dimensions. Sustainable principles and practices are examined in the context of energy production and consumption, transportation systems, food production, water resources, industry, and the built environment. Environmental as well as social and cultural impacts of industrialization, capitalism, and globalization are addressed at various scales, and potential solutions to current problems are discussed.

Student Learning Outcomes

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

- apply the scientific method and critical analysis to environmental investigations
- evaluate natural resource systems, including their past and present use and management and future sustainability
- analyze social, ethical, and biological implications of environmental management alternatives
- identify ecological phenomena in one’s everyday experiences and apply ecological principles to understand local, national, and global environmental issues
- assess the relationships of plants and animals to their environment and to each other
- measure and analyze the physical environment of plant and animal populations
- evaluate basic land survey, water quality, vegetation, and wildlife data

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(Environmental Conservation Technician: Sustainability continued)

- examine the significance of biodiversity conservation
- examine technological, geographic, socioeconomic, cultural, and environmental considerations of alternative forms of energy production
- investigate theoretical and practical aspects of sustainability in the context of energy consumption, transportation systems, food production, water resources, industry, the built environment, and socio-cultural institutions and practices

Career Opportunities

This program prepares students for entry-level sustainability consultant/technician positions in a variety of industries and settings, including private firms, nonprofit organizations, educational institutions, and government agencies at the local, state, and federal levels. Work opportunities for program graduates include positions in environmental economics, sustainable business practices, green building, as well as sustainable communities, food systems, energy, and transportation.

Requirements for Certificate		15 - 16 Units
NATR 300	Introduction to Natural Resource Conservation and Policy.....	4
NATR 303 or NATR 307	Energy and Sustainability (3)..... Principles of Sustainability (4)	3 - 4
NATR 310	Study Design and Field Methods	4
NATR 320	Principles of Ecology.....	4

Environmental Conservation Technician: Vegetation Certificate

This certificate advances the understanding of ecological systems and their interrelationships, including those with human society. It focuses on ecology, field methods and study design, and conservation and management of ecosystems and natural resources, with an emphasis on woody and herbaceous vegetation. Major topics include plant taxonomy, natural history and life cycle, physiology, evolution, human uses of--and threats to--California native plant communities and their component species.

Student Learning Outcomes

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

- apply the scientific method and critical analysis to environmental investigations
- evaluate natural resource systems, including their past and present use and management and future sustainability
- analyze social, ethical, and biological implications of environmental management alternatives
- identify ecological phenomena in one's everyday experiences and apply ecological principles to understand local, national and global environmental issues
- assess the relationships of plants and animals to their environment and to each other
- measure and analyze the physical environment of plant and animal populations
- evaluate basic land survey, water quality, vegetation, and wildlife data
- examine the significance of biodiversity conservation
- assess the structure and function of vegetative communities of California

- interpret plant keys and develop skills in their use in plant identification
- collect and prepare a plant collection of representative native California plants
- analyze plant adaptations and environmental gradients in a variety of ecosystems
- investigate the implications of plant conservation, restoration, and community management alternatives

Career Opportunities

This program prepares students for entry-level plant ecologist aide/technician positions in a variety of industries and settings, including private firms, nonprofit organizations, educational institutions, and government agencies at the local, state, and federal levels. Students receive not only rigorous instruction in the theory and application of environmental sciences but also unique hands-on training in plant identification, ecology, conservation, and management. Skills developed support student preparation for positions related to plant taxonomy, dendrology, research and management (e.g., of California endemics, unique environments such as vernal pools, invasive species, etc.) and environmental restoration.

Requirements for Certificate		15 - 16 Units
NATR 300	Introduction to Natural Resource Conservation and Policy.....	4
NATR 310	Study Design and Field Methods	4
NATR 320	Principles of Ecology.....	4
NATR 330 or NATR 332	Native trees and shrubs of California (4)	3 - 4
	Wildflowers of California (3)	

Environmental Conservation Technician: Water Resources Certificate

This certificate advances the understanding of ecological systems and their interrelationships, including those with human society. It focuses on ecology, field methods and study design, and conservation and management of ecosystems and natural resources, with an emphasis on water resources. It provides a historical perspective on water development and explores current and projected water issues. Surface water and groundwater systems are considered, with an emphasis on the interdisciplinary nature of sustainable water resource management that balances urban, agricultural, industrial, and environmental water needs. The implications of water rights and key water policies are considered in evaluating how water is used and exploited.

Student Learning Outcomes

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

- apply the scientific method and critical analysis to environmental investigations
- evaluate natural resource systems, including their past and present use and management and future sustainability
- analyze social, ethical, and biological implications of environmental management alternatives
- identify ecological phenomena in one's everyday experiences and apply ecological principles to understand local, national and global environmental issues
- assess the relationships of plants and animals to their environment and to each other
- measure and analyze the physical environment of plant and animal populations

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**(Environmental Conservation Technician:
Water Resources Certificate continued)**

- evaluate basic land survey, water quality, vegetation, and wildlife data
- examine the significance of biodiversity conservation
- describe the hydrologic cycle in both natural and urban environments, including key characteristics of surface water and groundwater resources and the interactions between these
- investigate the components of integrated water resources planning and management, including evaluation of water policy initiatives and determination of water rights
- analyze future water sustainability scenarios under uncertain conditions, including impacts of drought and climate change

Career Opportunities

This program prepares students for entry-level water resources aide/technician positions in a variety of industries and settings, including private firms, nonprofit organizations, educational institutions, and government agencies at the local, state, and federal levels. Students receive not only rigorous instruction in the theory and application of environmental sciences but also unique hands-on training in water resources conservation and management, preparing them for positions in environmental consulting and planning, water conservation, hydrological research, and other fields.

Requirements for Certificate		15 Units
NATR 300	Introduction to Natural Resource Conservation and Policy	4
NATR 310	Study Design and Field Methods	4
NATR 320	Principles of Ecology.....	4
NATR 346	Water Resources and Conservation	3

**Environmental Conservation Technician:
Wildlife Certificate**

This certificate advances the understanding of ecological systems and their interrelationships, including those with human society. It focuses on ecology, field methods and study design, and conservation and management of ecosystems and natural resources, with an emphasis on vertebrate wildlife. Major topics include population ecology; community dynamics; wildlife habitat; management of game, invasive, and non-game species; conservation of threatened and endangered wildlife; and theoretical and practical tools and methods for studying wildlife, such as sampling techniques, population modeling, habitat assessment, radiotelemetry, and remote sensing.

Student Learning Outcomes

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

- apply the scientific method and critical analysis to environmental investigations
- evaluate natural resource systems, including their past and present use and management and future sustainability
- analyze social, ethical, and biological implications of environmental management alternatives
- identify ecological phenomena in one's everyday experiences and apply ecological principles to understand local, national and global environmental issues

- assess the relationships of plants and animals to their environment and to each other
- measure and analyze the physical environment of plant and animal populations
- evaluate basic land survey, water quality, vegetation, and wildlife data
- examine the significance of biodiversity conservation
- apply and compare various wildlife habitat and population assessment techniques across a variety of environmental settings
- interpret wildlife population data and construct a population model, evaluating alternative wildlife management decisions based on computer-simulation results
- evaluate alternative wildlife management decisions in the context of ecosystem dynamics as well as and social/cultural and economic considerations

Career Opportunities

This program prepares students for entry-level wildlife biologist aide/technician positions in a variety of industries and settings, including private firms, nonprofit organizations, educational institutions, and government agencies at the local, state, and federal levels. Students receive not only rigorous instruction in the theory and application of environmental sciences but also unique hands-on training in wildlife ecology, conservation, and management. Participants develop skills appropriate for positions dealing with aspects of wildlife such as population sampling and monitoring, data analysis, and management/conservation of threatened, endangered, and invasive species of wildlife.

Requirements for Certificate		16 Units
NATR 300	Introduction to Natural Resource Conservation and Policy	4
NATR 302	Introduction to Wildlife Biology	4
NATR 310	Study Design and Field Methods	4
NATR 320	Principles of Ecology.....	4

Natural Resources

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**

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340; AND eligible for transfer-level Math.
General Education: AA/AS Area IV
Course Transferable to UC/CSU
Hours: 54 hours LEC; 54 hours LAB

This course is an introduction to the science of wildlife biology and the basic principles and techniques involved in wildlife research, conservation, and management. It emphasizes ecological aspects of wildlife populations and communities such as predator-prey relationships, population dynamics, diseases and parasites of wildlife, and wildlife habitat. Animal behavior, nutritional ecology, and other aspects of wildlife biology are also explored. Human dimensions of wildlife management including wildlife restoration and conservation, human-wildlife conflicts, hunting, invasive species, impacts of global climate change, and other relevant issues are examined. Social, economic, and ecological implications of management alternatives are investigated. Additionally, this course provides hands-on experience with habitat and population sampling, data analysis and interpretation; radio telemetry; wildlife capture and handling; and critical analysis of wildlife management policies and the development of a wildlife management plan. Field trips are required.

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**

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340; AND eligible for transfer-level math.
Course Transferable to CSU
Hours: 54 hours LEC; 54 hours LAB

This course covers the fundamentals of marine and freshwater fisheries, ecosystems, and their impacts on society and the environment. Fish life history, ecology, habitats, and population dynamics are examined. Fisheries' sustainability issues are investigated, including environmental, ecological, economic, and social aspects. Commercial and recreational fisheries management and aquaculture are covered. Field trips are required.

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 Study Design and Field Methods 4 Units

Advisory: MATH 133; (1) NATR 300 or equivalent introductory science course with a grade of "C" or better; (2) 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 (3) MATH 120, MATH 124, MATH 125, or MATH 129 or higher, with a grade of "C" or better.

General Education: AA/AS Area IV (effective Summer 2014);

CSU Area B2; CSU Area B3

Course Transferable to CSU

Hours: 54 hours LEC; 54 hours LAB

This course addresses study design and field methods important to the field of Natural Resources. Basic statistical theory and sampling designs are covered, and a variety of sampling and monitoring protocols and techniques are introduced. Field labs provide practice with a variety of hands-on methods for vertebrate study, vegetation assessment, land survey, and aquatic studies. Specific portions of the course focus on (1) survey skills including distance and direction measurement and topographic map reading; (2) woody and herbaceous vegetation sampling strategies such as transect and quadrat, and habitat assessment; (3) methods used in terrestrial vertebrate wildlife studies, such as radiotelemetry, remote cameras, and live-trapping; and (4) techniques specific to aquatic ecology and water quality measurements. Also included are applications of Global Positioning Systems (GPS) and Geographic Information Systems (GIS). Field trips may be 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 330 Native Trees and Shrubs of California 4 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340

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 component tree and shrub species. Emphasis is placed on biotic and abiotic factors of native woody plant distribution and abundance in northern California, focusing on characterization of the dominant vegetation types and identification of native woody species. Major topics include plant adaptation, evolution, and diversity in time and space; morphology and physiology; life history; soils, climate, and topography; endemism; interspecific and intraspecific interactions; invasive species; disease; anthropogenic and natural environmental change; human uses of native plants; and native plant restoration and conservation. This course involves the creation of a plant collection including at least 60 representative native woody species. Field trips are required.

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 346 Water Resources and Conservation 3 Units

Advisory: MATH 133; (1) NATR 300 or equivalent introductory science course with a grade of "C" or better; (2) 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 (3) MATH 120, MATH 124, MATH 125, or MATH 129 or higher, with a grade of "C" or better.

General Education: AA/AS Area IV (effective Summer 2014)

Course Transferable to CSU

Hours: 54 hours LEC

This course provides an introduction to water resource management with an emphasis on water issues in California. It provides a historical perspective on water development and explores current and projected water issues. Surface water and groundwater systems are considered, with an emphasis on the interdisciplinary nature of sustainable water resource management that balances urban, agricultural, industrial, and environmental water needs. The implications of water rights and key water policies are considered in evaluating how water is used and exploited. Field trips may be required.

**NATR 495 Independent Studies in
Natural Resources 1-3 Units**

Course Transferable to CSU

Hours: 54-162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

**NATR 498 Work Experience in
Natural Resources 1-4 Units**

*Advisory: Eligible for ENGRD 310 or ENGRD 312 AND
ENGWR 300; OR ESLR 340 AND ESLW 340.*

Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position, or job related to natural resources with a cooperating site supervisor. Students are advised to consult with the Natural Resources Department faculty to review specific certificate and degree work experience requirements.

General Education: AA/AS Area III(b)

Course Transferable to CSU

Hours: 60-300 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 Title 5 required forms which document the student's progress and hours spent at the work site, and developing workplace skills and competencies. During the semester, the student is required to 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. First-time participants are required to attend a weekly orientation and a final meeting. Returning participants are required to attend the first class meeting, a mid-semester meeting, and a final meeting and may meet individually with the instructor as needed to complete a work site observation and all program forms, receive updates, and assignments. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Area: Health & Education
 Dean: Dr. Steven Boyd
 Program Director:
 Susan Peterson
 Phone: (916) 484-8873 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
 Department Certificates:
 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: The California Board of Registered Nursing (BRN) protects the public by screening applicants for licensure in order to identify potentially unsafe practitioners. The law provides for denial of licensure for crimes or acts, which are substantially related to nursing qualifications, functions or duties. At time of licensure application, all convictions must be reported except for minor traffic violation. (Business and Professions Code 480 and Nurse Practice Act article 3 section 2761) Pursuant to Section 30(c) of the Business and Professions code.

Note: Providing a Social Security Number (SSN): Pursuant to Section 30(c) of the Business and Professions code the BRN will not process any application for licensure unless the applicant provides a United States SSN. The Nursing Practice Act provides for a unified examination and licensing application. Once an applicant passes the examination, a license is automatically issued. Under these circumstances the BRN cannot accept applications for the examination and licensure without a US SSN.

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 Health Care fluctuates depending on the general employment picture. Registered nurses continue to be one of the most sought after licenses within the industry and is projected to be strong in the future. Registered nurses enjoy well compensated, rewarding, highly flexible careers, which should continue in the future.

Enrollment Eligibility

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

- Note: The American River College Nursing Program reserves the right to make changes in the enrollment criteria, academic requirements, grading standards and other processes without notice at any time.
- 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: ENGWR 300 or ENGWR 480, NUTRI 300, and PSYC 300 or PSYC 480.
- Completion of the latest edition of the Test of Essential Academic Skills (TEAS), developed by the Assessment Technologies Institute, LLC (ATI). A minimum composite score is necessary to be eligible for application to the program. Additional information is available from the ARC Nursing website at: <http://www.arc.losrios.edu/~nursing/>.
- 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.

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(Registered Nursing Degree continued)

Enrollment Process

Eligible students are selected for the program according to the following steps:

- The Associate in Science Degree Registered Nursing Program at American River College uses a multicriteria enrollment process. Students must reapply each semester. There is no waiting list.
- Enrollment criteria, enrollment applications, and deadlines are available from the ARC Nursing website.
- Applicants must obtain a Los Rios Community College District student identification number in order to access the online application.
- Acceptance of pre-nursing courses taken outside the Los Rios Community College District will be determined by the Nursing Admissions Committee.
- Applications for enrollment, OFFICIAL transcripts, and all other supporting documents must be submitted by the posted due date for the candidate's application to be reviewed and name potentially to be placed into the random pool for selection. See the ARC Nursing website for detailed instructions. Only students who meet the educational and pre-nursing requirements and follow the enrollment procedures will be considered for the program. Meeting all these requirements does not guarantee acceptance into the program.
- In order to apply all candidates must take the Test of Essential Academic Skills (TEAS) developed by Assessment Technologies Institute, LLC (ATI). Additional information is available on the ARC Nursing website.

Requirements for Degree		71-72 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 Microbiology and Public Health (5)	
ENGWR 300	College Composition (3).....	3
or ENGWR 480	Honors College Composition (3)	
NUTRI 300	Nutrition.....	3
PSYC 300	General Principles (3).....	3
or PSYC 480	Honors General Principles (3)	
1st Semester:		
NURSE 400	Fundamentals of Medical-Surgical Nursing I.....	10.5
SPEECH 301	Public Speaking (3).....	3 ²
or SPEECH 331	Group Discussion (3)	
2nd Semester:		
NURSE 410	Maternal/Child and Medical-Surgical Nursing II.....	10.5
ANTH 310	Cultural Anthropology (3).....	3 ³
or ANTH 481	Honors Cultural Anthropology (3)	
or SOC 300	Introductory Sociology (3)	
or SOC 480	Introductory Sociology - Honors (3)	
3rd Semester:		
NURSE 420	Psychiatric and Medical-Surgical Nursing III.....	10.5
4th Semester:		
NURSE 430	Management of Multiple Patients and Medical - Surgical Nursing IV.....	10.5

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 must be taken either prior to or concurrently with NURSE 400.

³SOC or ANTH 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.

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(LVN to RN Career Mobility Degree continued)

- 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.
- 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 Microbiology and Public Health (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.

See losrios.edu/gainful-emp-info/gedt.php?major=011201C01 for Gainful Employment Disclosure.

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(Licensed Vocational Nurse (LVN) 30-unit option Certificate continued)

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.
- 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

DEPARTMENT CERTIFICATES

Certified Nurse Assistant Certificate

The Certified Nurse Assistant (CNA) certificate program provides instruction in the holistic care and health needs of people over 65 years of age, who live in long-term care facilities. Students who successfully complete the program receive a certificate of course completion from the instructor, and become eligible to take the California state exam to become a certified nurse assistant.

Student Learning Outcomes

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

- explain the California Administrative Code, Title XXII, Section 72527, as it relates to the role and responsibilities of the Certified Nursing Assistant regarding professionalism, ethics, and confidentiality.
- discuss resident rights, appropriate interaction with residents, families and other members of the health care team.

- discuss and demonstrate rehabilitation and restorative care. Give examples of assistive devices.
- explain what constitutes an emergency and the basics of emergency care required of a certified nurse assistant.
- discuss and practice basic restraint use and associated safety measures. 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.
- Student 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.
- Spring semester student must submit proof of having a current influenza vaccine to participate in clinical experiences. Fall semester student must obtain an influenza vaccine when the vaccine becomes available.
- Student must submit a completed health history and physical exam completed within 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 California Department of Public Health 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 review the list of penal codes that determine automatic CNA certification denial. If student has been convicted of any crime on the list that student can not be enrolled in the NURSE 100 class. The California Department of Public Health (CDPH) automatic denial penal code list can be found at the ARC Nursing website in the NURSE 100 course information packet. If student has been convicted of

(continued on next page)

(Certified Nurse Assistant Certificate continued)

any crime that is not listed on the automatic denial penal code list, the student must submit to CDPH the required forms for criminal clearance review. The student must have proof of criminal clearance before entering the NURSE 100 class. Information about conviction review and required review forms can be found at the ARC Nursing web site in the NURSE 100 information packet.

- 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.
- Submission of medical prerequisites [Tuberculin clearance, student health history and physical exam].
- Submission of proof of influenza vaccine.
- Completion of live scan fingerprinting and CA Department of Justice criminal background clearance prior to start of class.

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: More information is available about NURSE 101 at the ARC nursing website in the NURSE 101 course information packet.

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 Public Health approved CNA program. Certificate must be signed and dated by the course instructor; OR (B.) A copy of unofficial program or college transcript denoting CNA course and date of completion; OR (C.) A copy of active status, California CNA certificate.
- Student must meet the English prerequisite: (A.) A student who received a CA state CNA certificate prior to 2005 must complete and submit the NURSE 101 English prerequisite. The English prerequisite is ESLW 50, ESLR 50, and ESLL 50; OR ENGWR 51 and ENGRD 15; OR evaluation through assessment at the ARC assessment center. Further information about the English prerequisite and the ARC assessment center can be found at the ARC Nursing website in the NURSE 101 course information packet; OR (B.) A student who received a CA state certified nurse assistant certificate in 2005, or after 2005, has already met the California state English requirement. It was required prior to entering a CNA program. Therefore, no English prerequisite submission is needed for NURSE 101.
- Student must submit completed health history and physical exam done within the last one year prior to the start of class. The health history and physical exam must be signed by the student and the health care provider. Physical exam must clear student to fully participate in clinical labs. Student must use the ARC Nurse Assistant Medical form provided in the NURSE 101 online information packet.
- Student must submit Tuberculin [TB] skin clearance test within the past six months prior to start of class. Or student must submit a TB clearance chest x-ray within one year prior to start of class.
- Student must submit proof of current influenza vaccine.
- Student must review the list of penal codes that determine automatic HHA certification denial. If student has been convicted of any crime on the list that student can not be enrolled in the NURSE 101 class. The California Department of Public Health (CDPH) automatic denial penal code list can be found at the ARC Nursing website in the NURSE 101 course information packet. If student has been convicted of any crime that is not listed on the automatic denial penal code list, the student must submit to CDPH the required forms for criminal clearance review. The student must have proof of criminal clearance before entering the NURSE 101 class. Information about conviction review and required review forms can be found at the ARC Nursing web site in the NURSE 101 information packet.

Enrollment Process

Eligible students are selected for the program according to the following steps:

- Student must submit completed, time-sensitive prerequisites. Student must refer to the 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 50, ESLR 50, and ESLL 50; OR ENGWR 50 and ENGRD 15; OR ENGWR 56; OR ENGRD 56; OR evaluation through assessment at ARC assessment center.

Enrollment Limitation: Prior to the first class the following requirements must be submitted for review: (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.) Spring semester student must submit proof of having a current season influenza vaccine. Fall semester student must submit proof of current season influenza vaccine when the vaccine becomes available. (5.) Nurse Assistant initial application (CDPH 283B) which holds student accountable to make a check mark in the NO box to any felony conviction listed on the CNA certification automatic denial penal code list from the CA Department of Public Health (CDPH), Aide and Technician Certification Section (ATCS). ATCS 98-4 (4/02) (6.) proof of English prerequisite.

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 asepsis, 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 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. Quality and Safety in the Education of Nurses (QSEN) concepts are incorporated into learning. Topics include care of adult and geriatric clients with specific medical-surgical nursing disorders, review of pediatrics and obstetrics, 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, absorption, duration of action, distribution in the body, and adverse drug reactions. Major drug classes are included, as well as their related implications for people receiving these drugs. How these drugs affect the body systems are also covered. Administration of the medications according to nursing professional standards and health care professionals are discussed.

NURSE 320 Medical Dosage Calculations 1.5 Units

Advisory: MATH 25 and 41

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. This course provides a foundation in reproductive anatomy and physiology, fetal development, perinatal care practices, and clinical terminology. It covers professional standards and ethics, business practices, values clarification, and communication skills. It introduces techniques for providing comfort, examines methods for facilitating the labor process and supporting the mother-baby dyad, and focuses on the emotional and psychological aspects of the birth experience with its significance for women's future self-concept and self-efficacy.

NURSE 370 Focused Learning in the First Year of the ARC Nursing Program 1.5 Units

Corequisite: NURSE 400 or 410

Course Transferable to CSU

Hours: 27 hours LEC

This course offers strategies to enhance student success in the first year of the Associate Degree Nursing (ADN) program. It provides an assessment of personal aptitudes, learning styles, strengths, and weaknesses in written and verbal communication, and potential barriers to successful completion of the nursing program. It also provides the development of personal and professional support systems and development of a purposeful analytic process that supports reasoned decisions and judgments as a health care professional. Pass/No Pass only.

NURSE 372 Focused Learning in the Second Year of the ARC Nursing Program 1.5 Units*Corequisite: NURSE 420 or 430**Course Transferable to CSU**Hours: 27 hours LEC*

This course offers strategies to enhance student success in the second year of the Associate Degree Nursing (ADN) program. This course reviews personal aptitudes, learning styles, strengths, and weaknesses in written and verbal communication as well as potential barriers to completion of the nursing program. Course content addresses the specific theory and clinical needs of NURSE 420 and NURSE 430 while focusing on the development of critical thinking skills used when managing a group of patients in the clinical setting. Pass/No Pass only.

NURSE 390 Fundamentals of Lactation Consultant Assisting 2.5 Units*Course Transferable to CSU**Hours: 45 hours LEC*

This course is designed for community workers responsible for promoting and protecting breastfeeding and charged with providing basic assessment, support, and appropriate referral for breastfeeding mothers in the community. It is also an introductory course in human lactation for students entering or preparing for professions in nursing, nutrition, health education, or early childhood development as well as for practicing professionals in these fields. This course provides an overview of factors impacting breastfeeding rates, explores health effects and current recommendations, discusses the anatomy and physiology of lactation, and considers the role of the lactation consultant assistant in facilitating breastfeeding. It covers counseling skills, cultural awareness, and community resources for promoting, protecting, and supporting breastfeeding.

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. It focuses on the physiology of attachment, bonding, and breastfeeding and the short- and long-term impacts of perinatal care practices on the mother-baby dyad. It grapples with the challenges of applying best-practice guidelines and model hospital policies to alleviate barriers for mothers choosing exclusive breastfeeding and creating environments that support maternal-infant biology and the newborn's natural capabilities, allowing improved outcomes with less time and effort. This course meets Board of Registered Nursing continuing education requirements and, when combined with requisite supervised clinical experience, fulfills all criteria for staff education as set by the Baby Friendly Hospital Initiative.

NURSE 400 Fundamentals of Medical-Surgical Nursing I 10.5 Units*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; and SPEECH 301 or SPEECH 331 with a "C" or better.**Corequisite: ANTH 310, ANTH 481, SOC 300, or SOC 480**Course Transferable to CSU**Hours: 81 hours LEC; 324 hours LAB*

In this course, concepts of Orem's self-care deficit theory of nursing 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. 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.

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
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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 Department of Public Health's certification requirements.

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.

See losrios.edu/gainful-emp-info/gedt.php?major=011144C01 for Gainful Employment Disclosure.

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
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.

NUTRI 133 Clinical Experience in Health Care Facilities 2.5 Units

Prerequisite: NUTRI 130 with a grade of “C” or better
Corequisite: NUTRI 132
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 and is performed under professional supervision. Topics include residents’ rights in food service, disaster relief feeding programs, getting ready for state inspection, and injury and illness prevention programs. A portion of this course may be offered in a TBA component of 90 hours which will include professionally supervised clinical experience in dietary departments of acute care hospitals and long term care facilities.

NUTRI 134 Nutritional Care Management 3 Units

Prerequisite: NUTRI 130 with a grade of “C” or better
Corequisite: NUTRI 135
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.

NUTRI 135 Clinical Experience in Nutritional Care Management 2.5 Units

Prerequisite: NUTRI 130 with a grade of “C” or better
Corequisite: NUTRI 134
Enrollment Limitation: Current TB clearance and other immunizations required by clinical facility.
Hours: 18 hours LEC; 90 hours LAB

This course provides clinical experience in nutritional care management. Topics include disorders of the gastrointestinal tract, diabetes, wasting disorders, nutrition, and mental health. A portion of this course may be offered in a TBA component of 90 hours which will include professionally supervised clinical experience in dietary departments of acute care hospitals and long term care facilities.

NUTRI 295 Independent Studies in Nutrition 1-3 Units

Hours: 54-162 hours LAB
 Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

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 E1
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 V(b) (effective Summer 2015); AA/AS Area VI; CSU Area D7; IGETC Area 4G
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. (C-ID ECE 220)

NUTRI 324 Nutrition for Healthy Aging 3 Units

*Same As: GERON 340
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
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, 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.

NUTRI 481 Honors – Cultural Foods of the World 3 Units

*Prerequisite: Placement into ENGWR 480 through the assessment process.
General Education: AA/AS Area V(b) (effective Summer 2015); AA/AS Area VI (effective Summer 2015)
Course Transferable to CSU
Hours: 54 hours LEC*

This seminar-style course offers an in-depth anthropological perspective of traditional and contemporary food customs and cultures. Western and non-western food customs are compared including their social, religious, economic, and aesthetic significance. Included are ethnocentrism, gender-related stereotypes, and racism as they relate to the availability, distribution, and preparation of food throughout the world. The nutritional status of various cultures as it relates to geographic, agricultural, and socioeconomic factors is studied. The specific cultural groups included are driven by student interests. This course is not open to students who have completed NUTRI 310.

NUTRI 495 Independent Studies in Nutrition 1-3 Units

*Course Transferable to CSU
Hours: 54-162 hours LAB*

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

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
 Department Certificate:
 Emergency Medical Technician (EMT)

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 Emergency Medical Services Education Standards.

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.

See losrios.edu/gainful-emp-info/gedt.php?major=011213C01 for Gainful Employment Disclosure.

Enrollment Eligibility

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

- Graduation from an accredited high school in the United States, or successful completion of General Education Development (GED) or the California High School Proficiency Exam (CHSPE).
- Students with a high school diploma from a school outside the United States must have transcripts evaluated by an approved independent agency. Such cases will be evaluated on an individual basis.
- A cumulative college GPA of 2.0 and a grade of "C" or better in BIOL 102, or BIOL 430 and BIOL 431, or other college human anatomy and physiology course with a lab which includes all human systems; a grade of "C" or better in NURSE 320 or PMED 105 or equivalent course covering basic pharmacology and drug calculations.
- Current curriculum planning summary sheet within the semester in which the pre-enrollment packet is being submitted.
- Completion of the program application (pre-enrollment packet) and submittal prior to the deadline.
- Current certification as an Emergency Medical Technician-Basic and approximately one year verified EMS experience or a minimum of 280 verifiable EMS patient encounters acting as a team lead. See program website for examples of commonly acceptable experience and a patient encounter tracking form.

Enrollment Process

Eligible students are selected for the program according to the following steps:

- Pre-enrollment applications to the program may be obtained from the Health and Education Division office or at <http://arc.losrios.edu/edhealth/paramed.html>. Applications for Spring admission will be available 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.

(continued on next page)

(Paramedic Degree and Certificate continued)

- Students accepted into the Paramedic program are required to have a physical examination, approved immunizations, drug screen, background check, program uniform, field internship fees, and malpractice insurance prior to entering the second semester.

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.

DEPARTMENT CERTIFICATE

Emergency Medical Technician (EMT) Certificate

This program prepares students to function as certified Emergency Medical Technicians. Training topics include skills necessary to provide emergency medical care at a basic life support level with a fire, ambulance, or other specialized service. This program is conducted in compliance with Title 22, Division 9, Chapter 2 of the California Code of Regulations and Emergency Medical Technician (EMT). A "C" or better is required to obtain a course completion certificate.

Student Learning Outcomes

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

- evaluate the nature and seriousness of the patient's condition or extent of injuries.
- apply emergency medical care based on assessments and findings.
- demonstrate proper procedures in lifting, moving, and positioning a patient to minimize discomfort and prevent further injury.
- utilize communicating, transporting, and record keeping skills.

Career Opportunities

Emergency Medical Technicians operate in a variety of settings from public emergency services, private industry and health care facilities. EMT employment varies from community to community and is considered a growing occupation within the Allied Health professions.

Enrollment Eligibility

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

- Upon entry into the program, all students must provide written evidence of course completion in CPR training at the Professional Rescuer or Health Care Provider levels.
- CPR course completion must be current and not expired.

Enrollment Process

Eligible students are selected for the program according to the following steps:

- Verification of current CPR certification at the Health Care Provider or Professional Rescuer level.

Requirements for Certificate 7 Units

EMT 110	Emergency Medical Technician (EMT) Didactic	6
EMT 111	Emergency Medical Technician (EMT) Practicum	1

Emergency Medical Technology

EMT 110 Emergency Medical Technician (EMT) Didactic 6 Units

Prerequisite: HEED 310 and 323 with grades of "C" or better
Advisory: AH 110 and PMED 108; ENGWR 102, and ENGRD 116 with a grade of "C" or better; OR ESLR 320 and ESLW 320 with a grade of "C" or better; MATH 32 (Pre-Algebra), or MATH 42 (Algebra Readiness - Part II)

Enrollment Limitation: Documentation of current certification in Professional Rescuer CPR, Healthcare Provider CPR or an equivalent approved by the Paramedic Department must be presented on the first day of the course. Not open to students with current NREMT or California State certification or licensure as an EMT, EMT-Basic, Advanced EMT or paramedic.

Hours: 81 hours LEC; 81 hours LAB

This course provides academic preparation and psychomotor skills training to prepare the student for EMT 111, the Basic Life Support (BLS) clinical and field practicum. Successful completion of EMT 110 and EMT 111 will make the student eligible to take the National Registry of EMTs (NREMT) EMT certification exam. Topics include the BLS knowledge, application, and problem solving necessary to work as an EMT (formerly known as EMT-Basic or EMT-1) in the Emergency Medical Services (EMS) field for an ambulance service, fire department, emergency department, or other specialized service. A "C" letter grade as well as successful completion of the EMT 110 Exit Exam and psychomotor skill tests are required to be eligible for EMT 111. The course conforms to the 2007 National EMS Scope of Practice Model and 2009 EMS National Education Standards and complies with Title 22, Division 9, Chapter 2 of the California State Code of Regulations. This course is approved by the Emergency Medical Services (EMS) Agency of the Sacramento County Health Department. Field trips and off-campus lab assignments may be required.

EMT 111 Emergency Medical Technician (EMT) Practicum 1 Unit

Prerequisite: EMT 110, HEED 310, and HEED 323 with grades of "C" or better

Advisory: AH 110; ENGWR 102, and ENGRD 116 with a grade of "C" or better; OR ESLR 320 and ESLW 320 with a grade of "C" or better; MATH 32 (Pre-Algebra), or MATH 42 (Algebra Readiness - Part II)

Enrollment Limitation: Current Healthcare Provider CPR certification or equivalent is required. Must be able to pass a qualifying background check and drug screen, show proof of current immunizations. The student must be able to purchase online resources, malpractice insurance as well as a uniform and other lab equipment. This course is not available to students with current EMT certification or who are licensed paramedics since they have already achieved the learning outcomes for this course. Due to regulatory requirements, this course must be completed less than twelve months after the beginning of EMT 110.

Hours: 54 hours LAB

This course provides the supervised practical lab hours necessary to complete EMT education after completion of EMT 110. Successful completion of EMT 110 and EMT 111 will make the student eligible to take the National Registry of EMTs (NREMT) EMT certification exam. The student is placed in the clinical and field environments necessary to obtain the minimum required patient contacts. This course conforms to the 2007 National EMS Scope of Practice Model as well as the 2009 EMS National Education Standards and complies with Title 22, Division 9, Chapter 2 of the California State Code of Regulations. This course is approved by the Emergency Medical Services (EMS) Agency of the Sacramento County Health Department. Field trips or off-campus lab assignments are required. This course is Pass/No Pass only.

EMT 150 Advanced Emergency Medical Technician (AEMT) Didactic 3 Units

Prerequisite: HEED 310 and 323 with grades of "C" or better
Advisory: AH 110, BIOL 102, and PMED 105; ENGWR 102, and ENGRD 116 with a grade of "C" or better; OR ESLR 320 and ESLW 320 with a grade of "C" or better; MATH 32 (Pre-Algebra), or MATH 42 (Algebra Readiness - Part II)

Enrollment Limitation: Current Healthcare Provider CPR or equivalent recognition and California State EMT certification are required. The student must be able to purchase online resources as well as a uniform and other lab equipment. This course is not available to certified NREMT or California State Advanced EMTs or paramedics.
Hours: 36 hours LEC; 54 hours LAB

This course provides academic preparation and psychomotor skills training to prepare the student for EMT 151, the Advanced Emergency Medical Technician (AEMT) clinical and field Internship. Successful completion of EMT 150 and EMT 151 will make the student eligible to take the National Registry of EMTs (NREMT) Advanced EMT certification exam. Topics include the Limited Advanced Life Support (LALS) knowledge, application and problem solving skills necessary to work as an AEMT (formerly known as EMT-Intermediate or EMT-2) in the Emergency Medical Services (EMS) field for an ambulance service, fire department, emergency department or other specialized service. A "C" letter grade as well as successful completion of the EMT 150 Exit Exam and psychomotor skill tests are required to be eligible for EMT 151. The course conforms to the 2007 National EMS Scope of Practice Model and 2009 EMS National Education Standards and complies with Title 22, Division 9, Chapter 3 of the California State Code of Regulations. This course is approved by the Emergency Medical Services (EMS) Agency of the Sacramento County Health Department. Field trips or off-campus lab assignments are required.

EMT 151 Advanced Emergency Medical Technician (AEMT) Internship 3.5 Units

Prerequisite: EMT 150, HEED 310, and HEED 323 with grades of "C" or better

Advisory: AH 110 and BIOL 102; PMED 105 or NURSE 320

Enrollment Limitation: Current Healthcare Provider CPR or equivalent certification and California State EMT certification is required.

The student must be able to pass a qualifying background check and drug screen, show proof of current immunizations. The purchase of online resources, malpractice insurance as well as a uniform and other lab equipment is also required. This course must be completed less than six months after the completion of EMT 150. This course is not available to NREMT or California State certified AEMTs or paramedics.

Hours: 189 hours LAB

This course provides supervised clinical and field internship experience at the Limited Advanced Life Support (LALS) scope of practice. Successful completion of EMT 150 and EMT 151 makes the student eligible to take the National Registry of EMTs (NREMT) Advanced Emergency Medical Technician (AEMT) certification exam. The course conforms to the 2007 National EMS Scope of Practice Model and 2009 EMS National Education Standards and complies with Title 22, Division 9, Chapter 3 of the California State Code of Regulations. This course is approved by the Emergency Medical Services (EMS) Agency of the Sacramento County Health Department. Field trips or off-campus lab assignments are required.

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.

PMED 101 Pre-paramedic Emergency Medical Technician – Basic Skills Review .5 Units

Enrollment Limitation: 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. 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 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 Pharmacology .5 Units

Advisory: Math 32, 39 or 42 with a grade of “C” or better AND ENGRD 116 OR ESLR 320 with a grade of “C” or better.

Hours: 9 hours LEC

This course provides basic instruction in prehospital pharmacology and calculating medication dosages.

PMED 106 Emergency Medical Technician Pre-hospital Practices and Internship 6.5 Units

Prerequisite: Current California Emergency Medical Technician (EMT-1 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 .5 Units**

*Enrollment Limitation: 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.

**PMED 142 Advanced Cardiac Life
Support Certification .5 Units**

*Enrollment Limitation: 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.

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

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**

*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.

**PMED 242 Advanced Cardiac Life Support –
Recertification .5 Units**

*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.

**PMED 295 Independent Studies
in Paramedic**

1-3 Units

Hours: 54-162 hours LAB

Course description: PMED 295 is an opportunity for the student to extend classroom experience in this subject area, while working independently of a formal classroom situation. PMED 295 is an extension of work offered in a specific class in the college catalog. To be eligible for PMED 295, students must have completed the basic regular catalog course at American River College. They must also discuss the study project with a professor in this subject area and secure prior approval. Only one independent study for each catalog course will be allowed.

**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.

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: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
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. (C-ID PHIL 100)

PHIL 310 Introduction to Ethics 3 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 and ESLW 340.
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 ethics and moral philosophy. It includes a survey of various normative ethical theories including Aristotle's Virtue Ethics, Utilitarianism, and Kant's Deontological Ethics. It may also cover various meta-ethical issues such as ethical relativism vs. ethical objectivism, as well as questions of knowledge and justification of moral claims. It may also include the application of normative ethical theories to contemporary moral issues. (C-ID PHIL 120)

PHIL 315 Contemporary Moral Issues 3 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
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: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
General Education: AA/AS Area II(b); CSU Area A3
Course Transferable to UC/CSU
Hours: 54 hours LEC

This course introduces basic principles of good reasoning. It focuses on recognizing arguments and identifying their premises and conclusions. It examines the distinction between inductive and deductive standards of evaluation and includes an overview of types of inductive reasoning, deductive argument patterns, use and misuse of language, and fallacious reasoning. Practical application to everyday life is emphasized. (C-ID PHIL 110)

PHIL 324 Symbolic Logic 3 Units

Same As: MATH 320
Prerequisite: MATH 120, 124, 125, 129, or 133 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. (C-ID PHIL 210)

PHIL 330 History of Classical Philosophy 3 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
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. (C-ID PHIL 130)

PHIL 331 History of Modern Philosophy 3 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

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 the history of Western Philosophical thought from the Early Modern era to the turn of the nineteenth century. These themes may include the fundamental nature of reality, knowledge, values, society, God, and human nature. (C-ID PHIL 140)

PHIL 350 Philosophy of Religion 3 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

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 360 Social/Political Philosophy 3 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

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: Greg Warzecka
Phone: (916) 484-8201
Counseling: (916) 484-8572

Physical Education –
see Kinesiology and Athletics, pg. 349

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 degree provides a broad study in the fields of physical science and mathematics. It is a good foundation for transfer to a four-year program in science, technology, engineering, or mathematics (STEM).

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
A minimum of 18 units from the following:.....18	
ASTR	300, 310, 320, 330, 400, 480, 495, 499
CHEM	305, 306, 309, 310, 311, 334, 400, 401, 410, 420, 421, 423, 480, 482, 495, 499
ENGR	300, 305, 310, 312, 320, 401, 413, 420, 430, 495, 499
GEOG	300, 301, 305, 306, 307, 308, 309, 390, 495, 499
GEOL	300, 301, 305, 306, 310, 311, 320, 325, 330, 331, 342, 345, 390, 495, 499
MATH	300, 310, 320, 325, 330, 336, 340, 342, 350, 351, 355, 356, 370, 400, 401, 402, 410, 420, 480, 495, 499
PHYS	310, 311, 312, 350, 360, 410, 421, 431, 495, 499
PS	300, 301, 495, 499
STAT	300, 305, 495, 499

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.

This transfer degree can only be awarded using the IGETC pattern:

Physics A.S. for Transfer Degree

The Associate in Science in Physics for Transfer degree provides students with a major that fulfills the general requirements of the California State University for transfer. Students with this degree will receive priority admission with junior status to the California State University system.

The Associate in Science in Physics for Transfer degree (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
MUFHL 400	Music Theory .....4
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 Arts for Transfer Degree Requirements: The Associate in Science in Physics for Transfer (AA-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) the Intersegmental General Education Transfer Curriculum (IGETC) 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:..... 18¹

Physical Science Courses:

ASTR	300, 310, 320, 330, 400, 481, 495, 499
CHEM	305, 306, 309, 310, 311, 400, 401, 420, 421, 423, 495, 499
GEOG	300, 301, 305, 306, 307, 308, 309, 390, 495, 499
GEOLOGY	300, 301, 305, 306, 310, 311, 320, 325, 330, 331, 342, 345, 390, 495, 499
PHYS	310, 311, 312, 350, 360, 410, 421, 431, 495, 499
PS	300, 301, 495, 499

Biological Science Courses:

ANTH	300, 301, 303, 370, 372, 480, 495, 499
BIOL	300, 301, 303, 305, 310, 322, 332, 342, 352, 370, 390, 400, 410, 415, 420, 430, 431, 440, 442, 482, 490, 491, 495, 499
BIOT	301, 305, 307, 308, 311, 312, 499
NATR	300, 302, 303, 304, 305, 306, 307, 310, 320, 322, 330, 332, 340, 346, 495, 499
PSYC	310, 311, 495, 499

¹must be transfer-level and must include one laboratory course in a physical science and one laboratory course in a biological science

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.

Physics

PHYS 310 Conceptual Physics 3 Units

Advisory: MATH 100, 104 or 132 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 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: AA/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
Advisory: MATH 100, 104, or 132
General Education: AA/AS Area IV; CSU Area B3; IGETC Area 5C
Course Transferable to UC/CSU
Hours: 54 hours LAB

This laboratory course provides hands-on observation activities and interpretation of data in a variety of experimental situations. Topics include motion, sound, light, heat, electricity, and magnetism.

PHYS 350 General Physics 4 Units

Prerequisite: MATH 330 with a grade of "C" or better
Advisory: PHYS 311; and eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
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. (C-ID PHYS 105)

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 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 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. (C-ID PHYS 110)

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; and eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

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. (C-ID PHYS 205)

PHYS 421 Electricity and Magnetism 4 Units

Prerequisite: MATH 401 and PHYS 410 with grades of "C" or better

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

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. (C-ID PHYS 210)

PHYS 431 Heat, Waves, Light and Modern Physics 4 Units

Prerequisite: MATH 401 and PHYS 410 with grades of "C" or better

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

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. (C-ID PHYS 215)

PHYS 495 Independent Studies in Physics 1-3 Units

Course Transferable to CSU

Hours: 54-162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

Physical Science**PS 300 Introduction to Physical Science 3 Units**

Advisory: MATH 100, 104 or 132 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 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, 104, or 132

General Education: 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.

PS 495 Independent Studies in Physical Science 1-3 Units

Course Transferable to CSU

Hours: 54-162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

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

Degree: A.A. - Political Science
 A.A. for Transfer - Political Science

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.

Requirements for Degree	18 Units
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 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.

Political Science A.A. for Transfer Degree

The Associate in Arts degree in Political Science for Transfer provides a clearly articulated curricular track for students who wish to transfer to a CSU campus, while also serving the diverse needs of students interested in the breadth and depth of the field of Political Science. Additionally, this degree exposes students to the core principles and practices of the field in order to build a foundation for their future personal, academic, or vocational paths.

The Associate in Arts degree in Political Science for Transfer provides students with a major that fulfills the general requirements of the California State University for transfer. Students with this degree will receive priority admission with junior status to the California State University system. The Associate in Arts degree in Political Science for Transfer (A.A.-T.) may be obtained by the completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program outlined below (earning a C or better in these courses) and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

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

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.

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(Political Science A.A. for Transfer Degree continued)

Requirements for Degree	18 Units
POLS 301 Introduction to Government: United States (3)	3
or POLS 481 Introduction to Government: United States - Honors (3)	
A minimum of 9 units from the following:	9
POLS 302 Introduction to Government: Foreign (3)	
POLS 310 Introduction to International Relations (3)	
POLS 320 Introduction to Political Theory (3)	
STAT 300 Introduction to Probability and Statistics (4)	
A minimum of 6 units from the following:	6
POLS 304 Introduction to Government: California (3)	
POLS 330 Constitutional Rights (3)	
POLS 332 Law and Society (3)	
POLS 342 Women and Politics from a Global Perspective (3)	
SOCSC 310 International Studies - Peace and Conflict Studies (3)	
SOCSC 312 International Studies - Current International Development Issues (3)	

Associate in Arts for Transfer Degree Requirements: The Associate in Arts in Political Science for Transfer (AA-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

Political Science

POLS 301 Introduction to Government: United States 3 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340
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, federal structure, and constitutional structures. The course studies the rights and liberties of individuals as articulated in the U.S. Constitution and federal court decisions. Further, it examines and describes the procedural aspects of the U.S. and California political systems including amending the U.S. and California constitutions, holding elections, campaigning, legislating, executing and adjudicating law. The course examines individual and group political behavior in voting, interest groups, political parties, and the media. It provides an analysis of contemporary problems and issues and looks at factors that shape politics and policy-making including diversity, political culture, political socialization, political ideologies, and public opinion. Finally, it also describes California state and local governments' constitutional base, structures and functions, political process, problems and issues, and federal-state relations. (C-ID POLS 110)

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 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 D8; CSU Area F3
Course Transferable to UC/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 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 introduces the academic field of International Relations. It surveys global issues as they relate to theories of international relations, the nation-state system, the role of state and nonstate actors, globalization, armed conflict and its causes, international law and conflict resolution, and international political economy. Special emphasis is placed on comparing global perspectives among developed and developing nations. (C-ID POLS 140)

POLS 320 Introduction to Political Theory 3 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
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 include theories of just and unjust societies, social contract theory, justifications for government authority, and the rights of citizens versus the responsibilities of citizenship. (C-ID POLS 120)

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 342 Women and Politics from a Global Perspective 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 D4; CSU Area D8; IGETC Area 4D; IGETC Area 4H
Course Transferable to UC/CSU
Hours: 54 hours LEC

This course examines the impact of politics on women's lives and women's impact on politics from a global perspective. It explores past and current influences on the political and legal status of women as well as women's participation in the political process throughout the world.

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); 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. 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 495 Independent Studies in Political Science 1-3 Units

Course Transferable to CSU
Hours: 54-162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

Area: Behavioral & Social Sciences
 Dean: Carlos Reyes
 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 305 Psychology Applied to Modern Life (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 365	Issues of Diverse Populations (3)
or HSER 330	Issues of Diverse Populations (3)
PSYC 370	Human Development: A Life Span (3)
PSYC 372	Child Development (3)
or ECE 312	Child Development (3)
PSYC 373	Child Psychology (3)
PSYC 374	Psychology of Aging: Adult Development and Aging (3)
or GERON 302	Psychology of Aging: Adult Development and Aging (3)
PSYC 383	Introduction to Organizational Psychology (3)
PSYC 390	Psychology of Death and Dying (3)
PSYC 400	Introduction to Chemical Dependency (3)
or HSER 340	Introduction to Chemical Dependency (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 Psychology Applied to Modern Life (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 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

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
General Education: AA/AS 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. This course is not open to students who have taken PSYC 480. (C-ID PSY 110)

PSYC 305 Psychology Applied to Modern Life 3 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
General Education: AA/AS 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 aspects of psychology in everyday life utilizing both psychological theory and research. Topics include personality, stress and coping, self-understanding, communication, interpersonal relationships, gender, sexuality, psychological disorders and their treatment, personality, personal values, and positive psychology. (C-ID PSY 115)

PSYC 310 Biological Psychology 3 Units

Prerequisite: PSYC 300 or 480 with a grade of "C" or better
General Education: AA/AS Area IV; CSU Area B2; IGETC Area 5B
Course Transferable to UC/CSU
Hours: 54 hours LEC

This course examines the physiological determinants of behavior and cognition. The role of genetics, neural development, neural communication and pathways, brain structures, neurotransmitters, drugs, endocrine system, and sensory systems in typical and atypical behavior and cognition are addressed. Current theories related to the role of neural and biological processes in the etiology and treatment of psychological disorders, motor disorders, and other central nervous pathologies are presented. Ethical standards for human and animal research are discussed. (C-ID PSY 150)

PSYC 311 Biological Psychology Laboratory 1 Unit

Corequisite: PSYC 310
General Education: 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. (C-ID PSY 170)

PSYC 330 Introductory Statistics for the Behavioral Sciences 3 Units

Prerequisite: MATH 120, MATH 124, MATH 125, MATH 129 or MATH 133 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 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. (C-ID PSY 200)

PSYC 340 Abnormal Behavior 3 Units

Prerequisite: PSYC 300, 305, or 480 with a grade of "C" or better
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
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 explores the broad questions of normality and abnormality. Topics include the investigation of specific mental, emotional, and behavioral difficulties and current approaches to psychological intervention including present community mental health practices. It considers the contribution of social, biological, and psychological factors to the development and persistence of behavior disorders. This class is not open to students who have taken PSYC 481. (C-ID PSY 120)

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. (C-ID SOCI 130)

PSYC 356 Human Sexuality 3 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
General Education: AA/AS Area III(b); AA/AS Area VI (effective Summer 2014); CSU Area D4; CSU Area D9; CSU Area E1; IGETC Area 4D; IGETC Area 4I
Course Transferable to UC/CSU
Hours: 54 hours LEC

This course offers a balanced scientific understanding of the biopsychosocial perspective on human sexual behavior from birth through adulthood. It provides factual, up-to-date, nonjudgmental information designed to dispel myths, and to facilitate problem identification and possible solutions. Sexuality is explored from historical, cultural, psychological, physiological, sociological, and legal viewpoints. (C-ID PSY 130)

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. (C-ID PSY 180)

PSYC 372 Child Development 3 Units

Same As: ECE 312

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 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 interaction of maturational and environmental factors. 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. (C-ID CDEV 100)

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;

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. After the first class session, this course is held off campus in a long-term care setting. This course is not open to students who have completed GERON 330.

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.

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 and techniques of reminiscence therapy and provides experience in planning, facilitating, and evaluating reminiscence groups with the elderly in an institutional setting. After the first class session, this course is held off campus in a long-term care setting. This class is not open to students who have completed GERON 334.

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 D9; CSU Area E1;

IGETC Area 4I

Course Transferable to UC/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: AA/AS Area V(b); CSU Area D9

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: Placement into ENGWR 480 through the assessment process.

General Education: AA/AS 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.

This course is not open to students who have completed PSYC 300. (C-ID PSY 110)

PSYC 481 Honors Abnormal Behavior 3 Units

Prerequisite: Assessment into ENGWR 480, and completion of PSYC 300 or PSYC 480 with a grade of "C" or better.

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 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. This course is not open to students who have taken PSYC 340. (C-ID PSY 120)

PSYC 495 Independent Studies in Psychology 1-3 Units

Course Transferable to CSU

Hours: 54-162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

Area: Sacramento Regional Public Safety Training Center
5146 Arnold Avenue
McClellan, CA 95652

Dean: Steven Segura

Phone: (916) 570-5000

Counseling: (916) 484-8572

Website: www.arc.losrios.edu/safety

Certificate: POST Basic Law Enforcement Academy - Modular Format

Department Certificates*:
Basic Law Enforcement Academy - Module I
Basic Law Enforcement Academy - Module II
Basic Law Enforcement Academy - Module III

**Additional department certificates are listed on pg. 452, information available at:
http://www.arc.losrios.edu/programs_of_study/safety/law_enforcement/course_offerings.htm*

Other Offerings at SRPSTC:

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) 874-2677, or visit the webpage at: www.sacsheriff.com/organization/support_services/administrative_division/training_education_bureau/academy.cfm
- For information regarding in-service training course, contact the Sheriff's Department, Division of Training and Reserve Forces at (916) 876-7457 or visit the webpage at www.sacsheriff.com/organization/support_services/administrative_division/training_education_bureau/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 and courses presented by City of Sacramento Police Department, call (916) 808-0880 or visit their training page at: <http://www.sacpd.org/inside/academy/>

USDA Forest Service

- For information on courses presented by USDA Forest Service, call (916) 454-0803

(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) 475-1660 or visit their website at www.fireandrescuetraining.ca.gov/

Sacramento Metropolitan Fire District

- For information on courses presented by the Sacramento Metropolitan Fire District, call (916) 859-4391 or visit the district's training webpage at <http://metrofire.ca.gov/>

Sacramento City Fire Department

- For information on courses presented by the Sacramento Fire Department call (916) 566-6599 or visit the Division of Training webpage at <http://portal.cityofsacramento.org/Fire>

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

Additional information regarding training programs offered by the Sacramento Regional Public Safety Training Center and any one of its 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 28 - 35.5 Units

PSTC 1502	Basic Law Enforcement Academy - Module III	.....	6-8
PSTC 1503	Basic Law Enforcement Academy - Module II	.	8.5-10.5
PSTC 1504	Basic Law Enforcement Academy - Module I	...	13.5-17

DEPARTMENT CERTIFICATES

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.

(continued on next page)

(Basic Law Enforcement Academy - Module I continued)

- 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 **13.5 - 17 Units**
PSTC 1504 Basic Law Enforcement Academy - Module I..... 13.5-17

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 Puloovers, 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 preliminary 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.

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 **8.5 - 10.5 Units**
PSTC 1503 Basic Law Enforcement Academy - Module II.... 8.5-10.5

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.

(continued on next page)

(Basic Law Enforcement Academy - Module III continued)

- 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**6 - 8 Units**

PSTC 1502 Basic Law Enforcement Academy - Module III 6-8

DEPARTMENT CERTIFICATES

For information about the following department certificates, please go to www.arc.losrios.edu/programs_of_study/safety/law_enforcement/course_offerings.htm

Academy Graduate Training
 Academy Instructor Certification
 Adult Correctional Officer
 Arrest Control and Baton Instructor
 Automated Field Reporting (AFR)
 Background Investigations
 Basic Crime Prevention
 Basic Crisis Negotiation-FBI
 Campus Supervisor
 Citizens Academy
 Code Enforcement Officer
 Code Enforcement Officer-Advanced
 Code Enforcement Officer-Intermediate
 Communications Training
 Community Oriented Policing
 Continuing Professional Training for Peace Officers
 Crime Analysis
 Crime Prevention Through Environmental Design
 Crime Scene and Forensic Photography
 Crime Scene Investigation-Basic

Criminal Investigation (Non-ICI)
 Defensive Driving
 Driver Training Update
 Drug and Alcohol Recognition
 Drug Recognition Evaluator (DRE)
 Emergency Vehicle Operations Instructor
 Employment Training Power Program
 Field Training Officer
 Field Training Officer Update
 Field Training Program Coordinator
 Fingerprint Identification-Basic
 Firearms Familiarization (PC 832)
 Firearms Instructor
 Firearms Instructor Update
 Firearms Rifle Instructor Update
 Force and Weaponry-Advanced
 Force and Weaponry- Basic
 Frontline Leadership-SPD
 High Rise Policing and Crime Prevention Through Environmental Design
 Impact Weapons Instructor
 Impact Weapons Instructor Update
 Internal Affairs Investigation
 Interpersonal and Tactical Communications: Train The Trainer
 Interview and Interrogation Techniques
 Juvenile Corrections Officer Core
 Latent Print Development Techniques - Advanced
 LIDAR Operator
 Life Skills Power Program
 Media for the Public Information Officer or Public Affairs Officer
 PC 832 Arrest, Search & Seizure
 Post Academy Training
 POST Instructor Development - Intermediate Level 2
 Probation Officer Core
 Property and Evidence Room Management
 Public Safety Dispatcher- Advanced
 Public Safety Dispatcher-Basic
 Regulatory Investigation Techniques
 School Resource Officer
 School Security Officer
 Sergeant Training and Orientation
 Special Weapons and Tactics (SWAT)
 Special Weapons and Tactics Commander
 Supervisor Training - Non-Sworn
 Supervisory (POST Format)
 Supervisory (STC Format)
 Supervisory Update
 Survival and Tactics
 Traffic Accident Reconstruction

Traffic Collision Investigation-Intermediate
 Traffic Collision-Basic
 Volunteers in Partnership-Module A
 Volunteers in Partnership-Module B
 Weaponless Defense Instructor
 Weaponless Defense Instructor-Advanced
 Weaponless Defense Instructor-Update

California Highway Patrol

CHP 1100 California Highway Patrol Academy 17.5 Units

*Prerequisite: Acceptance in a California Highway Patrol Academy.
 Hours: 706 hours LEC; 586 hours LAB*

This course is a consolidated program of training in criminal law, juvenile law, laws of evidence, administration of justice, community relations, investigation, traffic control and procedures, patrol procedures, defensive tactics, arrest control including handcuffing and weaponless defense, baton techniques, first aid CPR and vehicle operations. This course meets all mandates and course objectives defined for basic peace officer training. Credit/No Credit only.

Public Safety Training Center

PSTC 1121 Arrest, Search & Seizure (PC 832) 2 Units

Hours: 34 hours LEC; 6 hours LAB

This course satisfies the arrest, search, and seizure requirement for peace officers as defined in section 832 of the California Penal Code. Topics include professional orientation, justice system, knowing your community, law, laws of evidence, communications, investigation, use of force, and arrest and control. Credit/No Credit only.

PSTC 1200 Basic Law Enforcement Academy 24-32 Units

Hours: 389 hours LEC; 584 hours LAB

The Basic Law Enforcement Academy meets or exceeds the minimum training requirements of the California Commission on Peace Officer Standards and Training (POST) for Level I Reserve Officer training and for Full-time Regular Peace Officer employment. Topics include: Leadership, Professionalism & Ethics, Policing in the Community, Introduction to Criminal Law, Law of Arrest, Search and Seizure, Presentation of Evidence, Juvenile Law & Procedure, Investigative Report Writing, Vehicle Operations, Use of Force, Vehicle Operations, Domestic Violence, Unusual Occurrences, Traffic Collision Investigations, Crime Scenes, Evidence & Forensics, Arrest and Control, Firearms/Chemical Agents, Hazardous Materials Awareness, and Cultural Diversity/Discrimination. Pass/No Pass only.

PSTC 1251 Skills and Knowledge Modules .25-3 Units

Prerequisite: PSTC 1200

Hours: 4-40 hours LEC; 0-40 hours LAB

This course provides continuing education to meet POST requirements. The content is tailored for each agency to meet agency-specific needs, local needs, and state mandates.

PSTC 1272 CDC Advanced Investigations 2 Units

Prerequisite: PSTC 1294

Hours: 40 hours LEC

This course is designed to enhance the basic criminal investigation skills of the California Department of Corrections Investigator. Pass/No Pass only.

PSTC 1294 Adult Corrections: Supplemental Core Course 3.5 Units

Prerequisite: PSTC 1200

Hours: 59.5 hours LEC; 10.5 hours LAB

This course is designed to provide supplemental training to the corrections officer who has completed the Commission on Peace Officer Standards and Training (POST) Basic Academy. Topics include correctional codes and statutes, inmate classification, contraband, booking and inmate supervision. Pass/No Pass only.

PSTC 1500 Basic Sheriff Academy 25 Units

Hours: 511 hours LEC; 445 hours LAB

This course is a consolidated program of training in criminal law, juvenile law, laws of evidence, administration of justice, community relations, investigation, traffic control and procedures, patrol procedures, defensive tactics, arrest control including handcuffing and weaponless defense, baton techniques, first aid/cardio pulmonary resuscitation (CPR), and vehicle operations. It meets all mandates and course objectives defined for basic peace officer training. Pass/No Pass only.

PSTC 1501 PC 832 Arrest, Search & Seizure 2 Units

Hours: 36 hours LEC; 4 hours LAB

This course satisfies the arrest, search and seizure requirement for peace officers as defined in section 832 of the California Penal Code. Topics include professional orientation, justice system, knowing your community, laws of evidence and arrest, investigation, use of force and arrest and control. This course is Commission on Peace Officer Standards and Training (POST) certified. Pass/No Pass only.

PSTC 1502 Basic Law Enforcement Academy – Module III 6-8 Units

Enrollment Limitation: Students must 1) Be free of felony convictions 2) Possess a valid California Driver's License 3) Undergo a fingerprint and criminal history check 4) Be a minimum of 18 years of age 5) Be a United States high school graduate, pass the GED, pass the California High School Proficiency Examination, or have attained a two-year or four-year degree from an accredited college or university 6) Complete a medical suitability examination.

Hours: 100 hours LEC; 126 hours LAB

The course satisfies Level III training requirements of the Commission on Peace Officer Standards and Training (POST) Level III module. Topics covered include: Study Skills, Leadership and Ethics, Introduction to Criminal Law, Investigative Report Writing, Use of Force, Traffic Enforcement, Crimes Scenes and Forensics, Arrest Methods and Defensive Tactics, Firearms, First Aid/ CPR, Information Systems, and Cultural Diversity. Pass/No Pass only.

PSTC 1503 Basic Law Enforcement Academy – Module II 8.5-10.5 Units

Prerequisite: PSTC 1502

Enrollment Limitation: Students must 1) Be free of felony convictions 2) Possess a valid California Driver's License 3) Undergo a fingerprint and criminal history check 4) Be a minimum of 18 years of age 5) Be a United States high school graduate, pass the GED, pass the California High School Equivalency Examination, or have attained a two-year or four-year degree from an accredited college or university 6) Complete a medical suitability examination.

Hours: 108-140 hours LEC; 132-200 hours LAB

This course satisfies Level II training requirements of the Commission on Peace Officer Standards and Training Level II module. It covers 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/Discrimination, Lifetime Fitness and Law Enforcement Career Preparation. Pass/No Pass only.

PSTC 1504 Basic Law Enforcement Academy – Module I 13.5-17 Units

Prerequisite: PSTC 1503

Enrollment Limitation: Students must 1) Be free of felony convictions 2) Possess a valid California Driver's License 3) Undergo a fingerprint and criminal history check 4) Be a minimum of 18 years of age 5) Be a United States high school graduate, pass the GED, pass the California High School Proficiency Examination, or have attained a two-year or four-year degree from an accredited college or university 6) Complete a medical suitability examination.

Hours: 149-190 hours LEC; 286-360 hours LAB

This course meets or exceeds the California Commission on Peace Officer Standards and Training (POST) minimum standards for the Level I Reserve Officer training and for Full-time Regular Peace Officer employment. Instruction builds upon knowledge, skills, and abilities students gained in the Basic Law Enforcement Academy- Modules III and II, and includes: 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. Pass/No Pass only.

PSTC 1505 California Highway Patrol Basic Law Enforcement Academy 25 Units

Prerequisite: Acceptance into the California Highway Patrol Academy.

Hours: 152 hours LEC; 894 hours LAB

This course is a consolidated program of training in criminal law, juvenile law, laws of evidence, administration of justice, community relations, investigation, traffic control and procedures, patrol procedures, defensive tactics, arrest control including handcuffing and weaponless defense, baton techniques, first aid CPR and vehicle operations. This course meets all mandates and course objectives defined for basic peace officer training. Pass/No Pass only.

PSTC 1506 Sacramento Police Department Basic Academy 22-26 Units

Enrollment Limitation: Acceptance into Basic Recruit Academy.

See program requirements.

Hours: 251 hours LEC; 466-682 hours LAB

This course presents a comprehensive program of training in law, ethics, community policing, vehicle operations, use of force, patrol techniques, firearms, traffic control and enforcement, criminal investigations, physical fitness, chemical agents, first aid and CPR. Upon successful completion of the course, the student will receive a POST Basic Academy Certificate. This course is formerly known as SPD 1100. Pass/No Pass only.

PSTC 1507 Sacramento Police Department Pre-Academy 1 Unit

Hours: 26 hours LEC

This course provides knowledge and skills necessary to enable students to successfully pass law enforcement entry-level tests and become familiar with the POST Basic Academy Training Program. This course is formerly known as SPD 1101. Pass/No Pass only.

PSTC 1512 POST Instructor Development – Intermediate Level 2 2 Units

Hours: 40 hours LEC

This course provides students the skills necessary for obtaining level 2 instructor certification through California POST (California Commission on Peace Officer Standards and Training). Topics include learning theories, instructional design, student assessment, outcome based learning, problem based learning, facilitation skills, active learning, presentation skills, and critical thinking. Pass/No Pass only.

PSTC 1514 Academy Graduate Training – SPD 1.5-2 Units

Prerequisite: PSTC 1200 with a grade of "C" or better

Hours: 28-34 hours LEC; 0-6 hours LAB

This course, designed for the new academy graduate, provides specific additional training in areas not covered in the POST Basic Academy. Topics include use of the intoxilyzer, in-car camera, field training overview and the robbery alarm monitor system. Pass/No Pass only.

PSTC 1515 Academy Instructor Certification Course 1 Unit

Hours: 34 hours LEC; 6 hours LAB

This course meets the basic instructional skills training requirement to teach in the POST Regular Basic Course and for the Academy Instructor Certificate Program. Students will gain facilitation skills and an understanding of how to employ adult learning methodologies appropriate for various law enforcement topics. Pass/No Pass only.

PSTC 1517 Post Academy Training 2 Units

Prerequisite: PSTC 1200 with a grade of "C" or better

Hours: 52 hours LEC; 21 hours LAB

This course provides the recent police academy graduate with required additional training. Topics include radio use, intoxilyzer use, Taser, arrest control, baton techniques, vehicle pullovers, internal affairs, drug-endangered children, and officer-involved shootings. Pass/No Pass only.

PSTC 1519 Juvenile Corrections Officer Core 7.5 Units

Hours: 126 hours LEC; 34 hours LAB

This course is designed for the new juvenile corrections officer or the individual interested in a career in juvenile corrections. Topics include California criminal justice system, professionalism and ethics, defensive tactics, report writing, mental health issues, gangs and physical conditioning. This course is certified by California Standards and Training for Corrections (STC). Pass/No Pass only.

PSTC 1520 Supervisory (POST Format) 2 Units

Prerequisite: PSTC 1200 with a grade of "C" or better

Hours: 16 hours LEC; 64 hours LAB

This course is designed for law enforcement, and regulatory personnel who are to be appointed supervision responsibilities. Topics include ethics, values, role of supervisor, vicarious liability, grievance procedures, and evaluation techniques. This Course is accredited by the Commission on Peace Officer Standards and Training (POST) with POST Certification #2970-00400. This course is formerly known as PSTC 1140. Pass/No Pass only.

PSTC 1521 Supervisory (STC Format) 2 Units

Prerequisite: PSTC 1200 with a grade of "C" or better

Hours: 26 hours LEC; 54 hours LAB

This course is designed for correctional, probation, and parole personnel who will be or have been appointed supervision responsibilities. Topics include ethics, problem solving, discipline, legal update, grievance procedures, and leadership. It is accredited by the State of California's Standards and Training for Corrections (STC) with STC Certification #0218-011703. Pass/No Pass only.

**PSTC 1522 Supervisor Training –
Non-Sworn SPD 2 Units***Hours: 32 hours LEC; 8 hours LAB*

This course is designed for the non-sworn new supervisor who will be responsible for first line supervision. Topics include leadership, sources of influence, performance evaluations, communications, practical exercises and legal issues. Pass/No Pass only.

PSTC 1525 Supervisory Update .5-1 Units*Hours: 1 hours LEC; 23-39 hours LAB*

This course is designed for the current supervisor who requires additional training and/or updating on current issues and supervisory techniques. Topics include leadership and ethics, tactical resources, legal issues, general orders, use of force and progressive discipline. This course is presented in educational partnership with the Sacramento Police Department. This course is accredited by the Commission on Peace Officer Standards and Training (POST) with POST Certification number #9270-1200 and #1039-1200. Pass/No Pass only.

PSTC 1531 Frontline Leadership SPD 3 Units*Hours: 71 hours LEC; 12 hours LAB*

This course is designed to enhance the leadership skills of line level personnel, both sworn and civilian. It is not intended for supervisors. The course also introduces strategies for dealing with a variety of work place challenges and ethics issues. Pass/No Pass only.

PSTC 1533 Internal Affairs Investigation .5-1 Units

*Prerequisite: PSTC 1200 with a grade of "C" or better
Enrollment Limitation: Completion of a POST/CPOST/STC
Basic Academy.*

Hours: 22-33 hours LEC; 0-7 hours LAB

This course provides basic internal affairs investigation techniques for the new Internal Affairs investigator. Topics include legal framework including the Peace Officers Bill of Rights, case law, interviewing and investigative techniques and writing requirements for such investigations. It is presented in an educational partnership with the Sacramento Sheriff's Department (SSD). It also is accredited by the Commission on Peace Officer Standards and Training (POST) with POST Certification #2970-32100 and #2310-32103 (SSD). Pass/No Pass only.

**PSTC 1534 Sergeant Training and
Orientation Program (TOPS) 4 Units***Hours: 72 hours LEC; 8 hours LAB*

This course introduces the new police supervisor to the responsibilities and job requirements of the sergeant position. Emphasis is placed on leadership, handling of critical incidents, major crimes, internal affairs, and pursuit liability. Pass/No Pass only.

**PSTC 1542 Property and Evidence
Room Management 1.25 Units**

*Prerequisite: PSTC 1200 with a grade of "C" or better
Hours: 24 hours LEC*

This course is designed for personnel assigned to manage a law enforcement agency's evidence or property room. Topics include roles and responsibilities, audits and inventory, internal controls, tracking and emergency planning. The course is accredited by the Commission on Peace Officer Standards and Training (POST) with POST Certification #2970-32901. Pass/No Pass only.

PSTC 1550 Code Enforcement Officer 2 Units*Hours: 36 hours LEC; 4 hours LAB*

This course is designed for the newly assigned code enforcement officer or peace officer who is assigned to enforce the codes of a city, county, or state. Topics include ethics, zoning laws, sub-standard housing, inspection protocol, report writing, case preparation, and administrative hearings. Pass/No Pass only.

**PSTC 1551 Code Enforcement Officer –
Intermediate 2 Units***Prerequisite: PSTC 1550**Hours: 36 hours LEC; 4 hours LAB*

This course is designed for code enforcement officers or peace officers who have experience enforcing city, county and state administrative codes. Topics include legal update, courtroom testimony, administrative hearings, tactical communication, use of pepper spray, problem oriented policing (POP), customer service, and officer safety/animal awareness. Pass/No Pass only.

**PSTC 1552 Code Enforcement Officer –
Advanced 2 Units***Prerequisite: PSTC 1186**Hours: 36 hours LEC; 4 hours LAB*

This course is designed for code enforcement officers or peace officers who have experience enforcing city, county and state administrative codes. Topics include legal update, personal safety, with a focus on vectors, molds, fire, electrical and plumbing codes. Pass/No Pass only.

**PSTC 1555 Regulatory Investigative
Techniques 2 Units***Hours: 40 hours LEC*

This course is designed for the law enforcement officer assigned to an investigative role within a state agency. The course focuses on techniques that enhance the investigator's ability to prepare a criminal or administrative cases for prosecution in a criminal or administrative hearing. Topics include roles and responsibilities, interview techniques, search warrants and report writing. Pass/No Pass only.

PSTC 1571 Field Training Officer 2 Units*Prerequisite: PSTC 1200 with a grade of "C" or better**Hours: 40 hours LEC*

This course is designed for newly assigned personnel whose responsibility is to train law enforcement officers. Topics include liability issues, remediation strategies, adult learning concepts, evaluations and Field Training Officer and trainee relationships. Pass/No Pass only.

PSTC 1572 Field Training Officer – Update 1.25 Units*Prerequisite: PSTC 1571**Hours: 24 hours LEC*

This course is designed to update field training officers on new training methods, new policing methods and legal liabilities. Topics include academy update, remediation methodologies, tactical communications, adult learning theories, ethics, liability and supervision. Pass/No Pass only.

**PSTC 1573 Field Training Program
Supervisor, Administrator,
Coordinator Course 1.25 Units**

*Prerequisite: PSTC 1200 with a grade of "C" or better
Hours: 24 hours LEC*

This course is designed for personnel responsible for administering their agency's Field Training Program. Topics include POST approved Field Training Program and manual, managing a training program, documentation and legal liability. This course is accredited by Commission on Peace Officer Standards and Training (POST) with POST Certification #2970-2954. Pass/No Pass only.

**PSTC 1581 Volunteers in Partnership
with the Sheriff – Module A 1 Unit**

Hours: 26 hours LEC

This course is designed as an entry level course for individuals who desire to work for law enforcement in a volunteer capacity. Topics include peer support, basic law, scams and frauds, crime prevention and report writing. Pass/No Pass only.

PSTC 1582 VIPS Academy – Module B 1 Unit

*Prerequisite: PSTC 1581
Hours: 25 hours LEC*

This course is designed as the second of two courses to assist citizen volunteers to better understand the various aspects of the law enforcement community. Topics include traffic control, explosives, radio procedures, drugs and search and rescue techniques. Pass/No Pass only.

**PSTC 1584 Life Skills – Power Program –
Sac Sheriff 1 Unit**

Hours: 26 hours LEC

This course is designed to assist those who have a criminal background in developing life skills. Course topics include Domestic Violence, Substance Abuse, Identifying Drug Problems, Anger Management, and Communication Techniques. Pass/No Pass only.

**PSTC 1585 Employment Training –
Power Program – SSD 1 Unit**

Hours: 26 hours LEC

This course is designed to prepare those who have a criminal background in seeking employment. Course topics include completing employment applications and resumes, navigating the job interview and job seeking skills. Pass/No Pass only.

PSTC 1586 Citizens Academy – SPD 1 Unit

Hours: 25 hours LEC; 11 hours LAB

This course provides participants with a comprehensive overview of the criminal justice system. The class meets once per week for two and a half hours over ten weeks. Topics include the role of the District Attorney, role of law enforcement and internal affairs, special challenges of prosecution, race as a factor in the criminal justice system, the federal criminal justice system, anatomy of a criminal case, the judicial system, community focus and gangs, building bridges and partnerships. Pass/No Pass only.

PSTC 1602 Weaponless Defense Instructor 1.5 Units

*Prerequisite: PSTC 1200 with a grade of "C" or better
Hours: 4 hours LEC; 76 hours LAB*

This course is designed for newly assigned Weaponless Defense Instructors or individuals who desire to teach weaponless defense in a law enforcement environment. Topics include defense and liability issues, instructor preparation techniques, control holds, take-down maneuvers, and ground fighting. This course is certified by Commission on Peace Officer Standards and Training (POST) and California Standards and Training for Corrections (STC). Pass/No Pass only.

**PSTC 1603 Weaponless Defense Instructor –
Advanced (Groundfighting) 1 Unit**

Prerequisite: PSTC 1602

Hours: 4 hours LEC; 36 hours LAB

This is an advanced course for Weaponless Defense Instructors. Topics include legal updates, ground control, take-downs, wall defenses, escapes, and sustained resistance techniques. This course is approved by Commission on Peace Officer Standards and Training (POST) and California Standards and Training for Corrections (STC). Pass/No Pass only.

**PSTC 1604 Weaponless Defense Instructor –
Update .5 Unit**

Prerequisite: PSTC 1602

Hours: 2 hours LEC; 22 hours LAB

This course provides Defensive Tactics Instructors updated information on contemporary tactics, teaching techniques, and legal issues. Topics include legal issues, control holds, take-downs, arrest tactics, searches, handcuffing, and ground control. Pass/No Pass only.

PSTC 1621 Impact Weapons Instructor 2.5 Units

*Prerequisite: PSTC 1200 with a grade of "C" or better
Hours: 29.5 hours LEC; 50.5 hours LAB*

This course is designed for the new Impact Weapons Instructor or one who desires to become an Impact Weapons Instructor. Topics include side handled baton, straight baton, long baton, short baton, yawara stick, expandable baton, and several additional impact weapons. This course is Commission on Peace Officer Standards and Training (POST) and California Standards and Training for Corrections (STC) approved. Pass/No Pass only.

**PSTC 1622 Impact Weapons Instructor –
Update .5 Units**

Prerequisite: PSTC 1621

Hours: 1 hours LEC; 15 hours LAB

This course provides Impact Weapons Instructors with updated knowledge in the use of force and legal issues. Topics include review of baton use, striking techniques, and liability updates. Pass/No Pass only.

**PSTC 1625 Arrest Control and
Baton Instructor - SPD 3 Units**

Hours: 36 hours LEC; 44 hours LAB

This course provides law enforcement officers with the skills necessary to be certified as arrest control and baton instructors. Topics include principles of arrest control, legal issues, search fundamentals, handcuffing techniques and application, ground-fighting techniques, carotid control hold, and pugilistics. Pass/No Pass only.

PSTC 1640 Firearms Familiarization (PC 832) 1 Unit*Hours: 19 hours LEC; 5 hours LAB*

This course is designed to comply with California Penal Code 832 as well as requirements by Commission on Peace Officer Standards and Training (POST). This course is approved by POST. This course is a basic introduction to the legal aspects of shooting and safety. Topics include handgun familiarization, safety, shooting principles and live fire exercises. Pass/No Pass only.

PSTC 1645 Force and Weaponry – Basic 1.5 Units*Prerequisite: PSTC 1200**Hours: 24 hours LEC; 16 hours LAB*

This course is designed for field officers who are required to carry firearms in the performance of their duties. Topics include day and night shooting, use of force, firearms safety, principles of weaponless defense, and tactical reloading. Pass/No Pass only.

PSTC 1646 Force and Weaponry – Advanced 1 Unit*Prerequisite: PSTC 1645**Hours: 12 hours LEC; 12 hours LAB*

This course is designed as an update for armed probation officers. Topics include legal issues, shoot/don't shoot, weapon retention, arrest and control, and weapon malfunctions. Pass/No Pass only.

PSTC 1648 Firearms Tactical Rifle SSD .75 Unit*Prerequisite: PSTC 1200**Hours: 7 hours LEC; 17 hours LAB*

This course is designed to teach patrol officers the assembly, practical application of firearms skills and the legal aspects of the tactical rifle. This course is formerly known as SCSD 1221. Pass/No Pass only.

PSTC 1650 Firearms Instructor 3.5 Units*Prerequisite: PSTC 1200**Hours: 48 hours LEC; 32 hours LAB*

This course is designed to teach students to be firearms instructors within the law enforcement field. Topics include fundamentals of instruction, liability, assessing shooting problems and target analysis, standard and non-traditional shooting positions, weapons transition, movement to cover and partner communication. Pass/No Pass only.

PSTC 1651 Firearms Instructor Update .5 Units*Prerequisite: PSTC 1158 with a grade of "C" or better**Hours: 2 hours LEC; 22 hours LAB*

This course is designed to further develop and update existing firearm instructors. Topics include instructional techniques, diagnostic interpretation, and target systems. This course is accredited by the Commission on Peace Officer Standards and Training (POST) with POST Certification #297021740 and the Standards and Training with Correction (STC) Program #0218-027422. This course is formerly known as PSTC 1258. Pass/No Pass only.

PSTC 1653 Firearms Instructor – Long Rifle 1.5 Units*Prerequisite: PSTC 1200; Completion of a POST; STC Basic Academy**Hours: 29 hours LEC; 11 hours LAB*

This course is designed for the law enforcement instructor responsible for training in-service personnel on the use of a long rifle in day to day duties. Topics include safety protocol, liability, nomenclature, weapon employment and practical exercises. Because this course is designed to provide practical hands-on training in police tactics and weapon usage, participants in this course will engage in activities and exercises that include a risk of injury. Pass/No Pass only.

PSTC 1654 Firearms / Rifle Instructor – Update .5 Units*Prerequisite: PSTC 1200; Firearms Instructor PSTC 1650 or Firearms Instructor - Long Rifle PSTC 1653**Hours: 2 hours LEC; 22 hours LAB*

This course provides the law enforcement firearms instructor with contemporary information on legal issues, liability issues, updated training techniques and skills assessment in the use of the short barreled patrol rifle. Topics include instructional techniques, close-quarter combat and active shooter techniques, maintenance, and deployment shooting techniques. Pass/No Pass only.

PSTC 1660 Public Safety Dispatcher – Basic (SPD) 6 Units*Hours: 105 hours LEC; 15 hours LAB*

This course is designed to introduce new dispatchers to the basic requirements of first responder dispatching. This course fulfills the requirement by Commission on Standards and Training for Peace Officers (POST). Topics include telephone procedures, radio procedures, stress management, criminal justice system and law. Pass/No Pass only.

PSTC 1661 Public Safety Dispatcher – Advanced (SPD) 8 Units*Prerequisite: PSTC 1660**Hours: 151 hours LEC; 129 hours LAB*

This course is designed for the public safety dispatcher who has successfully completed Public Safety Dispatcher - Basic. Topics include local geography, data bases, officer safety, system inquiries, telephone systems and practical exercises. Pass/No Pass only.

PSTC 1663 SPD Communications Training Program (CTP) 2 Units*Prerequisite: PSTC 1200 with a grade of "C" or better; Completion of a POST Law Enforcement Basic or Dispatcher's Academy**Hours: 34 hours LEC; 6 hours LAB*

This course is designed to instruct dispatchers on the techniques for training newly assigned personnel to a communications center. Topics include leadership, training models, adult learning theories and practical exercises. Pass/No Pass only.

PSTC 1671 Automated Field Reporting (AFR) .25 Units*Prerequisite: PSTC 1200 with a grade of "C" or better; Completion of a POST Basic Academy or Dispatcher's basic training program**Hours: 1 hours LEC; 19 hours LAB*

This course is designed to provide training and orientation to law enforcement records management system. Topics include Introduction to records management, tracking, data screens and terminology. Pass/No Pass only.

PSTC 1683 Continuing Professional Training for Peace Officers .25-1.5 Units*Prerequisite: PSTC 1200 with a grade of "C" or better**Hours: 4-40 hours LEC; 0-40 hours LAB*

This course consists of required modules for techniques and perishable skills required by law. Topics include laws of arrest, search and seizure, first aid and CPR, firearms, defensive tactics, illegal drugs, officer safety, civil liability, ethics, communications skills, interview and interrogation, investigations, crime scene processing, report writing and current law enforcement topics. This course is formerly known as SCSD 1150. Pass/No Pass only.

PSTC 1684 Continued Professional Training – Sacramento Police Department .25-2.5 Units

Prerequisite: PSTC 1200

Hours: 4-40 hours LEC; 0-36 hours LAB

This course provides practical knowledge and skill-building tools to enhance the student's competencies for interacting with increasingly diverse communities and agency personnel. Topics include legal update, interpersonal/tactical communication, first aid/cpr update, arrest and control update, and firearms update. This course is formerly known as SPD 1193. Pass/No Pass only.

PSTC 1695 Media for the Public Information Officer or Public Affairs Officer 2 Units

Hours: 40 hours LEC

This course is designed for the new Public Information Officer, Public Affairs Officer or individual whose responsibility it is to work with the media. Topics include legal issues, issue management, crisis and incident management, media management, interview training and writing for the media. Pass/No Pass only.

PSTC 1710 Special Weapons and Tactics (SWAT) 2 Units

Prerequisite: PSTC 1200 with a grade of "C" or better

Hours: 14 hours LEC; 66 hours LAB

This course is designed for the officer newly assigned to the Special Weapons and Tactics (SWAT) team. Topics include tactical entries, utilizing assault weapons, barricaded subjects and tactical rescues. The course is presented in an educational partnership with the Sacramento Sheriff's Department (SSD) and the Federal Bureau of Investigation (FBI). This course is accredited by the Commission on Peace Officer Standards and Training (POST) with POST Certification #9680-23000 (FBI) and # 2310-23000 (SSD). This course is formerly known as SCSD 1132. Pass/No Pass only.

PSTC 1713 Special Weapons and Tactics – Commander 1.5 Units

Prerequisite: PSTC 1200 with a grade of "C" or better

Hours: 20 hours LEC; 30 hours LAB

This course is designed for supervisors or command staff assigned responsibility for a SWAT unit. Topics include tactical entries, utilizing assault weapons, barricaded subjects and conducting tactical rescues. This course is formerly known as SCSD 1232. Pass/No Pass only.

PSTC 1715 Tactical Casualty Care 1-1.25 Units

Hours: 16-24 hours LEC

This course is designed for law enforcement personnel who routinely work in high risk tactical environments or situations where traditional emergency medical support (EMS) is not routinely available. Emphasis is placed on basic trauma life support provision while in a tactical environment, self and buddy aid, hemorrhage control, use of tourniquets, advanced hemostatic dressings, basic airway support, medical management of blast injuries, environmental injuries, mass casualty incidents, and practical skills/scenario based training. Pass/No Pass only.

PSTC 1717 Basic Crisis Negotiation – FBI 2 Units

Prerequisite: PSTC 1200

Hours: 40 hours LEC

This course provides students the basic theory to peacefully resolve hostage, barricaded, and/or suicide situations through use of active listening, assessment, and other appropriate negotiating techniques. Pass/No Pass only.

PSTC 1720 Defensive Driving .25-.5 Units

Hours: 2-3 hours LEC; 6-13 hours LAB

This course is designed to enhance the driving skills of public employees, sworn and non-sworn personnel, who are required to drive motor vehicle in the performance of their duties. Pass/No Pass only.

PSTC 1722 Driver Training – Update .5 Units

Prerequisite: PSTC 1200 with a grade of "C" or better

Hours: 6 hours LEC; 12 hours LAB

This course is designed for law enforcement personnel to update them on new laws and refresh their driving skills. This is a Commission on Peace Officer Standards and Training (POST) mandate. Pass/No Pass only.

PSTC 1729 Emergency Vehicle Operations Instructor (SSD/SPD) 1 Unit

Prerequisite: PSTC 1200; Completion of a Commission on Peace Officer Standards and Training (POST) Basic Academy

Hours: 12 hours LEC; 28 hours LAB

This course provides information and resources to start an emergency vehicle operations course, develop instructional lesson plans, and day to day operational issues. Topics include starting an Emergency Vehicle Operations Course program, Emergency Response, Pursuit Driving, and Civil Liability. Pass/No Pass only.

PSTC 1734 Basic K9 Training 7 Units

Hours: 8 hours LEC; 372 hours LAB

This course is designed to provide officers with skills and knowledge in all areas of canine (K9) training and deployment. Topics include home care, kenneling, obedience, narcotics, obstacles, control work, area search, bite work, canine behavior, gunfire, building search, tracking, socialization, call-outs, call-offs, multiple agitators, and vehicle deployments. Pass/No Pass only.

PSTC 1749 Survival and Tactics – SPD 1 Unit

Prerequisite: PSTC 1200 with a grade of "C" or better

Hours: 8 hours LEC; 32 hours LAB

This course is designed to instruct emergency personnel in the most current methods of firearms, field tactics and combative confrontations. Topics include officer survival techniques, handgun retention techniques, and defensive tactics. Pass/No Pass only.

PSTC 1760 Basic Crime Prevention 2 Units

Hours: 40 hours LEC

This course is a one week (40 Hour) course designed to prepare the student for the task of entry level community and crime prevention services usually found in law enforcement agencies. Topics include physical hardware, alarm applications, use of environmental design, security surveys, community support and program evaluation. Pass/No Pass only.

PSTC 1761 Crime Prevention Through Environmental Design 2 Units

Hours: 40 hours LEC

This course is designed for crime prevention personnel and city and county planners dealing with environmental designs. Topics include reviewing new construction submittals and its impact on law enforcement, community policing, problem solving and theory and process. Pass/No Pass only.

PSTC 1763 High Rise Policing and Crime Prevention through Environmental Design 2 Units

Prerequisite: PSTC 1200
Hours: 40 hours LEC

This course provides participants with an awareness of the specific and unique considerations for designing high rise structures relative to preparing for, preventing, and responding to high rise incidents. Topics include infrastructure protection, critical assessment and management, crime prevention, physical security, mass evacuations and terror mitigation. Pass/No Pass only.

PSTC 1768 Community Oriented Policing 1 Unit

Prerequisite: PSTC 1200
Hours: 24 hours LEC

This course is for new personnel assigned to work within Community Oriented Policing Programs (COPPS) and/or Problem Oriented Policing Program (POPPS). Topics include introduction to COPPS and POPPS, problem solving, facilitating community meetings, politics and Section 8 housing. Pass/No Pass only.

PSTC 1771 Faith in Crisis 1.5 Units

Hours: 24 hours LEC

This course provides volunteer crisis responders with the basic knowledge needed to provide appropriate support for survivors of violent crimes and critical incidents. Topics include local program background, structure, and code of ethics; operational procedures for local public safety agencies; local resources and referral agencies; occupational health, safety, and first aid; and mandated reporting requirements. Pass/No Pass only.

PSTC 1773 Basic Critical Incident Stress Management 1 Unit

Hours: 18 hours LEC

This course examines a wide range of crisis intervention services, including pre-incident and post-incident crisis education, significant support services, crisis intervention for individuals, demobilizations after large-scale traumatic incidents, small group diffusing, and the group intervention known as Critical Incident Stress Debriefing (CISD). Pass/No Pass Only.

PSTC 1778 Interpersonal and Tactical Communications: Train the Trainer 1 Unit

Prerequisite: PSTC 1200
Hours: 24 hours LEC

This course is designed for the individual who is assigned to or intends to teach Interpersonal and Tactical Communications. Topics include elements of communication, persuasion techniques, questioning techniques, adult learning concepts and lesson planning. Pass/No Pass only.

PSTC 1781 School Resource Officer 2 Units

Prerequisite: PSTC 1200
Hours: 40 hours LEC

This course is designed for the officer assigned or newly assigned as a school resource officer. Topics include school law, mentoring, basic teaching skills, instructional techniques and constructing a course outline. Pass/No Pass only.

PSTC 1783 Campus Supervisor 2 Units

Hours: 32 hours LEC; 8 hours LAB

This course is designed to provide skills and knowledge to school security officers, guards, campus monitors, or campus officers employed by a school district. Topics include roles and responsibilities, liability issues, security awareness, bullying, conflict resolution, cultural diversity, violence mitigation, substance abuse, and student behavior. Pass/No Pass only.

PSTC 1787 School Security Officer 1 Unit

Hours: 24 hours LEC

This course is designed for security officers and guards (watch-person, campus monitor, campus officer) employed by a school district (K-12 or California Community College) for more than 20 hours per week. Topics include roles and responsibilities, liability issues, conflict resolution and student behavior. This course is approved by Department of Consumer Affairs/Bureau of Security and Investigative Services, and the California Commission on Peace Officers Standards and Training (POST). Pass/No Pass only.

PSTC 1800 Interview and Interrogation Techniques 2 Units

Prerequisite: PSTC 1200
Hours: 40 hours LEC

This course is designed to teach law enforcement officers the legal and behavioral techniques of interview and interrogation. Topics include court preparation, polygraphs, predictable behavior and the Ten Step Plan. Pass/No Pass only.

PSTC 1801 Background Investigations 1.5-2 Units

Prerequisite: PSTC 1200
Hours: 32-40 hours LEC

This course is designed for law enforcement or civilian personnel who are responsible for conducting background investigations for the hiring of public safety personnel. Topics include the background process, psychological evaluations, interviewing techniques and documentation. This course is approved by the California Commission on Peace Officer Standards and Training (POST) and California Standards and Training for Corrections (STC). Pass/No Pass only.

PSTC 1803 Criminal Investigation Course (Non-ICI) 4 Units

Prerequisite: PSTC 1200 with a grade of "C" or better
Hours: 72 hours LEC; 12 hours LAB

This is an intensive two-week (84 hour) core course designed to prepare the student for the task of conducting criminal investigations within a law enforcement agency. Topics include evidence, interviewing techniques, search and seizure, search warrants, working with victims and witnesses, managing informants, information sources, case preparation, courtroom testimony, media relations, and surveillance techniques. Pass/No Pass only.

PSTC 1806 Crime Analysis 1.5 Units

Hours: 32 hours LEC

This course is designed for the newly hired, promoted, or assigned crime analyst and/or supervisor responsible for law enforcement crime analysis functions with an agency. Topics include building a crime analysis unit, staffing, data collection and information dissemination. Pass/No Pass only.

PSTC 1812 Fingerprint Identification – Basic 2 Units

Hours: 40 hours LEC

This course is designed to provide basic instruction in fingerprint comparison and identification. Topics include ridge characteristics, basic pattern types, classifications and verifications. Pass/No Pass only.

PSTC 1813 Crime Scene and Forensic Photography of Physical Evidence 1.25 Units

Hours: 24 hours LEC

This course provides law enforcement officers and crime scene investigators the skills necessary to conduct forensic photography of physical evidence as well as conduct general crime scene photography. Topics include legal admissibility, photographic coverage, major crime scene photography, film speed, lighting techniques, and photographic equipment. Pass/No Pass only.

PSTC 1820 Crime Scene Investigation – Basic 2 Units

Prerequisite: PSTC 1200 with a grade of “C” or better; Concepts, training and skills developed in the POST Basic Law Enforcement Academy are built upon in this course. Likelihood of success is minimal without this initial training.

Hours: 30 hours LEC; 30 hours LAB

This course is designed for the newly assigned CSI investigator who is responsible for conducting crime scene investigations. Topics include evidence integrity, documentation, evidence recognition and preservation, firearms study, latent prints and evidence handling and storage. Pass/No Pass only

PSTC 1821 Latent Print Development Techniques – Advanced 2 Units

Hours: 40 hours LEC

This course provides the crime scene investigator or fingerprint technician advanced training in finding, developing, recovering, comparing, and documenting latent fingerprint evidence. Topics include pattern recognition, lifting procedures, comparison techniques, chemical development of latent prints, courtroom presentation, and safety considerations. Pass/No Pass only.

PSTC 1852 Drug and Alcohol Recognition 1 Unit

Prerequisite: PSTC 1200

Hours: 24 hours LEC

This course provides law enforcement personnel with the knowledge and skills to evaluate the effects of drugs and alcohol on an individual and to provide expert testimony on the evaluation. Topics include legal codes, stimulants and depressants, investigative techniques and courtroom testimony. Pass/No Pass only.

PSTC 1854 Drug Recognition Evaluator Course 3 Units

Hours: 64 hours LEC; 8 hours LAB

This course provides law enforcement personnel with the knowledge and skills to evaluate and provide expert testimony on the effects of drugs and alcohol. Topics include psychophysical tests, eye examinations, alcohol workshop, signs and symptoms, drugs in society, vehicle operation, drug classification process and procedures, nystagmus, convergence, pupil size and reaction to light, physiology and drugs, depressants, stimulants, physician’s desk reference, hallucinogens, dissociative anesthetics, narcotic analgesics, inhalants, cannabis, report writing, curriculum vitae, and case preparation and testimony. Pass/No Pass only.

PSTC 1870 Disaster Preparedness 1.25 Units

Prerequisite: PSTC 1200

Hours: 19 hours LEC; 12 hours LAB

This course prepares officers to respond to a disaster and take the necessary steps to minimize loss of life and property. Topics include floods, hazardous materials, transportation disasters, wildfires, earthquakes, national security, and critical incidents. This course is formerly known as SCSD 1209. Pass/No Pass only.

PSTC 1874 Traffic Collision Investigation – Intermediate 2 Units

Prerequisite: PSTC 1900

Hours: 40 hours LEC

This course is designed to expand the investigative knowledge and skills of the traffic collision investigator. Topics include definitions and terminologies associated with minor and major collisions, measuring and diagramming the collision scene and speed computation. Pass/No Pass only.

PSTC 1878 Probation Officer Core Course 9 Units

Hours: 156 hours LEC; 40 hours LAB

This course is designed for entry-level positions in the probation officer field. Topics include criminal justice system, legal foundations, terminology, codes, statutes, case law, indicators of psychological problems, gangs, interviews, court reports, and report writing. This course meets or exceeds minimum standards set by Standards and Training for Corrections (STC). Pass/No Pass only.

PSTC 1879 Adult Correctional Officer Core Course 5 Units

Hours: 151 hours LEC; 28.5 hours LAB

This course is designed for entry level positions in the adult corrections field. Topics include criminal procedure, interviewing and counseling techniques, defensive tactics, public relations, oral and written communications, classifications and housing of inmates, court testimony and indicators of psychological problems. This course meets or exceeds Standards and Training for Corrections’ minimum training requirements for entry level adult corrections officers. This course is formerly known as SCSD 1139. Pass/No Pass only.

PSTC 1900 Traffic Collision – Basic 2 Units

Prerequisite: PSTC 1200

Hours: 40 hours LEC

This course is designed for officers who must investigate traffic collisions. Topics include collision related law, skid marks/tire marks, scene management, railroad collisions, hit and run investigations, and traffic collision report writing. Pass/No Pass only.

PSTC 1902 Traffic Accident Reconstruction 3 Units

Hours: 72 hours LEC; 8 hours LAB

This course provides law enforcement personnel with the knowledge and skills to determine at-impact speeds of collision involved vehicles and draw conclusions as to how and why the collision occurred. Topics include math and physics review, reconstruction principles, crush analysis, conservation of momentum analysis, heavy duty and articulated vehicles, motorcycle collision, vehicle vs. pedestrian and bicycle collision analysis. Pass/No Pass only.

PSTC 1904 LIDAR Operator Course .5 Units

Hours: 9 hours LEC

This course covers the legal and technical use of light distance and ranging speed enforcement (LIDAR). It includes the history of LIDAR, applicable case law, and visual speed determination skills. May be taken two times for credit. Pass/No Pass only.

PSTC 1999 Experimental Offering in PSTC .5-4 Units

Prerequisite: Completion of a POST/CPOST/STC Basic Academy.

Hours: 9-108 hours LEC; 0-40 hours LAB

This course provides mandated content required by POST, STC, CPOST or legislation. Additionally, the content is tailored for each agency to meet local needs. Credit/No Credit only.

Sacramento County Sheriff's Department

SCSD 1146 Bicycle Patrol 1 Unit

Prerequisite: SCSD 1100.
Hours: 10 hours LEC; 22 hours LAB

This course is designed to familiarize the new Bicycle Patrol Officer with the selection of equipment, maintenance programs, riding techniques and bike patrol techniques. Credit/No Credit only.

SCSD 1147 Bicycle Instructor 1 Unit

Prerequisite: SCSD 1100, 1146.
Hours: 7 hours LEC; 33 hours LAB

A POST course designed to teach accomplished bicycle patrol officers how to design and teach a Bicycle Patrol course. The course reviews basic techniques and focuses on development of training the student to teach others this unique skill.

SCSD 1214 Peer Support for Law Enforcement .5 Unit

Hours: 10 hours LEC; 14 hours LAB

This course introduces the basic skills necessary to perform as a peer support person for law enforcement personnel and their families. Topics covered include role of EAP, chaplaincy, psychologist, dealing with depression, burnout, suicide, expectations of and skills needed for peer support, and referral resources. Credit/No Credit only.

Sacramento Police Department

SPD 1182 Radar Operator – Police 1.5 Units

Prerequisite: Completion of a POST/CPOST/STC basic academy.
Hours: 16 hours LEC; 16 hours LAB

This course will train law enforcement officers in the proper use of police radar devices. Topics include speed enforcement, history and theory, vehicle code law and court decisions, moving radar operation, radar effects, visual speed and range estimation. Credit/No credit.

SPD 1193 Continuing Professional Training for Peace Officers .25-2 Units

Prerequisite: Completion of a POST/STC/CPOST Academy.
Hours: 4-40 hours LEC; 0-40 hours LAB

This course consists of required modules of techniques and perishable skills required by law. Topics include laws of arrest, search and seizure, first aid and CPR, firearms, defensive tactics, illegal drugs, officer safety, civil liability, ethics, communication skills, interview and interrogation, investigations, crime scene processing, report writing, and current topics. Per California Code of Regulations, Title 5 and Title 11, this course may be taken multiple times for credit. Credit/No Credit only.

SPD 1195 Less Lethal Force Update .5 Units

Prerequisite: Completion from a POST/CPOST or STC basic academy.
Hours: 12 hours LEC; 6 hours LAB

This update course in Lethal Force will enhance the knowledge of personal safety and effectiveness of the officer assigned to patrol. Topics include pepper spray, use of baton and carotid holds. Credit/No Credit only.

SPD 1217 Patrol Entry and Search Training .25 Units

Prerequisite: Completion of POST/CPOST/STC basic academy.
Hours: 2 hours LEC; 6 hours LAB

This update course provides current information in the various aspects of patrol entry and search techniques. Topics include firearms handling, entry techniques, room clearing, three man bump, and team composition. Credit/No Credit only.

SPD 1237 Integrated Narcotics Training 2 Units

Prerequisite: Completion of a POST/CPOST/STC basic academy.
Hours: 24 hours LEC; 16 hours LAB

This course provides uniformed and plainclothes officers with specialized narcotics related training. Topics include ethics and integrity, surveillance techniques, undercover operations, and asset seizure. Credit/No Credit only.

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

Students earning this degree are on the pathway to work in the following fields: real estate salesperson, real estate broker, 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)	

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.

See losrios.edu/gainful-emp-info/gedt.php?major=011223C01 for Gainful Employment Disclosure.

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)	
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 295 Independent Studies in Real Estate 1-3 Units

Hours: 54-162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

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: 62 hours LEC

This course covers entry-level education in the real estate appraisal field, concentrating on the appraisal of single-family residences (real property). It covers Basic Appraisal Principles (30 Hours) and Basic Appraisal Procedures (30 Hours) pursuant to the Appraiser Qualifications Board's (AQB) Real Property Appraiser Qualification Criteria (effective January 1, 2008). This course is designed to meet the California Bureau of Real Estate Appraisers (BREA) requirements for Basic Education (60 Hours). It also meets the California Bureau of Real Estate (BRE) college-level educational requirements (3 semester units) for the salesperson and broker examinations.

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

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 Bureau of Real Estate broker's examination.

RE 495 Independent Studies in Real Estate 1-3 Units

Course Transferable to CSU

Hours: 54-162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

Area: Kinesiology & Athletics
 Dean: Greg Warzecka
 Phone: (916) 484-8201
 Counseling: (916) 484-8572

Degree: A.A. - Recreation

Recreation 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 an integral part of the recreation and leisure services market.

<u>Requirements for Degree</u>	<u>20 Units</u>
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)	
RECR 300 Introduction to Recreation and Leisure Services	3
RECR 310 Outdoor Recreation	3
RECR 320 Recreation Activity Leadership.....	3
SPEECH 301 Public Speaking (3).....	3
or SPEECH 331 Group Discussion (3)	
A minimum of 2 units from the following:	2
RECR 498 Work Experience in Recreation (1 - 4)	

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 covers recreation as a form of community service, as well as the nature, scope, and significance of leisure and recreation as a social force in contemporary society. It emphasizes the role of the professional leader in organizing recreation programs and services, operations, facilities, and resources. Field trips may be required.

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

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

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 is placed on the role of the face-to-face leader in organizing recreational programs in a variety of settings. Field trips are required.

RECR 498 Work Experience in Recreation 1-4 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position, or job related to recreation with a cooperating site supervisor. Students are advised to consult with the Physical Education Department faculty to review specific certificate and degree work experience requirements.

General Education: AA/AS Area III(b)
Course Transferable to CSU
Hours: 60-300 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 Title 5 required forms which document the student's progress and hours spent at the work site, and developing workplace skills and competencies. During the semester, the student is required to 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. First-time participants are required to attend a weekly orientation and a final meeting. Returning participants are required to attend the first class meeting, a mid-semester meeting, and a final meeting and may meet individually with the instructor as needed to complete a work site observation and all program forms, receive updates, and assignments. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Area: Health and Education
 Dean: Dr. Steven Boyd
 Coordinator: Lisa Hunsaker Ilaga
 Phone: (916) 484-8670 or (916) 484-8902
 Counseling: (916) 484-8572

Degree: A.S. - Respiratory Care

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 Advanced Registered Respiratory Therapist level. It focuses on diagnostic procedures, treatment, and management of patients with conditions affecting the cardiopulmonary system. Course work includes physical assessment, medical gas therapies, mechanical life support, airway care, pharmacology, neonatal/pediatric therapy, and specialized cardiopulmonary procedures. All degree major courses require a grade of "C" or better to remain in the program.

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: www.arc.losrios.edu/Programs_of_Study/Health_and_Education/Respiratory_Care.htm You can also reach program coordinator Lisa Hunsaker Ilaga by email at: IlagaL@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, and medical equipment supply companies.

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.
- A GPA of 2.5 in all prerequisite courses.
- AH 110 with a grade of "C" or better.
- BIOL 430 and BIOL 431 with grades of "C" or better.
- BIOL 440 or BIOL 442 with a grade of "C" or better.
- PHYS 310 or PHYS 350 with a grade of "C" or better.
- Current college GPA of 2.0 or better.
- A Curriculum Planning Summary Sheet completed by an ARC counselor and dated within the year the enrollment application packet is submitted.
- A completed pre-enrollment application.

Enrollment Process

Eligible students are selected for the program according to the following steps:

- Applications to the program may be obtained online at http://www.arc.losrios.edu/Programs_of_Study/Health_and_Education/Respiratory_Care.htm and are due in the Health and Education office no later than 4:00 p.m. the second Friday in October.
- Only students who meet the pre-enrollment requirements and follow the pre-enrollment procedures will be considered for the program.
- Selection is based on a computerized random selection process from among the qualified applicants.
- The student accepted into the Respiratory Care program is required to have a physical examination, inoculations, drug screen, background check, and malpractice insurance. The student is responsible for any cost incurred related to meeting the requirements.

(continued on next page)

(Respiratory Care Degree continued)

Requirements for Degree	68-69 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)	4-5
or BIOL 442 General Microbiology and Public Health (5)	
PHYS 310 Conceptual Physics (3).....	3-4
or PHYS 350 General Physics (4)	
1st Semester:	
RC 110 Cardiopulmonary Pathologies for Respiratory Care.....	3
RC 111 Principles of Respiratory Care.....	7
2nd Semester:	
RC 121 Concepts of Airway Care & Mechanical Ventilation	4
RC 122 Airway Care & Mechanical Ventilation Laboratory.....	1
RC 123 Clinical Externship I	3
RC 124 Respiratory Care Pharmacology	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
Any Semester:	
A minimum of 3 units from the following:	3
ENGWR 300 College Composition (3)	
ENGWR 480 Honors College Composition (3)	
ESLW 340 Advanced Composition (4)	
A minimum of 3 units from the following:	3
ANTH 310 Cultural Anthropology (3)	
ANTH 481 Honors Cultural Anthropology (3)	
PSYC 300 General Principles (3)	
PSYC 320 Social Psychology (3)	
PSYC 390 Psychology of Death and Dying (3)	
PSYC 480 Honors General Principles (3)	

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 Principles of Respiratory Care 7 Units

Corequisite: RC 110
Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
Enrollment Limitation: Acceptance into the Respiratory Care Program.
Hours: 108 hours LEC; 54 hours LAB

This course introduces critical thinking skills necessary for entry into clinical practice in respiratory care. It includes a comprehensive overview of the cardiopulmonary system with emphasis on applied physiology. Additionally, it covers ventilation, gas transport, gas exchange, and acid-base balance, including interpretation of data and the relationship of therapeutics to physiological principles. Respiratory care equipment, patient assessment skills, safe practices, such as the Health Insurance Portability and Accountability Act (HIPAA), human rights and privacy, personal health and hygiene, and hospital orientations are introduced. This course is preparation for general practice as a respiratory care practitioner. It covers laboratory skills and procedures with emphasis on the application of theories and techniques related to assessment, evaluation, and interpretation of patients with cardiopulmonary illness. Included are concepts of Basic Life Support. Field trips may be required.

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 124 Respiratory Care Pharmacology 3 Units

Prerequisite: RC 110 and 111 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 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, polysomnography, 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: 18¹

Physical Science Courses:

ASTR	300, 310, 320, 330, 400, 481, 495, 499
CHEM	305, 306, 309, 310, 311, 400, 401, 420, 421, 423, 495, 499
GEOG	300, 301, 305, 306, 307, 308, 309, 390, 495, 499
GEOL	300, 301, 305, 306, 310, 311, 320, 325, 330, 331, 342, 345, 390, 495, 499
PHYS	310, 311, 312, 350, 360, 410, 421, 431, 495, 499
PS	300, 301, 495, 499

Biological Science Courses:

ANTH	300, 301, 303, 370, 372, 480, 495, 499
BIOL	300, 301, 303, 305, 310, 322, 332, 342, 352, 370, 390, 400, 410, 415, 420, 430, 431, 440, 442, 482, 490, 491, 495, 499
BIOT	301, 305, 307, 308, 311, 312, 499
NATR	300, 302, 303, 304, 305, 306, 307, 310, 320, 322, 330, 332, 340, 346, 495, 499
PSYC	310, 311, 495, 499

¹must be transfer-level and must include one laboratory course in a physical science and one laboratory course in a biological science

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

Sign Language Studies – *new program titles*

see Deaf Culture & ASL Studies, pg. 203

see ASL-English Interpreter Preparation, pg. 143

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

Degree: A.A. - Social Science
 A.A. - International Studies

DEGREES

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

IS 305 Introduction to Middle East Studies 3 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
General Education: AA/AS Area V(b) (effective Summer 2015); AA/AS Area VI (effective Summer 2015)
Course Transferable to CSU
Hours: 54 hours LEC

This course introduces the contemporary Middle East from a variety of disciplinary perspectives. It covers the major developments and events that have shaped the socio-economic and political institutions and structures within a distinct geopolitical area. It examines processes of state formation, colonialism, independence, major power players in the region, and the modern challenges of globalization. It also covers the consequence for foreign policy. Countries may include but are not limited to: Algeria, Egypt, Iran, Iraq, Israel, Jordan, Lebanon, Libya, Palestine, Saudi Arabia, Syria, and Tunisia. Increasing exchange with, attention to, and interest in the Middle East due both to globalization and the events of 9/11 has created a need and a demand for a deeper, broader, and more comprehensive understanding of the Middle East. This course provides a foundation in Middle East Studies and a sense of current directions in the field.

IS 310 Peace and Conflict 3 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
General Education: AA/AS Area V(b); AA/AS Area VI (effective Summer 2015); CSU Area D7; IGETC Area 4G
Course Transferable to UC/CSU
Hours: 54 hours LEC

This course examines the political and socioeconomic causes and consequences of peace and conflict from different theoretical views. It also includes an analysis of inter- and intra-state conflicts and wars, terrorism, ethnic and sectarian conflicts, and gender issues and conflicts. Among topics discussed are the war theory, "negative peace," post-conflict reconciliation, policy recommendations and proposed solutions for conflict resolution, and achieving peace through the engagement of the international community. This course is formerly known as SOCSC 310.

IS 312 Current International Development Issues 3 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
General Education: AA/AS Area V(b) (effective Spring 2015); AA/AS Area VI (effective Summer 2015); CSU Area D7 (effective Spring 2015); IGETC Area 4G (effective Spring 2015)
Course Transferable to CSU
Hours: 54 hours LEC

This course covers current socio-economic and political issues in developing countries. It presents alternative theories pertaining to the causes and consequences of development, underdevelopment, and uneven development with a particular focus on the issues of globalization including political and social change. It includes proposed solutions to various development problems from various scientific perspectives. This course is formerly known as SOCSC 312.

Social Science

SOCSC 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.

SOCSC 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: Carlos Reyes
 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 that include social work, law, criminology, law enforcement, teaching, health services, urban planning and development, and research.

Requirements for Degree		18 Units
SOC 300	Introductory Sociology (3)	3
or SOC 480	Introductory Sociology - Honors (3)	
SOC 301	Social Problems	3
PSYC 330	Introductory Statistics for the Behavioral Sciences	3
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
ANTH 310	Cultural Anthropology (3)	
GEOG 310	Human Geography: Exploring Earth's Cultural Landscapes (3)	
PSYC 300	General Principles (3)	
or PSYC 480	Honors General Principles (3)	
PSYC 354	The Psychology of Family Life and Intimate Relationships in a Diverse Society (3)	
SOC 309	Self and Society (3)	
SOC 350	Sociology of Popular Culture (3)	

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. (C-ID SOCI 110)

SOC 301 Social Problems 3 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

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 contemporary social problems in the US within a theoretical and global context. It examines the role and the structure of power and ideology in shaping our understanding and approach to social problems. It includes a critical analysis of their causes, consequences as well as an evaluation of proposed solutions and methods of treatment. Attention is directed to poverty and inequality, race and gender inequalities, problems of the environment, unequal access to education as well as problems in the economic and political systems and the impact of globalization on these problems. (C-ID SOCI 115)

SOC 309 Self and Society 3 Units

Advisory: ENGWR 102 (Proficient Writing), and ENGRD 116 (Proficient Reading) OR ESLR 320 (Advanced Reading Skills through Literature) and ESLW 320 (Advanced Composition) with a grade of "C" or better.

General Education: AA/AS Area V(b); CSU Area D0; IGETC Area 4J
Course Transferable to UC/CSU

Hours: 54 hours LEC

This course introduces concepts, social theories, and methods used to analyze how the sense of self is created in everyday life. It explores various theories of the development of self, the nature of human behavior, the importance of language for perception and thought, and reality as a social construction. Additionally, it examines how the self emerges and is maintained through social interaction and our involvement in social relationships. It includes the study of social identity, roles, socialization, identity change, and emotions.

SOC 318 Introduction to Crime, Deviance, and Social Control 3 Units

General Education: AA/AS Area V(b); CSU Area D0; IGETC Area 4J
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. (C-ID SOCI 160)

SOC 320 Minorities in America 3 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

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. It employs basic sociological approaches to the study of race and ethnicity, with an emphasis on a comparative analysis of historical, social, and economic factors affecting intergroup and intragroup dynamics. Topics include prejudice, discrimination, racism, racial and ethnic stratification, assimilation patterns among groups, demographic shifts, civil rights, and other related topics. Field trips may be required. (C-ID SOCI 150)

SOC 325 Chicano Culture 3 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

General Education: AA/AS Area V(b); AA/AS Area VI (effective Summer 2015); CSU Area D0; IGETC Area 4J

Course Transferable to UC/CSU

Hours: 54 hours LEC

This course is an introduction to fundamental concepts, social theories, and methods used to understand and critically analyze the production, adaptation, and construction of Chicano identity and Chicano culture within the United States. It includes micro and macro sociological analysis of Chicano culture and its relationship to Chicano social identity, social inequality, and social change.

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. (C-ID SOCI 140)

SOC 350 Sociology of Popular Culture 3 Units

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.

SOC 480 Introductory Sociology – Honors 3 Units

Prerequisite: Placement into ENGWR 480 through the 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 provides an in-depth examination of society and human behavior from various sociological perspectives. Sociological theories, both macro and micro, are applied to different aspects of life including culture, social stratification and inequality, conflict and social change, and politics and economy. The class is conducted as a seminar in which students will be responsible for developing in-depth analysis and understanding of issues based on classical and contemporary sociological theories. This course is designed for those from all academic disciplines who are motivated to learn sociological perspectives and how they apply to all aspects of human experience both at the individual and societal levels. The honors section utilizes a rigorous and an intensive instructional methodology designed to challenge motivated students. (C-ID SOCI 110)

SOC 495 Independent Studies in Sociology 1-3 Units

Course Transferable to CSU

Hours: 54-162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

Area: Humanities
 Dean: Kate Jaques
 Phone: (916) 484-8653
 Counseling: (916) 484-8572

Degree: A.A. for Transfer - Communication Studies

 See:
 (Communication – Sacramento City College)
 (Communication Studies – Cosumnes River College and Folsom Lake College)

The number-one skill identified by employers is the ability to communicate clearly in both oral and written form. The number-two skill identified by employers is the ability to work effectively as a member of a group or team. Speech courses are vital to developing the communication skills necessary for personal and professional success.

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.

<u>Requirements for Degree</u>	<u>18 Units</u>
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:	3¹
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. (C-ID COMM 110)

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-recording equipment may be used as an aid for self-analysis and improvement.

SPEECH 311 Argumentation and Debate 3 Units

Advisory: ENGWR 300, ENGWR 480, 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. (C-ID COMM 120)

SPEECH 321 Interpersonal Communication 3 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
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 personal, social, and professional relationships. Effective communication strategies are discussed, practiced, and reflected upon both in and outside the classroom environment. (C-ID COMM 130)

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. (C-ID COMM 150)

SPEECH 331 Group Discussion 3 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
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 oral communication in task and social groups. Topics include communication concepts and behaviors in problem solving, decision making, leadership, conflict management, and group roles and norms. (C-ID COMM 140)

SPEECH 361 The Communication Experience 3 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.
General Education: AA/AS Area II(b); CSU Area A1; IGETC Area 1C
Course Transferable to UC/CSU
Hours: 54 hours LEC

This course provides an introduction to basic skills and concepts necessary for effective communication in a variety of contexts. Topics include effective listening, facilitation of interpersonal relationships, conflict resolution, media communication, practical group experience, and public speaking. (C-ID COMM 180)

SPEECH 495 Independent Studies in Speech 1-3 Units

Course Transferable to CSU
Hours: 54-162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

Area: Health & Education Degree: A.S. - Speech - Language Pathology Assistant
 Dean: Dr. Steven Boyd
 Coordinator: Kristina Zajic
 Phone: (916) 484-8702 or (916) 484-8902
 Counseling: (916) 484-8572

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
DEAF 310	American Sign Language I	4
ECE 312	Child Development (3)	3
or PSYC 372	Child Development (3)	
ECE 325	Positive Guidance Strategies with 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
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
SLPA 300	Introduction to Communication Disorders	3
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. A portion of this course may be offered in a TBA component of 162 hours which will include supervised fieldwork experience assisting with the clinical management of persons with communicative disorders. All fieldwork is done in specified off-campus locations.

SLPA 125 Strategies for Clinical Success 3 Units

Prerequisite: SLPA 110 with a grade of "C" or better
Advisory: MATH 24, 25, or 41
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 Development
 Dean: Manuel Perez
 Phone: (916) 484-8924
 Center for Leadership and Development:
 (916) 484-8471

Student Government

SGVT 300 Introduction to Student Government 2 Units

Course Transferable to CSU
Hours: 18 hours LEC; 54 hours LAB

This course provides a study of the legal, educational, and philosophical basis of student government and leadership studies. It may include travel to other campuses, area and state conferences, and it provides the opportunity to participate on faculty and administrative committees. Topics are designed to teach leadership skills and to give practical experience in the field of student government. This course is highly advised for those involved in student government. Field trips may be required.

SGVT 310 Leadership Development 3 Units

Course Transferable to CSU
Hours: 54 hours LEC

This course provides emerging and existing student leaders the opportunity to explore the concept of leadership and to develop and improve their leadership skills. It examines contemporary leadership models as well as personal values and beliefs that affect personal philosophy of leadership. This course provides opportunities to experience leadership in college and community settings. This course is highly advised for those involved in student government.

Area: English
 Dean: Vicky Maryatt, Interim
 Phone: (916) 484-8101
 Counseling: (916) 484-8572

Degree: A.A. for Transfer - Elementary Teacher Education

Elementary Teacher Education A.A. for Transfer Degree

The Associate in Elementary Teacher Education for Transfer provides a clearly articulated curricular track for students who wish to transfer to a CSU campus, while also serving the diverse needs of students interested in the breadth and depth of the field of Elementary Teacher Education. Additionally, this degree exposes students to the core principles and practices of the field in order to build a foundation for their future personal, academic, or vocational paths.

The Associate in Arts degree in Elementary Teacher Education for Transfer provides students with a major that fulfills the general requirements of the California State University for transfer. Students with this degree will receive priority admission with junior status to the California State University system. The Associate in Arts degree in Elementary Teacher Education for Transfer (AA-T) may be obtained by the completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program outlined below (earning a C or better in these courses) and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

Student Learning Outcomes

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

- apply the scientific method using inquiry, data collection, quantitative reasoning, and basic mathematical concepts to analyze results
- assess teaching practices and learning conditions through application of child development theories
- evaluate attitudes, actions, and behaviors indicative of a professional educator
- apply analytical reading and writing, research, and critical thinking essential for completing assigned tasks
- explain relationships and interactions between humans and the earth
- apply knowledge of world history and cultures to identify the values of a culture and work with others of diverse cultures
- analyze statistical data
- present information effectively to an intended audience
- compare and contrast various forms and styles of music, artworks, and theatrical performances

Career Opportunities

Public or private instructional assistant or classroom aide, grades K-8; private tutor; publishing and textbook salesperson; curriculum and test developer; teacher, grades K-12 with additional education.

Requirements for Degree		51 Units
BIOL 303	Survey of Biology (4).....	4
or BIOL 310	General Biology (4)	
ECE 312 Child	Development (3).....	3
or PSYC 372	Child Development (3)	
ENGED 324	Introduction to Elementary Teaching with Field Experience (3).....	3
or ECE 350	Introduction to Elementary Teaching with Field Experience (3)	
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)	
GEOG 320	World Regional Geography.....	3
GEOL 305	Earth Science.....	3
GEOL 306	Earth Science Laboratory.....	1
HIST 307	History of World Civilizations to 1500.....	3
HIST 310	History of the United States (3).....	3
or HIST 483	History of the United States - Honors (3)	
MATH 310	Mathematical Discovery.....	3
PS 300	Introduction to Physical Science.....	3
PS 301	Physical Science Laboratory.....	1
POLS 301	Introduction to Government: United States (3).....	3
or POLS 481	Introduction to Government: United States - Honors (3)	
SPEECH 301	Public Speaking.....	3
And a minimum of 3 units from the following:		3
ART 300	Drawing and Composition I (3)	
MUFHL 300	Introduction to Music (3)	
TA 300	Introduction to the Theatre (3)	
And a minimum of 6 units from the following:		6
ART 430	Art and Children (3)	
ECON 302	Principles of Macroeconomics (3)	
ENGED 305	Structure of English (3)	
ENGED 320	Service Learning: Tutoring Elementary Students in Reading (3)	
ENGWR 302	Advanced Composition and Critical Thinking (3)	
or ENGWR 482	Honors Advanced Composition and Critical Thinking (3)	
SPEECH 361	The Communication Experience (3)	

Associate in Arts for Transfer Degree Requirements: The Associate in Arts in Elementary Teacher Education for Transfer (AA-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

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

Degrees: A.A. - Theatre Arts: Acting
 A.A. - Theatre Arts: Technical
 A.A. for Transfer Degree - Theatre Arts
 Certificates: Acting
 Children's Theatre
 Costuming
 Film
 Department Certificates:
 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

People with an Acting A.A. degree may go into directing, acting, teaching, and film/television.

Requirements for Degree	30 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 351 Theory and Techniques of Acting II	3
TA 370 Theatre Movement	2
TA 375 Voice, Diction and Dialects	3
TA 420 Stagecraft	3
TA 437 Stage Make-up I	3
And a minimum of 2 units from the following:	2
TA 344 Improvisation and Theatre Games (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)	

And a minimum of 2 units from the following:	2¹
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 377 Musical Theatre Techniques (3)	
TA 390 Directing and Play Production (3)	
TA 397 Introduction to Readers' Theatre (3)	
TA 406 Children's Theatre (3)	
And a minimum of 2 units from the following:	2
MUSM 342 Recording Studio Techniques (3)	
TA 404 Techniques of Puppetry (3)	
TA 422 Stage Lighting (3)	
TA 424 Advanced Technical Theatre (3)	
TA 430 Costume Construction (3)	
TA 433 Costume Production (0.5 - 3)	
TA 434 Vintage Costuming (0.5 - 2)	
TA 435 History and Theory of Costuming (3)	
or FASHN 330 History of Western World Fashion (3)	
TA 440 Arts Management (3)	
And a minimum of 2 units from the following:	2²
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 470 Rehearsal and Performance II (0.5 - 3)	
TA 472 Rehearsal and Performance III (0.5 - 3)	
TA 475 Fundamentals of Repertory Production (0.5 - 6)	
TA 477 Fundamentals of Repertory Production (1 - 3)	
Any TAP (Theatre Arts Performance) course.	
And a minimum of 2 units from the following:	2
DANCE 310 Jazz Dance I (1)	
DANCE 320 Ballet I (1)	
DANCE 340 Ballroom Dance (1)	
DANCE 360 Tap Dance I (1)	
DANCE 377 Musical Theatre Dance I (2)	
ENGLT 380 Introduction to Shakespeare (3)	
ENGLT 382 Introduction to Dramatic Literature (3)	
MUFHL 321 Basic Musicianship (3)	
MUIVI 310 Voice Class I (2)	
MUIVI 390 Jazz and Popular Vocal Styles and Improvisation I (2)	
MUP 350 Concert Choir I (2)	
Any TA or TAP course not used to fulfill other requirements of the major.	

¹Not used to fulfill other requirements for the major.

²Earned 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, playwriting, and technical elements.
- analyze the components of a theatrical production and the role of technical theatre in the production process.
- evaluate a script, assess production requirements, and develop practical and artistic solutions through scenic, lighting, costume, sound or makeup designs.
- integrate practical information from construction plans.
- demonstrate proficiency in technical production skills.
- evaluate tools, materials, and processes used in technical theatre work.

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 29 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 3 units from the following:		3
TA 404	Techniques of Puppetry (3)	
TA 422	Stage Lighting (3)	
TA 430	Costume Construction (3)	
TA 437	Stage Make-up I (3)	
And a minimum of 9 units from the following:		9 ¹
ART 300	Drawing and Composition I (3)	
ART 302	Drawing and Composition II (3)	
ART 320	Design: Fundamentals (3)	
ART 370	Three Dimensional Design (3)	
ART 420	Film Making (2)	
ARTNM 302	Digital Basics for Art New Media (1.5)	
ARTNM 332	Digital Video (3)	
ARTNM 405	Digital 2D Animation (3)	
ARTNM 420	Introduction to 3D Modeling (3)	
ARTPH 305	Digital Photography (3)	
DESGN 100	Introduction to Computer Aided Drafting and Design (CADD) (3)	
FASHN 320	Textiles (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)	
IDES 310	History of Interior Architecture and Furnishings I (3)	
IDES 312	History of Interior Architecture and Furnishings II (3)	
IDES 332	Portfolio and Presentation in Interior Design (3)	
IDES 340	Beginning CADD for Interior Design (3)	
MUSM 140	Concert Sound Reinforcement (2)	

MUSM 334	Introduction to Musical Instrument Digital Interface (MIDI) (2)	
MUSM 342	Recording Studio Techniques (3)	
MUSM 344	Recording Studio Techniques (3)	
MUSM 356	Pro Tools 101, Introduction to Pro Tools (1.5)	
TA 404	Techniques of Puppetry (3)	
TA 406	Children's Theatre (3)	
TA 422	Stage Lighting (3)	
TA 424	Advanced Technical Theatre (3)	
TA 430	Costume Construction (3)	
TA 434	Vintage Costuming (0.5 - 2)	
or FASHN 334	Vintage Costuming (0.5 - 2)	
TA 435	History and Theory of Costuming (3)	
or FASHN 330	History of Western World Fashion (3)	
TA 437	Stage Make-up I (3)	
TA 440	Arts Management (3)	
WELD 300	Introduction to Welding (3)	
And a minimum of 2 units from the following:		2 ²
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 470	Rehearsal and Performance II (0.5 - 3)	
TA 472	Rehearsal and Performance III (0.5 - 3)	
TA 475	Fundamentals of Repertory Production (0.5 - 6)	
TA 477	Fundamentals of Repertory Production (1 - 3)	
TA 478	Repertory Production - III (0.5 - 6)	
TAP (Theatre Arts Performance) 310, 311, 312, 313, 330, 331, 332, 333, 350, 351, 352, 353, 370, 371, 372, 373, 390, 391, 392, 393		
And a minimum of 6 units from the following:		6
Any TA or TAP courses not used to fulfill other requirements for the major.		

¹Not used to fulfill other requirements for the major.

²Earned by a minimum of 0.5 units in each of two productions for a total of 2 units.

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.

Theatre Arts A.A. for Transfer Degree

This degree is designed to facilitate successful transfer to baccalaureate theatre or drama degree programs. This degree provides students with the lower division breadth and depth of the field of theatre arts and exposes students to the core principles and practices in the field. It will cover the basics of acting, theatre technology and production, and the historical and modern development of theatre and dramatic literature in the world of entertainment.

This degree provides students with a major that fulfills the general requirements of the California State University for transfer. Students with this degree will receive priority admission with junior status to the CSU system.

The A.A.-T degree in Theatre may be obtained by the completion of 60 transferable units with a minimum of a 2.0 GPA, including (a) the major area described in the Required Program 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.

(continued on next page)

(Theatre Arts A.A. for Transfer Degree continued)

Student Learning Outcomes

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

- critique and evaluate the role of the theatre arts and its relationship to other parts of society.
- evaluate the historical, artistic, social, and philosophical environments in which theatre exists.
- analyze and critique dramatic literature and performance.
- formulate alternative solutions to theatrical production situations.
- employ audition and performance skills in community, educational, and/or professional theatres.
- develop skills to work as a theatre technician in community, educational, and/or professional theatres.
- demonstrate the ability to work effectively as an ensemble member of a theatre company.
- demonstrate skills that will allow the student to thrive in a baccalaureate level theatre program.

Career Opportunities

People with advanced degrees in Theatre have a broad range of employment opportunities including, but not limited to, acting, directing, design/technology for the theatre, publicity and public relations, teaching, technical theatre, stage management, and box office management. Some of these careers may need additional degrees beyond the Associate level.

Requirements for Degree	18 Units
TA 300 Introduction to the Theatre (3)	3
or TA 302 History and Theory of the Theatre I (3)	
TA 350 Theory and Techniques of Acting I (3)	3
or TA 480 Honors Theory and Techniques of Acting (3)	
A minimum of 3 units from the following:	3
TAP (Theatre Arts Production) courses TAP 300, 301, 302, 303, 320, 321, 322, 323, 340, 341, 342, 343, 360, 361, 362, 363, 380, 381, 382, 383	
A minimum of 9 units from the following:	9
TA 351 Theory and Techniques of Acting II (3)	
TA 420 Stagecraft (3)	
TA 422 Stage Lighting (3)	
TA 430 Costume Construction (3)	
A maximum of 3 units not already used toward this degree from TAP (Theatre Arts Production) courses TAP 300, 301, 302, 303, 320, 321, 322, 323, 340, 341, 342, 343, 360, 361, 362, 363, 380, 381, 382, 383	

Associate in Arts for Transfer Degree Requirements:

The Associate in Arts in Theatre Arts for Transfer (AA-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

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:

- 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
- execute skill for technical aspects of acting, including physical, vocal, imaginative, and emotional elements
- apply imagination and character analysis to identify and describe the personality and motivations of a given character

Career Opportunities

Students with an acting certificate may go into acting, directing, film, teaching, and many other careers where oration and presentation are key components.

See losrios.edu/gainful-emp-info/gedt.php?major=011485C01 for Gainful Employment Disclosure.

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	3
And a minimum of 2 units from the following:	2
TA 344 Improvisation and Theatre Games (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 377 Musical Theatre Techniques (3)	
TA 397 Introduction to Readers' Theatre (3)	
And a minimum of 1 units from the following:	1
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)	
Any TAP (Theatre Arts Performance) course	
And a minimum of 2 units from the following:	2
Any TA or TAP course not used to fulfill other requirements of the major.	

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	14 Units
TA 350 Theory and Techniques of Acting I	3
And a minimum of 4 units from the following:	4
ENGLT 370 Children and Literature (3)	
TA 344 Improvisation and Theatre Games (2)	
TA 370 Theatre Movement (2)	
TA 400 Creative Drama for Children (3)	
TA 404 Techniques of Puppetry (3)	
And a minimum of 2 units from the following:	2¹
TA 404 Techniques of Puppetry (3)	
TA 420 Stagecraft (3)	
TA 430 Costume Construction (3)	
TA 437 Stage Make-up I (3)	
And a minimum of 1 units from the following:	1²
TA 406 Children's Theatre (3)	
TA 464 Rehearsal and Performance - Children's Show (0.5 - 3)	
TA 475 Fundamentals of Repertory Production (0.5 - 6)	
TAP 360 Children's Theatre Performance I (1 - 3)	
TAP 370 Children's Theatre Technical Production I (1 - 3)	
TAP 380 Repertory/Touring Rehearsal and Performance I (1 - 3)	
TAP 390 Repertory and Touring Technical Production I (1 - 3)	
And a minimum of 4 units from the following:	4
Any TA or TAP courses not used to fulfill other requirements	

¹Not used to fulfill other requirements.

²Connected 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.

See losrios.edu/gainful-emp-info/gedt.php?major=011487C01 for Gainful Employment Disclosure.

Requirements for Certificate	17.5 Units
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.....	3
A minimum of 3 units from the following:	3
FASHN 320 Textiles (3)	
FASHN 342 Fashion Illustration (3)	
FASHN 378 Advanced Pattern Making and Design (3)	
TA 404 Techniques of Puppetry (3)	
A minimum of 0.5 units from the following:	0.5
FASHN 334 Vintage Costuming (0.5 - 2)	
TA 434 Vintage Costuming (0.5 - 2)	
A minimum of 1 unit from the following:	1
TA 433 Costume Production (0.5 - 3)	
A minimum of 1 unit from the following:	1¹
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 470 Rehearsal and Performance II (0.5 - 3)	
TA 472 Rehearsal and Performance III (0.5 - 3)	
TA 475 Fundamentals of Repertory Production (0.5 - 6)	
TA 477 Fundamentals of Repertory Production (1 - 3)	
TA 478 Repertory Production - III (0.5 - 6)	
TAP (Theatre Arts Performance) courses 300, 301, 302, 303, 310, 311, 312, 313, 320, 321, 322, 323, 330, 331, 332, 333, 340, 341, 342, 343, 350, 351, 352, 353, 360, 361, 362, 363, 370, 371, 372, 373, 380, 381, 382, 383, 390, 391, 392, 393	

¹Must include wardrobe crew.

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	17 Units
TA 310 Introduction to Film	3
TA 318 Diversity in American Film	3
And a minimum of 6 units from the following:	6
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)	
And a minimum of 5 units from the following:	5
ART 420 Film Making (2)	
ARTNM 332 Digital Video (3)	
ARTNM 405 Digital 2D Animation (3)	
ENGCW 441 Feature Film Screenwriting Workshop I (3)	
ENGLT 403 Film Adaptations (3)	
MUSM 334 Introduction to Musical Instrument Digital Interface (MIDI) (2)	
MUSM 342 Recording Studio Techniques (3)	
TA 320 Cinema Genres (3)	
TA 356 Acting for the Camera I (3)	
TA 420 Stagecraft (3)	
TA 422 Stage Lighting (3)	
TA 430 Costume Construction (3)	
TA 437 Stage Make-up I (3)	

DEPARTMENT CERTIFICATES

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
TA 350 Theory and Techniques of Acting I	3
TA 370 Theatre Movement	2
TA 377 Musical Theatre Techniques	3
And a minimum of 2 units from the following:	2
MUIVI 310 Voice Class I (2)	
MUIVI 390 Jazz and Popular Vocal Styles and Improvisation I (2)	
MUP 350 Concert Choir I (2)	
MUP 360 Chamber Singers (2)	
MUP 400 Vocal Jazz Ensemble (2)	
And a minimum of 4 units from the following:	4¹
DANCE 310 Jazz Dance I (1)	
DANCE 320 Ballet I (1)	
DANCE 340 Ballroom Dance (1)	
DANCE 360 Tap Dance I (1)	
DANCE 377 Musical Theatre Dance I (2)	
MUFHL 321 Basic Musicianship (3)	
MUIVI 310 Voice Class I (2)	
MUIVI 311 Voice Class II (2)	
MUIVI 320 Voice Class III (2)	
MUIVI 340 Beginning Piano (2)	
MUIVI 390 Jazz and Popular Vocal Styles and Improvisation I (2)	
MUIVI 391 Jazz and Popular Vocal Styles and Improvisation II (2)	
MUP 350 Concert Choir I (2)	
MUP 360 Chamber Singers (2)	
MUP 400 Vocal Jazz Ensemble (2)	
TA 351 Theory and Techniques of Acting II (3)	
TA 362 Styles of Acting: Classical (3)	
TA 366 Styles of Acting: Modern (3)	
TA 375 Voice, Diction and Dialects (3)	
And a minimum of 1 units from the following:	1
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)	
TAP 340 Musical Rehearsal and Performance I (1 - 3)	
TAP 380 Repertory/Touring Rehearsal and Performance I (1 - 3)	

¹Not used to fulfill other requirements of the major.

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.

(continued on next page)

(Technical Theatre Certificate continued)

- demonstrate proficiency in technical production skills.
- identify and evaluate tools, materials and processes used in technical theatre areas.

Career Opportunities

A person with a Technical Theatre certificate may become a stagehand, set builder, lighting and sound technician, makeup artist, properties artisan, or stage manager in theatre, film or TV.

See losrios.edu/gainful-emp-info/gedt.php?major=011491C01 for Gainful Employment Disclosure.

Requirements for Certificate	16 Units
TA 420 Stagecraft	3
TA 422 Stage Lighting	3
And a minimum of 5 units from the following:	5
ART 300 Drawing and Composition I (3)	
ART 420 Film Making (2)	
ARTNM 302 Digital Basics for Art New Media (1.5)	
ARTNM 328 Beginning Digital Photo Imagery (3)	
ARTNM 332 Digital Video (3)	
DESGN 100 Introduction to Computer Aided Drafting and Design (CADD) (3)	
IDES 340 Beginning CADD for Interior Design (3)	
MUSM 140 Concert Sound Reinforcement (2)	
MUSM 334 Introduction to Musical Instrument Digital Interface (MIDI) (2)	
MUSM 342 Recording Studio Techniques (3)	
MUSM 344 Recording Studio Techniques (3)	
MUSM 356 Pro Tools 101, Introduction to Pro Tools (1.5)	
TA 404 Techniques of Puppetry (3)	
TA 424 Advanced Technical Theatre (3)	
TA 430 Costume Construction (3)	
TA 433 Costume Production (0.5 - 3)	
TA 437 Stage Make-up I (3)	
TA 440 Arts Management (3)	
WELD 300 Introduction to Welding (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 466 Rehearsal and Performance - Musical Ensemble (0.5 - 3)	
TA 470 Rehearsal and Performance II (0.5 - 3)	
TA 472 Rehearsal and Performance III (0.5 - 3)	
TA 475 Fundamentals of Repertory Production (0.5 - 6)	
TA 477 Fundamentals of Repertory Production (1 - 3)	
TA 478 Repertory Production - III (0.5 - 6)	
TAP (Theatre Arts Production) courses 300, 301, 302, 303, 310, 311, 312, 313, 320, 321, 322, 323, 330, 331, 332, 333, 340, 341, 342, 343, 350, 351, 352, 353, 360, 361, 362, 363, 370, 371, 372, 373, 380, 381, 382, 383, 390, 391, 392, 393	
And a minimum of 3 units from the following:	3
Any TA or TAP class not used to fulfill other requirements.	

¹Earned by enrollment for a minimum of 0.5 units in each of two productions as crew for a total of 2 units.

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 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. (C-ID THTR 111)

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. (C-ID THTR 113)

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. 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. (C-ID THTR 151)

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. (C-ID THTR 152)

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 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

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 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 101 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: MATH 25 OR MATH 41 with a grade of "C" or better or placement through the placement process; AND TA 300; AND eligible for ENGRD 116 AND ENGWR 102; OR ESLR 320 AND ESLW 320
Course Transferable to UC/CSU
Hours: 36 hours LEC; 72 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. A portion of this course may be offered in a TBA component of 18 hours which may include scenery construction, props, and painting. (C-ID THTR 171)

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 or MATH 41, TA 300, and TA 420.
Course Transferable to UC/CSU
Hours: 36 hours LEC; 72 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. A portion of this course may be offered in a TBA component of 18 hours which may include hanging, circuiting, and focusing lights. (C-ID THTR 173)

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; 72 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. A portion of this course may be offered in a TBA component of 18-72 hours which may include practical work in lighting, scenic construction or design, sound design, rigging, or stage managing techniques.

TA 430 Costume Construction 3 Units

Advisory: Eligible for ENGRD 116 AND ENGWR 102; OR ESLR 320 AND ESLW 320.
Course Transferable to UC/CSU
Hours: 36 hours LEC; 54 hours LAB

This course explores the basic areas of costume construction and offers experience in constructing costumes for theatrical productions. Topics include fabrics, color, patterns, sewing techniques, costume pieces, and accessories. Period styles, costume analysis, and basic elements of costume design are also covered. Field trips may be required. (C-ID THTR 174)

TA 433 Costume Production .5-3 Units

Prerequisite: FASHN 374 or TA 430 with a grade of "C" or better
Advisory: Eligible for ENGRD 116 AND ENGWR 102; OR ESLR 320 AND ESLW 320
Course Transferable to CSU
Hours: 27-162 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 focus on developing sewing, craft, and patterning skills, clothing alteration methods and working with fabrics, hats and accessories, dyes and textile paints as utilized in each production. Field trips may be required. A portion of this course may be offered in a TBA component of hours which may include pattern making, sewing, alteration, and maintenance of costumes.

TA 434 Vintage Costuming .5-2 Units

Same As: FASHN 334
Advisory: ENGWR 051 and ENGRD 015, or ESLW 310 and ESLR 310 or placement through assessment process.
Course Transferable to UC/CSU
Hours: 9-18 hours LEC; 27-54 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. Not open to those who have completed FASHN 334. Field trip may be required.

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 3 Units

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

This course covers the basic techniques of theatrical makeup. It explores makeup materials, color and light, modeling techniques, and design elements in the development of makeup designs for corrective, old age, historical, stylized faces, clowns, animals, and fantasy makeup. (C-ID THTR 175)

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

Enrollment Limitation: Audition/Interview
Course Transferable to UC/CSU
Hours: 36 hours LEC; 54 hours LAB

This course explores the play production process. It provides experience as an active participant in the analysis, preparation, and production of one-act plays through participation as either directors, writers, actors, or technicians. This course culminates in public performances.

TA 460 Rehearsal and Performance .5-3 Units

Enrollment Limitation: Audition/Interview
Course Transferable to UC/CSU
Hours: 27-162 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 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. A portion of this course may be offered in a TBA component of 27-162 hours which may include acting, singing, dancing or technical rehearsals and preparation.

TA 461 Rehearsal and Performance – Drama .5-3 Units

Enrollment Limitation: Audition / Interview
Course Transferable to UC/CSU
Hours: 27-162 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. A portion of this course may be offered in a TBA component of 27-162 hours which may include acting, singing, dancing or technical rehearsals and preparation.

TA 462 Rehearsal and Performance – Comedy .5-3 Units

Enrollment Limitation: Audition / Interview
Course Transferable to UC/CSU
Hours: 27-162 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. A portion of this course may be offered in a TBA component of 27-162 hours which may include acting, singing, dancing or technical rehearsals and preparation.

TA 463 Rehearsal and Performance – Classical .5-3 Units

Enrollment Limitation: Audition / Interview
Course Transferable to UC/CSU
Hours: 27-162 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. A portion of this course may be offered in a TBA component of 27-162 hours which may include acting, singing, dancing or technical rehearsals and preparation.

TA 464 Rehearsal and Performance – Children's Show .5-3 Units

Enrollment Limitation: Audition / Interview
Course Transferable to CSU
Hours: 27-162 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. A portion of this course may be offered in a TBA component of 27-162 hours which may include acting, singing, dancing or technical rehearsals and preparation.

TA 465 Rehearsal and Performance – Musical .5-3 Units

Enrollment Limitation: Audition / Interview
Course Transferable to UC/CSU
Hours: 27-162 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. A portion of this course may be offered in a TBA component of 27-162 hours which may include acting, singing, dancing or technical rehearsals and preparation.

TA 466 Rehearsal and Performance – Musical Ensemble .5-3 Units

Same As: MUP 370
Enrollment Limitation: Audition / Interview
Course Transferable to UC/CSU
Hours: 27-162 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. A portion of this course may be offered in a TBA component of 27-162 hours which may include acting, singing, dancing or technical rehearsals and preparation. 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: 27-162 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. A portion of this course may be offered in a TBA component of 27-162 hours which may include acting, singing, dancing or technical rehearsals and preparation.

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: 27-162 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. A portion of this course may be offered in a TBA component of 27-162 hours which may include acting, singing, dancing or technical rehearsals and preparation.

TA 475 Fundamentals of Repertory Production .5-6 Units

Enrollment Limitation: Audition/Interview

Course Transferable to UC/CSU

Hours: 0-36 hours LEC; 27-216 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. A portion of this course may be offered in a TBA component of 27-252 hours which may include acting, singing, dancing technical activities, lectures and preparation.

TA 477 Repertory Production – II .5-6 Units

Prerequisite: TA 475 with a grade of "C" or better

Enrollment Limitation: Audition / Interview

Course Transferable to UC/CSU

Hours: 0-36 hours LEC; 27-216 hours LAB

This workshop explores the challenges involved in repertory theatre through participation at the intermediate level 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. A portion of this course may be offered in a TBA component of 27-252 hours which may include acting, singing, dancing technical activities, lectures and preparation.

TA 478 Repertory Production – III .5-6 Units

Prerequisite: TA 477 with a grade of "C" or better

Enrollment Limitation: Audition / Interview

Course Transferable to UC/CSU

Hours: 0-36 hours LEC; 27-216 hours LAB

This workshop explores the challenges involved in repertory theatre through participation at the advanced level 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. A portion of this course may be offered in a TBA component of 27-252 hours which may include acting, singing, dancing technical activities, lectures and preparation.

TA 480 Honors Theory and Techniques of Acting 3 Units

Prerequisite: Placement into ENGWR 480 through the assessment process AND two semesters of high school drama.

Advisory: TA 300

General Education: AA/AS Area I; CSU Area C1; IGETC Area 3A

Course Transferable to UC/CSU

Hours: 54 hours LEC

This honors course covers the major theories and techniques of acting, including script analysis and interpretation, physical expressiveness, voice production, character analysis, and improvisation. Course work includes research, analysis and performance of memorized scenes and monologues as well as written production critiques, and one or more critical essay. A portion of the class takes place in small group seminar format. Supplementary reading is required. Attendance at live theatrical performances and field trips may be required. This class is not open to students who have successfully completed TA 350. (C-ID THTR 151)

TA 481 Honors Seminar in History of Film 1 Unit

Prerequisite: Placement into ENGWR 480 through the assessment process.

Corequisite: TA 312, 314, or 315

Advisory: TA 310

Course Transferable to UC/CSU

Hours: 18 hours LEC

This honors course (a supplement to TA 312, TA 314, and TA 315) provides a seminar for advanced students to analyze films important to the development of cinematic art in terms of acting, directing, writing, editing, cinematography, and genre. Field trips may be required.

TA 495 Independent Studies in Theatre Arts 1-3 Units

Course Transferable to CSU

Hours: 54-162 hours LAB

Independent Study is an opportunity for the student to extend classroom experience in this subject, while working independently of a formal classroom situation. Independent study is an extension of work offered in a specific class in the college catalog. To be eligible for independent study, students must have completed the basic regular catalog course at American River College. They must also discuss the study with a professor in this subject and secure approval. Only one independent study for each catalog course will be allowed.

TA 498 Work Experience in Theatre Arts 1-4 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position, or job related to theatre arts with a cooperating site supervisor. Students are advised to consult with the Theatre Arts Department faculty to review specific certificate and degree work experience requirements.

General Education: AA/AS Area III(b)

Course Transferable to CSU

Hours: 60-300 hours LAB

This course provides students with opportunities to develop marketable skills in preparation for employment or advancement within the field of theatre arts. It is designed for students interested in work experience and/or internships in transfer-level degree occupational programs. Course content includes understanding the application of education to the workforce, completion of Title 5 required forms which document the student's progress and hours spent at the work site, and developing workplace skills and competencies. During the semester, the student is required to 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. First-time participants are required to attend a weekly orientation and a final meeting. Returning participants are required to attend the first class meeting, a mid-semester meeting, and a final meeting and may meet individually with the instructor as needed to complete a work site observation and all program forms, receive updates, and assignments. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Theatre Arts Performance

TAP 300 Modern Rehearsal and Performance I 1-3 Units

Course Family: Modern Performance and Technical Production (see page 34 - limitation on active participatory courses)

Advisory: TA 350 or 480

Enrollment Limitation: Students must audition and/or interview with the director to participate in this course.

Course Transferable to UC/CSU

Hours: 54-162 hours LAB

This course is the first in a series of four courses that provide workshop training in the rehearsal and performance of Modern theatre. It is designed for students with little or no prior theatre experience. Students audition or interview with the director for participation in a Modern drama or comedy. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include acting, singing, dancing, and/or technical rehearsals and preparation. (C-ID THTR 191)

TAP 301 Modern Rehearsal and Performance II 1-3 Units

Course Family: Modern Performance and Technical Production (see page 34 - limitation on active participatory courses)

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

Advisory: TA 366

Enrollment Limitation: Students must audition and/or interview with the director to participate in this course.

Course Transferable to UC/CSU

Hours: 54-162 hours LAB

This course is the second in a series of four courses that provide workshop training in the rehearsal and performance of Modern theatre. It is designed for students with basic/minimal theatre experience. Students audition or interview with the director for participation in a Modern drama or comedy. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include acting, singing, dancing, and/or technical rehearsals and preparation. (C-ID THTR 191)

TAP 302 Modern Rehearsal and Performance III 1-3 Units

Course Family: Modern Performance and Technical Production (see page 34 - limitation on active participatory courses)

Prerequisite: TAP 301 with a grade of "C" or better

Advisory: TA 366

Enrollment Limitation: Students must audition and/or interview with the director to participate in this course.

Course Transferable to UC/CSU

Hours: 54-162 hours LAB

This course is the third in a series of four courses that provide workshop training in the rehearsal and performance of Modern theatre. It is designed for students with beginning/moderate theatre experience. Students audition or interview with the director for participation in a Modern drama or comedy. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include acting, singing, dancing, and/or technical rehearsals and preparation. (C-ID THTR 191)

TAP 303 Modern Rehearsal and Performance IV 1-3 Units

Course Family: Modern Performance and Technical Production (see page 34 - limitation on active participatory courses)

Prerequisite: TAP 302 with a grade of "C" or better

Advisory: TA 366

Enrollment Limitation: Students must audition and/or interview with the director to participate in this course.

Course Transferable to UC/CSU

Hours: 54-162 hours LAB

This course is the fourth in a series of four courses that provide workshop training in the rehearsal and performance of Modern theatre. It is designed for students with intermediate/significant theatre experience. Students audition or interview with the director for participation in a Modern drama or comedy. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include acting, singing, dancing, and/or technical rehearsals and preparation. (C-ID THTR 191)

TAP 310 Modern Technical Production I 1-3 Units

*Course Family: Modern Performance and Technical Production
(see page 34 - limitation on active participatory courses)*

Enrollment Limitation: Interview

Course Transferable to CSU

Hours: 54-162 hours LAB

This course is the first in a series of four courses that provide workshop training in the technical production of modern theatre. It provides practical experience, in the modern theatre style, in one of the following areas: scenery, scenic painting, properties, costumes, lighting, sound, video, projections, stage management, house management, box office, publicity, and running crews. It is designed for students who want an introductory experience. Students interested in technical work interview for positions with the technical director. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include technical preparation, activities, rehearsals, and performances. (C-ID THTR 192)

TAP 311 Modern Technical Production II 1-3 Units

*Course Family: Modern Performance and Technical Production
(see page 34 - limitation on active participatory courses)*

Prerequisite: TAP 310 with a grade of "C" or better

Enrollment Limitation: Interview

Course Transferable to CSU

Hours: 54-162 hours LAB

This course is the second in a series of four courses that provide workshop training in the technical production of modern theatre. It provides practical experience, in the modern theatre style, in one of the following areas: scenery, scenic painting, properties, costumes, lighting, sound, video, projections, stage management, house management, box office, publicity, and running crews. It is designed for students with basic/minimal experience. Students interested in technical work interview for positions with the technical director. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include technical preparation, activities, rehearsals, and performances. (C-ID THTR 192)

TAP 312 Modern Technical Production III 1-3 Units

*Course Family: Modern Performance and Technical Production
(see page 34 - limitation on active participatory courses)*

Prerequisite: TAP 311 with a grade of "C" or better

Enrollment Limitation: Interview

Course Transferable to CSU

Hours: 54-162 hours LAB

This course is the third in a series of four courses that provide workshop training in the technical production of modern theatre. It provides practical experience, in the modern theatre style, in one of the following areas: scenery, scenic painting, properties, costumes, lighting, sound, video, projections, stage management, house management, box office, publicity, and running crews. It is designed for students with beginning/moderate experience. Students interested in technical work interview for positions with the technical director. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include technical preparation, activities, rehearsals, and performances. (C-ID THTR 192)

TAP 313 Modern Technical Production IV 1-3 Units

*Course Family: Modern Performance and Technical Production
(see page 34 - limitation on active participatory courses)*

Prerequisite: TAP 312 with a grade of "C" or better

Enrollment Limitation: Interview

Course Transferable to CSU

Hours: 54-162 hours LAB

This course is the fourth in a series of four courses that provide workshop training in the technical production of modern theatre. It provides practical experience, in the modern theatre style, in one of the following areas: scenery, scenic painting, properties, costumes, lighting, sound, video, projections, stage management, house management, box office, publicity, and running crews. It is designed for students with intermediate/significant theatre experience. Students interested in technical work interview for positions with the technical director. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include technical preparation, activities, rehearsals, and performances. (C-ID THTR 192)

TAP 320 Classical Rehearsal and Performance I 1-3 Units

*Course Family: Classical Performance and Technical Production
(see page 34 - limitation on active participatory courses)*

Advisory: TA 350 or 480

Enrollment Limitation: Students must audition and/or interview with the director to participate in this course.

Course Transferable to UC/CSU

Hours: 54-162 hours LAB

This course is the first in a series of four courses that provide workshop training in the rehearsal and performance of Classical theatre. It is designed for students with little or no prior theatre experience. Students audition or interview with the director for participation in a Classical drama or comedy. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include acting, singing, dancing, and/or technical rehearsals and preparation. (C-ID THTR 191)

TAP 321 Classical Rehearsal and Performance II 1-3 Units

*Course Family: Classical Performance and Technical Production
(see page 34 - limitation on active participatory courses)*

Prerequisite: TAP 320 with a grade of "C" or better

Advisory: TA 362

Enrollment Limitation: Students must audition and/or interview with the director to participate in this course.

Course Transferable to UC/CSU

Hours: 162 hours LAB

This course is the second in a series of four courses that provide workshop training in the rehearsal and performance of Classical theatre. It is designed for students with basic/minimal theatre experience. Students audition or interview with the director for participation in a Classical drama or comedy. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include acting, singing, dancing, and/or technical rehearsals and preparation. (C-ID THTR 191)

TAP 322 Classical Rehearsal and Performance III 1-3 Units

Course Family: Classical Performance and Technical Production (see page 34 - limitation on active participatory courses)
Prerequisite: TAP 321 with a grade of "C" or better
Advisory: TA 362

Enrollment Limitation: Students must audition and/or interview with the director to participate in this course.

Course Transferable to UC/CSU

Hours: 54-162 hours LAB

This course is the third in a series of four courses that provide workshop training in the rehearsal and performance of Classical theatre. It is designed for students with beginning/moderate theatre experience. Students audition or interview with the director for participation in a Classical drama or comedy. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include acting, singing, dancing, and/or technical rehearsals and preparation. (C-ID THTR 191)

TAP 323 Classical Rehearsal and Performance IV 1-3 Units

Course Family: Classical Performance and Technical Production (see page 34 - limitation on active participatory courses)
Prerequisite: TAP 322 with a grade of "C" or better
Advisory: TA 362

Enrollment Limitation: Students must audition and/or interview with the director to participate in this course.

Course Transferable to UC/CSU

Hours: 54-162 hours LAB

This course is the fourth in a series of four courses that provide workshop training in the rehearsal and performance of Classical theatre. It is designed for students with intermediate/significant theatre experience. Students audition or interview with the director for participation in a Classical drama or comedy. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include acting, singing, dancing, and/or technical rehearsals and preparation. (C-ID THTR 191)

TAP 330 Classical Technical Production I 1-3 Units

Course Family: Classical Performance and Technical Production (see page 34 - limitation on active participatory courses)

Enrollment Limitation: Interview

Course Transferable to CSU

Hours: 54-162 hours LAB

This course is the first in a series of four courses that provide workshop training in the technical production of classical theatre. It provides practical experience, in the classical theatre style, in one of the following areas: scenery, scenic painting, properties, costumes, lighting, sound, video, projections, stage management, house management, box office, publicity, and running crews. It is designed for students who want an introductory experience. Students interested in technical work interview for positions with the technical director. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include technical preparation, activities, rehearsals, and performances. (C-ID THTR 192)

TAP 331 Classical Technical Production II 1-3 Units

Course Family: Classical Performance and Technical Production (see page 34 - limitation on active participatory courses)

Prerequisite: TAP 330 with a grade of "C" or better

Enrollment Limitation: Interview

Course Transferable to CSU

Hours: 54-162 hours LAB

This course is the second in a series of four courses that provide workshop training in the technical production of classical theatre. It provides practical experience, in the classical theatre style, in one of the following areas: scenery, scenic painting, properties, costumes, lighting, sound, video, projections, stage management, house management, box office, publicity, and running crews. It is designed for students with basic/minimal theatre experience. Students interested in technical work interview for positions with the technical director. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include technical preparation, activities, rehearsals, and performances. (C-ID THTR 192)

TAP 332 Classical Technical Production III 1-3 Units

Course Family: Classical Performance and Technical Production (see page 34 - limitation on active participatory courses)

Prerequisite: TAP 331 with a grade of "C" or better

Enrollment Limitation: Interview

Course Transferable to CSU

Hours: 54-162 hours LAB

This course is the third in a series of four courses that provide workshop training in the technical production of classical theatre. It provides practical experience, in the classical theatre style, in one of the following areas: scenery, scenic painting, properties, costumes, lighting, sound, video, projections, stage management, house management, box office, publicity, and running crews. It is designed for students with beginning/moderate theatre experience. Students interested in technical work interview for positions with the technical director. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include technical preparation, activities, rehearsals, and performances. (C-ID THTR 192)

TAP 333 Classical Technical Production IV 1-3 Units

Course Family: Classical Performance and Technical Production (see page 34 - limitation on active participatory courses)

Prerequisite: TAP 332 with a grade of "C" or better

Enrollment Limitation: Interview

Course Transferable to CSU

Hours: 162 hours LAB

This course is the fourth in a series of four courses that provide workshop training in the technical production of classical theatre. It provides practical experience, in the classical theatre style, in one of the following areas: scenery, scenic painting, properties, costumes, lighting, sound, video, projections, stage management, house management, box office, publicity, and running crews. It is designed for students with intermediate/significant theatre experience. Students interested in technical work interview for positions with the technical director. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include technical preparation, activities, rehearsals, and performances. (C-ID THTR 192)

TAP 340 Musical Rehearsal and Performance I 1-3 Units

Course Family: Musical Performance and Technical Production (see page 34 - limitation on active participatory courses)
Advisory: TA 350 or 480
Enrollment Limitation: Students must audition and/or interview with the director to participate in this course.
Course Transferable to UC/CSU
Hours: 54-162 hours LAB

This course is the first in a series of four courses that provide workshop training in the rehearsal and performance of musical theatre. It is designed for students with little or no prior theatre experience. Students audition or interview with the director for participation in a musical. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include acting, singing, dancing, and/or technical rehearsals and preparation. (C-ID THTR 191)

TAP 341 Musical Rehearsal and Performance II 1-3 Units

Course Family: Musical Performance and Technical Production (see page 34 - limitation on active participatory courses)
Prerequisite: TAP 340 with a grade of "C" or better
Advisory: TA 377
Enrollment Limitation: Students must audition and/or interview with the director to participate in this course.
Course Transferable to UC/CSU
Hours: 54-162 hours LAB

This course is the second in a series of four courses that provide workshop training in the rehearsal and performance of musical theatre. It is designed for students with basic/minimal theatre experience. Students audition or interview with the director for participation in a musical. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include acting, singing, dancing, and/or technical rehearsals and preparation. (C-ID THTR 191)

TAP 342 Musical Rehearsal and Performance III 1-3 Units

Course Family: Musical Performance and Technical Production (see page 34 - limitation on active participatory courses)
Prerequisite: TAP 341 with a grade of "C" or better
Advisory: TA 370 and 377
Enrollment Limitation: Students must audition and/or interview with the director to participate in this course.
Course Transferable to UC/CSU
Hours: 54-162 hours LAB

This course is the third in a series of four courses that provide workshop training in the rehearsal and performance of musical theatre. It is designed for students with beginning/moderate theatre experience. Students audition or interview with the director for participation in a musical. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include acting, singing, dancing, and/or technical rehearsals and preparation. (C-ID THTR 191)

TAP 343 Musical Rehearsal and Performance IV 1-3 Units

Course Family: Musical Performance and Technical Production (see page 34 - limitation on active participatory courses)
Prerequisite: TAP 342 with a grade of "C" or better
Advisory: TA 370 and 377
Enrollment Limitation: Students must audition and/or interview with the director to participate in this course.
Course Transferable to UC/CSU
Hours: 54-162 hours LAB

This course is the fourth in a series of four courses that provide workshop training in the rehearsal and performance of musical theatre. It is designed for students with intermediate/significant theatre experience. Students audition or interview with the director for participation in a musical. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include acting, singing, dancing, and/or technical rehearsals and preparation. (C-ID THTR 191)

TAP 350 Musical Technical Production I 1-3 Units

Course Family: Musical Performance and Technical Production (see page 34 - limitation on active participatory courses)
Enrollment Limitation: Interview
Course Transferable to CSU
Hours: 54-162 hours LAB

This course is the first in a series of four courses that provide workshop training in the technical production of musical theatre. It provides practical experience, in the musical theatre style, in one of the following areas: scenery, scenic painting, properties, costumes, lighting, sound, video, projections, stage management, house management, box office, publicity, and running crews. It is designed for students who want an introductory experience. Students interested in technical work interview for positions with the technical director. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include technical preparation, activities, rehearsals, and performances. (C-ID THTR 192)

TAP 351 Musical Technical Production II 1-3 Units

Course Family: Musical Performance and Technical Production (see page 34 - limitation on active participatory courses)
Prerequisite: TAP 350 with a grade of "C" or better
Enrollment Limitation: Interview
Course Transferable to CSU
Hours: 54-162 hours LAB

This course is the second in a series of four courses that provide workshop training in the technical production of musical theatre. It provides practical experience, in the musical theatre style, in one of the following areas: scenery, scenic painting, properties, costumes, lighting, sound, video, projections, stage management, house management, box office, publicity, and running crews. It is designed for students with basic/minimal theatre experience. Students interested in technical work interview for positions with the technical director. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include technical preparation, activities, rehearsals, and performances. (C-ID THTR 192)

TAP 352 Musical Technical Production III 1-3 Units

Course Family: Musical Performance and Technical Production

(see page 34 - limitation on active participatory courses)

Prerequisite: TAP 351 with a grade of "C" or better

Enrollment Limitation: Interview

Course Transferable to CSU

Hours: 54-162 hours LAB

This course is the third in a series of four courses that provide workshop training in the technical production of musical theatre. It provides practical experience, in the musical theatre style, in one of the following areas: scenery, scenic painting, properties, costumes, lighting, sound, video, projections, stage management, house management, box office, publicity, and running crews. It is designed for students with beginning/moderate theatre experience. Students interested in technical work interview for positions with the technical director. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include technical preparation, activities, rehearsals, and performances. (C-ID THTR 192)

TAP 353 Musical Technical Production IV 1-3 Units

Course Family: Musical Performance and Technical Production

(see page 34 - limitation on active participatory courses)

Prerequisite: TAP 352 with a grade of "C" or better

Enrollment Limitation: Interview

Course Transferable to CSU

Hours: 54-162 hours LAB

This course is the fourth in a series of four courses that provide workshop training in the technical production of musical theatre. It provides practical experience, in the musical theatre style, in one of the following areas: scenery, scenic painting, properties, costumes, lighting, sound, video, projections, stage management, house management, box office, publicity, and running crews. It is designed for students with intermediate/significant experience. Students interested in technical work interview for positions with the technical director. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include technical preparation, activities, rehearsals, and performances. (C-ID THTR 192)

TAP 360 Children's Theatre Performance I 1-3 Units

Course Family: Children's Theatre Performance and Technical Production (see page 34 - limitation on active participatory courses)

Advisory: TA 350 or 480

Enrollment Limitation: Students must audition and/or interview with the director to participate in this course.

Course Transferable to UC/CSU

Hours: 54-162 hours LAB

This course is the first in a series of four courses that provide workshop training in the rehearsal and performance of children's theatre. It is designed for students with little or no prior theatre experience. Students audition or interview with the director for participation in a children's show. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include acting, singing, dancing, and/or technical rehearsals and preparation. (C-ID THTR 191)

TAP 361 Children's Theatre Rehearsal and Performance II 1-3 Units

Course Family: Children's Theatre Performance and Technical Production (see page 34 - limitation on active participatory courses)

Prerequisite: TAP 360 with a grade of "C" or better

Advisory: TA 350 or 480

Enrollment Limitation: Students must audition and/or interview with the director to participate in this course.

Course Transferable to UC/CSU

Hours: 54-162 hours LAB

This course is the second in a series of four courses that provide workshop training in the rehearsal and performance of children's theatre. It is designed for students with basic/minimal theatre experience. Students audition or interview with the director for participation in a children's show. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include acting, singing, dancing, and/or technical rehearsals and preparation. (C-ID THTR 191)

TAP 362 Children's Theatre Rehearsal and Performance III 1-3 Units

Course Family: Children's Theatre Performance and Technical Production (see page 34 - limitation on active participatory courses)

Prerequisite: TAP 361 with a grade of "C" or better

Advisory: TA 350 or 480

Enrollment Limitation: Students must audition and/or interview with the director to participate in this course.

Course Transferable to UC/CSU

Hours: 54-162 hours LAB

This course is the third in a series of four courses that provide workshop training in the rehearsal and performance of children's theatre. It is designed for students with beginning/moderate theatre experience. Students audition or interview with the director for participation in a children's show. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include acting, singing, dancing, and/or technical rehearsals and preparation. (C-ID THTR 191)

TAP 363 Children's Theatre Rehearsal and Performance IV 1-3 Units

Course Family: Children's Theatre Performance and Technical Production (see page 34 - limitation on active participatory courses)

Prerequisite: TAP 362 with a grade of "C" or better

Advisory: TA 350 or 480

Enrollment Limitation: Students must audition and/or interview with the director to participate in this course.

Course Transferable to UC/CSU

Hours: 54-162 hours LAB

This course is the fourth in a series of four courses that provide workshop training in the rehearsal and performance of children's theatre. It is designed for students with intermediate/significant theatre experience. Students audition or interview with the director for participation in a children's show. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include acting, singing, dancing, and/or technical rehearsals and preparation. (C-ID THTR 191)

**TAP 370 Children's Theatre
Technical Production I 1-3 Units**

Course Family: Children's Theatre Performance and Technical Production (see page 34 - limitation on active participatory courses)
Enrollment Limitation: Interview
Course Transferable to CSU
Hours: 54-162 hours LAB

This course is the first in a series of four courses that provide workshop training in the technical production of children's theatre. It provides practical experience, in the children's theatre style, in one of the following areas: scenery, scenic painting, properties, costumes, lighting, sound, video, projections, stage management, house management, box office, publicity, and running crews. It is designed for students who want an introductory experience. Students interested in technical work interview for positions with the technical director. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include technical preparation, activities, rehearsals, and performances. (C-ID THTR 192)

**TAP 371 Children's Theatre
Technical Production II 1-3 Units**

Course Family: Children's Theatre Performance and Technical Production (see page 34 - limitation on active participatory courses)
Prerequisite: TAP 370 with a grade of "C" or better
Enrollment Limitation: Interview
Course Transferable to CSU
Hours: 54-162 hours LAB

This course is the second in a series of four courses that provide workshop training in the technical production of children's theatre. It provides practical experience, in the children's theatre style, in one of the following areas: scenery, scenic painting, properties, costumes, lighting, sound, video, projections, stage management, house management, box office, publicity, and running crews. It is designed for students with basic/minimal theatre experience. Students interested in technical work interview for positions with the technical director. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include technical preparation, activities, rehearsals, and performances. (C-ID THTR 192)

**TAP 372 Children's Theatre
Technical Production III 1-3 Units**

Course Family: Children's Theatre Performance and Technical Production (see page 34 - limitation on active participatory courses)
Prerequisite: TAP 371 with a grade of "C" or better
Enrollment Limitation: Interview
Course Transferable to CSU
Hours: 54-162 hours LAB

This course is the third in a series of four courses that provide workshop training in the technical production of children's theatre. It provides practical experience, in the children's theatre style, in one of the following areas: scenery, scenic painting, properties, costumes, lighting, sound, video, projections, stage management, house management, box office, publicity, and running crews. It is designed for students with beginning/moderate theatre experience. Students interested in technical work interview for positions with the technical director. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include technical preparation, activities, rehearsals, and performances. (C-ID THTR 192)

**TAP 373 Children's Theatre
Technical Production IV 1-3 Units**

Course Family: Children's Theatre Performance and Technical Production (see page 34 - limitation on active participatory courses)
Prerequisite: TAP 372 with a grade of "C" or better
Enrollment Limitation: Interview
Course Transferable to CSU
Hours: 54-162 hours LAB

This course is the fourth in a series of four courses that provide workshop training in the technical production of children's theatre. It provides practical experience, in the children's theatre style, in one of the following areas: scenery, scenic painting, properties, costumes, lighting, sound, video, projections, stage management, house management, box office, publicity, and running crews. It is designed for students with intermediate/significant theatre experience. Students interested in technical work interview for positions with the technical director. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include technical preparation, activities, rehearsals, and performances. (C-ID THTR 192)

**TAP 380 Repertory/Touring Rehearsal
and Performance I 1-3 Units**

Course Family: Repertory/Touring Performance and Technical Production (see page 34 - limitation on active participatory courses)
Advisory: TA 350 or 480
Enrollment Limitation: Students must audition and/or interview with the director to participate in this course.
Course Transferable to UC/CSU
Hours: 54-162 hours LAB

This course is the first in a series of four courses that provide workshop training in the rehearsal and performance of repertory and/or touring theatre. It is designed for students with little or no prior theatre experience. Students audition or interview with the director for participation in a repertory and/or touring theatre production. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include acting, singing, dancing, and/or technical rehearsals and preparation. (C-ID THTR 191)

**TAP 381 Repertory/Touring Rehearsal
and Performance II 1-3 Units**

Course Family: Repertory/Touring Performance and Technical Production (see page 34 - limitation on active participatory courses)
Prerequisite: TAP 380 with a grade of "C" or better
Advisory: TA 350 or 480
Enrollment Limitation: Students must audition and/or interview with the director to participate in this course.
Course Transferable to UC/CSU
Hours: 54-162 hours LAB

This course is the second in a series of four courses that provide workshop training in the rehearsal and performance of repertory and/or touring theatre. It is designed for students with basic/minimal theatre experience. Students audition or interview with the director for participation in a repertory and/or touring theatre production. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include acting, singing, dancing, and/or technical rehearsals and preparation. (C-ID THTR 191)

TAP 382 Repertory/Touring Rehearsal and Performance III 1-3 Units

Course Family: Repertory/Touring Performance and Technical Production (see page 34 - limitation on active participatory courses)
Prerequisite: TAP 381 with a grade of "C" or better
Advisory: TA 350 or 480

Enrollment Limitation: Students must audition and/or interview with the director to participate in this course.

Course Transferable to UC/CSU

Hours: 54-162 hours LAB

This course is the third in a series of four courses that provide workshop training in the rehearsal and performance of repertory and/or touring theatre. It is designed for students with beginning/moderate theatre experience. Students audition or interview with the director for participation in a repertory and/or touring theatre production. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include acting, singing, dancing, and/or technical rehearsals and preparation. (C-ID THTR 191)

TAP 383 Repertory/Touring Rehearsal and Performance IV 1-3 Units

Course Family: Repertory/Touring Performance and Technical Production (see page 34 - limitation on active participatory courses)
Prerequisite: TAP 382 with a grade of "C" or better
Advisory: TA 350 or 480

Enrollment Limitation: Students must audition and/or interview with the director to participate in this course.

Course Transferable to UC/CSU

Hours: 54-162 hours LAB

This course is the fourth in a series of four courses that provide workshop training in the rehearsal and performance of repertory and/or touring theatre. It is designed for students with intermediate/significant theatre experience. Students audition or interview with the director for participation in a repertory and/or touring theatre production. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include acting, singing, dancing, and/or technical rehearsals and preparation. (C-ID THTR 191)

TAP 390 Repertory and Touring Technical Production I 1-3 Units

Course Family: Repertory/Touring Performance and Technical Production (see page 34 - limitation on active participatory courses)
Enrollment Limitation: Interview

Course Transferable to CSU

Hours: 54-162 hours LAB

This course is the first in a series of four courses that provide workshop training in the technical production of repertory and touring theatre. It provides practical experience, in the repertory and touring theatre style, in one of the following areas: scenery, scenic painting, properties, costumes, lighting, sound, video, projections, stage management, house management, box office, publicity, and running crews. It is designed for students who want an introductory experience. Students interested in technical work interview for positions with the technical director. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include technical preparation, activities, rehearsals, and performances. (C-ID THTR 192)

TAP 391 Repertory and Touring Technical Production II 1-3 Units

Course Family: Repertory/Touring Performance and Technical Production (see page 34 - limitation on active participatory courses)
Prerequisite: TAP 390 with a grade of "C" or better

Enrollment Limitation: Interview

Course Transferable to CSU

Hours: 54-162 hours LAB

This course is the second in a series of four courses that provide workshop training in the technical production of repertory and touring theatre. It provides practical experience, in the repertory and touring theatre style, in one of the following areas: scenery, scenic painting, properties, costumes, lighting, sound, video, projections, stage management, house management, box office, publicity, and running crews. It is designed for students with basic/minimal theatre experience. Students interested in technical work interview for positions with the technical director. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include technical preparation, activities, rehearsals, and performances. (C-ID THTR 192)

TAP 392 Repertory and Touring Technical Production III 1-3 Units

Course Family: Repertory/Touring Performance and Technical Production (see page 34 - limitation on active participatory courses)
Prerequisite: TAP 391 with a grade of "C" or better

Enrollment Limitation: Interview

Course Transferable to CSU

Hours: 54-162 hours LAB

This course is the third in a series of four courses that repertory and touring theatre. It provides practical experience, in the repertory and touring theatre style, in one of the following areas: scenery, scenic painting, properties, costumes, lighting, sound, video, projections, stage management, house management, box office, publicity, and running crews. It is designed for students with beginning/moderate theatre experience. Students interested in technical work interview for positions with the technical director. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include technical preparation, activities, rehearsals, and performances. (C-ID THTR 192)

TAP 393 Repertory and Touring Technical Production IV 1-3 Units

Course Family: Repertory/Touring Performance and Technical Production (see page 34 - limitation on active participatory courses)
Prerequisite: TAP 392 with a grade of "C" or better

Enrollment Limitation: Interview

Course Transferable to CSU

Hours: 54-162 hours LAB

This course is the fourth in a series of four courses that repertory and touring theatre. It provides practical experience, in the repertory and touring theatre style, in one of the following areas: scenery, scenic painting, properties, costumes, lighting, sound, video, projections, stage management, house management, box office, publicity, and running crews. It is designed for students with intermediate/significant theatre experience. Students interested in technical work interview for positions with the technical director. Field trips may be required. A portion of this course may be offered in a TBA component of 54-162 hours which may include technical preparation, activities, rehearsals, and performances. (C-ID THTR 192)

Area: Technical Education
 Dean: Dr. Trish Caldwell
 Phone: (916) 484-8354
 Counseling: (916) 484-8572
 www.arc.losrios.edu/~welding/



American Welding Society
 Accredited Testing Facility, 2001

Degree: A.S. - Welding Technology
 Certificates: Shielded Metal Arc Plate and Pipe
 Welding Metallurgy and Inspection
 Department Certificates:
 Gas Metal Arc, Flux Core Arc Welding Plate
 Gas Tungsten Arc Plate & Pipe Welding
 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

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

DEPARTMENT CERTIFICATES

Gas Metal Arc, Flux Core Arc Welding Plate (252 hours) Certificate

The Gas Metal Arc Welding certificate promotes competence in welding with different types of metal transfer, constant voltage power sources, different types of shielding gases, and electrode selection on various joint designs. Instruction is provided in gas metal and flux cored arc welding on fillet and groove welds to specific structural and pipe standards.

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

Pipe Welding Certificate

This certificate promotes competence in pipe welding with emphasis 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. Training in math and workforce wellness is covered.

Student Learning Outcomes

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

- interpret electrode classifications and specifications
- 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
- use math in welding applications

Career Opportunities

Graduates may find employment in a number of industries, including PG&E pipeline construction, oil refining, structural building, bridge construction, and small commercial fabricating shops.

Requirements for Certificate		17.5 Units
FITNS 100	Utility Workforce Wellness.....	1
MATH 145	Mathematics for the Trades	1.5
WELD 155	Industry Training	3
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 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 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

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. Code and test requirements are presented. Welders select the code, metal, process, and positions to be used. Preparation for competing in the SkillsUSA regional, state, and national competition is also covered. This course may be taken up to four times for credit with different competitions. A field trip and participation at the site of the SkillsUSA regional competition are required.

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 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.

WELD 300 Introduction to Welding**3 Units***Course Transferable to CSU**Hours: 36 hours LEC; 54 hours LAB*

This course is an introduction to welding processes, including shielded metal arc, gas metal arc, flux-cored gas shield and self shield, gas tungsten arc, oxyacetylene cutting and welding on joint designs, and positions used in industry. Safety in arc welding, oxyacetylene, and plasma cutting is also covered. Field trips may be required.

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**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 provides training in shielded metal arc welding skills, using low, medium, and high carbon steels. It covers pre-employment training for welding technicians. Topics include open-groove and fillet welds with Shielded Metal Arc Welding (SMAW) in the horizontal (2F&2G), vertical (3F&3G), and overhead (4F&4G) positions used in plate welding, while preparing students for pipe welding in positions 1G horizontal rolled, 2G horizontal fixed, 5G vertical fixed, and 6G 45degrees in the fixed position, used by American Society of Mechanical Engineering (ASME) and American Petroleum Institute (API) and American Welding Society (AWS). It also provides technical instruction on destructive and non destructive testing on filler materials, base metal, 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*

This course covers the applications of shielded metal arc welding used to join low-pressure piping systems that carry water and residential natural gas as well as non-corrosive and non-combustible piping systems. The welding required for high pressure critical piping systems such as steam pipe, pipe lines, boilers, offshore oil-rigs, and other critical heavy-duty piping systems is also 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: Business & Computer Science
 Dean: Dr. Derrick Booth
 Coordinator: Vivian Orcasitas Dillon
 Phone: (916) 484-8941
 Counseling: (916) 484-8572
<http://wexp.losrios.edu>

Cooperative Work Experience (WEXP) is an experiential academic program where students apply what they have learned in the classroom to a work environment.

The program offers students the opportunity to develop technical skills, explore possible career choices, build confidence, network with people in the field, and transition into the world of work.

Student Learning Outcomes

Upon completion of WEXP 198, the student will be able to:

- demonstrate competencies for effective and competitive workforce performance as written in the minimum three (3) learning objectives created by the student and his/her employer or work site supervisor at the start of the course.
- make effective decisions, use workforce information, and manage his/her personal career plans.
- behave professionally, ethically, and legally at work, consistent with applicable laws, regulations, and organizational norms.
- behave responsibly at work, exhibiting initiative and self-management in situations where it is needed.
- apply effective leadership styles at work, with consideration to group dynamics, team and individual decision making, and workforce diversity.
- communicate in oral, written, and multimedia formats in a variety of contexts at work.
- locate, organize, evaluate, and reference information at work.
- demonstrate originality and inventiveness at work by combining ideas or information in new ways, making connections between seemingly unrelated ideas, and reshaping goals in ways that reveal new possibilities using critical and creative thinking skills such as logical reasoning, analytical thinking, and problem-solving.

Upon completion of WEXP 298, the student will be able to:

- demonstrate mastery of specific job skills in a field of study related to an associate degree or certificate occupational program level career as written in the minimum three (3) learning objectives created by the student and his/her employer or work site supervisor at the start of the course.
- make effective decisions, use workforce information, and manage his/her personal career plans.
- behave professionally, ethically, and legally at work, consistent with applicable laws, regulations, and organizational norms.
- behave responsibly at work, exhibiting initiative and self-management in situations where it is needed.
- apply effective leadership styles at work, with consideration to group dynamics, team and individual decision making, and workforce diversity.
- communicate in oral, written, and multimedia formats in a variety of contexts at work.
- locate, organize, evaluate, and reference information at work.

- demonstrate originality and inventiveness at work by combining ideas or information in new ways, making connections between seemingly unrelated ideas, and reshaping goals in ways that reveal new possibilities using critical and creative thinking skills such as logical reasoning, analytical thinking, and problem-solving.

Upon completion of WEXP 498, the student will be able to:

- demonstrate application of industry knowledge and theoretical concepts in a field of study related to a transfer degree level career as written in the minimum three (3) learning objectives created by the student and his/her employer or work site supervisor at the start of the course
- make effective decisions, use workforce information, and manage his/her personal career plans.
- behave professionally, ethically, and legally at work, consistent with applicable laws, regulations, and organizational norms.
- behave responsibly at work, exhibiting initiative and self-management in situations where it is needed.
- apply effective leadership styles at work, with consideration to group dynamics, team and individual decision making, and workforce diversity.
- communicate in oral, written, and multimedia formats in a variety of contexts at work.
- locate, organize, evaluate, and reference information at work.
- demonstrate originality and inventiveness at work by combining ideas or information in new ways, making connections between seemingly unrelated ideas, and reshaping goals in ways that reveal new possibilities using critical and creative thinking skills such as logical reasoning, analytical thinking, and problem-solving.

Career Opportunities

The Cooperative Work Experience and Internship Program (WEXP) provides opportunities that support students working to advance their career. Participating in WEXP gives students the opportunity to learn professional skills in preparation for their chosen career, acquire hands-on experience in a structured program, and develop industry contacts. WEXP gives students a “competitive edge” by providing real-world experience.

The Work Experience Program serves 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 consult with their major program faculty to review specific certificate or degree work experience requirements. Up to four units of credit may be earned each semester. A maximum total of sixteen (16) units may be earned during the student’s enrollment in a community college.

(continued on next page)

(Career Opportunities continued)

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 earned in a semester. Work Experience 198 is not repeatable. 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 second 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 finding an internship should go to the program website at <http://wexp.losrios.edu/>. Positions may be paid or unpaid. The weekly orientation course is required for first time participants. Returning participants are not required to attend the weekly orientation course but are required to meet with the instructor as needed as well as attend the first class meeting, a mid-semester meeting, and a final meeting. 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.

Work experience has courses in the following discipline areas: ACCT 498, ACT 298, ARTNM 498, AT 298, BIOT 498, BUS 498, CISC 498, CARPT 298, DANCE 498, DCDT 298, DESGN 298, DRLTH 298, ELECT 298, ET 298, FASHN 498, GEOG 498, GERON 498, HM 498, HORT 298, HSER 498, IDES 498, IW 298, KINES 498, LA 498, NATR 498, OE3 298, RECR 498, SHME 298, TA 498.

For more information about these courses, please see their program of study sections in the catalog.

Work Experience

WEXP 198 Work Experience – General 1-3 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position, or job with a cooperating site supervisor.

General Education: AA/AS Area III(b)

Hours: 60-225 hours LAB

This course provides students with opportunities to acquire desirable work habits, attitudes and career awareness. It is designed for students interested in exploring various career options. Course content includes understanding the application of education to the workforce, completion of Title 5 required forms which document the student's progress and hours spent at the work site, and developing workplace skills and competencies. During the semester, the student is required to 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. First-time participants are required to attend a weekly orientation and a final meeting. Returning participants are required to attend the first class meeting, a mid-semester meeting, and a final meeting and may meet individually with the instructor as needed to complete a work site observation and all program forms, receive updates, and assignments. Students may take up to 16 units total across all Work Experience course offerings. This course is not repeatable. Only one Work Experience course may be taken per semester.

WEXP 298 Work Experience in (Subject) 1-4 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position, or job related to career goals with a cooperating site supervisor.

General Education: AA/AS Area III(b)

Hours: 60-300 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 Title 5 required forms which document the student's progress and hours spent at the work site, and developing workplace skills and competencies. During the semester, the student is required to 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. First-time participants are required to attend a weekly orientation and a final meeting. Returning participants are required to attend the first class meeting, a mid-semester meeting, and a final meeting and may meet individually with the instructor as needed to complete a work site observation and all program forms, receive updates, and assignments. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

WEXP 498 Work Experience in (Subject) 1-4 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position, or job related to career goals with a cooperating site supervisor.

General Education: AA/AS Area III(b)

Course Transferable to CSU

Hours: 60-300 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 Title 5 required forms which document the student's progress and hours spent at the work site, and developing workplace skills and competencies. During the semester, the student is required to 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. First-time participants are required to attend a weekly orientation and a final meeting. Returning participants are required to attend the first class meeting, a mid-semester meeting, and a final meeting and may meet individually with the instructor as needed to complete a work site observation and all program forms, receive updates, and assignments. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

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This addendum to the 2015-16 American River College Catalog contains important changes and additions. This addendum was updated after the 2015-2016 American River College Catalog went to press in April.

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 New Transfer Degree: Anthropology A.A. for Transfer

Business page 3
 New Department Certificate: Internet Marketing

Foreign Languages page 4
 New Transfer Degree: Spanish A.A. for Transfer

Corrections page 5
 2015-2016 College Catalog corrections

New Courses page 6
 New courses added to the 2015-2016 College Catalog

**AMERICAN RIVER
 COLLEGE**

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

Degree: A.A. for Transfer - Anthropology

The degree listed here is an addition to the Catalog 2015-2016. For other programs in Anthropology, please see Catalog 2015-2016, page 104.

Anthropology A.A. for Transfer (AA-T) Degree

The Associate in Arts degree in Anthropology for Transfer provides students with a major that fulfills the general requirements of the California State University for transfer. Students with this degree will receive priority admission with junior status to the California State University system. The Associate in Arts degree in Anthropology for Transfer (AA-T) may be obtained by the completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program outlined below (earning a C or better in these courses) and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education Breadth Requirements.

Anthropology is the study of humankind around the world and throughout time, with the goal of understanding our evolutionary origins, our biological distinction as a species, and our diverse manifestations of culture. A degree in anthropology provides the student with basic skills in critical analysis, application of the scientific method, and cross-cultural understanding.

Student Learning Outcomes

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

- apply the science of anthropology towards a holistic understanding of human nature.
- synthesize the principles that form the foundation of anthropology.
- analyze social and ethical issues using anthropological concepts and methods.
- assess the cultural, physical, and linguistic diversity expressed in our species.

Career Opportunities

The AA-T degree provides students with a solid foundation in anthropology as well as the standard prerequisites for upper division coursework leading to the baccalaureate degree. Anthropologists with graduate degrees work in archaeological excavation and museum management, the analysis of cultures, linguistics, forensics, primatology, and education. They also consult with governmental, business, and educational institutions.

Requirements for Degree 19 - 20 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
or ANTH 481	Honors Cultural Anthropology (3)	
ANTH 320	Introduction to Archaeology and World Prehistory.....	3
STAT 300	Introduction to Probability and Statistics (4)	3-4
or PSYC 330	Introductory Statistics for the Behavioral Sciences (3)	

And a minimum of 6 units from the following:6

A minimum of 3 units must come from the Anthropology Major Prep electives. The other 3 units may come from either the Anthropology Major Prep electives or the General electives listed below.

Anthropology Major Prep Electives

ANTH 303	Introduction to Forensic Anthropology (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)

General Electives

ANTH 319	Visual Anthropology: Introduction to Ethnographic Film (3)
ANTH 321	Ancient Technology (3)
ANTH 335	Research Methods in Anthropology (3)
ANTH 370	Primatology (3)
GEOG 310	Human Geography: Exploring Earth's Cultural Landscapes (3)
GEOL 300	Physical Geology (3)
and GEOL 301	Physical Geology Laboratory (1)
GEOL 305	Earth Science (3)
and GEOL 306	Earth Science Laboratory (1)
MUFHL 330	World Music (3)
SOC 320	Minorities in America (3)

Associate in Arts for Transfer Degree Requirements: The Associate in Arts in Anthropology for Transfer (AA-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

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

Department Certificate: Internet Marketing

The department certificate listed here is an addition to the Catalog 2015-2016. For programs and courses in Business, please see Catalog 2015-2016, page 169.

DEPARTMENT CERTIFICATE

Internet Marketing Certificate

This certificate offers a program of study for students seeking jobs that require skills in technical marketing applications. It provides opportunities to combine traditional marketing theory with the technical skills needed in today's business environment. Courses address current technology-based business communications, marketing, Internet strategies, applications, and trends.

Student Learning Outcomes

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

- identify and create effective Internet marketing strategies that enhance business relationships with present and future customers.
- apply communication theory, effective writing techniques, and presentation skills to business situations.
- utilize software applications designed to present and promote business in print and visual media.
- devise a marketing plan using social media applications and content platforms for marketing both small and large businesses.
- analyze various software applications for Search Engine Optimization (SEO), analytic tools, web-building and blog applications, email marketing, and other technical marketing tools.

Career Opportunities

Career opportunities include titles such as social media administrator, digital marketing director, campaign specialist, marketing/events coordinator, media marketing, social media squad, Internet marketing communications, and communications and social media coordinator.

Requirements for Certificate		14 Units
BUS 310	Business Communications.....	3
CISA 330	Desktop Publishing.....	2
CISA 340	Presentation Graphics.....	2
CISA 345	Technical Marketing Applications	2
CISA 346	Social Media Applications	1
CISW 350	Imaging for the Web.....	1
MKT 330	Internet Marketing.....	3

Area: Humanities
 Dean: Kate Jaques
 Phone: (916) 484-8653
 Counseling: (916) 484-8572

Degree: A.A. for Transfer - Spanish

*The degree listed here is an addition to the Catalog 2015-2016.
 For other programs in Foreign Languages, please see Catalog 2015-2016,
 page 277.*

Spanish A.A. for Transfer (AA-T) Degree

This degree provides students with a major that fulfills the general requirements of the California State University for transfer. Students with this degree will receive priority admission with junior status to the California State University system. The Associate in Arts degree in Spanish for Transfer (AA-T) may be obtained by the completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program outlined below (earning a C or better in these courses) and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education Breadth Requirements.

Student Learning Outcomes

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

- demonstrate proficiency in the five skills as mandated by the competency guidelines of the American Council of the Teaching of Foreign Languages (ACTFL): comprehension, speaking, reading, writing, and understanding the people and culture of the Spanish-speaking countries.
- utilize correct grammatical structures of standard Spanish.
- read Spanish proficiently as found, for example, in Spanish language newspapers, magazines, short stories, essays, and selections of poetry written by Spanish, Spanish-American, and Chicano authors.
- demonstrate appropriate writing and composition skills in Spanish.
- critique and discuss Latin American and Peninsular literature in a historical context.
- analyze and discuss major historical events and periods in the history of Spanish-speaking countries.
- compare and contrast aspects of the Spanish-speaking culture that are different or similar to one's own culture.
- compare and contrast aspects of Spanish to another modern language.

Career Opportunities

This degree is designed to facilitate students' successful transfer to four-year colleges that prepare them for a variety of career opportunities, such as airlines/travel, banking, bilingual education, bilingual telecommunications, emergency services, foreign service, Foreign Language Teacher, imports and exports, international business, intelligence/military services, IRS/State Franchise Tax Board, law enforcement/correctional officer, social services, translating/interpreting, and tourism. Some careers may require additional training specific to the trade.

Requirements for Degree	19 Units
SPAN 401 Elementary Spanish	4
SPAN 402 Elementary Spanish	4
SPAN 411 Intermediate Spanish	4
SPAN 412 Intermediate Spanish	4
And a minimum of 3 units from the following:	3
FREN 411 Intermediate French (4)	
FREN 412 Intermediate French (4)	
HIST 327 History of the Chicano/Mexican American (3)	
HIST 373 History of Mexico (3)	
ITAL 411 Intermediate Italian (4)	
ITAL 412 Intermediate Italian (4)	
SOC 325 Chicano Culture (3)	
SPAN 361 Conversational Spanish, Intermediate (3)	

Associate in Arts for Transfer Degree Requirements: The Associate in Arts in Spanish for Transfer (AA-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education Breadth Requirements.

The items listed have been corrected for the Catalog 2015-2016.

Hour and Unit corrections:

PSTC 1502 Basic Law Enforcement Academy – Module III 6-7 Units

Enrollment Limitation: Students must 1) Be free of felony convictions 2) Possess a valid California Driver's License 3) Undergo a fingerprint and criminal history check 4) Be a minimum of 18 years of age 5) Be a United States high school graduate, pass the GED, pass the California High School Proficiency Examination, or have attained a two-year or four-year degree from an accredited college or university 6) Complete a medical suitability examination.
Hours: 80 - 100 hours LEC; 86 - 126 hours LAB

The course satisfies Level III training requirements of the Commission on Peace Officer Standards and Training (POST) Level III module. Topics covered include: Study Skills, Leadership and Ethics, Introduction to Criminal Law, Investigative Report Writing, Use of Force, Traffic Enforcement, Crimes Scenes and Forensics, Arrest Methods and Defensive Tactics, Firearms, First Aid/ CPR, Information Systems, and Cultural Diversity. Pass/No Pass only

PSTC 1503 Basic Law Enforcement Academy – Module II 8-11 Units

Enrollment Limitation: Students must 1) Be free of felony convictions 2) Possess a valid California Driver's License 3) Undergo a fingerprint and criminal history check 4) Be a minimum of 18 years of age 5) Be a United States high school graduate, pass the GED, pass the California High School Equivalency Examination, or have attained a two-year or four-year degree from an accredited college or university 6) Complete a medical suitability examination.
Hours: 108 - 140 hours LEC; 132 - 200 hours LAB

This course satisfies Level II training requirements of the Commission on Peace Officer Standards and Training Level II module. It covers 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/Discrimination, Lifetime Fitness and Law Enforcement Career Preparation. Pass/No Pass only.

Repeatability correction:

WEXP 198 Work Experience – General 1 - 3 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position, or job with a cooperating site supervisor.
Hours: 60 - 225 hours LAB

This course provides students with opportunities to acquire desirable work habits, attitudes and career awareness. It is designed for students interested in exploring various career options. Course content includes understanding the application of education to the workforce, completion of Title 5 required forms which document the student's progress and hours spent at the work site, and developing workplace skills and competencies. During the semester, the student is required to 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. First-time participants are required to attend a weekly orientation and a final meeting. Returning participants are required to attend the first class meeting, a mid-semester meeting, and a final meeting and may meet individually with the instructor as needed to complete a work site observation and all program forms, receive updates, and assignments. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

The courses listed in this section are new and have been added to the Catalog 2015-2016.

ARTNM 406 Design for Tablets 3 Units

Prerequisite: ARTNM 352 and 402 with grades of “C” or better

Advisory: ARTNM 330

Hours: 36 hours LEC; 54 hours LAB

This course introduces production and design processes of tablet-based media. Various industry standard software applications are employed to create compatible websites, digital documents, PDF presentations, and ePub creations. Topics include the processes and the strategies of combining text, images, animation, video, and audio elements to create compelling visual experiences for tablet-oriented mobile media.

ARTPH 302 Black and White Silver Gelatin Photography Lab 1 Unit

Corequisite: ARTPH 300 or 340

Hours: 54 hours LAB

This course offers additional lab hours to more fully develop creative vision and technical skills in black and white silver gelatin photography. It also allows alternative process photographers additional lab hours for development of film and digital negatives. It provides additional assistance in assignments and portfolio development for ARTPH 300 and ARTPH 340.

ARTPH 306 Photography Lab: Digital Editing 1 Unit

Corequisite: ARTPH 305, 310, 322, or 360

Hours: 54 hours LAB

This course offers additional lab hours to more fully develop creative vision and technical skills in digital image editing, processing, and printing. It provides additional assistance in assignments and portfolio development in ARTPH 305, ARTPH 310, ARTPH 322, and ARTPH 360.

ARTPH 361 Photography Lab: Studio Lighting 1 Unit

Corequisite: ARTPH 360 or 370

Hours: 54 hours LAB

This course offers additional lab hours to more fully develop creative vision and technical skills in studio lighting and large format photography. It provides additional assistance in assignments and portfolio development for ARTPH 360 and ARTPH 370.

CARPT 155 Commercial Concrete 1.3 Units

Enrollment Limitation: Must be a registered Carpenter Apprentice

Hours: 18 hours LEC; 16 hours LAB

This course covers concepts and practices of commercial concrete construction. Topics include layout and construction of bolt patterns, concrete columns, and gang forms, as well as the types and methods used to safely build, shore, and place column caps and concrete decks.

DANCE 433 Performance Group: ARCH Dance Company 3 Units

Course Family: Dance Performance Group (see page 34 of Catalog 2015-2016 - limitation on active participatory courses)

Enrollment Limitation: Audition

Hours: 36 hours LEC; 54 hours LAB

This course provides performance opportunities based on “classic” short stories, fables, and myths. The emphasis is on communicating the ideas and sentiments of well-known stories through dance. How characters might move to convey who they are and what they want is covered, as well as making transition choices to build the story line through dance. Individual portfolios are stressed and field trips may be required.

FIRE 1635 Fire Command 2D 2 Units

Prerequisite: FIRE 1622 and 1627

Hours: 36 hours LEC; 4 hours LAB

This is the fourth of a ten-course series for Chief Officer certification through California State Fire Training. Topics include principles of disaster planning and management; fire service emergency plans; emergency operations centers; case studies of various natural and man-made disasters; the roles of local, state, and federal offices of emergency services and emergency management agencies; and discussion of multi-hazard planning techniques. This course applies to the California Fire Service Training and Education system’s certification program. Pass/No Pass only.

GEOG 391 Field Studies in Geography: Mountain Landscapes 1-4 Units

Hours: 6-24 hours LEC; 36-144 hours LAB

This course covers geographic principles and processes in mountain environments. Course content varies by destination but may include topics in physical geography (e.g., plant and animal communities, climate and weather, geology and geomorphology, natural hazards, environmental impacts), human geography (e.g., cultural landscapes, economic activities, transportation issues, land use patterns, etc.), and introduces tools and techniques used for geographic field research (e.g., map and compass use, the Global Positioning System (GPS), Geographic Information Systems (GIS)). Field trips are required.

HIST 374 History of Latin America to 1830 3 Units

Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340

Hours: 54 hours LEC

This course is a general historical survey of Latin American history from the pre-contact indigenous civilizations to the 19th-century nationalist movements in the region. The focus is on the influence of political, economic, cultural, and demographic factors that shaped Latin America.

HLACT 301 Supporting the Mother-Baby Connection: Evidence-Based Practices for Perinatal Care 1 Unit

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. It focuses on the physiology of attachment, bonding, and breastfeeding and the short- and long-term impacts of perinatal care practices on the mother-baby dyad. It grapples with the challenges of applying best-practice guidelines and model hospital policies to alleviate barriers for mothers choosing exclusive breastfeeding and creating environments that support maternal-infant biology and the newborn's natural capabilities, allowing improved outcomes with less time and effort. This course meets Board of Registered Nursing continuing education requirements and, when combined with requisite supervised clinical experience, fulfills all criteria for staff education as set by the Baby Friendly Hospital Initiative. This course is not open to students who have completed NURSE 391.

HLACT 302 Fundamentals of Lactation Consultant Assisting 2.5 Units

Hours: 45 hours LEC

This course is designed for community workers responsible for promoting and protecting breastfeeding and charged with providing basic assessment, support, and appropriate referral for breastfeeding mothers in the community. It is also an introductory course in human lactation for students entering or preparing for professions in nursing, nutrition, health education, or early childhood development as well as for practicing professionals in these fields. This course provides an overview of factors impacting breastfeeding rates, explores health effects and current recommendations, discusses the anatomy and physiology of lactation, and considers the role of the lactation consultant assistant in facilitating breastfeeding. It covers counseling skills, cultural awareness, and community resources for promoting, protecting, and supporting breastfeeding. This course is formerly known as NURSE 390.

HLACT 311 Human Lactation for Lactation Counselors & Educators 2.5 Units

Prerequisite: HLACT 302 with a grade of "C" or better

Corequisite: HLACT 301 or NURSE 391; AND HLACT 321

Advisory: ECE 312, PSYC 300, PSYC 372, or SPEECH 361

Hours: 42 hours LEC; 9 hours LAB

This course prepares healthcare professionals, or other interested individuals who work with mothers and children, to provide evidence-based support to families, focusing on the normal processes of human lactation, the principles of adult education, and the art of counseling. It enables participants to provide accurate and consistent information about breastfeeding and lactation from birth through the process of weaning to improve breastfeeding outcomes.

HLACT 321 Interpreting Baby Behavior 0.5 Unit

Hours: 9 hours LEC

This course provides expertise in cutting-edge, evidence-based messages about babies' cues, crying, and sleep patterns and how to teach these to new parents. Parents with inaccurate expectations about infant behavior are less able to interact effectively with their infants. Infant crying and waking are common reasons for using supplemental formula or discontinuing breastfeeding. Helping parents better understand their infant's behavior supports new mothers in providing appropriate interactions and responsiveness to their infant's needs while meeting their breastfeeding goals, preventing overfeeding and the risk of obesity. This expertise is essential for lactation support professionals as well as for those in the child development and early childhood education professions.

HLACT 322 Nutrition and Biochemistry of Human Lactation 1 Unit

Same As: NUTRI 321

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

Advisory: BIOL 102

Hours: 18 hours LEC

This course addresses dietary recommendations for lactating women and for infants and young children with an emphasis on breastfeeding as the evidence-based norm. It also covers cultural and physiologic weaning practices and appropriate complementary foods. Primary topics include comparison of human milk with milks of other mammals and with other products and artificial baby milks, the array of individual biochemical and biological components in human milk, and their multiple nutritional and bioactive functions with a focus on immunologic components. Toxicology and pharmacology related to human milk and lactation are addressed. This course is not open to students who have completed NUTRI 321.

HLACT 331 Foundations of Lactation Consultant Practice 2 Units

Corequisite: HLACT 351

Advisory: HLACT 322 or NUTRI 321 with a grade of "C" or better

Enrollment Limitation: Acceptance into the Human Lactation Certificate Program.

Hours: 36 hours LEC

This course builds core competencies for lactation consultant practice. It is designed for individuals who will be working with mothers and young children in a variety of healthcare and other settings and is suitable for physicians; midwives; community, pediatric, and perinatal nurses; dietitians; speech, physical, and occupational therapists; social workers; and others with the requisite background in social and biological sciences and the field of human lactation. It provides preparation for conducting a systematic assessment of mother and child related to breastfeeding; selecting effective, evidence-based, individualized assistance for the breastfeeding dyad including triage and referral to other care providers as indicated; evaluating the outcomes; and revising the plan of care as required. Emphasis is placed on coordinating care of women and babies who are at risk of or currently experiencing lactation difficulties related to pregnancy, labor, birth, postpartum, and newborn interventions and complications, with particular focus on choosing behaviors consistent with standards of professional ethics and the lactation consultant scope of practice. Interpretation of scientific research is introduced.

HLACT 342 Managing Complex Problems in Lactation Consultant Practice 2 Units

Prerequisite: HLACT 331 with a grade of "C" or better

Corequisite: HLACT 322 or NUTRI 321; AND HLACT 352

Enrollment Limitation: Acceptance into the Human Lactation Certificate Program.

Hours: 36 hours LEC

This course builds on the skills and knowledge base acquired through HLACT 331 and HLACT 351 to cover all areas of the International Board of Lactation Consultant Examiners certification examination blueprint. It applies the lactation consultant process to complex breastfeeding experiences, including those affected by mental or physical health alterations or physical disabilities in the mother; anatomical, neurological, gastrointestinal, or other serious health alterations in the child; and vulnerable, at-risk populations including those experiencing emergency events or disasters. It covers appropriate use of selected breastfeeding aids, techniques, and devices in specific clinical situations and integrates behaviors consistent with standards of professional ethics and the lactation consultant scope of practice. The systematic review and critical analysis of relevant research is developed to support evidence-based practice.

HLACT 351 Clinical Preceptorship in Lactation Consulting I 3.5 Units*Corequisite: HLACT 331**Enrollment Limitation: Acceptance into the Human Lactation Certificate Program.**Hours: 189 hours LAB*

This course provides clinical opportunities to apply the cognitive knowledge and skills gained in HLACT 331 and its prerequisite courses. It serves as preparation for the more advanced clinical expectations in HLACT 352. Clinical experience is provided in regional hospitals and clinics under the direct supervision and evaluation of an International Board Certified Lactation Consultant (IBCLC) with over 5 years post-certification experience. Field trips are required. Students are responsible for costs associated with meeting the health, background check, liability insurance, and CPR certification requirements for Allied Health Program clinical placement.

HLACT 352 Clinical Preceptorship in Lactation Consulting II 3.5 Units*Prerequisite: HLACT 331 and 351 with grades of "C" or better**Corequisite: HLACT 342**Enrollment Limitation: Acceptance into the Human Lactation Certificate Program.**Hours: 189 hours LAB*

This course provides clinical opportunities to apply the cognitive knowledge and skills gained in HLACT 342 and its prerequisite courses. It serves as the final clinical preparation course for Lactation Consultant preparation. Clinical experience is provided in regional hospitals and clinics under the direct supervision and evaluation of an International Board Certified Lactation Consultant (IBCLC) with over 5 years post-certification experience. Field trips are required. Students are responsible for costs associated with meeting the health, background check, liability insurance, and CPR certification requirements for Allied Health Program clinical placement.

IDES 101 Interior Design Careers 0.5 Unit*Hours: 9 hours LEC*

This course explores a variety of career options in the multi-faceted field of interior design. Field trips are required.

IDES 102 Working with Clients 0.5 Unit*Hours: 9 hours LEC*

This course covers methods for effectively working with clients. Field trips are required.

IDES 103 Furniture Markets 0.5 Unit*Hours: 9 hours LEC*

This course provides an opportunity to attend seasonal markets, such as the San Francisco Design Center (SFDC), to tour showrooms, attend lectures, and see the upcoming interior design offerings. Trends, markets, budgets, and products are discussed. Field trips are required.

IDES 104 Home Staging 0.5 Unit*Hours: 9 hours LEC*

This course is a basic introduction to the process of staging homes for sale. Topics include model homes and resale. Field trips are required.

IDES 108 Lighting For Better Health 0.5 Unit*Hours: 9 hours LEC*

This course introduces better lighting design that could improve your health. New research shows that properly designed lighting can enhance our human biology and overall good health. Field trips are required.

IDES 109 Interior Design Specifications 0.5 Unit*Hours: 9 hours LEC*

This is a basic introduction to the process of specifying interior fixtures, furniture, and equipment. Topics include selection, documentation, and industry standards for specification writing. Field trips may be required.

IDES 120 Seasonal Decorating 0.5 Unit*Hours: 9 hours LEC*

This course introduces the basics for changing decor according to various seasons and holidays. Resourcing for props, elements and accessories is included. This course covers both commercial and residential applications.

NUTRI 321 Nutrition and Biochemistry of Human Lactation 1 Unit*Same As: HLACT 322**Prerequisite: NUTRI 300 with a grade of "C" or better**Advisory: BIOL 102**Hours: 18 hours LEC*

This course addresses dietary recommendations for lactating women and for infants and young children with an emphasis on breastfeeding as the evidence-based norm. It also covers cultural and physiologic weaning practices and appropriate complementary foods. Primary topics include comparison of human milk with milks of other mammals and with other products and artificial baby milks, the array of individual biochemical and biological components in human milk, and their multiple nutritional and bioactive functions with a focus on immunologic components. Toxicology and pharmacology related to human milk and lactation are addressed. This course is not open to students who have completed HLACT 322.

PSTC 1685 Patrol Entry and Search Training - SPD 0.25 Unit*Prerequisite: PSTC 1200**Hours: 3 hours LEC; 5 hours LAB*

This update course provides current information in the various aspects of patrol entry and search techniques. Topics include firearms handling, entry techniques, room clearing, three man bump, and team composition. This course is formerly known as SPD 1217. Pass/No Pass only.

PSTC 1770 Peer Support 0.5 - 0.75 Unit*Hours: 6 - 10 hours LEC; 18 - 22 hours LAB*

This course introduces the basic skills necessary to perform as a peer support person for law enforcement personnel and their families. Topics covered include role of the Employee Assistance Program (EAP), chaplaincy, psychologist, dealing with depression, burnout, suicide, expectations of and skills needed for peer support, and referral resources. This course is formerly known as SCSD 1214. Pass/No Pass only.

PSTC 1804 Informant Development and Maintenance 1 Unit*Prerequisite: PSTC 1200**Hours: 24 hours LEC*

This course is designed for law enforcement, correctional, probation, and parole officers in the development of informants. Course topics include common problems when using informants, limitations on the use of informants, informant motives, informant policies, investigative strategies, and informants and ethics. Pass/No Pass only.



This addendum to the 2015-16 American River College Catalog contains important changes and additions. This addendum was updated after the 2015-2016 American River College Catalog went to press in April.

ACADEMIC CALENDAR.....page 2
 Correction of Dates (Catalog–p 1)

GETTING STARTEDpage 3
 Changes to Student’s Universal Transit Pass Fee (Catalog–pp 15, 16)

POLICIES, RIGHTS & RESPONSIBILITIES page 4-5
 Revised Non-discrimination Policy (Catalog–p 44)
 New Smoking Standard (Catalog–p 49)

ACCOUNTING..... page 6
 Added certificate: Payroll Practitioner (Catalog–p 95)

CORRECTIONS..... page 7-8
 2015-2016 College Catalog corrections

NEW COURSES page 9
 New courses added to the 2015-2016 College Catalog

AMERICAN RIVER COLLEGE

4700 College Oak Drive
Sacramento, CA 95841
(916) 484-8011
www.arc.losrios.edu

Los Rios Community College District

2015-2016 Academic Calendar

Summer Session 2015*

Instruction begins	June 8	Monday
Independence Day holiday (College closed)	July 3	Friday
Instruction ends	August 5	Wednesday
Grades due	August 10	Monday

Fall Semester 2015*

Instructional Improvement Days	August 20, 21	Thursday, Friday
Instruction begins	August 22	Saturday
Labor Day holiday (College closed)	September 7	Monday
Veterans Day holiday (College closed)	November 11	Wednesday
Last day to withdraw from full semester classes	November 17	Tuesday
Thanksgiving recess (College closed)	November 26-Nov. 29	Thursday-Sunday
Finals	December 11-17	Friday-Thursday
End of semester	December 17	Thursday
Winter recess	Dec. 18 - Jan. 1	Friday-Friday
Grades due	January 4	Monday
Semester break	January 2-13	Saturday-Wednesday

Spring Semester 2016*

Instructional Improvement Days	January 14, 15	Thursday, Friday
Instruction begins	January 16	Saturday
King's Birthday holiday (College closed)	January 18	Monday
Lincoln's Birthday holiday (College closed)	February 12	Friday
Washington's Birthday holiday (College closed)	February 15	Monday
Spring recess (Limited office hours)	March 21-March 27	Monday-Sunday
Last day to withdraw from full semester classes	April 17	Sunday
Finals	May 12-18	Thursday-Wednesday
End of semester	May 18	Wednesday
Memorial Day holiday (College closed)	May 30	Monday
Grades due	May 31	Tuesday

<p>Note: Online (eServices) enrollment is available every day, including holidays, 7:00 a.m. to 11:30 p.m. for registration and adding/dropping classes, except when down due to maintenance.</p>

Student's Universal Transit Pass (UTP) Fees and Dates

LRCCD Students approved a Universal Transit Pass fee to provide students with a special unlimited pass to use on all of Sacramento Regional Transit (RT) light rail and bus lines and where RT has transfer agreements with other regional transit agencies, including Folsom Transit, Yolo County Transit, Sacramento Airport Transit and Roseville Transit. The pass is valid seven days a week from August 1 – December 31 for the Fall semester, January 1 – May 31 for the Spring semester and June 1 – July 31 for the Summer session.

Fall/Spring Semester: All students (including BOG students) enrolled in more than three units at any of the Los Rios colleges will be assessed a mandatory UTP fee at \$2.10 per unit rounded up to the next whole unit (3.01 units = 4 units x \$2.10 = \$8.40) for Fall and/or Spring semester. Maximum UTP fee per semester is \$31.50 for all units taken districtwide. If you are enrolled in multiple Los Rios colleges you must be enrolled in at least 3.01 units at a single Los Rios college to be eligible for the Sacramento Regional Transit (RT) light rail and bus pass.

RT Pass Discount: Students with **3 units or less** are **NOT eligible** for the Sacramento Regional Transit (RT) Pass. However, they are eligible for a 50% discount off of the monthly Sacramento Regional Transit Pass.

Summer Session: All students (including BOG students) enrolled in Summer are eligible for the Sacramento Regional Transit (RT) light rail and bus pass. The mandatory UTP fee is a flat rate of \$10 regardless of the number of units enrolled in.

Exemptions/Waivers: Eligible Apprentice Enrollees; Sacramento Regional Public Safety Center students; students taking classes on the UC Davis main campus and students studying abroad.

UTP Sticker/Student Access Card Refund and Replacement Policy

The UTP fee is refundable only if you drop classes by the deadlines indicated.

A minimum fee of \$8.40 will be withheld from your refund if a UTP sticker has been issued for the current Fall or Spring semester. No refunds will be given if you have already been issued a sticker for Summer.

If your Student Access Card is lost or stolen during the academic year in which it was issued, there will be a \$5 fee for a replacement card.

There will be a \$36.50 fee to replace the Student Access card (\$5) and re-issue the UTP Sticker (\$31.50) if lost or stolen.

Non-discrimination Policy

It is the policy of the District to implement policies to guarantee that no qualified student or prospective student or any person having an educational relationship with the District shall be unlawfully discriminated against, harassed, or excluded from any benefits, activities, or programs on the grounds of ethnic group identification, race, color, gender, sexual orientation, sexual identity, religion, age (over forty), national origin, ancestry, disability, political affiliation or belief, military and veteran status, or marital status, nor shall any students be discriminated against for conversing in a language other than English. However, students shall be required to speak English when the use of English is necessary for educational or communication purposes. Sexual harassment is a form of unlawful discrimination based on sex and is prohibited in the District/College programs and activities under Title IX of the Education Amendments of 1972, 20 U.S.C., sections 1681 and following (Title IX). Further information may be found on the Los Rios website at:

www.losrios.edu/legal/Policies/P-2000/P-2113.pdf

(web link is case sensitive)

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

College Equity Officer

Dr. Stephen Boyd

(Interim) Associate Vice President, Instruction.....(916) 484-8540

Disciplinary Officer

Manuel Perez

Dean, Student Development.....(916) 484-8924

Student Grievance Officer

Dr. Judy Mays

(Interim) Dean, Counseling & Student Services...(916) 484-8375

Sexual Harassment Officer

Dr. Stephen Boyd

(Interim) Associate Vice President, Instruction.....(916) 484-8540

Title IX Coordinator

Dr. Stephen Boyd

(Interim) Associate Vice President, Instruction.....(916) 484-8540

504 Coordinator

Dr. Robin Neal

Dean, Enrollment Services.....(916) 484-8171

Americans with Disabilities Act (ADA) Coordinator

Dr. Robin Neal

Dean, Enrollment Services.....(916) 484-8171

Smoking Standard

American River College and its centers will be smoke, tobacco, and vapor free as of January 1, 2016.
For more information, please visit www.arc.losrios.edu/About_ARC/Smoke-Tobacco-Free.htm

The department certificate listed here is an addition to the Catalog 2015-2016.

**For programs and courses in Accounting,
please see Catalog 2015-2016, page 95**

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

Department Certificate: Payroll Practitioner

DEPARTMENT CERTIFICATE

Payroll Practitioner Certificate

This certificate meets the modern needs of employers for employees with specialized skills needed in a payroll department. It is designed to prepare students to pass the exams to become certified as either a Certified Payroll Professional (CPP) or Fundamental Payroll Certification (FPC), both of which are administered and awarded by the American Payroll Association. Additional coursework in the certificate provides students with appropriate skills in accounting, accounting technologies, business, communication skills, and workplace behavior.

Student Learning Outcomes

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

- apply the complex knowledge of laws affecting payroll.
- calculate gross pay, employee taxes, other withholdings, net pay, and employer taxes.
- prepare all payroll tax returns.
- utilize appropriate technologies used in payroll, including small business accounting software and spreadsheets.
- understand the business environment and effectively function within it.
- communicate effectively in the business environment.

Career Opportunities

This certificate leads to careers as a payroll clerk, supervisor, and manager. It also enhances careers in human resources, accounting, budget, and finance departments. All employers need staff who can process payroll, either within the organization or by working with payroll processing companies. Additional opportunities may be found in companies that provide payroll services. Students who transfer to 4-year universities will be employed in professional accounting positions which work collaboratively with a payroll department.

Requirements for Certificate		16 - 17 Units
ACCT 101 or ACCT 301	Fundamentals of College Accounting (3) Financial Accounting (4)	3 - 4
ACCT 131	Fundamental Payroll Administration	1.5
ACCT 132	Intermediate Payroll Administration	1.5
ACCT 133	Advanced Payroll Administration	1.5
ACCT 134	California Payroll Administration	1.5
ACCT 341	Computerized Accounting 2	
ACCT 343	Computer Spreadsheet Applications for Accounting (2).....	2
or CISA 316	Intermediate Electronic Spreadsheets (2)	
BUS 310	Business Communications (3)	3
or BUS 312	Workplace Behavior and Ethics (3)	

The items listed have been corrected for the Catalog 2015-2016.

Program description correction.
For the complete program information,
see page 281:

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 degree program at **American River College** is accredited by the American Board of Funeral Service Education (ABFSE) 3414 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).

National Board Examination scores, graduation rates and employment rates for this and other ABFSE-accredited programs are available at www.abfse.org. To request a printed copy of this program's scores and rates, go to Health and Education 770 or by e-mail at delacrd@arc.losrios.edu or by telephone at (916)484-8158.

Program course list correction.
For the complete program information,
see page 437:

Physics A.S. for Transfer Degree

The Associate in Science in Physics for Transfer degree provides students with a major that fulfills the general requirements of the California State University for transfer. Students with this degree will receive priority admission with junior status to the California State University system.

The Associate in Science in Physics for Transfer degree (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.

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 Arts for Transfer Degree Requirements: The Associate in Science in Physics for Transfer (AA-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) the Intersegmental General Education Transfer Curriculum (IGETC) Requirements.

The items listed have been corrected for the Catalog 2015-2016.

Hour/Unit corrections:

CARPT 155 Commercial Concrete 1.5 Units

*Enrollment Limitation: Must be a registered Carpenter Apprentice
Hours: 23 hours LEC; 12 hours LAB*

This course covers concepts and practices of commercial concrete construction. Topics include layout and construction of bolt patterns, concrete columns, and gang forms, as well as the types and methods used to safely build, shore, and place column caps and concrete decks.

ECE 407 Curriculum and Strategies for Children with Special Needs 4 Units

*Prerequisite: ECE 404 with a grade of "C" or better
Hours: 54 hours LEC; 54 hours LAB*

This course provides supervised experience working with young children with special needs in inclusive early care and education settings with an option to work in a non-inclusive classroom (e.g., a diagnostic preschool, preschool communication class, social communication class, or autism special day classroom). This course covers curriculum and intervention strategies for working with children with special needs and partnering with their families as well as the importance of cultural competence. It focuses on the use of observation and assessment in meeting the individualized needs of children and families in inclusive and non-inclusive classrooms. Topics include integration strategies, classroom environments, and individualized instructional strategies for children. This course emphasizes creating modifications, accommodations, and/or adaptations to the environment, routines and curriculum, role of the teacher in partnering with families, and working with interdisciplinary teams.

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.

Hours: 18 hours LEC; 27 - 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 First Year Experience, SAGES, Journey program, MESA, Puente, EOP&S, and Umoja.

Prerequisite correction:

MATH 330 Trigonometry 3 Units

Prerequisite: MATH 120, 129, or 133 with a grade of "C" or better, or placement through the assessment process.

*Advisory: MATH 110 or completion of high school geometry
Hours: 54 hours LEC*

This course covers the fundamentals of trigonometry and its applications. Topics include degree and radian measurements of angles, right triangle trigonometry, unit circle trigonometry, graphs of trigonometric functions, algebraic manipulation and proof of trigonometric identities, inverse trigonometric functions, solving trigonometric equations, the Laws of Sines and Cosines, vectors, the polar coordinate system, and roots and powers of complex numbers (De Moivre's Theorem).

The courses listed in this section are new and have been added to the Catalog 2015-2016.

New courses:

ENG CW 455 College Literary Publishing 3 Units

Prerequisite: ENG CW 450 with a grade of "C" or better
Advisory: ENG CW 400, ENG CW 410, ENG CW 430, ENGL T 300, ENGL T 321, ENGL T 341, ENG WR 300, ENG WR 301, ENG WR 303, ENG WR 480, or ENG WR 481
Hours: 54 hours LEC; 18 hours LAB

This course provides instruction and editorial staff experience in the selection of literary works of high artistic merit for publication by Ad Lumen Press, American River College's professional literary press. It focuses on evaluating and selecting literary works submitted for publication by the public, making of editorial recommendations to the Ad Lumen Press Editorial Board, communicating in a professional manner with the public, and providing publicity for the press.

**ENG WR 360 Writing in the Disciplines:
 Composing Essays in History 0.5 - 1 Unit**

Hours: 9 - 18 hours LEC

This course offers small and large group instruction on the writing processes and writing strategies necessary to compose academic essays and reports that follow the guidelines and requirements of the History discipline. Additionally, approaches to composing longer, more complex writing tasks following this discipline's style are covered. Topics include the principles of the writing process, analysis of discipline-specific writing assignments, strategies for revision, and research and documentation skills such as Chicago or MLA style. In order to take this course, students must be concurrently enrolled in at least one transfer-level History course. Pass/No Pass only.

**ENG WR 361 Writing in the Disciplines:
 Composing Essays in the
 Social Sciences 0.5 - 1 Unit**

Hours: 9 - 18 hours LEC

This course offers small and large group instruction on the writing processes and writing strategies necessary to compose academic essays and reports that follow the guidelines and requirements of the courses in the social science disciplines. Additionally, approaches to composing longer, more complex writing tasks following the styles of one or more disciplines in this area are covered. Topics include the principles of the writing process, analysis of discipline-specific writing assignments, strategies for revision, and research and documentation skills such as APA or Chicago style. In order to take this course, students must be concurrently enrolled in at least one transfer-level social science course, such as Psychology or Sociology. Pass/No Pass only.

**ENG WR 362 Writing in the Disciplines:
 Composing Essays in English 0.5 - 1 Unit**

Hours: 9 - 18 hours LEC

This course offers small and large group instruction on the writing processes and writing strategies necessary to compose academic essays that follow the guidelines and requirements of the English discipline. Additionally, approaches to composing longer, more complex writing tasks following this discipline's style are covered. Topics include the principles of the writing process, analysis of discipline-specific writing assignments, strategies for revision, and research and documentation skills such as MLA style. In order to take this course, students must be concurrently enrolled in at least one other transfer-level English course. Pass/No Pass only.