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COSUMNES
RIVER COLLEGE
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LOS RIOS COMMUNITY COLLEGE DISTRICT

COSUMNES RIVER COLLEGE

2025-2026 Official Catalog

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Disclaimer

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

Additional information can be found on the Los Rios Community College District website and Cosumnes River College website.

Website: crc.losrios.edu

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Introduction

How to Use This Catalog

An Important Resource

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

Changes

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

Official Updates

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

Career Education Program Changes

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

About This Catalog

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

About Cosumnes River College

Cosumnes River College (CRC) values diversity, focuses on creativity and personal enrichment, and empowers students to reach their full potential as informed and productive community members. CRC is a leader in innovative ideas and sustainable values.

Serving south Sacramento County and Elk Grove since 1970, CRC's main campus and its Elk Grove Center provide a dynamic learning environment for more than 14,000 ethnically and racially diverse students. As one of the nation's top 10 most diverse, two-year public colleges (noted in the Almanac of Higher Education), CRC is a student-centered, open-access community college dedicated to preparing students for an ever-changing future.

Mission, Vision, and Values

Our Vision

Cosumnes River College strives to create an inclusive and equitable environment by recognizing, addressing, and eliminating all forms of racism, discrimination, and oppression. We educate and empower all students and employees to achieve their goals and improve the well-being of their communities.

Our Mission

Cosumnes River College provides an innovative, equitable, and inclusive path for all students in our diverse communities to achieve their educational, career, and personal goals. We promote the timely attainment of associate degrees, certificates, and transfer to other institutions and support the pursuit of individual enrichment and career aspirations. We uphold excellence in teaching and learning through diverse educational opportunities and effective student services.

Our Values

Cosumnes River College's culture is built upon a foundation of respect, compassion, empathy, and shared decision-making. We value equity, inclusion, cultural humility, innovation, academic integrity, and sustainability. We embrace anti-racism and social justice for the communities we serve.

Our Commitment to Equity

Education should belong to everyone. To nourish this inclusion, CRC champions equity, diversity, social justice, and environmental sustainability as foundational to academic, campus, and community life. We work with the communities we serve toward just and fair inclusion into society in which all people can participate, prosper, and reach their full potential. We commit to equity driven decision-making, planning, and reflective processes that are responsive to the diverse identities and experiences in our community.

We seek to empower marginalized voices, nurture our many identities and social circumstances, foster cultural responsiveness, and stand against all manifestations of discrimination, including (but not limited to) those based on: ability statuses, age, ancestry, body size, citizenship/immigration status, economic status, educational status, employment status, ethnicity, food/housing insecurity, gender, gender identity, gender expression, incarceration experience, language, marital/partner status, military/veteran status, national origin, neurodiversity, political affiliation, pregnancy/reproductive status, race/racial identity, religion, sex, and sexual orientation.

Accreditation

The Los Rios Community College District consists of four comprehensive, public California community colleges: American River College, Cosumnes River College, Folsom Lake College, and Sacramento City College. Cosumnes River College is accredited by the Accrediting Commission for Community and Junior Colleges (ACCJC) of the Western Association of Schools and Colleges, an institutional accrediting body recognized by the Council of Higher Education Accreditation and the US Department of Education. The Cosumnes River College educational centers are fully accredited under the college's accreditation status.

Program Accreditation and Regional Memberships

Automotive Mechanics Technology (AMT) / Ford ASSET

The traditional Automotive Mechanics Technology program is accredited by the ASE (Automotive Service Excellence) Education Foundation as a Master Automobile Service Technology (MAST) program.

The Ford ASSET (Automotive Student Service Education Training) program within the Automotive Mechanics Technology Department is also accredited by the ASE (Automotive Service Excellence) Education Foundation as a Master Automobile Service Technology (MAST) program.

Fire Technology (FT)

The Fire Technology program is accredited by the California State Fire Marshal – State Fire Training.

Health Information Technology (HIT)

The Health Information Technology program is accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM), a commission of the American Health Information Management Association (AHIMA).

Pharmacy Technology

The Pharmacy Technology program is accredited by the American Society of Health-System Pharmacists (ASHP).

Veterinary Technology and Medical Assisting

The Veterinary Technology program is accredited by the American Veterinary Medical Association.

College and University

The University of California, California State University system, and all other accredited colleges and universities give full credit for appropriate courses completed at Cosumnes River College. The college holds institutional memberships in the American Association of Community and Junior Colleges and the Community College League of California.

Board of Trustees and Chancellor

The Board of Trustees is the governing body of Los Rios Community College District.

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

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

Board Members

Dr. Colette Harris-Mathews

Mr. Dustin Johnson

Mr. Robert Jones

Mr. John Knight

Ms. Tami Nelson

Ms. Deborah Ortiz

Ms. Kelly Wilkerson

Student Trustee

Chancellor

Dr. Brian King

Getting Started

Academic Calendar

Fall 2025

Fall 2025 starts August 23, 2025, and ends December 18, 2025.

Date	Action/Event
August 23	Instruction begins
September 1	Holiday – Labor Day (no classes; offices closed)
October 3	Last day to petition for graduation/certification
November 11	Holiday – Veterans Day (no classes; offices closed)
November 27 to 30	Holiday – Thanksgiving Recess
December 18	End of semester
January 2, 2026	Grades due

Spring 2026

Spring 2026 starts January 17, 2026, and ends May 21, 2026.

Date	Action/Event
January 17	Instruction begins
January 19	Holiday – Martin Luther King, Jr.'s Birthday (no classes; offices closed)
February 13	Holiday – Lincoln's Birthday (no classes; offices closed)
February 16	Holiday – Washington's Birthday (no classes; offices closed)
March 6	Last day to petition for graduation/certification
March 16 to 22	Holiday – Spring Recess (no classes; offices closed)
March 31	Holiday – César Chávez Day (no classes; offices closed)
May 21	End of semester
May 28	Grades due

Summer 2026

Summer 2026 starts June 8, 2026, and ends August 5, 2026.

Date	Action/Event
June 8	Instruction begins
June 19	Holiday – Juneteenth (no classes; offices closed)
July 3	Holiday – Independence Day (no classes; offices closed)
July 3	Last day to petition for graduation/certification
August 5	End of semester
August 11	Grades due

How to Enroll

Apply Now

Guarantee your admission to Cosumnes River College by completing the online application to Cosumnes River College (https://www.opencccapply.net/cccapply-welcome?cccMisCode=232).

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

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

Save Money

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

Other Admissions Tips

- Submit your high school and/or college transcripts to be placed automatically into English and mathematics courses that match your skill level. Learn more about placement (https://crc.losrios.edu/admissions/placement). English as a Second Language (ESL) assessment testing is still available via assessment testing (https://crc.losrios.edu/admissions/placement/assessment-testing).
- Participate in orientation for new students (https://crc.losrios.edu/admissions/orientation).

Challenges to Matriculation Process

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

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

Participation in matriculation activities does not provide enhancement in priority registration and students who elect not to participate in these activities will not receive a less favorable priority registration date as a result. Matriculation activities are intended to promote student success and Los Rios encourages students to participate.

Submit Transcripts and Test Scores

Official Transcripts and Test Scores

Cosumnes River College does not require official transcripts from institutions outside of the Los Rios Community College District as a condition of admission to the college or to award a degree or certificate that has been earned without inclusion of credit from external institutions.

Official transcripts are required to apply credit earned outside of the Los Rios Community College District (transfer credit) towards a degree or certificate at Cosumnes River College.

Official transcripts may be required in other circumstances, such as to receive veteran's educational benefits, to participate in intercollegiate athletics, or to receive certain financial aid awards for those who have applied.

Students who have completed examinations for college credit such as Advanced Placement (AP), International Baccalaureate (IB), or College-Level Examination Program (CLEP) must submit official scores to Cosumnes River College to apply applicable credit to their program of study. For more information about how these scores may be applied, see Credit for Prior Learning and Alternative Study Options (https://crc.losrios.edu/2025-2026-catalog-development/while-you-are-here/credit-for-prior-learning-and-alternative-study-options).

All records submitted become the property of the college and will not be returned to the applicant.

Official transcripts can be mailed directly from the college or university. If students submit official transcripts, the official transcripts must remain in their original, unopened envelopes. Mail official transcripts and test scores to:

Cosumnes River College
Attn: Admissions-Evaluations
8401 Center Parkway
Sacramento, CA 95823

Official transcripts can be sent electronically to admissions@crc.losrios.edu, but they must come directly from the college or university. Official transcripts submitted to Cosumnes River College become the property of the college; official copies will not be returned to the student.

Transfer Credit Acceptance

We accept coursework from colleges and universities that are accredited by the following regional bodies:

- Accrediting Commission for Community and Junior Colleges, Western Association of Schools and Colleges (ACCJC)
- Higher Learning Commission (HLC)
- Northwest Commission on Colleges and Universities (NWCCU)
- Southern Association of Colleges and Schools Commission on Colleges (SACSCOC)
- Middle States Commission on Higher Education (MSCHE)
- New England Commission of Higher Education (NECHE)
- WASC Senior College and University Commission (WSCUC)

We do not accept coursework that is remedial or post-baccalaureate in nature. Transfer credit may not be reflected on your records, but it is kept on file for use in completion of degrees or certificates.

Foreign Transcript Evaluation

Students who want to use coursework from a foreign college or university need to have their transcript(s) evaluated. We do not give credit for coursework that is from high school, remedial, or post-baccalaureate in nature.

We accept transcript evaluations from companies that are current members of National Association of Credential Evaluation Services (NACES) (https://www.naces.org/members) or Association of International Credential Evaluators, Inc. (AICE) (http://www.aice-eval.org/). When you get your transcript evaluated, make sure you ask for:

- A course by course evaluation
- A breakdown of coursework into general education academic areas
- Whether unit values are in semester or quarter units
- What coursework is lower division, upper division, or graduate level

After it is received by Cosumnes River College, the evaluation becomes property of Cosumnes River College and is treated in the same manner as an official transcript. Official copies will not be returned to the student.

Placement

With the passage of AB 705 (https://crc.losrios.edu/admissions/placement/ab-705-and-ab-1805), there are now several different ways for students to receive their math and English placements.

To view your placements online:

1. Log in to eServices (https://ps.losrios.edu/student/signon.html).
2. Click on **Academic Records**.
3. Click on **Placements**.

If you encounter a "requisites not met" error message when attempting to enroll in any CRC course, please complete a Placement Office Other Questions Form (https://crc.losrios.edu/admissions/placement/placement-re-evaluation/other-questions) for additional assistance or you may contact the Admissions and Records office at admissions@crc.losrios.edu.

Are your placements expired? Please email the Admissions Office at admissions@crc.losrios.edu for additional assistance.

Know Your Rights: AB 705 and AB 1805 (https://crc.losrios.edu/2025-2026-official-catalog/getting-started/how-to-enroll/ab-705-and-ab-1805)

Using High School Records for Placement

You will be automatically placed into English and math classes if you:

- Graduated from a US high school within the last ten years
- Included all of the requested information about your high school records on your college application

You can view your placement results in your eServices (https://ps.losrios.edu/student/signon.html) account. From your eServices dashboard, click on the Academic Records tile, then Placements.

Submit Your High School Records for Placement

If you graduated from a US high school within the last ten years, but you did not report your high school information on your application, then you can email your unofficial high school transcripts to CRC's Admissions Office at admissions@crc.losrios.edu to receive your English and math course placements. Alternatively, you can drop off your transcripts to the Welcome Center in the College Center building at the main campus.

Use College Records for Placement

If you attended another college (outside of Los Rios), then you can provide college transcripts showing that you passed certain classes. Additional forms may be necessary depending on the college and course.

Please review the pre-approved course lists:

- Math Pre-Approved List (shared/doc/admissions-records/prerequisite/math-prerequisite-clearance-list.pdf)
- English Pre-Approved List (shared/doc/admissions-records/prerequisite/english-prerequisite-clearance-list.pdf)

Only pre-approved courses/prerequisite forms can be emailed to Admissions. Math and English Challenges go to the respective email addresses listed below.

If your course is included on the pre-approved list, please email the Admissions and Records Office at admissions@crc.losrios.edu with the appropriate Math Clearance Challenge Form (crc/main/doc/2-admissions/placement/math-clearance-challenge-form.pdf) or the English Placement and Requisite Clearance Form (crc/main/doc/2-admissions/placement/english-placement-requisite-clearance-form.pdf). Admissions and Records staff will assist you with getting the prerequisite cleared.

If you do not see your non-Los Rios Math course listed, you will need to challenge the prerequisite by emailing a completed Math Clearance Challenge Form (crc/main/doc/2-admissions/placement/math-clearance-challenge-form.pdf) to CRC-MathPrereq@crc.losrios.edu.

If you do not see your non-Los Rios English course listed, you will need to challenge the prerequisite by emailing a completed English Placement and Requisite Clearance Form (crc/main/doc/2-admissions/placement/english-placement-requisite-clearance-form.pdf) to CRC-EnglishPrereq@crc.losrios.edu.

Use Guided Self-Placement

If you have been out of high school for more than 10 years, have foreign high school transcripts or left high school without graduating, then you are eligible to utilize the guided self-placement process to determine which English and math courses to take. Complete the questions under *Missing Math or English Placements? Expired Placements?* on our Placement Process (https://crc.losrios.edu/admissions/placement/placement-process) page.

After completing guided self-placement, your placements will be updated in our enrollment system (eServices (https://ps.losrios.edu/student/signon.html)) the following day.

For questions, please email the Placement Office at crc-placement@crc.losrios.edu or call (916) 691-7332.

Placement for Dual Enrollment Students

As part of the Dual Enrollment approval process, you will submit your current unofficial high school transcript with your Special Admit Form. If you plan to enroll in a math class, English class, or a class which has an English or math prerequisite, Admissions and Records will process your High School information and inform you of the outcome. You can also submit your transcript or AP scores to Admissions and Records at a later time to fulfill the prerequisite. Email your unofficial high school transcript to admissions@crc.losrios.edu.

English as a Second Language (ESL) Placement Process

If you are still learning English, then you can complete the ESL Guided Self-Placement Process online, which will place you in ESL classes that match your skill level. Your placements will immediately appear on the screen when you complete the process. Allow 24 hours for those placements to post to your eServices account. See the ESL Placement (https://crc.losrios.edu/admissions/placement/esl-placement) page for additional information.

Visit the ESL Placement Page (https://crc.losrios.edu/admissions/placement/esl-placement)

Acceptance of Other Test Results

CRC accepts assessment results from other Los Rios Colleges (American River College, Folsom Lake College, and Sacramento City College). We do not accept results from any other colleges and we do not accept EAP test results, SAT scores, or ACT scores.

CRC does grant credit towards its degrees for other successfully completed exams and programs, such as Advanced Placement (AP), International Baccalaureate (IB), and others. See Alternative Credit/Study Options (https://crc.losrios.edu/2025-2026-official-catalog/while-you-are-here/credit-for-prior-learning-and-alternative-study-options) for more information.

Advanced Placement (AP) Tests (CEEB)

Students enrolling at Cosumnes River College may be awarded units of credit for Advanced Placement examinations passed with a 3, 4, or 5. Refer to the AP Chart (https://crc.losrios.edu/2025-2026-official-catalog/while-you-are-here/credit-for-prior-learning-and-alternative-study-options/advanced-placement-test-scores) in the online catalog for information on the specific course credit awarded and General Education areas covered.

- Submitting scores to meet a course prerequisite? Email your unofficial scores to admissions@crc.losrios.edu.
- Want credit for a course? Make a counseling appointment (https://crc.losrios.edu/student-resources/counseling) so your unofficial scores can be evaluated.

*Note: Please **do not** submit official scores to the Admissions and Records Office unless advised to do so by a CRC counselor. Credits/units earned are posted on the transcript as "Pass" ("P") - letter grades are not awarded. Credit may not be earned for courses in which duplicate credit has already been awarded by way of Advanced Placement examinations.*

AB 705 and AB 1805

AB 705

California law (Assembly Bill 705) essentially eliminated the use of assessment tests for purposes of determining the placement of students into transfer-level math and English courses in community colleges.

Research shows that California students are far more prepared than assessment tests have acknowledged. A student's high school performance is a much stronger predictor of success in transfer-level courses than standardized placement tests.

AB 705 requires colleges to take into account high school coursework, high school grades, and high school grade point average when determining math and English placement upon enrollment.

AB 1805 – Placement and Enrollment Outcomes

Cosumnes River College wants to make sure students are placed fairly, equitably, and accurately in English, math, statistics, and English as a Second Language (ESL) courses. As part of that effort, we are making placement and enrollment data in these courses available to you.

The data includes the number of new students placed in English, math, statistics, and ESL courses, either with or without support. The information provided also includes the number of students who enrolled in transfer-level courses, transfer-level courses with support, degree-applicable math coursework, and transfer-level ESL courses.

As part of our equity and anti-racism efforts, we have included data by race and ethnicity, so you can see how students from different racial and ethnic groups placed and where they enrolled.

See CRC English and Math Placement and Enrollment Data (crc/main/doc/2-admissions/placement/crc-ab1805-placement-enrollment-report.pdf).

Admission Requirements and Procedures

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 including a General Education Development (GED) – is eligible for admission to Cosumnes River College. Non-high school graduates 18 years of age or older who demonstrate ability to profit from a community college education may also be admitted.

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

First-Time College Students

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

Continuing Students

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

Returning or Transfer Students

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

Special Admit Students (Dual Enrollment)

High school students who will have started ninth grade or be at least 14 years of age by the start of classes and adult school students working on a high school diploma program may be eligible to enroll in a maximum of eleven units of community college classes each semester through Dual Enrollment program.

Admission with Transfer Credit

Students who want academic credit for courses taken outside of Los Rios Community College District at regionally accredited colleges and universities must submit official transcripts (https://crc.losrios.edu/2025-2026-catalog-development/getting-started/how-to-enroll/submit-transcripts-and-test-scores) for those courses to the Admissions and Records office.

Admission for Veterans and Dependents Using Veterans Educational Benefits

Veterans services are available to assist veterans, spouses, and children of disabled or deceased veterans who may be eligible for federal and/or state educational benefits.

Veterans and their dependents should contact Cosumnes River College's Veterans Resource Center (https://crc.losrios.edu/vrc) each semester to initiate benefits. Veterans will need to provide a copy of their DD-214 and other supporting documentation. Eligibility may take several weeks to process. Eligibility is determined by the US Department of Veterans Affairs (VA).

Eligibility for Programs Eligibility for VA educational benefits can be extended to veterans, reservists, and children of service-connected deceased or disabled veterans under the following programs:

- Forever GI Bill® – Harry W. Colmery Veterans Educational Assistance Act
- The Montgomery GI Bill® (Chapter 30)
- US Department of Veterans Affairs Veteran Readiness and Employment (VR&E) (Chapter 31)

- Post-9/11 GI Bill® (Chapter 33)
- Dependents' GI Bill® (Chapter 35)
- Reservists Montgomery GI Bill® (Chapter 1606)

For more information please visit Veterans Affairs Educational Benefits (https://benefits.va.gov/gibill/).

VA requires that all credit for previous education and training is on file at Cosumnes River College. Veterans and dependents are required to submit transcripts from other institutions before they meet with their academic counselor at Cosumnes River College. Cosumnes River College will maintain a record of the previous education and training of veterans and eligible persons – and indicate where credit has been granted, if appropriate – and the student will be notified accordingly. An evaluation of prior credit will be recorded and granted appropriately on a VA Education Plan. All recipients of VA educational benefits are required to select a major and have a VA Educational Plan on record.

In most cases, all tuition and enrollment fees, miscellaneous fees, textbooks, and class supplies are paid for by the student and not by VA. The exception is students who are using the Post 9/11 GI Bill® or Vocational Rehabilitation benefits. Students using Post 9/11 – Chapter 33, Transfer of Entitlement, Fry Scholarship, or Vocational Rehabilitation – Chapter 31 benefits must notify the Veterans Resource Center immediately after they enroll each semester to avoid being dropped for non-payment.

Principles of Excellence

Cosumnes River College is a member of the White House Executive Order 13607 Principles of Excellence for Educational Institutions Serving Service Members, Veterans, Spouses, and Other Family Members. The Departments of Defense, Veterans Affairs, and Education established Principles of Excellence to apply to educational institutions receiving funding from Federal military and veterans educational benefits programs, including benefits programs provided by the Post-9/11 GI Bill. The Principles ensure that these educational institutions provide meaningful information to service members, veterans, spouses, and other family members about the financial cost and quality of educational institutions to assist those prospective students in making choices about how to use their Federal educational benefits; prevent abusive and deceptive recruiting practices that target the recipients of Federal military and veterans educational benefits; and ensure that educational institutions provide high-quality academic and student support services to active-duty service members, reservists, members of the National Guard, veterans, and military families.

Veterans Choice Act

If you're receiving veterans educational benefits, you may be able to receive in-state tuition rates under Section 702 of the Veterans Choice Act.

Eligibility Requirements for Veterans

To be eligible, all the following must be true:

- When you start school, you live in the state where your school is located
- You've served on active duty for at least 90 days since September 10, 2001
- You're receiving benefits under the Post-9/11 GI Bill, the Montgomery GI Bill Active Duty (MGIB-AD), or Veteran Readiness and Employment (VR&E)

Note: Section 702 of the Veterans Choice Act covers you only after discharge, not while you're still on active duty or while you're a member of the Active Guard Reserve (AGR).

Eligibility Requirements for Spouses or Children

To be eligible, the following must be true:

- When you start school, you live in the state where your school is located
- *One* of the following must be true:
  - You're using education benefits transferred from a veteran
  - You're using benefits under the Fry Scholarship and the veteran had served a period of active-duty service of at least 90 days before their death
  - You're using benefits through the Survivors' and Dependents' Educational Assistance (DEA) program

Keeping Your In-State Residency Status

You'll keep your in-state residency status as long as you remain enrolled at a Los Rios college. You can take scheduled breaks between courses, semesters, or terms, but if you discontinue and return, you won't keep your in-state residency status under the Veterans Choice Act.

Registration Priority for Veterans

All veteran student are subject to the provisions under SBI 1456. Under the provisions of California Education Code 66025.8. Cosumnes River College will grant priority registration to eligible members or former members of the Armed Forces of the United States. Proof of current military status (military ID or DD214 Member4) must be submitted to the School Certifying Official. For eligibility information, please contact the Veterans Resource Center (https://crc.losrios.edu/vrc).

GI Bill® is a registered trademark of the US Department of Veterans affairs (VA). More information about education benefits offered by VA is available at the official US Department of Veterans Affairs website (https://www.benefits.va.gov/gibill/).

International Student Admission

Cosumnes River College welcomes students from all over the world. There are different attendance requirements for each visa type. International students are those who are attending college in the US on an F-1 visa.

Cosumnes River College is approved by the US Citizenship and Immigration Services (USCIS) to issue I-20s, which students can use to apply for the F-1 visa. An international student must be enrolled in at least 12 units each semester and must maintain the same academic standards as all students, in order to comply with F-1 visa requirements.

For more information, see international student admissions (https://crc.losrios.edu/international-student).

Dual Enrollment Admission

Courses that provide enrichment and advancement in educational experience may be offered to high school and adult school students. The student must have started ninth grade or be at least 14 years old by the first day of instruction.

High school students should request information from their high school counselor regarding eligibility and complete the Special Admit Form. The high school counselor should then submit a completed Special Admit Form that has been signed by a parent and by the high school counselor or principal, and an official transcript.

After the Special Admit Form has been approved, Admissions and Records staff will enroll the student in classes. A Dual Enrollment student is not considered a continuing student when registering for classes for any subsequent semesters. It is the responsibility of the Dual Enrollment student to become familiar with, and aware of, all the requirements, processes, and deadlines pertaining to Dual Enrollment.

For more information, see Dual Enrollment admissions (https://crc.losrios.edu/admissions/get-started-and-apply/dual-enrollment-admission-and-enrollment-steps).

Undocumented Student Admission

At Cosumnes River College, we define undocumented to include all immigrants who reside in the US without legal status. All undocumented students must:

1. Complete the online application to Cosumnes River College (https://www.opencccapply.net/cccapply-welcome?cccMisCode=232).
2. Submit a California Non-Resident Tuition Exemption Form available to the Admissions & Records Office.
3. Complete the California Dream Act Application (https://dream.csac.ca.gov) (CADAA) by March 2 of every year.

For more information, see undocumented student admissions (https://crc.losrios.edu/undocumented-students).

Residency Requirements

Students who are California residents pay in-state tuition of $46 per unit, whereas students who are non-residents pay out-of-state tuition of $466 per unit. Community college enrollment fees are set by the California State Legislature. All fees are subject to change.

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

Residency Eligibility

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

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

For more information, go to residency requirements on the Cosumnes River College website (https://crc.losrios.edu/residency-requirements).

Readmission from Dismissed Status

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

Fees

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

Fees for 2025-2026

Mandatory Fees

Fee Name	Fall 2025	Spring 2026	Summer 2026	Refundable
Resident tuition and enrollment	$46 per unit	$46 per unit	$46 per unit	Yes
Non-resident tuition and enrollment	$466 per unit	$466 per unit	$466 per unit	Yes
Foreign student application fee[1]	$50	$50	$50	No
Student representation fee	$2	$2	N/A	Yes
Health services fee	$20	$20	N/A	Yes
Universal transit pass (UTP) fee	$3 per unit[2]	$3 per unit[2]	$13[3]	Yes

[1] A non-refundable application processing fee shall be charged to nonresident applicants who are both citizens and residents of a foreign country in accordance with provisions established by state regulations.

[2] Eligible students must be taking one (1) or more units to be charged the UTP fee. Students taking more than 12 units will only be charged for 12 units ($36). Fractions of units are rounded up to the nearest whole unit.

[3] All eligible students pay a flat rate during the summer.

Parking Fees

Fee Name	Fall 2025	Spring 2026	Summer 2026	Refundable
Semester parking permit (automobiles)	$41[4]	$41[4]	$26	Yes
Semester parking permit (carpools with 3 or more passengers)	$36	$36	N/A	Yes

Fee Name	Fall 2025	Spring 2026	Summer 2026	Refundable
Semester parking permit (motorcycles)	$26	$26	$16	Yes
Daily parking permit	$2	$2	$2	No

[4] Students who receive the California College Promise Grant are eligible to buy a semester parking permit for $30.

Fee Descriptions

Tuition and Enrollment Fee

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

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

Foreign Student Application Fee

Refundable: No.

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

Student Representation Fee

Refundable: Yes.

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

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

Students can refuse to pay this fee based on moral, religious, political, or financial grounds. To be exempted from paying the fee, submit the Student Representation Fee Exemption Form (https://losrios.edu/srf), preferably before you pay your fees.

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

Health Services Fee

Refundable: Yes.

In a remote environment, the health services fee provides access to virtual health and mental health services as well as virtual mental health counseling by local mental health counselors. College nurses are available by appointment for phone or email advice and referrals to community resources as needed. College nurses will offer remote health and wellness educational offerings throughout the semester along with virtual health fairs.

The following students may be exempted from the health services fee if they submit the Health Services Fee Exemption Form (https://losrios.edu/hsf) before the last day of the semester:

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

The following students are not charged the health services fee:

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

Universal Transit Pass (UTP) Fee

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

The Universal Transit Pass (UTP) is available to certain students for use on Regional Transit (RT) services, including buses and light rail. All eligible students are charged the UTP fee, regardless of whether or not they use the pass.

The UTP is available electronically via SacRT's mobile fare app, ZipPass. Learn how to download and use ZipPass (https://crc.losrios.edu/student-resources/technology-resources/apps-and-software-for-students/sacramento-regional-transit-zippass/universal-transit-pass).

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

Eligibility

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

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

- Students enrolled in the Regional Public Safety Training Center (RPSTC)
- Students enrolled in apprenticeship programs
- Students taking classes on the UC Davis main campus
- Students studying abroad
- High school students attending a Los Rios college through dual enrollment or concurrent enrollment
- Incarcerated students inside correctional facilities
- Students whose home college is not a Los Rios college but who are enrolled in courses at a Los Rios college through the California Community Colleges Online Education Initiative Course Exchange

Fee Structure

Fall 2025 and Spring 2026

Eligible students will pay $3 per unit during the fall and spring semesters. Any fraction of a unit is rounded up to the next whole unit. The minimum fee is $3.00 (for one unit) and the maximum fee is $36 (for 12 or more units). For example:

- A student enrolled in .5 units will not pay the UTP fee.
- A student enrolled in one unit will pay $3.
- A student enrolled in 1.5 units will pay $6.
- A student enrolled in 12 or more units will pay the maximum fee of $36.

Summer 2026

During the summer semester, all eligible students pay $13 for the UTP.

Valid Dates

- For the fall semester, the UTP is valid from August 1 through December 31.
- For the spring semester, the UTP is valid from January 1 through May 31.
- For the summer semester, the UTP is valid from June 1 through the last day of the semester (for summer 2026, that is August 5).

Semester Parking Permit Fee

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

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

Read Administrative Regulation R-2252: Student Parking Fees (shared/doc/board/regulations/R-2252.pdf) to learn more.

Lost, Stolen, or Damaged Parking Permit

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

* *Parking permits can be purchased at the Business Services Office on each campus.*

Daily Parking Permit Fee

Refundable: No.

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

Instructional Material Fees

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

Fee Payment Deadlines

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

Fall 2025 Payment Deadlines

Payment deadlines for the fall 2025 semester.

Date Enrolled in Classes	Payment Due Date
July 25, 2025 or earlier	August 8, 2025 *Your payment is due on this date to avoid being dropped from your classes.*
July 26, 2025 or later	The next day after enrollment date*

* To make sure students who enroll during open enrollment have sufficient time to pay for classes, we will not drop students for non-payment if they enroll in classes on July 26, 2025 or later. However, students who have unpaid fees after the end of the term will receive a hold preventing future enrollment until payment is received.

Spring 2026 Payment Deadlines

Payment deadlines for the spring 2026 semester.

Date enrolled in classes	Payment Due Date
December 26, 2025 or earlier	January 9, 2026
December 27, 2025 or later	The next day after enrollment date*

* To make sure students who enroll during open enrollment have sufficient time to pay for classes, we will not drop students for non-payment if they enroll in classes on December 27, 2025 or later. However, students who have unpaid fees after the end of the term will receive a hold preventing future enrollment until payment is received.

Summer 2026 Payment Deadlines

Payment deadlines for the summer 2026 semester.

Date Enrolled in Classes	Payment Due Date
May 11, 2026 or earlier	May 25, 2026 *Your payment is due by 11:59 pm on May 25 to avoid being dropped from your classes.*
May 12, 2026 or later	The next day after enrollment date*

* To make sure students who enroll during open enrollment have sufficient time to pay for classes, we will not drop students for non-payment if they enroll in classes on May 12, 2026 or later. However, students who have unpaid fees after the end of the term will receive a hold preventing future enrollment until payment is received.

A Note About Financial Aid

Not all your financial aid awards are automatically applied to your fees (the California College Promise Grant is an example of financial aid that *is* automatically applied). After you have applied your financial aid, you are responsible for paying the remaining amount on your account.

Make sure you apply for financial aid as early as possible and review the financial aid deadlines (https://crc.losrios.edu/financial-aid-deadlines).

How to Pay for Classes

Pay your tuition and fees using any of the following methods:

1. Online through eServices (https://ps.losrios.edu/student/signon.html) with a credit card
2. By mail with a check
    - Make checks payable to Los Rios Community College District.
    - Mail your check to the Business Services office.
    - Make sure to include your student ID number and "enrollment fees" on the check's subject line.
3. In person
    - Visit Cosumnes River College's Business Services Office and pay with check, cash, or credit card.
4. Using the student payment plan (https://crc.losrios.edu/admissions/cost-of-attendance/student-payment-plan)
    - Pay your fees over a few months instead of all at once. There is a non-refundable $15 fee each semester you use the student payment plan.

Debts Owed to College

Should a student or former student fail to pay a debt owed to the institution, the institution may withhold permission to any combination of the following from any person owing a debt until the debt is paid (Title 5, California Code of Regulations, Sections 42380 and 42381)

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

If a student believes they do not owe all or part of an unpaid obligation, the student should contact the Business Services office.

Federal Education Tax Credits

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

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

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

Who Does Not Receive the 1098-T

Students will not receive a 1098-T if any of the following apply:

- The student (or parents of dependent students) did not pay qualified educational expenses in the previous tax year.
- The student received a Promise Grant (which waived their enrollment fees).
- The student is an international student who does not have a social security number (SSN) or individual taxpayer identification number (ITIN).

Fee Refunds

What Fees are Refundable?

Refundable Fees

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

Non-Refundable Fees

- Foreign student application fee
- Daily parking permit fee

How to Get a Refund

Refunds for Enrollment and Tuition Fees

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

1. **Drop your class(es) by the deadline.** After your class is dropped, money is credited to your eServices account. Keep all documentation that shows the date your class was officially dropped.
2. **Request a refund in eServices (https://crc.losrios.edu/admissions/financial-aid-and-fees/tuition-and-fees/refunds/refund-application-instructions) to get the money out of your eServices account by the deadline.**

Refunds for Health Services Fee

Follow these steps to get a refund for the health services fee:

1. **Drop all of your class(es) by the deadline.** After your class is dropped, money is credited to your eServices account. Keep all documentation that shows the date your class was officially dropped.
2. **Request a refund in eServices (https://crc.losrios.edu/admissions/financial-aid-and-fees/tuition-and-fees/refunds/refund-application-instructions) to get the money out of your eServices account by the deadline.**

Students who depend exclusively upon prayer for healing in accordance with the teachings of a bona fide religious sect, denomination, or organization – or students who receive the California College Promise Grant Part A – can refuse to pay this fee. To be exempted from paying the fee, submit the Health Services Fee Exemption Form (https://losrios.edu/hsf) before the last day of the semester.

Refunds for Semester Parking Permits

To get a refund for a semester parking permit, go to Cosumnes River College's Business Services Office to fill out a paper refund application before the deadline. Your parking permit decal must be attached to your refund application. You cannot do this step online. Your refund will be processed within six to eight weeks.

Refunds for Student Representation Fee

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

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

2. **Request a refund in eServices (https://crc.losrios.edu/admissions/financial-aid-and-fees/tuition-and-fees/refunds/refund-application-instructions) to get the money out of your eServices account by the deadline.**

Students can refuse to pay this fee based on moral, religious, political, or financial grounds. To be exempted from paying the fee, submit the Student Representation Fee Exemption Form (https://losrios.edu/srf) before the last day of the semester (but preferably before you pay your fees).

Refunds for UTP Fee

With the introduction of the digital UTP/ZipPass (https://crc.losrios.edu/student-resources/technology-resources/apps-and-software-for-students/sacramento-regional-transit-zippass/universal-transit-pass), students who drop all units by the deadline are eligible to receive a full Universal Transit Pass (UTP) refund. *Students who request a physical version of the UTP are not eligible for a UTP refund.*

Follow these steps to get a refund for the UTP fee:

1. **Drop your class(es) by the deadline.** After your class is dropped, money is credited to your eServices account. Keep all documentation that shows the date your class was officially dropped.
2. **Request a refund (https://crc.losrios.edu/admissions/financial-aid-and-fees/tuition-and-fees/refunds) to get the money out of your eServices account by the deadline.** You can submit this request online.

Important Information About Refunds

Credit Balances in eServices

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

Exceptions for Military Students

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

How long will it take to get my refund?

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

While You Are Here

Available Learning Resources

- Bookstore (https://www.bkstr.com/losriosstore)
- Business Services (https://crc.losrios.edu/student-resources/support-services/business-services)
- CalWORKs (https://crc.losrios.edu/student-resources/support-services/calworks)
- Career Center (https://crc.losrios.edu/academics/transfer-internships-and-career-services/career-services)
- Child Development Center (https://crc.losrios.edu/student-resources/support-services/child-development-center)
- Counseling (https://crc.losrios.edu/student-resources/counseling)
- DSPS (https://crc.losrios.edu/student-resources/disability-support-programs-and-services-(dsps))
- Dual Enrollment (https://crc.losrios.edu/admissions/get-started-and-apply/dual-enrollment-admission-and-enrollment-steps) (formerly Advanced Education)
- EOPS and CARE (https://crc.losrios.edu/student-resources/support-services/eops-and-care)
- Financial Aid (https://crc.losrios.edu/admissions/financial-aid-and-fees)
- Honors Program (https://crc.losrios.edu/academics/honors-program)
- International Students (https://crc.losrios.edu/student-resources/support-services/international-students-office)
- Library (https://crc.losrios.edu/student-resources/library)
- NextUP/Guardian Scholars (https://crc.losrios.edu/student-resources/support-services/nextupguardian-scholars-(foster-youth-services))
- Re-Emerging Scholars Center (https://crc.losrios.edu/student-resources/incarcerated-and-formerly-incarcerated-students/re-emerging-scholars)
- Puente Project (https://crc.losrios.edu/student-resources/support-services/puente-project)
- Student Health and Wellness (https://crc.losrios.edu/campus-life/student-health-and-wellness)
- Support Services (https://crc.losrios.edu/student-resources/support-services)
- Transfer Center (https://crc.losrios.edu/academics/transfer-internships-and-career-services/transfer-center)
- TRIO Student Support Services (https://crc.losrios.edu/student-resources/support-services/trio-student-support-services)
- Tutoring (https://crc.losrios.edu/student-resources/tutoring)
- Umoja Diop Scholars (https://crc.losrios.edu/student-resources/umoja-diop-scholars)
- Upward Bound (https://crc.losrios.edu/student-resources/upward-bound)
- Veterans Resource Center (https://crc.losrios.edu/student-resources/support-services/veterans-resource-center)
- Work Experience and Internship Program (https://crc.losrios.edu/academics/transfer-internships-and-career-services/work-experience-and-internship-program)

Financial Aid

Get the Financial Help You Need

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

Financial Aid Eligibility

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

- Demonstrate financial need (for most programs)
- Be a US citizen or an eligible non-citizen
- Have a valid Social Security number (with the exception of students from the Republic of the Marshall Islands, Federated States of Micronesia, or the Republic of Palau)
- Be enrolled or accepted for enrollment as a regular student in an eligible degree or certificate program
- Be enrolled at least half-time to be eligible for Direct Loan Program funds
- Maintain satisfactory academic progress

- Sign the certification statement on the Free Application for Federal Student Aid (FAFSA) stating that:
  - You are not in default on a federal student loan and do not owe money on a federal student grant
  - You will use federal student aid only for educational purposes
- Show you're qualified to obtain a college or career school education by one of the following:
  - Having a high school diploma or a recognized equivalent such as a General Educational Development (GED) certificate
  - Completing a high school education in a homeschool setting approved under state law (or – if state law does not require a homeschooled student to obtain a completion credential – completing a high school education in a homeschool setting that qualifies as an exemption from compulsory attendance requirements under state law)
  - Enrolling in an eligible career pathway program and meeting one of the ability-to-benefit alternatives (https://crc.losrios.edu/2025-2026-official-catalog/while-you-are-here/financial-aid#benefit)

Ability-to-Benefit Alternatives

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

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

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

Contact Financial Aid Office

Email: financialaid@crc.losrios.edu

Phone: Phone: (916) 691-7325

Fax: (Fax: (916) 691-7651

For additional contact information, location information, and hours, visit the Financial Aid Webpage (https://crc.losrios.edu/student-resources/financial-aid).

Free Application for Federal Student Aid

The Free Application for Federal Student Aid (FAFSA) (https://studentaid.gov/h/apply-for-aid/fafsa) is a form for US Citizens, permanent residents, or eligible non-citizens to get financial aid. Financial aid includes fee waivers, grants, work-study, loans, and scholarships. Submit the FAFSA each year you are in college – it only takes about 30 minutes to complete when you are prepared.

Anyone who's required to provide information on the FAFSA form will need to create a Federal Student Aid ID (FSA ID). This includes the student and, if applicable, the student's spouse, biological/adoptive parent, or parent's spouse (if remarried). All contributing individuals must provide consent to have information transferred to the FAFSA form. If consent is not given, then the FAFSA form will remain incomplete and the student will be ineligible for federal student aid.

Undocumented students cannot apply for aid through the FAFSA but may be eligible for state financial aid through the California Dream Act (https://dream.csac.ca.gov/landing).

Dates and Deadlines

The 2025-2026 academic year includes fall 2025, spring 2026, and summer 2026. Submit the FAFSA as early as you can, so you have plenty of time to figure out how to pay for college before classes begin.

- Date FAFSA available: November 1, 2024
- FAFSA priority filing deadline: April 2, 2025
- Tax filing year to use for FAFSA: 2023

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

Federal School Code

Cosumnes River College's federal school code is **007536**. Make sure you include this on your financial aid application if you want to receive financial aid at Cosumnes River College.

California Dream Act Application

The California Dream Act allows undocumented and nonresident students who qualify for a non-resident exemption under Assembly Bill 540 (AB 540) to receive certain types of state-based financial aid. The California Dream Act Application (CADAA) is separate from the FAFSA and is unrelated to the federal Deferred Action for Childhood Arrivals (DACA) program.

Confidentiality: *All information submitted through the CADAA is kept private and protected. It is not shared with federal agencies and will not affect immigration status or future immigration applications.*

Who Can Apply?

You may complete the CADAA if you meet **both** of the following:

- **You are *one* of the following:**
  - Undocumented
  - A DACA recipient (valid or expired)
  - A U Visa holder
  - A Temporary Protected Status (TPS) holder
  - An asylum seeker with a pending case
- **You meet the nonresident exemption requirements** under AB 540, AB 2000, or SB 68

Financial Aid Available for Undocumented Students

Eligible students may qualify for the following:

- State grants (California College Promise Grant, Cal Grants, Chafee Grants, and Student Success Completion Grant)
- Campus support programs (EOPS, CARE, or CalWORKs)
- Certain scholarships
- Los Rios Promise Program

To simplify the process, the CADAA automatically includes the AB 540 affidavit required for financial aid eligibility.

CADAA Priority Filing Deadline

To be considered for state financial aid, submit your CADAA by the **April 2, 2025 priority deadline**. You may not qualify for a Cal Grant if you submit after the priority deadline.

Academic Year 2025-2026

The 2025-2026 academic year includes fall 2025, spring 2026, and summer 2026.

- Application available: December 1, 2024
- Priority deadline: April 2, 2025
- Tax year used: 2023

Federal School Code

Cosumnes River College's federal school code is **007536**. Make sure you include this on your financial aid application if you want to receive financial aid at Cosumnes River College.

Promise Programs

What is the Los Rios Promise Program?

The Los Rios Promise Program covers the cost of tuition for first-time, new, eligible students. You may also hear it referred to as California College Promise or AB 19 (Assembly Bill 19) and AB 2 (Assembly Bill 2).

Costs Covered

The Promise Program covers:

Resident tuition and enrollment fees (the cost of your classes), at **$46 per unit**

Costs Not Covered

The Promise Program does not cover:

Health Services fee

Student Representation fee

Books

Transportation

Living expenses

Eligibility Requirements

Student eligibility is based on funding availability. To be eligible, you must:

- Submit (and receive confirmation of processing) a complete CCCApply application for enrollment (https://crc.losrios.edu/admissions/get-started-and-apply/first-time-college-student-admission-and-enrollment-steps) for the term for which you are applying.
- Be a California resident (learn about residency requirements (https://crc.losrios.edu/residency-requirements)).
- Complete a Financial Aid application – either the Free Application for Federal Student Aid (https://studentaid.gov/h/apply-for-aid/fafsa) (FAFSA) or California Dream Act Application (https://dream.csac.ca.gov/landing) (CADAA) – by the deadline (https://crc.losrios.edu/2025-2026-official-catalog/while-you-are-here/financial-aid/promise-programs#deadline).
- Enroll in at least 12 units by the deadline (https://crc.losrios.edu/2025-2026-official-catalog/while-you-are-here/financial-aid/promise-programs#deadline).
- Complete each semester with a minimum 2.0 GPA and a 66.67% completion rate (learn more about satisfactory academic progress (https://crc.losrios.edu/sap), or SAP).

Eligibility for Mid-Year and First-Time New Recipients

You are only eligible for the Los Rios Promise Program for two consecutive award years beginning with your initial enrollment in the summer/fall term. If your first enrollment is the spring term, then you are only eligible for 1.5 years (not the full two years), provided that you meet the enrollment and FAFSA/CADAA deadline (https://crc.losrios.edu/2025-2026-official-catalog/while-you-are-here/financial-aid/promise-programs#deadline).

Eligibility for a Second Year of the Los Rios Promise Program

A second year of eligibility will be reviewed for you if you received the waiver in your first year under the Los Rios Promise Program or were eligible for the California College Promise Grant in your first year. You will automatically be awarded second-year funding if you:

- Submit the FAFSA/CADAA by the deadline (https://crc.losrios.edu/2025-2026-official-catalog/while-you-are-here/financial-aid/promise-programs#deadline).
- Enroll in a minimum of 12 units by the enrollment date requirement.
- Maintain a cumulative 2.0 GPA, with a 66.67% cumulative completion rate (learn more about SAP (https://crc.losrios.edu/sap)).

You must contact the Financial Aid office if you are transferring in from another California community college. If you are transferring from a college or university outside of California, then you are not eligible for the Los Rios Promise Program.

Deadlines

Semester	Deadline for Completed/Processed FAFSA/ CADAA	Deadline to be Enrolled in 12 or More Units
Summer 2025	N/A	June 18, 2025
Fall 2025	September 8, 2025	September 8, 2025
Spring 2026	February 2, 2026	February 2, 2026

Applications **must be completed and processed by the deadlines (https://crc.losrios.edu/2025-2026-official-catalog/while-you-are-here/financial-aid/promise-programs#deadline)**. "Processed" means that you must have received communication from the Department of Education indicating you have successfully submitted your FAFSA and you received an email from Los Rios indicating your FAFSA has been received. Alternatively, if you completed a CADAA, then you must have received communication from the California Student Aid Commission indicating you have successfully submitted your CADAA as well as an email from Los Rios indicating your CADAA has been received. Please plan accordingly and complete the application **at least three weeks before the deadline**.

Eligibility is based on funding availability. If you are determined eligible but do not enroll for subsequent terms (excluding summer) by the enrollment dates (https://crc.losrios.edu/2025-2026-official-catalog/while-you-are-here/financial-aid/promise-programs#deadline) and/or if you fail to complete the FAFSA/CADAA for the second year, then you will be ineligible for those terms.

FAQ

How is a "first-time student" defined?

If you are entering college directly from high school, attended adult school to complete your high school graduation requirements, or have never attempted college units, then you are considered a "first-time" student.

Am I still a first-time student if I earned college credit while attending high school or adult school to complete my high school education?

Yes! College credit earned while in high school (Dual Enrollment) or adult school does not affect your eligibility for the Los Rios Promise Program as long as you haven't yet earned a degree or certificate. However, you are not eligible for this tuition waiver if you earned a college certificate or degree while in high school.

Grants

What Is a Grant?

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

Types of Grants for Community College Students

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

Cal Grant A

Cal Grant A is available to low-income and middle-income California resident students. It may be used for a program that is at least two academic years in length resulting in an associate or baccalaureate degree of 48 semester units or the equivalent. If awarded at Los Rios, the award will be held in reserve for up to two academic years until the student transfers to a tuition-charging institution unless the student qualifies for the Cal Grant A Student with Dependent (SWD) Children access award. Los Rios abides by CSAC Cal Grant A regulations.

How to Apply

- Complete the FAFSA (https://studentaid.gov/h/apply-for-aid/fafsa) or the California Dream Act Application (https://dream.csac.ca.gov/landing) (CADAA) by March 2.

- Submit a Verified Cal Grant GPA (https://www.csac.ca.gov/post/cal-grant-gpa-verification-form) (high school GPA or community college GPA) to the California Student Aid Commission (CSAC) by March 2. Please note:
  - California community colleges have a second deadline – September 2 – for some types of Cal Grant.
  - Cosumnes River College submits electronically-eligible GPAs.
- Create an account at Web Grants for Students (https://mygrantinfo.csac.ca.gov/) after you submit your FAFSA or CADAA to review your award status.

After you submit your completed FAFSA/CADAA and high school GPA, then you will be considered (by CSAC) for the appropriate Cal Grant award based on GPA, financial need, and college of attendance.

Grant Amounts

Access awards for students with dependents are based on enrollment status as follows:

Enrollment	Semester-Based Awards
Full-Time	$3,000 SWD
Three-Quarter Time	$2,250 SWD
Half-Time	$1,500 SWD

Cal Grant B

Cal Grant B is a need-based program and provides free money to low-income students who are:

- Enrolled in a program of study resulting in an associate, baccalaureate degree, or certificate of at least 24 semester units in length
- Enrolled and attending at least six eligible units per semester

How to Apply

- Complete the FAFSA (https://studentaid.gov/h/apply-for-aid/fafsa) or the California Dream Act Application (https://dream.csac.ca.gov/landing) (CADAA) by March 2.
- Submit a Verified Cal Grant GPA (https://www.csac.ca.gov/post/cal-grant-gpa-verification-form) (high school GPA or community college GPA) to the California Student Aid Commission (CSAC) by March 2. Please note:
  - California community colleges have a second deadline – September 2 – for some types of Cal Grant.
  - Cosumnes River College submits electronically-eligible GPAs.
- Create an account at Web Grants for Students (https://mygrantinfo.csac.ca.gov/) after you submit your FAFSA or CADAA to review your award status.

After you submit your completed FAFSA/CADAA and high school GPA, then you will be considered (by CSAC) for the appropriate Cal Grant award based on GPA, financial need, and college of attendance.

Eligibility and Grant Amounts

See CSAC Cal Grant eligibility requirements (https://www.csac.ca.gov/cal-grants).

Dependent students, or independent students without dependent children, receive up to $1,648 annually; students with dependent children younger than 18 (*Students With Dependents* annual certification (https://www.csac.ca.gov/post/students-dependents) required) receive up to $6,000 annually. Awards are pro-rated according to eligible enrollment as per the following semester-based chart:

Student Type	Full-Time Amount	¾-Time Amount	½-Time Amount	Less than ½-Time Amount
Dependent Students or Independent without Dependent Children	$824	$618	$412	$0
Students with Dependent Children	$3,000	$2,250	$1,500	$0

Cal Grant Recalculation Dates (CRD) apply – see financial aid deadlines (https://crc.losrios.edu/financial-aid-deadlines).

In addition, awarded Cal Grant B students enrolled in 12 or more eligible units per semester might become eligible to receive the additional Student Success Completion Grant (SSCG). Students enrolled in 12 to 14.99 financial aid-eligible units will receive $1,298 SSCG for that semester. Students enrolled in 15 or more financial aid-eligible units will receive $4,000 for that semester.

Cal Grant C

Cal Grant C is a need-based program that provides free money to low-income students who are:

- Pursuing an occupational or technical program of least four months in length
- Enrolled and attending at least six eligible units per semester

How to Apply

- Complete the FAFSA (https://studentaid.gov/h/apply-for-aid/fafsa) or the California Dream Act Application (https://dream.csac.ca.gov/) (CADAA) by September 2.
- Create an account at Web Grants for Students (https://mygrantinfo.csac.ca.gov/) after you submit your FAFSA or CADAA to review your award status.

If the California Student Aid Commission (CSAC) determines you are eligible for a Cal Grant C, then complete the Cal Grant C Supplement Form through Web Grants for Students (https://mygrantinfo.csac.ca.gov/) by the requested deadline.

Eligibility and Grant Amounts

See CSAC Cal Grant eligibility requirements (https://www.csac.ca.gov/cal-grants).

Dependent students, or independent students without dependent children, receive up to $1,094 annually; students with dependent children younger than 18 (*Students With Dependents* annual certification (https://www.csac.ca.gov/post/students-dependents) required) receive up to $4,000 annually. Awards are pro-rated according to eligible enrollment as per the following semester-based chart:

Student Type	Full-Time Amount	¾-Time Amount	½-Time Amount	Less than ½-Time Amount
Dependent Students or Independent without Dependent Children	$547	$410	$274	$0
Students with Dependent Children	$2,000	$1,500	$1,000	$0

Cal Grant Recalculation Dates (CRD) apply – see financial aid deadlines (https://crc.losrios.edu/financial-aid-deadlines).

In addition, awarded Cal Grant C students enrolled in 12 or more eligible units per semester might become eligible to receive the additional Student Success Completion Grant (SSCG). Students enrolled in 12 to 14.99 financial aid-eligible units will receive $1,298 SSCG for that semester. Students enrolled in 15 or more financial aid-eligible units will receive $4,000 for that semester.

California College Promise Grant

The California College Promise Grant is just for California community college students and does not have to be repaid.

What It Covers

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

Eligibility

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

Type A

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

Type B

You meet the income standards listed below. Please note:

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

Family Size	2022 Total Family Income (for 2024-2025 school year)	2023 Total Family Income (for 2025-2026 school year)
1	$21,870	$22,590
2	$29,580	$30,660
3	$37,290	$38,730
4	$45,000	$46,800
5	$52,710	$54,870
6	$60,420	$62,940
7	$68,130	$71,010
8	$75,840	$79,080
Note	For each additional family member, add $7,710	For each additional family member, add $8,070

Type C

You submitted the Free Application for Federal Student Aid (FAFSA) or the California Dream Act application (for AB 540 students who are not US citizens or eligible non-citizens) and it shows you have unmet financial need.

How to Apply

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

- 2025-2026 California College Promise Grant Application – English (shared/doc/financial-aid/forms/25-26-ccpg-application-english.pdf) (For Summer 2025, Fall 2025, Spring 2026)
- 2025-2026 California College Promise Grant Application – Spanish (shared/doc/financial-aid/forms/25-26-ccpg-application-spanish.pdf) (For Summer 2025, Fall 2025, Spring 2026)

Maintaining the California College Promise Grant

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

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

Regaining the California College Promise Grant

If you lose your California College Promise Grant due to not meeting the academic and progress standards, then you may appeal the loss by following the process for Loss of Priority Registration (https://crc.losrios.edu/admissions/enroll-in-classes/loss-of-priority-registration).

Admissions and Records with notify you once the form has been processed. If approved, then your California College Promise Grant will be reinstated.

Chafee Grant for Foster Youth

Chafee Grants are awarded by the State of California to current or former foster youth. Chafee Grants do not have to be repaid.

What it Covers

A Chafee Grant can be used to pay for tuition, fees, books, supplies, transportation, living expenses, and child care.

Eligibility

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

- You are a current or former foster youth who was a ward of the court, living in foster care, for at least one day between the ages of 16 and 18

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

How to Apply

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

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

Federal Pell Grant

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

What it Covers

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

Eligibility

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

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

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

How to Apply

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

Federal Supplemental Educational Opportunity Grant (FSEOG)

Federal Supplemental Educational Opportunity Grants are awarded by the federal government and do not have to be repaid. Cosumnes River College has a limited amount of FSEOG funds, so make sure you submit your FAFSA as early as possible.

What it Covers

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

Eligibility

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

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

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

How to Apply

Submit the FAFSA (https://studentaid.gov/h/apply-for-aid/fafsa) each year to see if you qualify for a FSEOG.

Student Success Completion Grant (SSCG)

What it Covers

The Student Success Completion Grant (SSCG) provides up to $8,000 (and up to $10,500 for Former Foster Youth [FFY]) annually to pay for educational costs.

Due to limited funding, SSCG is awarded on a first-come, first-served basis.

Eligibility

To qualify for an SSCG, you must:

- Be a Cal Grant B or C recipient
- Meet federal satisfactory academic progress (SAP)
- Be a California resident or be exempt from paying nonresident tuition
- Be an undergraduate student pursuing an associate degree, certificate, or transfer program

Grant Amounts

Term-Based Funding

Attendance status	Semester units and term
For students who enroll in 12 to 14.99 units	$1,298 per primary term
For students who enroll in 15+ units	$4,000 per primary term
Former Foster Youth students who enroll in 12+ units and FFY who are in a DSPS program with an approved academic accommodation plan who enroll in 9+ units	$5,250 per primary term
Students in a disabled student program who enroll in 9+ units	$1,298 per primary term

Students enrolled in 12 to 14.99 financial aid-eligible units will receive $1,298 for that semester. Students enrolled in 15 or more financial aid-eligible units will receive $4,000 for that semester.

Effective Fall 2025, DSPS-eligible students who enroll in nine (9) or more financial aid-eligible units per semester who are considered full-time as part of the DSPS Academic Accommodation Plan (AAP) will be awarded $1,298 per semester. Former Foster Youth students who are in a DSPS program with an approved AAP who enroll in nine (9) or more financial aid-eligible units will be awarded $5,250 per semester.

The Cal Grant Recalculation Date (https://crc.losrios.edu/student-resources/financial-aid/financial-aid-deadlines) will be applied to determine course enrollment and award amounts.

How to Apply

Students who qualify will be notified. No additional application is required to determine SSCG eligibility.

Federal Work-Study

What is Federal Work-Study?

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

Eligibility

To be eligible, you must:

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

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

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

Students with Bachelor's degrees may be eligible for FWS. To be considered for eligibility, these students will be asked to submit an appeal.

Hours

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

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

Pay

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

Disclaimer

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

Federal Direct Loans

What is a Federal Direct Loan?

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

Loan Eligibility

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

- Submit the Free Application for Federal Student Aid (FAFSA) (https://studentaid.gov/h/apply-for-aid/fafsa)
- Demonstrate that you are qualified to enroll in college by one of the following means:
  - You have a high school diploma
  - You have a General Education Development (GED) Certificate
  - You passed the California High School Proficiency Exam (CHSPE)
- Be a US citizen or eligible non-citizen with a social security number (SSN)
- Be enrolled in an eligible degree or certificate program
- Be enrolled in six units that apply toward the completion of your program
- Maintain satisfactory academic progress
- Certify that you will use federal financial aid only for educational purposes
- Certify that you are not in default on a federal student loan and do not owe money on a federal student grant

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

Students with Bachelor's degrees may be eligible for federal loans (both subsidized and unsubsidized). These students will be asked to submit an appeal to be considered for eligibility.

Types of Federal Loans

Subsidized Direct Loans

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

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

Unsubsidized Direct Loans

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

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

Annual Loan Limits

Year	Dependent Students (except students whose parents are unable to obtain PLUS Loans)	Independent Students (and dependent undergraduate students whose parents are unable to obtain PLUS Loans)
First-Year Undergraduate Annual Loan Limit	$5,500 – no more than $3,500 of this amount may be in subsidized loans.	$9,500 – no more than $3,500 of this amount may be in subsidized loans.
Second-Year Undergraduate Annual Loan Limit	$6,500 – no more than $4,500 of this amount may be in subsidized loans.	$10,500 – no more than $4,500 of this amount may be in subsidized loans.
Subsidized and Unsubsidized Aggregate Loan Limit	$31,000 – no more than $23,000 of this amount may be in subsidized loans.	$57,500 for undergraduates – no more than $23,000 of this amount may be in subsidized loans.

View Federal Student Loan interest rates (https://studentaid.gov/understand-aid/types/loans/interest-rates).

How to Apply for Loans

Steps to Apply (for Academic Year – Fall/Spring Semesters)

Step 1: Federal Direct Loan Request in eServices

Only students who received an Award Notification may submit a Federal Loan Request.

1. Log in to eServices (https://ps.losrios.edu/student/signon.html).
2. Select *Financial Aid*.
3. Select *Financial Aid Award Year*.
4. Click on the *Federal Direct Loan Request* link.

Step 2: Loans Offered

A notification will be sent to your message center within a week for you to accept the offer.

Step 3: Accept, Decline, or Reduce Loans Offered

(Note: Firefox browser is recommended.)

Once you receive notification that your loans were offered, you can accept the amount, decline the offer, or reduce the amount to fit your financial need.

To Accept: Once you receive notification that your loans were offered, you can accept the amount offered. After you accept the loans offered, you will see checklist items added to your *To Do List*.

To Decline: Once you receive notification that your loans were offered, you can decide to decline the loans completely.

1. Under the Awards, click on *Accept/Decline.*
2. Click on the *edit/pencil* icon.
3. Under *Award Decision* column, click *Accept*/*Decline* to accept or decline the award.
4. Click the *Submit* button to submit your loan.

Federal Direct Loans screenshot (shared/img/body-misc/financial-aid/fa-fed-direct-accept-decline-screenshot.jpg)

To Reduce: Once you receive notification that your loans were offered and you have determined that you do not need the amount offered, but would like a reduced amount, please follow these steps:

1. Under the Awards, click on *Accept/Decline.*
2. Click on the *edit/pencil* icon.
3. To **reduce** the award, click *Accept* under the *Award Decision* column
4. Check the *Reduce* box.
5. Enter the updated amount.
6. Click the *Submit* button to submit your loan.

After you accept the loans offered, you will see checklist items added to your To Do List.

Federal Direct Loans screenshot (shared/img/body-misc/financial-aid/fa-fed-direct-reduce-screenshot.jpg)

If the process doesn't work for you, please contact the Financial Aid Office (https://crc.losrios.edu/financial-aid).

Step 4: Origination (Automated Process)

After loans have been originated, you will then be allowed to complete the Master Promissory note (MPN) process. New borrowers must also complete undergraduate Student Loan Entrance Counseling (https://studentaid.gov/entrance-counseling/).

Students are encouraged to electronically sign the MPN annually via the Federal Student Aid/Master Promissory Note (https://studentaid.gov/mpn/) webpage.

Alternatively, students can complete, print, sign and mail a paper MPN.* Paper MPNs are available at the financial aid office upon request.

**A mailed paper MPN may delay your refund for up to two months.*

Mail a paper MPN to:

Post Office Box (standard mail)	Street Address (overnight or commercial courier)
U.S. Department of Education P.O. Box 1130 Fairfax, VA 22033	U.S. Department of Education 4050 Legato Road, #1100 Fairfax, VA 22033

Step 5: Disbursement

Typically, loans are disbursed to students who have satisfied all the requirements to receive loans.

Steps to Apply (for Summer Term)

If this is your first time applying for student loans for the academic year, then refer to the previous section, *Steps to Apply (for Academic Year – Fall/Spring Semesters)*.

This section explains how a student who already has Federal Direct Loans for the academic year can meet the criteria and apply for summer Federal Direct Loans.

Step 1: Meet the Criteria

Students must meet the following criteria to apply for Summer Federal Direct Loans:

1. Have not borrowed the maximum annual loan limit for your grade level and dependency status:

Year	Dependent Students (except students whose parents are unable to obtain PLUS Loans)	Independent Students (and dependent undergraduate students whose parents are unable to obtain PLUS Loans)
First-Year* Undergraduate Annual Loan Limit	$5,500 – no more than $3,500 of this amount may be in subsidized loans.	$9,500 – no more than $3,500 of this amount may be in subsidized loans.
Second-Year Undergraduate Annual Loan Limit**	$6,500 – no more than $4,500 of this amount may be in subsidized loans.	$10,500 – no more than $4,500 of this amount may be in subsidized loans.
Subsidized and Unsubsidized Aggregate Loan Limit	$31,000 – no more than $23,000 of this amount may be in subsidized loans.	$57,500 for undergraduates – no more than $23,000 of this amount may be in subsidized loans.

*First-Year is a student who has completed less than 30 units before the start of the semester.
**Second-Year is a student who has completed 30 or more units before the start of the semester.

2. Meet satisfactory academic progress (SAP) for the term or have an approved summer SAP appeal.

Step 2: Enroll in Courses

Enroll in at least three (3) units of financial aid-eligible courses.

Step 3: Submit Loan Request

Submit the *Summer Loan Request Form* at least one (1) week before your summer classes end. **Note:** Download the form to your computer and complete it in an application such as Adobe Acrobat or Preview. Do not fill out the form in your internet browser window. Contact the Financial Aid Office (https://crc.losrios.edu/financial-aid) if you have questions.

Step 4: Wait for Processing

Allow up to two (2) weeks for your summer loan request to be processed.

Borrower's Rights and Responsibilities

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

Borrower's Rights

You have the right to:

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

Borrower's Responsibilities

You agree to:

- Repay your loan(s), including accrued interest and fees, even if you do not:
  - Complete or find satisfaction in your education
  - Complete the program within the regular timeframe
  - Obtain employment

- Attend exit counseling before you leave school or drop below half-time enrollment
- Notify your loan holder within ten days if you:
    - Change your name, address, or phone number
    - Drop below half-time status
    - Withdraw from school
    - Transfer to another school
    - Change your graduation date
- Direct all correspondence to your loan holder or servicer
- Make monthly payments on your loan after leaving school, unless you are granted a deferment or forbearance
- Notify your loan holder of anything that might change your eligibility for an existing deferment

First-Time Borrowers

If you are a first-time borrower or you had no outstanding balance on a Direct Loan, for federal regulations, you cannot receive a disbursement until 30 days after the first day of your enrolled class.

Visit the Student Aid website to learn more about receiving financial aid (https://studentaid.gov/complete-aid-process/receive-aid).

Loan Exit Counseling

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

How to Complete Loan Exit Counseling

Visit the Student Aid website to complete loan exit counseling (https://studentaid.gov/exit-counseling/). You will need your FSA ID and password to complete the loan exit counseling. Be sure to select Cosumnes River College (federal school code: 007536) when asked, otherwise the Financial Aid Office will not receive confirmation that you completed the requirement.

When to Complete Loan Exit Counseling

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

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

Failure to complete loan exit counseling may result in the delay of your financial aid processing.

Scholarships

What is a Scholarship?

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

Examples of types of scholarships:

- Merit scholarships are based on a student's achievements.
- School scholarships are given to students by the school they attend.
- Work scholarships require students to work to receive scholarship money.
- Field of Study scholarships are given to students pursuing a specific field of study or academic program.
- Need scholarships are based on financial need.

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

Learn More About Scholarships (https://crc.losrios.edu/scholarships)

College and Academic Regulations

Academic Freedom

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

- The purpose of this statement is to promote public understanding and support of academic freedom and tenure and agreement upon procedures to ensure them in colleges and universities. Institutions of higher education are conducted for the common good and not to further the interest of either the individual teacher or the institution as a whole. The common good depends upon the free search for truth and its free exposition.
- Academic freedom is essential to these purposes and applies to both teaching and research. Freedom in research is fundamental to the advancement of truth. Academic freedom in its teaching aspect is fundamental for the protection of the rights of the teacher in teaching and the freedom of the student in learning. It carries with it duties correlative with rights.
- Teachers are entitled to freedom in the classroom in discussing their subject, but they should be careful not to introduce into their teaching controversial matter, which has no relation to their subject.
- College and university teachers are citizens, members of a learned profession, and officers of an educational institution. When they speak or write as citizens, they should be free from institutional censorship or discipline, but their special position in the community imposes special obligations. As scholars and educational officers, they should remember that the public may judge their profession and their institution by their utterances. Hence they should at all times be accurate, should exercise appropriate restraint, should show respect for the opinions of others, and should make every effort to indicate that they are not speaking for the institution.

Academic Honors

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

Honors at Graduation

Students who maintain a high grade point average are eligible for honors at graduation. Students who maintain a grade point average of 3.0 or better are eligible for graduation with honors, and students who maintain a grade point average of 3.5 or better are eligible for graduation with highest honors. All undergraduate level coursework that a student has completed is used to calculate honors at graduation (including coursework taken outside of Los Rios). For ADT degrees, only transfer-level, undergraduate coursework is used.

The published lists of students are compiled from the data available at the time of publication and may be subject to subsequent revision.

Academic Renewal Without Course Repetition

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

1. A minimum of twelve (12) consecutive months shall have elapsed since the end of the semester or summer session in which the work to be alleviated was recorded, and a minimum of twelve (12) semester units (or its equivalent) with a grade of "C" or "Pass/Credit" or better shall have been attained. The coursework must have been completed at a regionally accredited college.
2. No more than thirty (30) units of substandard grades may be discounted by academic renewal districtwide.
3. Under no circumstances may coursework be discounted if it was used to fulfill requirements for a degree or certificate that has been awarded.
4. 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.

5. The discounting resulting from academic renewal is permanent. If approved, courses and grades will remain visible on the transcript but will not be calculated in the GPA.
6. Academic renewal is not intended for courses that are required and/or will be repeated.
7. Nontransferable courses in math, English, or English as a second language (ESL) sequences that cannot be repeated because they are no longer offered may be academically renewed, waiving requirements "A" and "B" above, upon successful completion of a transfer-level course in the same sequence.

Attendance

For students to successfully complete their college work, regular class attendance is necessary, and students are expected to attend all sessions of classes in which they are enrolled. See Los Rios Regulation R-2222 (shared/doc/board/regulations/R-2222.pdf).

All students who remain enrolled in a class after the last day to withdraw (see the academic calendar (https://crc.losrios.edu/academic-calendar)) will be issued a letter grade for the course. If a student has stopped attending but not dropped the class, the student may receive an F grade for the course on their permanent record. Exception to this policy involves completion of the Student Petition, with appropriate signatures and documentation of extenuating circumstances.

Excessive Absences

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

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

Non-Attendance at First Class

Per Los Rios Regulation R-2222 (shared/doc/board/regulations/R-2222.pdf), students who fail to attend the first session of a class may be dropped by the instructor.

Auditing Courses

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

Catalog Rights

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

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

Please note:

- Students with catalog rights prior to Fall 2025 can continue to follow the old local AA/AS GE pattern. Use the new local AA/AS GE requirements (https://crc.losrios.edu/catalog/local-ge) along with the new to old AA/AS GE mapping table (https://crc.losrios.edu/student-resources/counseling/cal-getc-and-general-education-guidance/mapping-new-to-old-local-general-education-requirements) to complete your general education requirements.
- A college may authorize or request substitution for discontinued courses.
- Students who change their major field of study may be required to complete those requirements for the major in effect at the point of change.
- For purposes of this section, "attendance" means taking classes in at least one session (semester or summer session) in each calendar year. Absence for attendance at another regionally accredited institution shall not be considered an interruption in attendance, per Los Rios Policy P-7242 (shared/doc/board/policies/P-7242.pdf).

Change of Address and/or Name

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

Students should report a change of address immediately. Changes can be submitted online in eServices (https://ps.losrios.edu/student/signon.html) or by submitting a Change of Data form to the Admissions & Records office. Cosumnes River College is not responsible for misdirected mail if the address change is not provided by the student.

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

Course Repetition and Repeatability

Repetition of courses must be conducted by all California community colleges in compliance with Title 5, sections 55029 and 55040 through 55046.

Course Repetition Where Substandard Grade is Recorded

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

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

Repeatable Courses

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

- Courses for which repetition is necessary to meet the major requirements of CSU or UC for completion of a bachelor's degree
- Intercollegiate athletics and their related conditioning courses may be repeated to meet requirements for California Community College Athletic Association (CCCAA) eligibility.
- Intercollegiate academic or vocational competition courses with the primary purpose of preparing students for competition
- Variable unit courses that are open entry/exit, such as math, reading, and writing laboratory courses. Students may re-enroll in these courses as many times as necessary to complete, one time, the entire curriculum of the course.
- Work Experience courses, which can be repeated when there is new or expanded learning on the job for a maximum of six (6) to sixteen (16) units.

Exceptions to Course Repetition Requirements

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

- Students may repeat a course where that course is required by a statute or regulation as a condition of continued paid or volunteer employment, or as a result of a significant change in industry or licensure standards such that repetition is necessary for employment or licensure. These repetitions are not limited and are granted based on the college's verification of established legal mandates (Cal. Code Regs., Title 5, section 55040). When repetition is allowed under this provision, credit will be awarded for the repeated course, and credit will be retained for the previous attempt(s).
- Students may repeat a course if there has been a significant lapse of time (more than three years) since the first grade was obtained, and:
    - If the college has a properly established recency prerequisite for a course or program (Cal. Code Regs., Title 5, section 55043) that the student shall not be able to satisfy without repeating the course in question.
    - If the college finds that another institution of higher education to which the student seeks to transfer has established a recency requirement that the student shall not be able to satisfy without repeating the course in question (Cal. Code Regs., Title 5, section 55043).
    - When repetition is allowed under this provision, the credit and grade recorded for the repeated course will be discounted, and the units and grade from the prior attempt(s) will be retained.

- The college finds that the student's most recent previous grade is, at least in part, the result of extenuating circumstances. Extenuating circumstances are verified cases of accident, illness, or other circumstances beyond the student's control. This is a one-time exception and may permit a fourth attempt. When repetition is allowed under this provision, credit will be awarded for the repeated course, and the units and grades from the prior attempt will be discounted.
- An educational assistance course, such as adaptive physical education, may be repeated any number of times by petition when the continuing success of the student in other courses is dependent on additional repetitions; when additional repetitions of the course are essential to completing a student's preparation for enrollment into other courses; or when the student has an Academic Accommodation Plan which involves a goal other than completion of the educational assistance class in question and repetition of the course will further achievement of that goal. (Cal. Code Regs., Title 5, section 55029) When repetition is allowed under this provision, credit will be awarded for the repeated course, and credit will be retained for the previous attempt(s). For more information on this type of course repetition, consult with a DSPS Counselor.

Course Families and Limitations on Active Participatory Courses

Active participatory courses are those courses where individual study or group assignments are the basic means by which learning objectives are obtained. These include kinesiology/physical education (PE) active participatory courses, as well as visual and performing arts active participatory courses (theatre arts, music, and art). Some courses in these categories are related in content and have been placed in groups that the Los Rios colleges call "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). A student may not petition to exceed the number of attempts within a course family.

In addition, if a student gets a substandard grade [a notation of "D," "F," "NC" (No Credit), "NP" (No Pass), or "W" (Withdrawal)] in any course within a family, the substandard grade counts as one of the four course limitations in the family. The list of families of courses (https://crc.losrios.edu/academics/programs-majors/course-families) is available online and in the Counseling office. Consult with a counselor for more information.

External Attempts and Duplicative Credit

For the purpose of course repetition, attempts at regionally accredited colleges and universities outside the Los Rios Community College District shall not be included in calculating the number of attempts in a course. If external credit is determined to be equivalent to courses attempted with substandard grades in Los Rios, the most recent prior attempt within Los Rios may be discounted as permissible in course repetition policies. If accepting external credit results in duplicative non-repeatable credit appearing on the student record (transcript), such credit shall not be applied to meet general education, degree, or major requirements.

Course Time Conflict/Course Overlap

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

Good Standing

In determining a student's eligibility to acquire or remain in good standing at Cosumnes 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 Grade Point Averages (GPA)

Types of Grades

Letter Grade	Explanation	Grade Points Per Unit
A	Excellent	Four (4) grade points per unit
B	Good	Three (3) grade points per unit
C	Satisfactory	Two (2) grade points per unit

Letter Grade	Explanation	Grade Points Per Unit
D	Passing (not satisfactory)	One (1) grade point per unit
F	Failing	Zero (0) grade points per unit
P	Pass (C or better)	Not computed in GPA
NP	No Pass (less than C)	Not computed in GPA; affects progress probation and dismissal
I	Incomplete	Not computed in GPA; affects progress probation and dismissal
W	Withdrawal	Not computed in GPA; affects progress probation and dismissal
EW	Excused Withdrawal	Not computed in GPA; does not affect progress probation and dismissal; does not count as one of your three attempts

Grade Point Average

The grade point average is found by taking the (total grade points earned) divided by the (total units attempted with a letter grade).

Progress Percentage

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

Pass/No Pass Grading

A student may elect to have graded courses that allow "Pass/No Pass (P/NP)" evaluation to be assessed as "Pass/No Pass." A petition must be filed with the admissions office before the deadline published in the academic calendar. An "A", "B," or "C" grade will be recorded as "P" with Grade Points Per Unit. A "D" or "F" grade will be recorded as "NP" with No Grade Points Per Unit. Units attempted for P/NP grades are not computed in the grade point average but are used for determining progress probation and dismissal. Once you have filed for P/NP grading in a course, it cannot be changed to a letter grade.

Incomplete Grading

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

In Progress

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

Withdrawal from Class

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

A "W" notation on the permanent academic record/transcript is used for determining progress probation and progress dismissal. No withdrawals are permitted after the "W" notation deadline, except due to extenuating circumstances (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 an excused withdrawal ("EW") rather than as a less-than-satisfactory or failing grade on the permanent academic record/transcript. The college may present the student with options to attempt to mitigate extenuating circumstances presented in a petition for an excused withdrawal and allow the student to remain enrolled; students may indicate they are willing to consider these options on the petition.

Excused withdrawal shall not be counted in progress probation and dismissal calculation. Excused withdrawal shall not be counted toward the permitted number of withdrawals or counted as an enrollment attempt.

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.

Remedial Unit Limitation

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

Transcripts

Order Transcripts Online

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

Order Transcripts Online (https://crc.losrios.edu/order-transcripts)

Unit/Academic Load

Per Los Rios Regulation R-7211: Maximum and Recommended Academic Load (shared/doc/board/regulations/R-7211.pdf), 15 units each semester is considered a full load. 12 units each semester is a minimum full-time load and is usually acceptable to qualify for scholarships, grants, loans, and holding student offices.

Fall/Spring Semester

18 units per semester is a maximum load. The unit limit is 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 (for a total of 24 units) district-wide through this process.

Summer Session

Eight (8) units per summer session is a maximum load. The unit limit is 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 (for a total of 12 units) district-wide through this process.

Special Considerations

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

The following categories require the minimum unit load indicated:

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

Unit of Credit

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

Academic and Progress Probation and Dismissal

Cosumnes River College uses **Academic Probation**, **Progress Probation**, **Academic Dismissal**, and **Progress Dismissal** to identify students who are struggling and offer them support. We will notify you if you are in one of these standings, or you can view your academic standing on your unofficial transcript after grades are posted each semester. Log in to eServices (https://ps.losrios.edu/student/signon.html), then click *Academic Records* to find your unofficial transcript. If you are in probation or dismissal status, then you may need to meet certain requirements to remain enrolled in classes.

Definitions

Academic Probation and Academic Dismissal (AP1, AP2, AD)

Students who have attempted at least 12 semester units, and whose cumulative GPA is below 2.0, will be placed on **Academic Probation 1 (AP1)**.

After the second consecutive semester of a cumulative GPA below 2.0, student will be placed on **Academic Probation 2 (AP2)**.

After the third consecutive semester, students are placed on **Academic Dismissal (AD)**.

When the overall GPA improves to 2.0 or higher, the student returns to **Good Standing**.

Progress Probation and Progress Dismissal (PP1, PP2, PD)

Students who have attempted at least 12 semester units are placed on **Progress Probation 1 (PP1)** when W, I, and NP grades are recorded in one half or more of all units in which a student has enrolled.

After the second consecutive semester, students fall into **Progress Probation 2 (PP2)**.

After the third consecutive semester, students are placed on **Progress Dismissal (PD)**.

When the overall CRC transcript has less than one half of W, I, or NP grades, the student returns to **Good Standing**.

Potential Consequences

Students who are placed on **Academic Probation 2**, **Progress Probation 2**, or **Dismissal**:

- Will lose priority registration as a continuing student and will only be able to register for classes during open enrollment (which is later than priority 1 and 2)
- May lose their California College Promise Grant (https://crc.losrios.edu/admissions/financial-aid-and-fees/types-of-financial-aid/grants) eligibility

Students who have a term GPA of 2.0 and have completed more than half the attempted units for the term may appeal their loss of priority registration or the California College Promise Grant.

How to Address a Probation or Dismissal Hold

Students on Academic or Progress Probation 1

We recommend that students on Probation 1 meet with a counselor. Contact the Counseling Department (https://crc.losrios.edu/student-resources/counseling) at (916) 691-7316 to make an appointment.

Students on Probation 1 must achieve a 2.0 GPA or better and complete at least half of their attempted units, or they will be placed on Probation 2.

Students on Academic or Progress Probation 2

We recommend that students on Probation 2 meet with a counselor and utilize campus resources for additional help and support. Contact the Counseling Department (https://crc.losrios.edu/student-resources/counseling) at (916) 691-7316 to make an appointment.

Students on Probation 2 must achieve a 2.0 GPA or better and complete at least half of their attempted units, or they will be placed on Dismissal.

Students on Academic or Progress Dismissal (First)

For these students, a hold is placed on their record and they are required to:

- Meet with a counselor and complete a Readmission Petition.
- Submit a Readmission Petition to Admissions and Records.
- Take the maximum number of units recommended by a counselor.

Contact the Counseling Department (https://crc.losrios.edu/student-resources/counseling) at (916) 691-7316 for more information.

Students on Academic or Progress Dismissal (Multiple)

Students may be placed on **Dismissal** multiple times.

For these students, a hold is placed on their record and they are required to:

- Meet with a counselor for a 45-minute appointment. To make an appointment, come to the Counseling Office in the College Center (CC-161) or call (916) 691-7316.
- Fill out reinstatement paperwork, which will be reviewed by counselors.
- Students readmitted after multiple dismissals may be limited in the following ways at counselor discretion:
    - Time management and study skills workshops
    - Two progress reports
    - Restricted units
    - Utilize tutoring services
    - Meet with a counselor twice a semester
    - Attend group counseling session
- Complete all attempted courses with a "C" or better.

If students do not adhere to the conditions outlined in the Student Agreement, they may be prevented from enrolling in the following term. The hold will be removed based on satisfactory academic progress.

Contact the Counseling Department (https://crc.losrios.edu/student-resources/counseling) at (916) 691-7316 for more information.

Resources For Students at Risk of Probation or Dismissal

Are you at risk of probation or dismissal? CRC has programs in place to support you and help get you back on track. Learn about the Back on Track (https://crc.losrios.edu/student-resources/counseling/academic-and-progress-probation-and-dismissal/back-on-track-program) program.

Enrollment Verification

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

Verifications for Child Care, Health Insurance, and Car Insurance

eServices

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

1. Click *Academic Records*
2. Click *Enrollment Verification*
3. Follow the instructions to get to your printable verification

Fax and In-Person Requests

We *do not* accept verification requests over the phone.

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

Faxed requests must include:

- Your name
- Your student ID number
- Your birthdate
- Which semester you need verified
- Your signature

Other Enrollment and Degree Verifications

The National Student Clearinghouse acts as Cosumnes River College's agent for verification of student enrollment and degree status. You can obtain an official Enrollment Verification Certificate online via the National Student Clearinghouse Verifications website (https://nscverifications.org/welcome-to-verification-services/) or by calling (703) 742-4200.

We will direct the following types of requests to the National Student Clearinghouse:

- Requests from credit issuers
- Requests from travel and consumer product companies
- Requests from housing providers
- Requests from scholarship providers
- Requests from employers and employment agencies
- Requests from students or parents that are not related to child care, health insurance, or car insurance

Credit for Prior Learning and Alternative Study Options

In addition to regular classes, students may receive college credit for prior learning and alternative study options.

Credit for Prior Learning

Advanced Placement (AP) Exams

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

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

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

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

Visit College Board's Advanced Placement Program website (https://ap.collegeboard.org) to learn more.

College-Level Examination Program (CLEP)

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

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

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

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

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

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

International Baccalaureate (IB) Tests

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

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

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

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

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

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

Visit the International Baccalaureate (IB) website (https://www.ibo.org/programmes/diploma-programme/assessment-and-exams/requesting-transcripts/) to learn more.

Credit by Examination

Credit by examination is a process by which students may earn credit in recognition of knowledge and skills gained from previous experience or training when such knowledge and skills are deemed to be substantially similar to the student learning outcomes of the course for which credit is being sought. A student may receive credit for some courses by passing an exam if they meet the following requirements:

- Be currently enrolled and in good standing at Cosumnes River College
- Have an education plan on file
- Request a course that is listed in the current college catalog
- Never have received credit for the particular course

Under special circumstances, these requirements may be waived by petition to the Dean of Student Services and Enrollment Management.

Credit by examination may not apply to all courses. Eligibility for credit by examination is **not** permissible under the following situations:

- The student has completed or enrolled in a more advanced course, which follows this course in sequence
- The course (or its equivalent) appears on the student's transcript with a grade other than a W
- The exam would duplicate coursework for which credit was granted previously
- The student does not meet the pre-requisite or co-requisite for the course

Under special circumstances, these restrictions may be waived by petition to the Vice President of Student Services.

Please note that some four-year colleges and universities do **not** accept units granted through credit by examination. Students are advised to meet with a counselor for more information.

Please follow these steps to participate:

1. Find a professor who is willing to administer the exam. The examining instructor determines the scope and form of the exam.
2. Complete the appropriate paperwork at the Admissions and Records Office. Staff will verify your eligibility.
3. Have the examining professor sign the petition and schedule the examination.
4. Have the appropriate area dean sign the petition.
5. Return the completed petition to the Admissions and Records Office for enrollment in a test section and provide payment of appropriate enrollment fees.
6. Take the exam as scheduled. (The examining professor will submit a grade of "Pass" or "No Pass" to the Admissions and Records Office. See "Pass/No Pass" Grading for further information.)

Please note that all Cosumnes River College policies are in effect with respect to credit by examination, except as indicated here.

Credit for Military Education and Training

Military personnel and veterans may receive course credit for prior military education and training.

See Credit for Military Experience (https://crc.losrios.edu/military-credit) for more information.

Alternative Study Options

Distance/Online Education

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

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

Online Classes

In online classes, classes meet online and all coursework is done online. Class schedules will indicate whether an online class is asynchronous (meaning there are no scheduled meeting times) or synchronous (meaning there are regularly scheduled meetings through teleconference).

Partially Online or "Hybrid" Classes

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

Online Learning Platform

All online classes are offered through Canvas (https://lrccd.instructure.com), a cloud-based learning management system used by faculty and students within Los Rios Community College District.

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

Experimental Offerings

An experimental offering is a course that is offered on a trial basis. Students enroll in experimental offerings through the regular registration process. Transfer institutions may not accept units earned in experimental offerings.

Honors Program

The Cosumnes River College Honors program is an enhanced transfer opportunity program designed specifically for academically-accomplished students and students seeking a challenge with the ability and desire for high achievement. Through its series of

special Honors courses and co-curricular activities, the program provides opportunities for intellectual growth beyond those generally found in most lower division programs.

These one to three unit courses are intended to augment and enhance a student's knowledge and educational experience. In the broad plan of the program, some of these courses are linked to a particular course and are intended to provide in-depth, rigorous treatment of certain related topics. These classes may require concurrent or previous enrollment in another course. Prospective Honors Program students should possess the ability to think and work independently, write clearly and purposefully, and cooperate in the spirit of discovery and understanding.

Honors courses are special intensive courses in which students will confront and attempt to resolve difficult questions that arise in a careful study of the issues found in the discipline(s). Honors students are expected to research aspects of these questions and present their findings to the class in written form for seminar discussion. Field trips to attend events or to conduct research may be an integral part of the Honors course experience. Students who successfully complete units from Honors courses may be able to count these units as part of the Transfer Breadth Requirements. Students who complete 15 units or more in honors-designated courses will earn special recognition as an Honors Scholar, a distinction that may entitle the student to guaranteed transfer and scholarship opportunities at select transfer colleges and universities, including UCLA, in whose Transfer Alliance Program the Cosumnes River College Honors Program is a participating member.

For eligibility and application information, please visit CRC Honors (https://crc.losrios.edu/academics/honors-program).

Independent Study

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

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

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

Credit for Military Service

Veterans may receive college credit for military service.

See Credit for Military Experience (https://crc.losrios.edu/military-credit) for more information.

Reserve Officer Training Corps (ROTC)

Aerospace Studies

Air Force ROTC is available to Cosumnes River College students through a program offered at CSU Sacramento. There is no obligation to join the military to take the courses. Students may take courses to explore an interest in a military career. Two-, three-, and four-year programs are available, leading to a commission in the United States Air Force. Scholarships are available to qualified students. Classes are conducted at CSU Sacramento. Topics include military history, management, leadership, problem solving, ethics, public speaking, world politics, international relations, and current events.

To apply for the program or for more information, contact the Unit Admissions Officer at (916) 278-7315. It is recommended that applications be submitted no later than the first semester of the sophomore year.

Military Science

Army ROTC is available to Cosumnes River College students at CSU Sacramento. The Military Science Department offers hands-on training in management and leadership. There is no obligation to join the military by taking the course. The program stresses the following leadership dimensions: oral and written communications, oral presentations (formal briefings), initiative, sensitivity, influence, planning and organizing, delegation, administrative control, problem analysis, judgment, decisiveness, physical stamina, and mission accomplishment. Also stressed are current events, national and international politics, military affairs, ethics training and human relations with emphasis on eliminating racial and gender discrimination. Management and leadership are taught using the US Army as a model. Two- and three-year scholarships are available, covering up to $9,000 per year for tuition, $225 per semester for books and supplies, $200 per semester for lab fees, and $150 a month tax free stipend during the academic year.

To apply for the program or for more information, contact the Unit Admissions Officer at (916) 278-7682. It is recommended that applications be submitted no later than the first semester of the sophomore year.

Study Abroad

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

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

Requirements

To study abroad, students must:

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

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

Financial Aid

Financial Aid is available for study abroad.

Upcoming Study Abroad Opportunities

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

Work Experience and Internship Program

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

For more information, please visit the Work Experience and Internship Program (https://crc.losrios.edu/wexp).

Advanced Placement Test Scores

Students may earn credit for College Entrance Board Advanced Placement (AP) tests with scores of 3, 4, or 5. AP scores can be used to meet Cosumnes River College Local AA/AS General Education requirements or California General Education Transfer Curriculum (Cal-GETC) requirements.

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

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

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

Cosumnes River College General Education AP Credit

The use of AP exam scores for Cosumnes River College course credit and general education is determined by Cosumnes River College policy.

AP Exam	Exam Score	CRC Course Credit	Satisfies CRC GE Area	Units Earned at CRC
2-D Art and Design	3, 4, 5	N/A	N/A	3
3-D Art and Design	3, 4, 5	N/A	N/A	3
African American Studies	3, 4, 5	N/A	N/A	3
Art History	3, 4, 5	ARTH 300	L3: Arts and Humanities	3
Biology	3	BIOL 308	L5: Natural Sciences	3
Biology	4, 5	BIOL 308 and BIOL 309	L5: Natural Sciences	4
Calculus AB	3, 4, 5	MATH 400	L2: Mathematical Concepts and Quantitative Reasoning	5
Calculus BC	3, 4, 5	MATH 400 and MATH 401	L2: Mathematical Concepts and Quantitative Reasoning	10
Calculus BC/AB Subscore	3, 4, 5	N/A	L2: Mathematical Concepts and Quantitative Reasoning	3
Chemistry (taken Fall 2009 or later)	3, 4	CHEM 305	L5: Natural Sciences	5
Chemistry (taken Fall 2009 or later)	5	CHEM 400	L5: Natural Sciences	5
Chinese Language and Culture	3, 4, 5	N/A	L3: Arts and Humanities	8
Comparative Government and Politics	3, 4, 5	N/A	L4: Social and Behavioral Sciences	3
Computer Science A	3	N/A	N/A	3
Computer Science A	4, 5	CISP 300	N/A	3
Computer Science AB	3, 4, 5	N/A	N/A	3
Computer Science Principles	3, 4, 5	CISC 310	N/A	3
Drawing	3, 4, 5	ART 300	L3: Arts and Humanities	3
English Language and Composition	3, 4, 5	ENGL C1000 (formerly ENGWR 300)	L1A: English Composition	3
English Literature and Composition	3, 4, 5	ENGL C1000 (formerly ENGWR 300)	L1A: English Composition **and** L3: Arts and Humanities	6
Environmental Science	3, 4, 5	BIOL 350	L5: Natural Sciences	4
European History	3, 4, 5	HIST 302	L3: Arts and Humanities **or** L4: Social and Behavioral Sciences	3
French Language and Culture	3, 4, 5	N/A	L3: Arts and Humanities	8
German Language and Culture	3, 4, 5	N/A	L3: Arts and Humanities	8
Human Geography	3, 4, 5	GEOG 310	L4: Social and Behavioral Sciences	3

AP Exam	Exam Score	CRC Course Credit	Satisfies CRC GE Area	Units Earned at CRC
Italian Language and Culture	3, 4, 5	N/A	L3: Arts and Humanities	8
Japanese Language and Culture	3, 4, 5	N/A	L3: Arts and Humanities	8
Latin	3, 4, 5	N/A	L3: Arts and Humanities	3
Macroeconomics	3, 4, 5	ECON 302	L4: Social and Behavioral Sciences	3
Microeconomics	3, 4, 5	ECON 304	L4: Social and Behavioral Sciences	3
Music Theory	3	N/A	L3: Arts and Humanities	3
Music Theory	4, 5	MUFHL 400	L3: Arts and Humanities	4
Physics 1: Algebra-Based	3, 4, 5	N/A	L5: Natural Sciences	4
Physics 2: Algebra-Based	3, 4, 5	N/A	L5: Natural Sciences	4
Physics 1: Algebra-Based, and Physics 2: Algebra-Based	4, 5	PHYS 350 and PHYS 360	L5: Natural Sciences	8
Physics C: Electricity and Magnetism	3, 4, 5	N/A	L5: Natural Sciences	4
Physics C: Mechanics	3, 4, 5	N/A	L5: Natural Sciences	4
Precalculus	3, 4, 5	N/A	L2: Mathematical Concepts and Quantitative Reasoning	3
Psychology	3, 4, 5	PSYC C1000 (formerly PSYC 300)	L4: Social and Behavioral Sciences	3
Seminar	3, 4, 5	N/A	N/A	3
Spanish Language and Culture	3, 4, 5	SPAN 401 and SPAN 402	L3: Arts and Humanities	8
Spanish Literature and Culture	3, 4, 5	N/A	L3: Arts and Humanities	3
Statistics	3, 4, 5	STAT C1000E (formerly STAT 300)	L2: Mathematical Concepts and Quantitative Reasoning	4
US Government and Politics	3, 4, 5	N/A	L4: Social and Behavioral Sciences	3
US History	3, 4, 5	HIST 310 and HIST 311	L3: Arts and Humanities **or** L4: Social and Behavioral Sciences **or** Va: American Institutions (before Fall 2025)	6
World History (taken before Fall 2019)	3, 4, 5	HIST 307 and HIST 308	L3: Arts and Humanities **or** L4: Social and Behavioral Sciences	6
World History – Modern	3, 4, 5	HIST 308	L3: Arts and Humanities **or** L4: Social and Behavioral Sciences	3

Cal-GETC AP Credit

Visit Cal-GETC External Exams (Section 6.1) (shared/doc/student-services/counseling/cal-getc-standards-section-6-1.pdf) to find information on how credit is granted for general education using the Cal-GETC pattern. Note that each CSU and UC campus individually determines how it will apply external examination credit in the major. For more information about AP credit, consult a counselor.

CSU AP Credit

Visit CSU's AP Credit Page (https://www.calstate.edu/apply/transfer/Pages/External-Exam-Credit.aspx) for information on how credit is granted for admission and general education. Note that each campus in the CSU system individually determines how it will apply external examination credit in the major. For more information about AP credit, consult a counselor.

UC AP Credit

Visit UC's AP Credit Page (https://admission.universityofcalifornia.edu/admission-requirements/ap-exam-credits/ap-credits/) for information on how credit is granted for admission and general education. Note that each campus in the UC system individually determines how it will apply external examination credit in the major. For more information about AP credit, consult a counselor.

College-Level Examination Program Scores

Cosumnes River College grants credit for College Level Examination Program (CLEP) examinations. CLEP scores may be used to meet Cosumnes River College Local AA/AS General Education requirements or California General Education Transfer Curriculum (Cal-GETC) requirements; they **do not** fulfill requirements for any major at Cosumnes River College or enrollment limitations (such as prerequisite requirements) for any course at Cosumnes River College.

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

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

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

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

Cosumnes River College General Education CLEP Credit

The use of CLEP exam scores for Cosumnes River College course credit and general education is determined by Cosumnes River College policy.

CLEP Exam	CLEP Score	CRC Course Credit	CRC GE Area	Units Earned at CRC
American Government	50	N/A	L4: Social and Behavioral Sciences **or** Va: American Institutions (through Summer 2025)	3
American Literature	50	N/A	L3: Arts and Humanities	3
Analyzing and Interpreting Literature	50	N/A	L3: Arts and Humanities	3
Biology	50	N/A	L5: Natural Sciences	3
Calculus	50	N/A	L2: Mathematical Concepts and Quantitative Reasoning	3
Chemistry	50	N/A	L5: Natural Sciences	3
College Algebra	50	N/A	L2: Mathematical Concepts and Quantitative Reasoning	3
College Algebra – Trigonometry	50	N/A	L2: Mathematical Concepts and Quantitative Reasoning	3
French Level II	59	N/A	L3: Arts and Humanities	3
German Level II	60	N/A	L3: Arts and Humanities	3
History, United States I	50	N/A	L4: Social and Behavioral Sciences **or** Va: American Institutions (through Summer 2025)	3
History, United States II	50	N/A	L4: Social and Behavioral Sciences **or** Va: American Institutions (through Summer 2025)	3
Human Growth and Development	50	N/A	L4: Social and Behavioral Sciences **or** L7B. Life Development Skills	3
Humanities	50	N/A	L3: Arts and Humanities	3
Introductory Psychology	50	N/A	L4: Social and Behavioral Sciences	3
Introductory Sociology	50	N/A	L4: Social and Behavioral Sciences	3
Natural Sciences	50	N/A	L5: Natural Sciences	3
Pre-Calculus	50	N/A	L2: Mathematical Concepts and Quantitative Reasoning	3
Principles of Macroeconomics	50	N/A	L4: Social and Behavioral Sciences	3
Principles of Microeconomics	50	N/A	L4: Social and Behavioral Sciences	3
Spanish Level II	63	N/A	L3: Arts and Humanities	3

CLEP Exam	CLEP Score	CRC Course Credit	CRC GE Area	Units Earned at CRC
Spanish and Writing Level II	63	N/A	L3: Arts and Humanities	3
Western Civilization I	50	N/A	L3: Arts and Humanities **or** L4: Social and Behavioral Sciences	3
Western Civilization II	50	N/A	L3: Arts and Humanities **or** L4: Social and Behavioral Sciences	3

Exceptions

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

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

CSU CLEP Credit

Visit CSU's CLEP Page (https://www2.calstate.edu/apply/transfer/Pages/college-level-examination-program.aspx) to find information on how credit is granted for admission and general education. Note that each campus in the CSU system individually determines how it will apply external examination credit in the major. For more information about CLEP credit, consult a counselor.

Cal-GETC and UC

CLEP may not be used for Cal-GETC credit and is not accepted in the UC system.

International Baccalaureate Test Scores

Cosumnes River College may award college credit for international baccalaureate (IB) higher-level (HL) course completion, if the coursework is compatible with the college's curriculum. IB test scores may be used to meet Cosumnes River College Local AA/AS General Education requirements or California General Education Transfer Curriculum (Cal-GETC) requirements. No credit will be granted for lower-level coursework completed in the IB program.

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

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

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

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

Cosumnes River College General Education IB Credit

The use of IB exam scores for Cosumnes River College course credit and general education is determined by Cosumnes River College policy.

IB Exam	Passing Score	CRC Course Credit	CRC GE Area	Units Earned at CRC
Biology HL	5	N/A	L5: Natural Sciences	3
Chemistry HL	5	CHEM 305	L5: Natural Sciences	5
Chemistry HL	6	CHEM 300	L5: Natural Sciences	5
Chemistry HL	7	CHEM 400	L5: Natural Sciences	5
Economics HL	5	ECON 302 and ECON 304	L4: Social and Behavioral Sciences	6
Geography HL	5	N/A	L4: Social and Behavioral Sciences	3
History HL (any region)	5	N/A	L3: Arts and Humanities **or** L4: Social and Behavioral Sciences	3
Language A: Language and Literature HL (any language)	5	N/A	L3: Arts and Humanities	3
Language A: Literature HL (any language)	5	N/A	L3: Arts and Humanities	3
Language B HL (any language)	5	N/A	N/A	3
Mathematics HL	5	N/A	L2: Mathematical Concepts and Quantitative Reasoning	3
Mathematics: Analysis and Approaches HL	5	N/A	L2: Mathematical Concepts and Quantitative Reasoning	3
Mathematics: Applications and Interpretation HL	5	N/A	L2: Mathematical Concepts and Quantitative Reasoning	3
Physics HL	5	N/A	L5: Natural Sciences	3
Psychology HL	5	PSYC C1000 (formerly PSYC 300)	L4: Social and Behavioral Sciences	3
Theatre HL	5	N/A	L3: Arts and Humanities	3

Cal-GETC IB Credit

Visit Cal-GETC External Exams (Section 6.1) (shared/doc/student-services/counseling/cal-getc-standards-section-6-1.pdf) to find information on how credit is granted for general education using the Cal-GETC pattern. Note that each CSU and UC campus individually determines how it will apply external examination credit in the major. For more information about IB credit, consult a counselor.

CSU IB Credit

Visit CSU's IB Page (https://www2.calstate.edu/apply/transfer/Pages/international-baccalaureate-ib.aspx) to find information on how credit is granted for admission and general education. Note that each campus in the CSU system individually determines how it will apply external examination credit in the major. For more information about IB credit, consult a counselor.

UC IB Credit

Visit UC's IB Page (https://admission.universityofcalifornia.edu/admission-requirements/ap-exam-credits/ib-credits.html) to find information on how credit is granted for admission and general education. Note that each campus in the UC system individually determines how it will apply external examination credit in the major. For more information about IB credit, consult a counselor.

Credit for Military Experience

Military Service Transcripts

Students must send an official military transcript to Cosumnes River College before petitioning for course credit for prior military education, training, and service.

The **Joint Services Transcript (JST)** is an academically accepted document used to validate an Army, Coast Guard, Marines, or Navy service member's military experience and training with the corresponding college credit recommendations. See Request Official Joint Services Transcript (https://jst.doded.mil/official.html).

For **Air Force Transcripts** see Community College of the Air Force Transcripts (https://www.airuniversity.af.edu/Registrar/Transcript-Requests/).

Contact the Veterans Resource Center (https://crc.losrios.edu/veterans) for assistance.

How to Apply for Military Credit

Credit for Military Education and Training

Military personnel and veterans may receive course credit for prior military education and training.

How to Apply

Submit a completed *Petition for Credit for Military Education and Training or Service* (shared/doc/admissions-records/forms/credit-for-military-education-training-or-service.pdf) and an official copy of your Joint Services Transcript to Admissions and Records for review. The college will consider the credit recommendations of the American Council for Education when determining the awarding of credit for courses with subject matter similar to that of the student's military education and training. You must be currently registered as a student and in good standing to receive credit.

Credit for Military Service

Veterans may receive credit for military service.

How to Apply

Submit a completed *Petition for Credit for Military Education and Training or Service* (shared/doc/admissions-records/forms/credit-for-military-education-training-or-service.pdf) and a copy of your DD-214 to Admissions and Records for review. You may be eligible to receive four (4) units of living skills graduation requirements.

If you have already submitted your DD-214 to receive veteran benefits, then you are not required to submit a second copy to receive Military Service Credit.

College Safety and Security

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

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

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

Crime Prevention

Cosumnes River College actively supports crime prevention through a number of programs.

Emergency Automobile Assistance

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

Unlawful Weapons

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

The California Penal Code Section also prohibits the possession of knives 626.10, switchblade 21510, pepper spray 22810 (e) and Tasers/Stun Gun 626.10.

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 (per Los Rios Policy P-2443: Drug and Alcohol-Free Workplace and College Premises (shared/doc/board/policies/P-2443.pdf)).

Emergency Telephones

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

Emergency Alerts

In the event of an emergency or disaster, Los Rios will provide critical information to students and employees via an emergency alert system. Emergency alerts are issued via text, phone calls, and email. Update your contact information to make sure you receive emergency alerts.

1. Log in to eServices (https://ps.losrios.edu/student/signon.html).
2. Click *Profile*.
3. Click *Emergency Alert Information*.
4. Update your information and click *Save*.

Illegal Drugs

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

Children on Campus

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

Parking

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

Sexual Harassment

Sexual harassment in any situation is unacceptable and is in violation of state and federal laws and regulations. Corrective action will be taken where evidence of sexual harassment is found (per Los Rios Policy P-2424: Sexual Harassment (shared/doc/board/policies/P-2424.pdf)).

Hate Crimes

Hate crimes include any of the following offenses that are motivated by bias:

- Murder/non-negligent manslaughter, negligent manslaughter, sexual assault, robbery, aggravated assault, burglary, motor vehicle theft, arson
- Larceny-theft: The unlawful taking carrying, leading or riding away of property from the possession or constructive possession of another
- Constructive possession: the condition in which a person does not have physical custody or possession, but is in a position to exercise dominion or control over a thing
- Simple assault: an unlawful physical attack by one person upon another where neither the offender displays a weapon, nor the victim suffers obvious severe or aggravated bodily injury involving apparent broken bones, loss of teeth, possible internal injury, severe laceration, or loss of consciousness
- Intimidation: To unlawfully place another person in reasonable fear of bodily harm through the use of threatening words and/or other conduct, but without displaying a weapon or subjecting the victim to actual physical attack
- Destruction, damage, vandalism: To willfully or maliciously destroy, damage, face, or otherwise injure real or personal property without the consent of the owner or the person having custody or control of it

Campus Traffic Regulations

Los Rios Police Department (LRPD) enforces the California Vehicle Code (CVC) and board-approved regulations on grounds designated for vehicle parking and traffic.

For more information, see parking regulations (https://police.losrios.edu/parking-resources/parking-regulations).

Reporting a Crime/Incident

To report an on-campus crime or incident, see crime and reporting (https://police.losrios.edu/crime-and-reporting) on the Los Rios Police Department website.

Clery Report

Each year, the Los Rios Police Department publishes the Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Report (also known as the Annual Clery Report). This report includes information about our safety and security policies and specific crime statistics.

View the Clery Report (https://police.losrios.edu/clery) on the Los Rios Police Department website.

Student Rights and Responsibilities

Academic Rights and Responsibilities

The classroom (including laboratories, field trips, independent study, and so on) is the essential part of any college where freedom to learn should flourish. The instructor has the responsibility for the manner of instruction and the conduct of the classroom. The instructor should not act in any way that denies the rights of students as set forth below (Administration Regulation R-2411: Student Rights and Responsibilities (shared/doc/board/regulations/R-2411.pdf)).

Student Academic Rights

Student Publications

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

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

Support Causes

Students shall have the right to:

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

Free Assembly and Free Speech

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

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

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

Free to Organize

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

Voice in Decision-Making

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

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

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

Confidentiality

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

Academic Evaluation

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

Grievance Procedure

Students shall have the right to file a grievance as outlined in Administrative Regulation R-2412: Student Grievance Procedures (shared/doc/board/regulations/R-2412.pdf), in the event of an alleged breach of their rights. Cosumnes River College's designated grievance officer will hear grievances of students who believe their academic rights have been denied or violated.

Go to Class-Related Concerns (https://crc.losrios.edu/class-related-concerns)

Student Responsibilities

The Expectations of the College

Admission to college assumes the expectation that the student will:

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

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

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

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

Students also have the responsibility to use information technology resources effectively. Each user has the responsibility to:

- Use the resources appropriately and efficiently
- Respect the freedom and privacy of others
- Protect the stability and security of the resources
- Understand and fully abide by established college policies and applicable public laws

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

See Student Disciplinary Procedures (https://crc.losrios.edu/student-discipline)

Access to Student Records (FERPA)

Use and Release of Student Information

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

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

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

A student can give permission for a third party to access their records by filing a Student Consent for Release of Records Form (shared/doc/admissions-records/forms/student-consent-for-release-of-student-records.pdf) with the Admissions and Records office.

The security of student information is very important to us, which is why we will not discuss student records over the phone. This includes resetting a student's password. If you do not remember your password reset questions, then you must come to the campus or one of the outreach centers in person with photo identification.

To obtain a copy of your records – including your current enrollment – you can log in to eServices (https://ps.losrios.edu/student/signon.html) or come to campus in person with photo identification. You can order your official transcripts online (https://crc.losrios.edu/order-transcripts).

Student Rights Under FERPA

Students have the right to:

1. Inspect and review their own education records within a reasonable time after the college receives a request for access. If a student wants to review their record, then they should contact the Vice President of Student Services for a petition. Education records include any item of information directly related to an identifiable student maintained by the district or college or required to be maintained by an employee in the performance of the employee's duties, whether that information is recorded by handwriting, print, tapes, files, microfilm, electronically, or by other means. Education records do not include: directory information, information provided by a student's parent related to financial aid or scholarships, information prepared by and that remains in the sole possession of the person who created it, certain medical records, and decisions reached as a result of disciplinary hearings. Education records are maintained by the offices that generate or receive those records and the manager of those offices is responsible for the maintenance of those records. The Admissions and Records Office at each college maintains a log of those persons who have been given access to education records as required by FERPA.
2. Request an amendment of their education record if a student believes it is inaccurate or misleading. If a student feels there is an error in their record, then the student should submit a statement to the college official responsible for the record, clearly identifying the part of the record they want to be changed and why they believe it is inaccurate or misleading. That office will notify the student of their decision and advise of any appropriate appeal rights.
3. Consent to disclosure of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosure without consent. There are several exceptions that permit disclosure without consent, including but not limited to:
    - Disclosure to school officials with "legitimate educational interests." School officials are employees of the district and its colleges, agents with which the district or college has contracted to provide services, the board of trustees, or students serving on a committee or assisting another school official in the performance of their tasks. A legitimate educational interest exists when the school official has a need to know the information in connection with their official duties.
    - "Directory information," which includes a student's name, 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 by the student. A student has the right to withhold the release of directory information. To do so, the student must complete a form, which is available in the Admissions and Records Office. However, placing a "No Release" on a student's records means that no one including friends, parents, prospective employers, honor societies, or any other group or individual will be able to obtain this information.
    - Disclosures to officials of another school, school system, or institution of postsecondary education where the student seeks or intends to enroll, or where the student is already enrolled, so long as the disclosure is for the purpose related to the student's enrollment or transfer.

4. File a complaint with the US Department of Education concerning alleged failures by the district or college to comply with the requirements of FERPA. Further information about FERPA and student records can be found in the District Policy P-2265: Access to Student Records (shared/doc/board/policies/P-2265.pdf) and Regulation R-2265: Access to Student Records (shared/doc/board/regulations/R-2265.pdf) or at the college office of the Vice President of Student Services.

Alcohol, Drug, and Smoking Policy

Alcohol and Drug Policy

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

District Policy

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

Legal Sanctions

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

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

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

Smoking Policy

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

Computer and Internet Use Policy

Computer Use Policy

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

General Rules

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

Respect Those Around You

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

Software

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

Internet Use Policy

Internet access is limited to *classroom assignments only*.

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

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

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

Copyright and Piracy Policy

What is a Copyright?

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

What is Piracy?

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

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

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

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

College Actions for Violation

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

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

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

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

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

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

Additional Resources

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

Disciplinary Procedures and Due Process

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

1. A student who is referred for discipline is required to meet with the Student Conduct Officer. This referral means the student's alleged behavior is believed to have been a violation of the Los Rios Student Standards of Conduct.
2. The student will receive a certified letter via US standard mail notifying them of their referral. In the notification, the student is instructed to make an appointment for an investigative meeting with the Student Conduct Officer.
3. At the informal, investigative meeting, the Student Conduct Officer shall interview the student for the purpose of discussing the alleged misconduct and the disciplinary action that should be taken (if any).
4. At the investigative meeting, the parties shall have the right to present statements, testimony, evidence, and witnesses, except that neither party shall have the right to be represented by an attorney.
5. The investigative meeting is mandatory. If the student fails to make an appointment and/or does not attend the meeting, then the Student Conduct Officer may review the case and initiate disciplinary action without input from the student.
6. After the investigative meeting, the Student Conduct Officer may initiate disciplinary action by filing a notice with the Vice President of Student Services and serving such notice on the student charged. This decision depends entirely on the information obtained during the investigation.
7. The student has the right to request an appeal to the disciplinary action with the Vice President of Student Services, no later than seven (7) days after the service of the notice of disciplinary action. A copy of the appeal form will be mailed to the student along with a notice of disciplinary action.
8. After an appeal hearing, a written decision will be mailed to the student from the Office of the President within ten days of the conclusion of the hearing.
9. At this point, the final decision for disciplinary action rests with the College President. The president may approve, reject, or modify the written decision. The decision of the college president for disciplinary action is final.

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

Contact

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

Gladis Troncoso
(916) 691-7589
troncog@crc.losrios.edu

Honor Code

Cosumnes River College's Honor Code serves as a bridge between the catalog's formal treatment of academic integrity and the day-to-day decisions of the members of our academic community. Its focus is on core academic values, the appropriate expression of those values in behavior, and the way those values create and sustain our academic community. It is intended as a straightforward tool for communicating and clarifying the college's fundamental expectations. It is also intended to be used frequently and easily.

Suggested Honor Code Uses

- As a syllabic supplement
- In conjunction with major assignments
- In conjunction with field trips/special events
- As a classroom management tool
- As documentation in the context of:
    - Referrals for 'Student Code of Conduct' violations
    - Grievance processes
    - Student disciplinary appeal processes

Cosumnes River College Honor Code*

Approved by the Cosumnes River College Academic Senate on October 26, 2007. Approved by the Cosumnes River College Executive Council on March 27, 2008.

I understand that Cosumnes River College (CRC) values academic integrity. Academic integrity requires:

Honesty, which means:

- A commitment to truthfulness
- The refusal to steal or mislead, cheat or plagiarize

Fairness, which means:

- The willingness to treat others as I would wish to be treated upon careful consideration

Respect, which means valuing, in attitude and practice:

- All human beings
- Myself
- My community at CRC and beyond

Responsibility, which means:

- Recognizing that the quality of a CRC education and the quality of the CRC student experience depend upon my behavior
- Accepting, at all times, the consequences of my actions

I understand that I, as a member of the Cosumnes River College community, am responsible for upholding this value, supporting academic quality, academic rigor, and an appropriate college atmosphere.

* *This code is modeled after that of Santa Monica Community College, Santa Monica, California.*

Photo and Video Policy

The Los Rios Community College District and its colleges take photos and video of students throughout the year. These images often include students in classrooms, study areas, athletic events, etc.

Cosumnes River College reserves the right to use these photographs and/or videos as a part of its publicity and marketing efforts. Students who enroll at Cosumnes River College do so with the understanding that these photographs and/or videos might include them and/or their family members and might be used in college publications, both printed and electronic, and for publicity.

Plagiarism and Cheating Policy

Academic Integrity and Responsibility

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

Academic Dishonesty

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

Plagiarism

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

Plagiarism may include:

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

Cheating

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

Cheating may include:

- Giving or receiving unauthorized assistance during an examination
- Fabricating or altering a source of data in a laboratory or experiment
- Collaborating with others when collaboration is not permitted, or when the contributions of others are not made clear
- Using unauthorized materials or aids during an examination, including calculators, dictionaries, or information accessed via any electronic devices
- Acquiring, without permission, tests or other academic material belonging to a member of the college faculty or staff

Right-to-Know Program Completion

In compliance with the Student Right-to-Know and Campus Security Act of 1990, completion and transfer rates for students attending Cosumnes River College can be found on the California Community College State Chancellor's Office Student Right-to-Know Rate Disclosure Website (http://srtk.cccco.edu/index.asp).

Service Animals on Campus

Students and employees with a disability* who need a service animal may use a service animal (including a service animal in training) on district and college property. Therapy animals and pets are not allowed.

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

Service Animal Guidelines

Service animals are subject to the following guidelines:

1. A service animal is any dog or miniature horse that is trained to do work or perform tasks for an individual with a disability.
2. Faculty, staff, or student owners of service animals who wish to bring the animal to campus are requested, but not required, to register their service animal (https://crc.losrios.edu/service-animals#serv-animal-form) with the Vice President of Student Services or Vice President of Administrative Services. Registration provides a quick way to demonstrate that the service animal is properly on campus.
3. If the owner applies for registration, the owner must provide documentation of their service animal's current shot/vaccination records at the time of registration. Visitors should check in with the Vice President's offices.
4. If the owner applies for registration, the owner must provide documentation of appropriate licenses.
5. If the owner applies for registration, the owner should carry proof of service animal registration when accompanied by that service animal on campus.
6. The owner is responsible for caring for and supervising the service animal, which includes toileting, feeding, grooming, and veterinary care. Los Rios employees are not obligated to supervise or otherwise care for a service animal. (See ADA Service Animal FAQs (https://www.ada.gov/resources/service-animals-faqs).)
7. A service animal must be under the control of its handler. Under the ADA, service animals must be harnessed, leashed, or tethered, unless the individual's disability prevents using these devices or these devices interfere with the service animal's safe, effective performance of tasks. In that case, the individual must maintain control of the animal through voice, signal,

or other effective controls. (See ADA Service Animal Requirements (https://www.ada.gov/resources/service-animals-2010-requirements).)

8. The service animal must be in good health and free of fleas and external parasites.
9. The service animal must be on a leash at all times.
10. The owner is responsible for all cleanup of animal feces.
11. Service animals that disrupt the learning environment and the ability of others to learn may be excluded from campus.
12. Service animals that are ill, unclean, noisy, or bedraggled will not be allowed on campus.
13. Service animals that show unprovoked aggressive tendencies or are deemed potentially dangerous will not be allowed on campus.
14. Service animals are not permitted to be in the following areas: mechanical rooms/custodial closets, any room where protective gear is worn, or any room that poses a potential danger to the animal.
15. The owner will be financially responsible for any damage or cleaning costs resulting from the animal being brought onto campus. Animals that cause damage may be excluded from the campus.

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

Social Media Policy

Social Media Participation Guidelines

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

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

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

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

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

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

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

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

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

- Comments, links, images, or videos that are illegal or encourage illegal activity, or are obscene, defamatory/libelous/slanderous, indecent, lewd, lascivious, sexually harassing or explicit in nature, or pose risks to the health or safety of individuals
- Comments that personally attack or threaten any person
- For students, anything that would violate District policies regarding student regulations (https://losrios.edu/about-los-rios/board-of-trustees/policies-and-regulations)
- For staff and faculty, anything that would violate District policies regarding staff and faculty regulations (https://losrios.edu/about-los-rios/board-of-trustees/policies-and-regulations)
- Successive off-topic posts by one or more individuals or groups
- Repetitive posts copied and pasted or duplicated by one or more individuals or groups
- Solicitations or advertisements
- Any materials that infringe upon the intellectual property or other rights of any third party

Standards of Conduct

Code of Conduct

A student who enrolls at Cosumnes River College may rightfully expect that students, faculty, and administrators will maintain an environment in which there is freedom to learn.

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

Disciplinary Offenses

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

- Continued disruptive behavior, continued willful disobedience, habitual profanity or vulgarity, or the open and persistent defiance the authority of, or persistent abuse of, members of the college community
- Assault, battery, or any threat of force or violence upon members of the college community
- Willful misconduct which results in injury or death to members of the college community, or which results in cutting, defacing, or other injury to any real or personal property owned by the district
- The use, sale, or possession on campus of, or presence on campus under the influence of, any controlled substance (See alcohol, drug, and smoking policies (https://crc.losrios.edu/about-us/our-values/student-rights-and-responsibilities/alcohol-drug-and-smoking-policies))
- Willful or persistent smoking in any area where smoking has been prohibited by law or district policy (See alcohol, drug, and smoking policies (https://crc.losrios.edu/about-us/our-values/student-rights-and-responsibilities/alcohol-drug-and-smoking-policies))
- Persistent, serious misconduct where other means of correction have failed to bring about proper conduct
- Violation of College rules and regulations including those concerning student organizations, the use of college facilities, or the time, place and manner of public expression and distribution of materials
- Obstruction or disruption of teaching, research, administrative disciplinary procedures or other college activities, including its community service activity, or of other authorized activities on college-controlled premises
- Theft of or non-accidental damage to property of the college or a member of the college community while on campus or at college-sponsored events
- Unauthorized entry to or use of college facilities
- Dishonesty, such as cheating, plagiarism, or furnishing false information to the college; forgery, alteration, or misuse of college documents, records, or identifications (See plagiarism and cheating policies (https://crc.losrios.edu/about-us/our-values/student-rights-and-responsibilities/plagiarism-and-cheating))
- Knowing possession or use of explosives, dangerous chemicals or deadly weapons on college property or at a college function without prior authorization of the college president or designated representative

- Use, possession, distribution or being under the influence of alcoholic beverages, narcotics or dangerous drugs on college property or at college-sponsored events (See alcohol, drug, and smoking policies (https://crc.losrios.edu/about-us/our-values/student-rights-and-responsibilities/alcohol-drug-and-smoking-policies))
- Soliciting or assisting another to do any act which would subject a student to expulsion, suspension, probation or other discipline pursuant to Regulation R-2441: Standards of Conduct (shared/doc/board/regulations/R-2441.pdf)
- Violation of any order of a college president, notice of which has been given prior to such violation, and which order is not inconsistent with any of the other provisions of this policy. This notice may be given by publication in the college newspaper, by posting on an official bulletin board designated for this purpose or by any other means reasonably calculated to inform students of its provisions.
- Attempting to commit an act that would be cause for disciplinary action identified above

Student Grievance and Class-Related Concerns

Steps to Resolution

Note: the informal process must begin within ten (10) days of the incident.

1. Students should speak with their instructor about the concern and attempt to resolve the problem informally.
2. Students who feel as though they are unable to speak with their instructor or resolve the situation should contact the instructional division area dean.
3. If the issue is not resolved by meeting with the instructor and/or divisional dean, then the student should contact the Student Grievance Officer and initiate a formal grievance.

Filing a Formal Grievance

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

There are specific timelines and date limitations to file a formal grievance. The formal grievance process must begin within five calendar days of the attempted informal resolution. File a student grievance online using the student Concern, Complaint, or Grievance Form (https://crc.losrios.edu/student-resources/care-support-and-conduct-resources/concern-complaint-or-grievance-form).

What You Should Know About Student Grievance Procedures

- Students may not grieve grades unless they demonstrate "there is a mistake, fraud, bad faith, or incompetence" in the giving of the grade. (Education Code, section 76224(a) and Los Rios Community College District Policy 2412).
- A student believing to have been adversely affected by an act of an instructor, administrator, or other staff of the college must make a reasonable, good faith attempt to resolve the matter within ten (10) days of the alleged act. This should be done on an informal basis by discussing the matter either with the staff member involved, or with the staff member's immediate supervisor.
- If a student does not meet the specific grievance timelines, the grievance is deemed waived and may not be pursued further.
- Within five (5) days of the completion of the informal process, and not later than twenty-five (25) days from the date of the alleged wrongful act, the student may file a formal grievance by submitting a Grievance Form to the college Student Grievance Officer.
- The college Grievance Officer will review the student's documentation and may interview the student to determine whether the complaint is grievable.
- If the Grievance Officer determines that the complaint is not grievable (meaning that sufficient evidence of the alleged wrongdoing is not provided or that the action does not fall within the scope of the grievance process), then the student will receive a letter to that effect. The Grievance Officer's decision on this point is final.
- If the college Student Grievance Officer determines that all the conditions for grievability have been met, the grievance will be referred to the designated hearing officer. Within ten (10) days from appointment, the Hearing Officer will schedule a hearing on the grievance.
- Failure of the student to file the completed grievance form within the above-specified time period shall constitute a waiver of any right to further proceedings.

Grades

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

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

Other Resources

- Behavioral Intervention Response Team (BIRT) (https://crc.losrios.edu/student-resources/counseling/behavioral-intervention-response-team-(birt)) - The Behavioral Intervention and Response Team (BIRT) addresses situations involving students who may be experiencing distress or who are perceived to pose a threat to the safety of themselves and/or our students, faculty, and staff.
- Discrimination Complaint (https://crc.losrios.edu/about-us/our-values/equity-and-diversity) - 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 per Los Rios Regulation R-2423: Discrimination and Harassment Complaint Procedures (shared/doc/board/regulations/R-2423.pdf).
- Sexual Violence and Title IX (https://crc.losrios.edu/campus-life/health-and-safety/sexual-violence-and-title-ix-protections) - Cosumnes River College is committed to creating and maintaining a safe environment free of sexual harassment and violence. Sexual misconduct is prohibited by district policy and federal and state law. We will promptly respond to reports of sexual assault and take action to prevent any further misconduct and impose discipline (when necessary).
- Types of Harassment (https://crc.losrios.edu/types-of-harassment/types-of-harassment/types-of-harassment/types-of-harassment) - It is a priority of Cosumnes River College to prevent and respond to all forms of harassment, including bullying, psychological harassment, racial harassment, religious harassment, stalking, mobbing, hazing, and backlash.
- Student Rights and Responsibilities (https://crc.losrios.edu/2025-2026-official-catalog/while-you-are-here/student-rights-and-responsibilities) - Read about student rights and responsibilities as outlined in the CRC Official Catalog.

Equal Opportunity, Equity, Discrimination, and Harassment

Equal Opportunity

Equal Opportunity is the Law

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

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

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

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

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

What to Do If You Believe You Have Experienced Discrimination

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

Cosumnes River College Equity Officer

Email: ellisb2@crc.losrios.edu

Phone: (916) 691-7233

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

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

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

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

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

La Igualdad De Oportunidades Es La Ley

Es contra la ley que este beneficiario de asistencia financiera federal discrimine de la siguiente manera: contra cualquier individuo en los Estados Unidos, sobre la base de raza, color, religión, sexo (incluyendo embarazo, parto y afecciones médicas relacionadas, estereotipos sexuales, estatus de transexuales e identidad de género), origen nacional (incluyendo la competencia limitada en inglés), edad, incapacidad, o afiliación o creencia política o contra cualquier beneficiario de, solicitante o participante en programas con asistencia financiera bajo el Titulo 1 del Workforce Innovation and Opportunity Act (WIOA), sobre la base del estatus de ciudadanía del individuo o la participación en cualquier programa o actividad con asistencia financiera del Título de WIOA.

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

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

Qué Hacer Si Usted Cree Que Ha Experimentado Discriminación

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

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

Cosumnes River College Oficial de Equidad

Email: ellisb2@crc.losrios.edu

Teléfono: (916) 691-7233

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

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

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

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

Si el destinatario le da una Notificación por escrito de la Acción Final sobre su queja, pero usted no está satisfecho con la decisión o resolución, usted puede presentar una queja ante el Civil Rights Center. Usted debe presentar su queja de Civil Rights Center dentro de 30 días de la fecha en que recibió Notificación de le Acción Final.

Non-Discrimination Policy

At Cosumnes River College, we value equity and diversity. That's why we work toward just and fair inclusion into a society in which all people can participate, prosper, and reach their full potential.

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

- Ethnic group identification
- Race or color
- Sex, gender, gender identity, or gender expression

- Pregnancy or childbirth-related condition
- Sexual orientation or sexual identity
- Religion or religious creed
- Age (over forty)
- National origin or ancestry
- Physical or mental disability
- Medical condition
- Political affiliation or belief
- Military and veteran status
- Marital status

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

For more information or to file a complaint, contact the Cosumnes River College Equity Officer, Brianna Ellis at ellisb2@crc.losrios.edu or (916) 691-7233.

Sexual Harassment or Assault

Title IX (Sex Discrimination)

Title IX of the Educational Amendments of 1972 and subsequent amendments bans sex discrimination in schools, whether it be in academics or athletics. Title IX states: "No person in the United States shall, on the basis of sex, be excluded from participation in, be denied benefits of, or be subjected to discrimination under any education program or activity receiving federal financial assistance."

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

Gender Harassment

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

Examples of gender harassment include the following:

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

Sexual Harassment Policy

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

Definition of Sexual Harassment

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

- Submission to the conduct is explicitly or implicitly made a term or a condition of an individual's employment, academic status, or progress

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

Sexual harassment includes, but is not limited to:

- Making unsolicited written, verbal, visual, or physical contact with sexual overtones. Some examples are:
  - Epithets
  - Derogatory comments or slurs of a sexual nature
  - Impeding or blocking movements or any physical interference with normal work
  - Derogatory posters or cartoons
- Continuing to express sexual interest after being informed that the interest is unwelcome (reciprocal attraction is not considered sexual harassment)
- Within the work environment, engaging in explicit or implicit coercive sexual behavior which controls, influences, or affects the career, salary, and/or work environment, or any other term or condition of employment
- Within the educational environment, engaging in explicit or implicit coercive sexual behavior which controls, influences, or affects the educational opportunities, grades, and/or learning environment of the student
- Making reprisals, threats of reprisal, or implied threats of reprisal following a negative response to a sexual advance. For example, within the work environment, either suggesting or actually withholding support for an appointment, promotion, or change of assignment; suggesting a poor performance report will be prepared; or suggesting probation will be failed. Within the educational environment, either suggesting or actually withholding grades earned or deserved; suggesting a poor performance evaluation will be prepared; or suggesting a scholarship recommendation or college application will be denied
- Offering favors of educational or employment benefits, such as grades or promotions, favorable performance evaluations, favorable assignments, favorable duties or shifts, recommendations, reclassifications, and so on, in exchange for sexual favors.

Sexual Assault

Sexual assault includes, but is not limited to:

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

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

Sexual Violence

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

Consent

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

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

Consent can be withdrawn or revoked. Consent to one form of sexual activity (or one sexual act) does not constitute consent to other forms of sexual activity (or other sexual acts). Consent to sexual activity given on one occasion does not constitute consent to sexual activity on another occasion. The fact that two people are, or were in, a dating or sexual relationship does not constitute consent to engage in sexual activity. 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 she/he is unconscious or coming in and out of consciousness. A person is incapacitated if she/he lacks the physical and/or mental ability to make informed, rational judgments. Examples of incapacitation include unconsciousness, sleep, and blackouts. Whether an intoxicated person (as a result of using alcohol or other drugs) is incapacitated depends on the extent to which the alcohol or other drugs impact the person's decision-making capacity, awareness of consequences, and ability to make fully informed judgments. A person with a medical or mental disability may also lack the capacity to give consent.

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

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

Domestic Violence

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

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

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

Dating Violence

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

Stalking

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

Policies and Regulations

- Board Policy P-2423: Discrimination and Harassment Procedures (shared/doc/board/policies/P-2423.pdf)
- Administrative Regulation R-2423: Discrimination and Harassment Procedures (shared/doc/board/regulations/R-2423.pdf)
- Administrative Regulation R-2423.5: Interim Title IX Guidelines (shared/doc/board/regulations/r-2423-5.pdf)

Resources

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

- Los Rios Police, (916) 558-2221
- WEAVE Confidential Advocate, (916) 568-3011 or WEAVE@losrios.edu
- Title IX Coordinator, Gladis Troncoso, (916) 691-7589 or troncog@crc.losrios.edu

Types of Harassment

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

Bullying

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

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

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

Psychological Harassment

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

Racial Harassment

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

Religious Harassment

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

Stalking

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

Mobbing

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

Hazing

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

Backlash

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

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

Outdated attitudes about certain kinds of harassment remain and there is often social pressure for victims to keep quiet about abuse or suffer the consequences.

Discrimination and Harassment Complaint Procedures

How to File a Complaint

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

For more information or to file a complaint, contact the Cosumnes River College Equity Officer, Brianna Ellis at ellisb2@crc.losrios.edu or (916) 691-7233.

Complaint Resolution

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

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

Regulations

- Administrative Regulation R-2423: Discrimination and Harassment Complaint Procedures (shared/doc/board/regulations/R-2423.pdf)
- Administrative Regulation R-2423.5: Interim Title IX Guidelines (shared/doc/board/regulations/r-2423-5.pdf)

Graduation and Transfer

Make a Plan for Transfer Success

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

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

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

Associate Degree Graduation Requirements

Students may graduate from Cosumnes River College with the Associate of Arts (AA) or the Associate of Science (AS) degree by fulfilling the following requirements:

1. Satisfactory completion of 60 units of collegiate work with a "C" (2.0) grade point average (GPA) in a curriculum that the district accepts toward the degree. At least 12 of the 60 units must be earned within the Los Rios Community College District.
2. Major: completion of an AA or AS Major Program of Study offered at Cosumnes River College. Courses used to complete requirements for the major must be completed with a grade of "C" or better.
3. Completion of Cosumnes River College's local AA/AS degree general education requirements (https://crc.losrios.edu/2025-2026-official-catalog/graduation-and-transfer/associate-degree-graduation-requirements/local-aa-as-degree-general-education-requirements) with a minimum GPA of 2.0 in courses used for general education (24 units minimum) or completion of the California General Education Transfer Curriculum (Cal-GETC) (https://crc.losrios.edu/2025-2026-official-catalog/graduation-and-transfer/preparing-to-transfer/california-general-education-transfer-curriculum-requirements).
4. Students are allowed to follow the graduation requirements established at the time they began college as long as they maintain catalog rights (https://crc.losrios.edu/2025-2026-official-catalog/graduation-and-transfer/associate-degree-graduation-requirements#catalog-rights).

Effective beginning summer 2004, students who possess a bachelor's (BA/BS) or higher degree from a regionally accredited college or university in the US are deemed to have met the general education and graduation competency requirements for an AA/AS degree. Degrees from accredited institutions outside of the US will be evaluated on a case-by-case basis.

Catalog Rights

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

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

Please note:

- Students with catalog rights prior to Fall 2025 can continue to follow the old local AA/AS GE pattern. Use the new local AA/AS GE requirements (https://crc.losrios.edu/catalog/local-ge) along with the new to old AA/AS GE mapping table (https://crc.losrios.edu/student-resources/counseling/cal-getc-and-general-education-guidance/mapping-new-to-old-local-general-education-requirements) to complete your general education requirements.
- A college may authorize or request substitution for discontinued courses.
- Students who change their major field of study may be required to complete those requirements for the major in effect at the point of change.

- For purposes of this section, "attendance" means taking classes in at least one session (semester or summer session) in each calendar year. Absence for attendance at another regionally accredited institution shall not be considered an interruption in attendance, per Los Rios Policy P-7242: Establishing Catalog Rights (shared/doc/board/policies/P-7242.pdf).

Local AA/AS Degree General Education Requirements

General education (GE) classes give you a broad foundation of knowledge and skills, but they're just one piece of what you need to earn your degree. You'll also need to complete major and elective coursework.

See our Associate Degree Graduation Requirements (https://crc.losrios.edu/catalog/associate-degree-graduation-requirements) to learn more about what you need to earn an associate degree at Cosumnes River College.

ZTC icon

CRC offers some courses in every required area that have free textbooks and are labeled as zero textbook costs (ZTC). The ZTC symbol means students have **free access** to all instructional materials. Use the “Free Textbook” filter and look for the symbol to find ZTC sections in the online class schedule (https://crc.losrios.edu/academics/search-class-schedules) and eServices. Learn more about free textbooks through ZTC (https://crc.losrios.edu/admissions/enroll-in-classes/zero-textbook-costs).

L1: English Communication, Oral Communication, Critical Thinking

Choose two courses for a minimum of six semester units (eight quarter units). Complete one course (three semester or four quarter units minimum) in each area.

Area	Courses
L1A: English Composition	BUS 310, ENGL C1000 (formerly ENGWR 300), ENGWR 341, ENGL C1000H (formerly ENGWR 480)
L1B: Oral Communication and Critical Thinking	COMM C1000 (formerly COMM 301), COMM 311, COMM 315, COMM 331, COMM 341, COMM 361, COMM 363, ENGRD 310, ENGRD 311, ENGWR 301*, ENGL C1001 (formerly ENGWR 302), LIBR 324, PHIL 320, PHIL 325, PHIL 486*, PSYC 335*, SOC 302*, SOC 305*

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

L2: Mathematical Concepts and Quantitative Reasoning

Choose one course for a minimum of three semester units (four quarter units).

Area	Courses
L2: Mathematical Concepts and Quantitative Reasoning	CISP 300, CISP 350, CISP 360, CISP 400, CISP 401, CISP 440, ECON 310, MATH 110, MATH 120, MATH 125, MATH 144, MATH 300, MATH 310, MATH 311, MATH 333, MATH 335, MATH 341, MATH 343, MATH 355, MATH 370, MATH 384, MATH 400, MATH 401, MATH 402, MATH 410, MATH 420, POLS 382, PSYC 330, STAT C1000E (formerly STAT 300), STAT C1000H (formerly STAT 480)

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

L3: Arts and Humanities

Choose one course for a minimum of three semester units (four quarter units).

Area	Courses
L3: Arts and Humanities	ANTH 331, ANTH 334*, ANTH 341, ART 300, ART 301, ART 312, ART 320, ART 323, ART 324, ART 337, ART 338, ART 361, ART 370, ART 372, ART 402, ART 430, ARTH 300, ARTH 303, ARTH 307, ARTH 309, ARTH 311, ARTH 312, ARTH 324, ARTH 325, ARTH 328, ARTH 332, ARTH 333, DANCE 386, DEAF 310, DEAF 312, DEAF 314, DEAF 316, DEAF 380, ECE 361, ENGCW 400, ENGCW 410, ENGCW 420, ENGCW 430, ENGLT 303, ENGLT 310, ENGLT 311, ENGLT 320, ENGLT 321, ENGLT 330, ENGLT 334, ENGLT 335, ENGLT 336, ENGLT 340, ENGLT 341, ENGLT 343, ENGLT 345, ENGLT 360, ENGLT 365, ENGLT 370, ENGLT 402, ENGLT 488, ENGWR 301*, FMS 300, FMS 305, FMS 307, FMS 320, FMS 321, FMS 488, FMS 489, HIST 301*, HIST 302*, HIST 307*, HIST 308*, HIST 344*, HIST 364*, HIST 365*, HIST 373*, HIST 380*, HIST 399, HIST 485*, HMONG 401, HMONG 402, HUM 300, HUM 301, HUM 310, HUM 320, HUM 324, HUM 331, HUM 332, HUM 339, HUM 370, KINES 455, MUFHL 300, MUFHL 308, MUFHL 310, MUFHL 311, MUFHL 315, MUFHL 321, MUFHL 330, MUFHL 400, MUFHL 401, MUFHL 416, MUSM 370, PHIL 300, PHIL 304, PHIL 310, PHIL 315, PHIL 330, PHIL 331, PHIL 338, PHIL 350, PHIL 352, PHIL 356, PHIL 360*, PHIL 485, PHIL 486*, PHOTO 301, PHOTO 302, PHOTO 365, PHOTO 420, PHOTO 421, RLST 301, RTVF 302, RTVF 305, RTVF 307, RTVF 368, SPAN 401, SPAN 402, SPAN 411, SPAN 412, SPAN 413, SPAN 415, SPAN 425, SPAN 426, SPAN 427, TA 300, TA 302, TA 303, TA 305, TA 306, TA 350, TA 401, VIET 401, VIET 402, VIET 411, VIET 412

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

L4: Social and Behavioral Sciences

Choose one course for a minimum of three semester units (four quarter units).

Area	Courses
L4: Social and Behavioral Sciences	AGB 321, ANTH 310, ANTH 313, ANTH 316, ANTH 323, ANTH 324, ANTH 331, ANTH 332, ANTH 334*, ANTH 336, ANTH 341, ANTH 374*, BUS 300, BUS 320, BUS 330, BUS 345, COMM 321, COMM 325, COMM 341, COMM 363, COMM 480, DEAF 351, DEAF 352, ECE 312, ECE 314, ECE 330, ECE 415*, ECE 430, ECON 300, ECON 302, ECON 304, ECON 306, ECON 320, ETHNS 300*, ETHNS 320*, ETHNS 330*, ETHNS 344, ETHNS 350*, ETHNS 360*, GEOG 302, GEOG 310, GEOG 320, GEOG 322, HIST 301*, HIST 302*, HIST 307*, HIST 308*, HIST 310, HIST 311, HIST 314, HIST 320, HIST 321, HIST 331, HIST 344*, HIST 360, HIST 364*, HIST 365*, HIST 370, HIST 371, HIST 373*, HIST 380*, HIST 485*, HSER 300, JOUR 310, JOUR 320, KINES 308, KINES 416*, KINES 460, NUTRI 310, PHIL 360*, POLS C1000 (formerly POLS 301), POLS 302, POLS 304, POLS 310, POLS 312, POLS 313, POLS 314, POLS 315, POLS 317, POLS 318, POLS 319, POLS 320, POLS 324, POLS C1000H (formerly POLS 481), POLS 482, PSYC C1000 (formerly PSYC 300), PSYC 320, PSYC 335*, PSYC 340*, PSYC 356, PSYC 371*, RTVF 300, SJS 300, SJS 310, SJS 320, SOC 300, SOC 301, SOC 302*, SOC 305*, SOC 310*, SOC 321, SOC 341, SWHS 300

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

L5: Natural Sciences

Choose one course for a minimum of three semester units (four quarter units).

Area	Courses
L5: Natural Sciences	ANSC 300, ANSC 301, ANTH 300, ANTH 303, ANTH 374*, ANTH 480, ASTR 300, BIOL 300, BIOL 307, BIOL 308, BIOL 310, BIOL 342, BIOL 350, BIOL 352, BIOL 400, BIOL 410, BIOL 420, BIOL 430, BIOL 431, BIOL 440, BIOL 485, CHEM 300, CHEM 305, CHEM 306, CHEM 309, CHEM 400, CHEM 401, CHEM 420, CHEM 421, ENGR 304, FT 304, GEOG 300, GEOG 302, GEOG 305, GEOG 306, GEOG 331, GEOL 300, GEOL 305, GEOL 310, GEOL 330, HORT 300, HORT 302, HORT 313, NUTRI 300*, PHYS 310, PHYS 350, PHYS 360, PHYS 370, PHYS 380, PHYS 411, PHYS 421, PHYS 431, PLTS 300, PLTS 310, PSYC 312

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

L6: Ethnic Studies

Choose one course for a minimum of three semester units (four quarter units).

Area	Courses
L6: Ethnic Studies	ETHNS 300*, ETHNS 320*, ETHNS 330*, ETHNS 350*, ETHNS 360*

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

L7: Living Skills

Choose one course from Area L7A and a minimum of two units from Area L7B, for a minimum of three semester units (four quarter units) total. This area can also be fulfilled by Military Service Credit (honorable or under honorable conditions) with basic training completed. Submit a copy of the DD214 to Admissions and Records as verification. Students whose majors have 45 or more units of required coursework are exempt from the L7: Living Skills requirement.

Area	Courses
L7A: Physical Education	ADAPT 300, ADAPT 332, ADAPT 333, ADAPT 334, ADAPT 336, ADAPT 339, ADAPT 495, ADAPT 499, FITNS 306, FITNS 314, FITNS 320, FITNS 323, FITNS 324, FITNS 326, FITNS 327, FITNS 328, FITNS 331, FITNS 348, FITNS 352, FITNS 355, FITNS 375, FITNS 380, FITNS 381, FITNS 384, FITNS 386, FITNS 390, FITNS 393, FITNS 394, FITNS 401, FITNS 406, FITNS 407, FITNS 440, FITNS 441, FITNS 442, FITNS 443, FITNS 444, FITNS 495, FITNS 499, PACT 310, PACT 311, PACT 381, PACT 390, PACT 391, PACT 393, PACT 430, PACT 432, PACT 495, PACT 499, SPORT 300, SPORT 301, SPORT 303, SPORT 311, SPORT 313, SPORT 314, SPORT 316, SPORT 318, SPORT 350, SPORT 351, SPORT 352, SPORT 355, SPORT 357, SPORT 358, SPORT 365, SPORT 366, SPORT 368, SPORT 370, SPORT 375, SPORT 376, SPORT 377, SPORT 403, SPORT 405, SPORT 406, SPORT 407, SPORT 408, SPORT 495, SPORT 499, TMACT 300, TMACT 301, TMACT 302, TMACT 303, TMACT 304, TMACT 320, TMACT 321, TMACT 322, TMACT 323, TMACT 330, TMACT 331, TMACT 333, TMACT 335, TMACT 495, TMACT 499
L7B: Life Development Skills	BIOL 342, BUS 320, COMM 321, ECE 312, ECE 314, ECE 322, ECE 330, ECE 350, ECE 415*, ECON 320, ENGED 320, FCS 324, HCD 110, HCD 122, HCD 310, HCD 330, HCD 346, HCD 382, HEED 300, HEED 350, HSER 302, HSER 340, INDIS 313, KINES 300, KINES 301, KINES 416*, LIBR 318, NUTRI 300*, NUTRI 303, NUTRI 322, PSYC 340*, PSYC 356, PSYC 371*, SGVT 300, SGVT 315, SOC 310*, SWHS 302, SWHS 340, SWHS 498, WEXP 198, WEXP 298, WEXP 498

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

Petition for a Certificate

How to Petition for a Certificate of Achievement

Students can file a petition for a Certificate of Achievement using our online certificate petition form (https://crc.losrios.edu/why-crc/graduation-and-transfer/graduating-from-cosumnes-river-college/petition-for-degree-or-certificate/petition-form). Be prepared to fill out your personal information and each course that satisfies the major requirements. All requirements must be met by the end of the term in which you petition.

Requirements

To petition for a certificate, students must:

1. Know their catalog year.*
2. Complete all certificate requirements with a minimum grade point average (GPA) of 2.0.

** Usually, students follow the current catalog year. However, if you are following certificate requirements from an old catalog, then you must have maintained catalog rights (https://crc.losrios.edu/2025-2026-official-catalog/graduation-and-transfer/petition-for-a-certificate#catalog-rights).*

Required Documentation

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

- Official transcripts for all coursework applicable to the certificate that was completed outside of the Los Rios Community College District#
- Official copies of AP/IB/CLEP test scores, if applicable
- List of courses in progress if attending another college
- Official final transcripts will be required at the end of the semester for the final certificate evaluation
- Copy of any required competency tests, if applicable

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

 # External coursework may require a petition for course substitution/waiver approval through the department and use towards your program.

Petition Deadlines for 2025-2026

- Fall 2025: Friday, October 3, 2025
- Spring 2026: Friday, March 6, 2026
- Summer 2026: Friday, July 3, 2026

Approval or Denial

Final evaluations begin after final grades are posted at the end of each respective term/semester.

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

If denied, then you will be notified of the missing requirements and advised to submit a new petition. If approved, then your certificate will be posted to your transcript within three to four months after the end of the semester.

All certificates will be mailed to the student's address on file. If you need an accommodation to pick up a certificate in person, then contact the Admissions and Records office.

Petition Semester	Petition Deadline	Approval/Denial Date	Mailed or Ready for Pick-Up
Summer	First Friday in July	October-November	December
Fall	First Friday in October	April	May
Spring	First Friday in March	September	October

Need to update your address? Complete the Change of Data (crc/main/doc/2-admissions/admissions-and-records/crc-change-of-data-form.pdf) form and submit to the Admissions and Records Office (https://crc.losrios.edu/admissions/admissions-and-records-office).

Catalog Rights

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

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

Please note:

- Students with catalog rights prior to Fall 2025 can continue to follow the old local AA/AS GE pattern. Use the new local AA/AS GE requirements (https://crc.losrios.edu/catalog/local-ge) along with the new to old AA/AS GE mapping table (https://crc.losrios.edu/student-resources/counseling/cal-getc-and-general-education-guidance/mapping-new-to-old-local-general-education-requirements) to complete your general education requirements.
- A college may authorize or request substitution for discontinued courses.
- Students who change their major field of study may be required to complete those requirements for the major in effect at the point of change.
- For purposes of this section, "attendance" means taking classes in at least one session (semester or summer session) in each calendar year. Absence for attendance at another regionally accredited institution shall not be considered an interruption in attendance, per Los Rios Policy P-7242: Establishing Catalog Rights (shared/doc/board/policies/P-7242.pdf).

Certificate Programs

Cosumnes River College offers two types of certificates:

Certificate of Achievement

The Certificate of Achievement certifies that a student has completed all required courses and is prepared to enter the career designated on their certificate. Certificate of Achievement programs are developed to provide vocational training for students who are not necessarily seeking a college degree. Certificates of Achievement require a grade of "C" or better in each course with a minimum of 12 degree-applicable units completed within the Los Rios Community College District. If the certificate requires fewer than 12 units, then students must take the number of units required by the certificate within the Los Rios Community College District. Certificates of Achievement are noted on transcripts.

Certificate of Proficiency

Certificates of Proficiency are intended to certify that students are prepared to meet specific occupational needs, upgrade skills, or advance in an existing career. Certificates of Proficiency require fewer than 16 units with a grade of "C" or better in each course. At least 12 units toward the degree must be completed within the Los Rios Community College District. If the certificate requires fewer than 12 units, then students must take the number of units required by the certificate within the Los Rios Community College District. As long as the units a student takes are degree- or transfer-applicable, they do not necessarily have to be the specific units required for the certificate.

Certificates of Proficiency are not noted on transcripts.

Petition for a Degree

How to Petition for a Degree

Students can file a petition for a degree using our online degree petition form (https://crc.losrios.edu/why-crc/graduation-and-transfer/graduating-from-cosumnes-river-college/petition-for-degree-or-certificate/petition-form). Be prepared to fill out your personal information and each course that satisfies the general education areas and major requirements. All requirements must be met by the end of the term in which you petition.

Requirements

To petition for a degree, students must:

1. Know their catalog year*
2. Complete all degree requirements with a minimum grade point average (GPA) of 2.0
3. Complete at least 12 units toward the degree within the Los Rios Community College District (American River College, Cosumnes River College, Folsom Lake College, and Sacramento City College)

** Usually, students follow the catalog year from which they began and maintained enrollment or the current catalog year. If you have questions about your catalog year, then please consult the information about catalog rights (https://crc.losrios.edu/2025-2026-official-catalog/graduation-and-transfer/petition-for-a-degree#catalog-rights) or a counselor.*

Required Documentation

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

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

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

 # External coursework may require a petition for course substitution/waiver approval through the department and use towards your program.

Petition Deadlines for 2025-2026

- Fall 2025: Friday, October 3, 2025
- Spring 2026: Friday, March 6, 2026
- Summer 2026: Friday, July 3, 2026

Approval or Denial

Final evaluations begin after final grades are posted at the end of each respective term/semester.

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

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

All diplomas will be mailed to the student's address on file. If you need an accommodation to pick up your diploma in person, then please contact the Admissions and Records office.

Petition Semester	Petition Deadline	Approval/Denial Date	Mailed or Ready for Pick-Up
Summer	First Friday in July	October-November	December
Fall	First Friday in October	April	May
Spring	First Friday in March	September	October

Need to update your address? Complete the Change of Data (crc/main/doc/2-admissions/admissions-and-records/crc-change-of-data-form.pdf) form and submit to the Admissions and Records Office (https://crc.losrios.edu/admissions/admissions-and-records-office).

Catalog Rights

For the purpose of graduating or earning a certificate from any college in the Los Rios Community College District, a student who attends at least one session (whether quarter, semester, or summer) in each calendar year at any California community college,

California State University, University of California, or any regionally accredited institution of higher education, may choose to meet the requirements in effect at the Los Rios college from which the student intends to graduate, as follows:

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

Please note:

- Students with catalog rights prior to Fall 2025 can continue to follow the old local AA/AS GE pattern. Use the new local AA/AS GE requirements (https://crc.losrios.edu/catalog/local-ge) along with the new to old AA/AS GE mapping table (https://crc.losrios.edu/student-resources/counseling/cal-getc-and-general-education-guidance/mapping-new-to-old-local-general-education-requirements) to complete your general education requirements.
- A college may authorize or request substitution for discontinued courses.
- Students who change their major field of study may be required to complete those requirements for the major in effect at the point of change.
- For purposes of this section, "attendance" means taking classes in at least one session (semester or summer session) in each calendar year. Absence for attendance at another regionally accredited institution shall not be considered an interruption in attendance, per Los Rios Policy P-7242: Establishing Catalog Rights (shared/doc/board/policies/P-7242.pdf).

Commencement

Cosumnes River College holds a commencement ceremony in May of each year, at the end of the spring semester. Students who meet and satisfy the graduation requirements during the prior summer term (August), prior fall semester (December), or during the spring semester may participate in the graduation commencement exercise.

All students who are eligible for an associate degree must petition for graduation.

While You Are Here

Make a Plan for Transfer Success

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

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

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

Transfer to a California State University

Transfer Requirements

A maximum of 70 transferable units completed at California community colleges can be applied to a baccalaureate degree. Coursework completed that exceeds the 70-unit maximum may be given "subject credit" after transfer. Consult with a counselor.

You may be eligible for transfer to the California State University (CSU) system after you complete the following at a California community college:

1. A minimum of 60 transferable units with a 2.0 grade point average*
2. One of the following general education requirements (check with a counselor to determine the appropriate pattern for the degree you are pursuing):
    - For students with catalog rights of Fall 2025 or later:
        - California General Education Transfer Curriculum (Cal-GETC) requirements (https://crc.losrios.edu/catalog/cal-getc)
    - For students with catalog rights before Fall 2025, one of the following:
        - CSU General Education (CSU GE) Breadth requirements (https://crc.losrios.edu/academics/programs-majors/catalog-archives/california-state-university-general-education-breadth-requirements), including areas A1, A2, A3, and B4
        - Intersegmental General Education Transfer Curriculum (IGETC) requirements (if you plan to continue following IGETC, then use the Cal-GETC requirements (https://crc.losrios.edu/catalog/cal-getc) along with the Cal-GETC to IGETC mapping table (https://crc.losrios.edu/student-resources/counseling/cal-getc-and-general-education-guidance/mapping-cal-getc-to-igetc) to complete your general education requirements)
        - Cal-GETC requirements (https://crc.losrios.edu/catalog/cal-getc)

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

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

Dual Admission to Community College and CSU

If you are enrolling in a California community college this fall, you may be eligible to apply for dual admission to a California State University. Visit the CSU Transfer Success Pathway (https://www.calstate.edu/apply/transfer/Pages/transfer-success-pathway.aspx) for more information. The agreement cycle (the window to apply) is August 1 through October 31.

CSU Application Dates and Deadlines

Priority application deadlines for CSU:

- For fall admission, the application period is October 1 to November 30 of the prior year.
- For spring admission, the application period is August 1 to 31 of the prior year.

Transfer to a University of California

Transfer Requirements

Students who plan to transfer to the University of California (UC) system must meet certain requirements.

A maximum of 70 UC-transferable units completed at California community colleges can be applied to a baccalaureate degree. Coursework completed that exceeds the 70-unit maximum may be given "subject credit" after transfer. Consult with a counselor.

Transfer Eligibility

Junior-Level Transfer

To be eligible for UC admission, CRC students must fulfill the following requirements:

1. Complete 60 semester (90 quarter) units of transferable college credit with a GPA of at least 2.4 (2.8 for nonresidents). No more than 14 semester (21 quarter) units – excluding units completed in winter, spring, and summer 2020 – may be taken "Pass/No Pass." *Exception: if your college/university only awards "Pass" credit, you are not subject to this limitation for your attendance at that institution.*
2. Complete the following seven-course pattern requirements:
    - Two transferable college courses (three semester units or four to five quarter units each) in English composition
    - One transferable college course (three semester units or four to five quarter units) in mathematical concepts and quantitative reasoning
    - Four transferable college courses (three semester units or four to five quarter units each) chosen from at least two of the following subject areas:
        - Arts and humanities
        - Social and behavioral sciences
        - Physical and biological sciences

Transfer Notes

- Students must also complete the lower-division preparatory courses for the major as required by the UC to which they want to transfer. Find lower-division major requirements at assist.org (https://assist.org), the official state-wide repository for transfer and course articulation information.
- Each course must be worth at least three semester or four quarter units.
- Students need to earn a grade of "C" or better in each course or a "Pass (P)" grade if "Pass" is equivalent to a "C" or better.
- AP exam scores of 3, 4, or 5 and IB Higher level exams passed with a 5 or higher may be used to meet portions of the seven-course breadth pattern for transfer students. *Exception: only one of the two English courses required can be satisfied by an AP exam score.*

To view additional transfer options and services, see the University of California Transfer Requirements (https://admission.universityofcalifornia.edu/counselors/preparing-transfer-students/transfer-requirements.html).

California General Education Transfer Curriculum (Cal-GETC)

When you complete the California General Education Transfer Curriculum (Cal-GETC) pattern (https://crc.losrios.edu/catalog/cal-getc), you partially fulfill the 60-unit requirement for transfer to UC and complete the lower division general education breadth requirements. You should request your Cal-GETC certification from the community college you last attended when your final transcript is sent to the UC campus.

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

Helpful Hints

- Connect with a counselor regularly to monitor your transfer progress.
- Many courses other than the ones listed in the Cal-GETC will transfer to UC. The units from those other courses will count toward the 60 units required to transfer as a junior. Check the catalog for the transfer status of any course.
- Though transfers do not require an associate degree, it is easy to complete one while preparing to transfer. Learn about associate degree graduation requirements (https://crc.losrios.edu/catalog/associate-degree-graduation-requirements).
- Check with your counselor about other courses needed for your major. In many cases, it is to your advantage to complete all pre-major requirements as well as general education requirements before you transfer.

UC Application Dates and Deadlines

Priority application deadlines for UC:

- Fall quarter/semester application period is October 1 through December 2.
- Winter quarter/spring semester application period is July 1 through 31.

See UC Admissions – Applying as a Transfer Student (https://admission.universityofcalifornia.edu/how-to-apply/applying-as-a-transfer/) for more information and application deadlines for each UC campus.

Transfer to a Private or Out-of-State College

Cosumnes River College's Counseling and Transfer Services can support you in evaluating transfer requirements and articulation agreements to many independent, private, or out-of-state colleges to which you want to transfer. Most four-year institutions give full credit for general education courses and other courses designated for transfer at community colleges. **The key is to start early so that you can develop a plan for your options.**

See CRC’s Articulation Agreements (https://crc.losrios.edu/why-CRC/transfer-to-a-four-year-institution/articulation) for the most up-to-date information regarding courses that are considered comparable to many independent, private, and out-of-state colleges.

Association of Independent California Colleges and Universities (AICCU)

The Association of Independent California Colleges and Universities (AICCU) is made up of more than 80 independent, private non-profit colleges and universities in California. Many have unique and specific transfer requirements. Visit AICCU's Choosing a College website (https://aiccu.edu/page/ChoosingColleges) to learn more about their campuses.

Many AICCU colleges and universities offer guaranteed admission when you earn an Associate Degree for Transfer (ADT) from a community college. You can view a full list of AICCU ADT Participating Institutions (https://docs.google.com/spreadsheets/d/1KeCD7ObkPwqkHDXeazhcb4OmPlizW6GAGnDPlcZT5ZU/edit?gid=1283451677#gid=1283451677) and majors accepted.

Historically Black Colleges and Universities (HBCUs)

Historically Black Colleges and Universities (HBCUs) were created primarily to serve the higher education needs of the Black community, however, they are open to students of all ethnicities. HBCUs are located in the South and on the East Coast and award bachelor's degrees in many fields; many award master's and doctorate degrees as well. (Source: California Community Colleges Transfer Guarantee Pathways to HBCU (https://www.californiacommunitycollegehbcutransfer.com/). To learn more about the History of HBCU campuses, please visit History of Black Higher Education in America (https://files.eric.ed.gov/fulltext/ED363247.pdf).)

Any California community college student with a GPA of 2.0 or higher (*note: certain partner HBCUs will require a higher GPA*) is guaranteed admission to all partner HBCU institutions using either of the following two options:

1. Complete an associate degree for transfer (ADT) using the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education Breadth pattern.

2. Complete a minimum of 30 UC or CSU units.

Resources

- HBCU: How to Qualify (https://www.californiacommunitycollegehbcutransfer.com/student-information)
- California Community Colleges HBCU Partner Schools (https://www.californiacommunitycollegehbcutransfer.com/partner-hbcus)
- Western Undergraduate Exchange (WUE) (https://www.wiche.edu/WUE/students) – The WUE is an agreement among the 16 member states and territories of the Western Interstate Commission for Higher Education (WICHE), through which over 160 participating public colleges and universities provide significant nonresident tuition savings for Western students. In addition, many out-of-state colleges participate in the WUE, which offers discounts to California students in certain majors. To learn more about WUE and eligibility, visit the WICHE's major/program search (https://www.wiche.edu/tuition-savings/wue/wue-savings-finder/) feature.

California General Education Transfer Curriculum Requirements

The California General Education Transfer Curriculum (Cal-GETC) is a general education pattern designed to make transferring from a California Community College to a California State University (CSU) or University of California (UC) easier and more efficient. Cal-GETC will be the only lower-division general education pathway for students with catalog rights of 2025-2026 and later pursuing an Associate Degree for Transfer (ADT) or planning to transfer to CSU or UC. Cal-GETC meets lower-division general education requirements at either a CSU or a UC without requiring students to take additional lower-division general education courses after they transfer. All courses must be completed with a grade of "C" or better.

ZTC icon

CRC offers some courses in every required area that have free textbooks and are labeled as zero textbook costs (ZTC). The ZTC symbol means students have **free access** to all instructional materials. Use the “Free Textbook” filter and look for the symbol to find ZTC sections in the online class schedule (https://crc.losrios.edu/academics/search-class-schedules) and eServices. Learn more about free textbooks through ZTC (https://crc.losrios.edu/admissions/enroll-in-classes/zero-textbook-costs).

2025-2026 Cal-GETC Requirements

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

1. English Communication and Critical Thinking

Choose one course (three units minimum) from each area for a minimum of nine semester units.

Area	Courses
1A. English Composition	ENGL C1000 (formerly ENGWR 300), ENGL C1000H (formerly ENGWR 480)
1B. Critical Thinking and Composition	COMM 311, COMM 315, COMM 482, ENGWR 301, ENGL C1001, PHIL 486
1C. Oral Communication	COMM C1000 (formerly COMM 301)

2. Mathematical Concepts and Quantitative Reasoning

Choose one course for a minimum of three semester units.

Area	Courses
2. Mathematical Concepts and Quantitative Reasoning	ECON 310, MATH 300, MATH 333, MATH 341, MATH 355, MATH 356, MATH 370, MATH 372, MATH 373, MATH 400, MATH 401, MATH 402, MATH 410, POLS 382, PSYC 330, STAT C1000E (formerly STAT 300), STAT C1000H (formerly STAT 480)

3. Arts and Humanities

Choose one course (three units minimum) from each area for a minimum of six semester units.

Area	Courses
3A. Arts	ARTH 300, ARTH 303, ARTH 307, ARTH 309, ARTH 311, ARTH 312, ARTH 324, ARTH 325, ARTH 328, ARTH 332, ARTH 333, DANCE 386, ENGLT 488, FMS 300, FMS 305, FMS 307, FMS 320, MUFHL 300, MUFHL 308, MUFHL 310, MUFHL 311, MUFHL 315, MUFHL 321, MUFHL 330, MUFHL 400, MUFHL 416, PHOTO 420, RTVF 305, RTVF 307, TA 300, TA 302, TA 303, TA 305, TA 306
3B. Humanities	ARTH 328, ARTH 333, DEAF 316, ENGLT 303, ENGLT 310, ENGLT 311, ENGLT 320, ENGLT 321, ENGLT 330, ENGLT 335, ENGLT 336, ENGLT 340, ENGLT 341, ENGLT 343, ENGLT 345, ENGLT 360, ENGLT 365, ENGLT 402, ENGLT 488, ENGWR 301, FMS 488, HIST 364, HIST 365, HIST 380, HIST 485, HUM 300, HUM 301, HUM 310, HUM 320, HUM 324, HUM 331, HUM 332, HUM 339, HUM 370, PHIL 300, PHIL 304, PHIL 310, PHIL 315, PHIL 330, PHIL 331, PHIL 338, PHIL 350, PHIL 352, PHIL 356, PHIL 360, PHIL 485, PHIL 486, RLST 301, SPAN 411, SPAN 412, SPAN 413, SPAN 415, SPAN 425, SPAN 426, SPAN 427, VIET 411, VIET 412

4. Social and Behavioral Sciences

Choose two courses from different disciplines for a minimum of six semester units.

Area	Courses
4. Behavioral and Social Sciences	ANTH 310, ANTH 313, ANTH 316, ANTH 323, ANTH 324, ANTH 331, ANTH 332, ANTH 334, ANTH 336, ANTH 341, ANTH 374, BUS 345, COMM 325, COMM 480, DEAF 351, ECE 312, ECE 314, ECON 300, ECON 302, ECON 304, ECON 306, ETHNS 300, ETHNS 320, ETHNS 330, ETHNS 344, ETHNS 350, ETHNS 360, GEOG 302, GEOG 310, GEOG 320, GEOG 322, HIST 301, HIST 302, HIST 307, HIST 308, HIST 310, HIST 311, HIST 314, HIST 320, HIST 321, HIST 331, HIST 344, HIST 360, HIST 370, HIST 371, HIST 373, JOUR 310, JOUR 320, KINES 308, NUTRI 310, POLS C1000 (formerly POLS 301), POLS 302, POLS 304, POLS 310, POLS 312, POLS 313, POLS 314, POLS 315, POLS 317, POLS 318, POLS 319, POLS 320, POLS 324, POLS 382, POLS C1000H (formerly POLS 481), PSYC C1000 (formerly PSYC 300), PSYC 320, PSYC 335, PSYC 340, PSYC 356, PSYC 371, RTVF 300, SJS 300, SJS 310, SOC 300, SOC 301, SOC 302, SOC 310, SOC 321, SOC 341, TA 306

5. Physical and Biological Sciences

Choose a minimum of two courses, with one from 5A. Physical Sciences and one from 5B. Biological Sciences; at least one of the two courses must include a laboratory component from 5C. For courses with separate lecture and laboratory, the lecture course must be completed before or concurrently with the related laboratory course.

Area	Courses
5A. Physical Science	ASTR 300, CHEM 300, CHEM 305, CHEM 306, CHEM 309, CHEM 400, CHEM 401, CHEM 420, CHEM 421, GEOG 300, GEOG 305, GEOG 306, GEOL 300, GEOL 305, GEOL 310, GEOL 330, HORT 302, PHYS 310, PHYS 350, PHYS 360, PHYS 370, PHYS 380, PHYS 411, PHYS 421, PHYS 431, PLTS 310
5B. Biological Science	ANTH 300, ANTH 303, BIOL 300, BIOL 307, BIOL 308, BIOL 310, BIOL 342, BIOL 350, BIOL 352, BIOL 400, BIOL 410, BIOL 420, BIOL 430, BIOL 431, BIOL 440, BIOL 485, PSYC 312
5C. Associate Lab Component	ANTH 301, ASTR 400, BIOL 307, BIOL 309, BIOL 310, BIOL 400, BIOL 410, BIOL 420, BIOL 430, BIOL 431, BIOL 440, CHEM 300, CHEM 305, CHEM 306, CHEM 309, CHEM 400, CHEM 401, CHEM 420, CHEM 421, GEOG 301, GEOL 301, GEOL 306, GEOL 311, HORT 302, PHYS 350, PHYS 360, PHYS 370, PHYS 380, PHYS 411, PHYS 421, PHYS 431, PLTS 310, PSYC 312

6. Ethnic Studies

Choose one course for a minimum of three semester units.

Area	Courses
6. Ethnic Studies	ETHNS 300, 320, 330, 350, 360

US History, Constitution, and American Ideals

This is a **California State University (CSU) graduation requirement only** – it is not required for Cal-GETC certification. Choose one of the following options.

Option	Courses
Option 1	Complete one of the following: HIST 310, HIST 311, HIST 320, HIST 321, HIST 331, HIST 371; plus, complete one of the following: POLS C1000 (formerly POLS 301), POLS C1000H (formerly POLS 481)
Option 2	Complete HIST 310 or HIST 320, plus one of the following: HIST 311, HIST 314, HIST 321, POLS 304, POLS C1000H (formerly POLS 481)

Language Other Than English

This is a **University of California (UC) graduation requirement only** – it is not required for Cal-GETC certification. Each UC campus has guidelines for the *Language Other Than English* requirement (https://admission.universityofcalifornia.edu/counselors/uc-graduation-requirements); please see a counselor for additional guidance.

Transfer Degree Requirements

Associate degrees for transfer (also called ADTs or transfer degrees) are designed to provide a clear pathway for California community college students to California State University (CSU) degrees. California community college students who earn an associate degree for transfer are guaranteed admission with junior standing to select CSU campuses and are given priority admission consideration over other transfer students. Students who have completed a transfer degree in a major deemed similar to a CSU major can complete the remaining requirements at that CSU within 60 units after transfer. For more information, consult a counselor.

Visit the I Can Go to College (https://icangotocollege.com/) website to learn more.

Requirements for a Transfer Degree

Transfer degrees require the following:

1. Complete all required courses for a major with a grade of "C" or better (or "P" if taking a class Pass/No Pass).
2. Complete one of the following general education (GE) patterns (check with your counselor to determine the appropriate pattern for the degree you are pursuing):
    - For students with catalog rights of Fall 2025 and later:
        - California General Education Transfer Curriculum (Cal-GETC)
    - For students with catalog rights before Fall 2025
        - CSU GE Breadth Requirements
        - Intersegmental General Education Transfer Curriculum (IGETC) – CSU option
        - California General Education Transfer Curriculum (Cal-GETC)
3. Complete 60 CSU-transferable units. At least 12 of the 60 units must be earned within the Los Rios Community College District.

Transfer Degrees at Cosumnes River College

Cosumnes River College offers the following associate degrees for transfer:

- AS-T in Agricultural Business
- AA-T in Anthropology
- AA-T in Art History
- AS-T in Biology
- AS-T in Business Administration 2.0
- AA-T in Communication Studies 2.0
- AS-T in Early Childhood Education for Transfer
- AA-T in Economics
- AA-T in Elementary Teacher Education for Transfer
- AA-T in English
- AS-T in Film, Television and Electronic Media
- AA-T in Geography
- AS-T in Geology
- AA-T in History
- AA-T in Journalism
- AA-T in Kinesiology
- AS-T in Mathematics
- AA-T in Music
- AS-T in Nutrition and Dietetics
- AS-T in Physics
- AA-T in Political Science

- AA-T in Psychology
- AA-T in Social Justice Studies: Race and Ethnicity
- AA-T in Social Justice Studies: Women, Gender and LGBTQ Studies
- AA-T in Sociology
- AA-T in Spanish
- AA-T in Studio Arts
- AA-T in Theatre Arts

Course Transferability and C-ID

Transferable Courses

Courses that can transfer to the University of California (UC) and/or California State University (CSU) systems are labeled as "Transferable" in the course details.

For questions about how specific courses transfer to particular institutions, students should consult a counselor.

Course Identification Numbering System (C-ID)

C-ID is a statewide system that identifies comparable courses across California community colleges, ensuring consistency in content, rigor, and student learning outcomes. A course with a C-ID number is equivalent to any other California community college course with the same designation and will be accepted at participating community colleges and CSU campuses. For example, **C-ID COMM 110** at Cosumnes River College will be accepted at any other college offering a course with the same C-ID number.

To evaluate course transferability, students should consult a counselor and visit ASSIST.org (https://assist.org) to see how Cosumnes River College courses apply to:

- Major requirements at CSU and UC campuses
- California General Education Transfer Curriculum (Cal-GETC) requirements

For private or out-of-state colleges, consult a counselor. An up-to-date list of Cosumnes River College's C-ID-approved courses is available on California's Transfer and Articulation System (https://www.c-id.net) website.

Common Course Numbering

Starting in Fall 2025, California community colleges are adopting a Common Course Numbering (CCN) system (per AB 1111). This system assigns common course numbers for comparable courses across all community colleges in the state. The goal of CCN is to facilitate a smoother transfer of credits between colleges and four-year institutions.

CCN does not replace C-ID but works alongside it. While C-ID ensures statewide articulation agreements, CCN provides a more direct, standardized course mapping. C-ID designations will still be used and displayed to maintain alignment with transfer pathways.

Order Official Transcripts From Cosumnes River College

Order Transcripts Online

Cosumnes River College has contracted with Parchment to provide transcript ordering and electronic delivery of PDF transcripts. Parchment can send PDF transcripts through an encrypted and secure service to any valid email address (another college or university, third-party recipient, or the requestor).

Current students, former students, and alumni can request a PDF transcript online anytime and from virtually anywhere. Submit separate orders for each Los Rios college attended.

Cost to Order Transcripts

You get two free transcript requests from each Los Rios college you attended. After that, each one costs $5. New users need to create a Parchment account to order.

Current Students

Order official transcripts online through eServices. Click *Academic Records*, then *Request Official Transcript*.

Order Transcripts (https://ps.losrios.edu/student/signon.html)

Alumni and Former Students

Alumni and former students can order official transcripts online directly through Parchment.

Order Transcripts (https://www.parchment.com/u/registration/34125/account)

Check Order Status

Current and former students can check the status of a transcript order online via their Parchment account.

Check Order Status (https://www.parchment.com/u/order/track)

Advantages of Ordering Transcripts Online

- You can order transcripts anytime, anywhere, through our partner, Parchment.
- Sending digital transcripts gets your credentials there almost instantaneously – it's the fastest way!
- Check your order status and order history online, through your Parchment Credential Profile.
- Parchment sends automatic order updates via email. From receipt of the order to order completion, the requestor is automatically notified each step of the way.
- You can send transcripts digitally to professional application services such as LSAC and AMCAS.

Important Order Information

Expedited Orders

If you need your transcript quickly, we recommend selecting the PDF delivery option. PDF transcripts are official transcripts. However, please be aware that when sending a PDF transcript to yourself, it cannot be forwarded to a different email address. Forwarding a PDF transcript makes it unofficial. If your transcript is going to a third party, then you should have it sent directly to their email address.

Requestor Responsibilities

Students and alumni requesting transcripts assume responsibility for the following:

- Providing the correct mailing address and/or email address.
- Ensuring the recipient accepts your chosen method of delivery.
- Ordering with enough time to meet the recipient's deadline.
- Following up with the recipient to ensure the order's arrival.

Current Semester Transcripts

Official transcripts for the current semester will be processed after final grades are submitted. At the end of the semester, you can check that your current grades are included by viewing your unofficial transcript in eServices (https://ps.losrios.edu/student/signon.html). Work-In-Progress grades will be included for current courses.

Third-Party Authorization

Student records are protected by the Family Educational Rights and Privacy Act (FERPA). If a third party is picking up your transcripts, they must provide an authorization signed by you. Online requests that are automatically verified through eServices (or another automated authentication) are the exception to this rule.

Lost Transcripts

We are not responsible if your transcript is lost by the US Postal Service, FedEx, or the school or agency to which it was sent. We are also not responsible if you provide the wrong mailing address and your transcript is lost as a result. You will have to pay the normal fees for new transcript orders.

Order Transcripts by Mail

Submit a completed transcript request form to Cosumnes River College. Make a check or money order payable to Los Rios Community College District (the fee is $5.00 per transcript request). Mail to:

Cosumnes River College
Attn: Records Office
8401 Center Parkway
Sacramento, CA 95823

Download the CRC Official Transcript Request Form (shared/doc/admissions-records/forms/crc-official-transcript-request-form.pdf).

Questions?

Visit the Parchment Help Center (https://www.parchment.com/chat-support/) if you have questions about ordering or email notifications, experience login issues, or need help. You can also engage with ParchieBot, an intelligent chat function designed to answer your questions and provide order information.

Programs of Study

Cosumnes River College offers associate degrees, certificates, and transfer opportunities, as well as courses in general education.

Degree Programs

Associate in Arts Degree (AA)

The Associate degree may be obtained by the completion of all required courses for a major (18 units or more) with grades of "C" or better in each course, fulfillment of general education requirements, satisfaction of competencies, and completion of sufficient electives to meet a minimum total of 60 units with a grade point average of 2.0 ("C" average). At least 12 units toward the degree must be completed within the Los Rios Community College District.

Associate in Science Degree (AS)

The Associate degree may be obtained by the completion of all required courses for a major (18 units or more) with grades of "C" or better in each course, fulfillment of general education requirements, satisfaction of competencies, and completion of sufficient electives to meet a minimum total of 60 units with a grade point average of 2.0 ("C" average). At least 12 units toward the degree must be completed within the Los Rios Community College District. An Associate in Science Degree includes all science, technology, engineering, and mathematics (STEM) disciplines and career education (CE) fields.

Associate in Arts for Transfer (AA-T) and Associate in Science for Transfer (AS-T)

The following are the Associate Degree for Transfer (ADT) student completion requirements (as stated in SB 1440 law):

1. Completion of a minimum of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
    A. One of the following general education (GE) patterns (check with your counselor to determine the appropriate pattern for the degree you are pursuing):
        - For students with catalog rights of Fall 2025 or later:
            - California General Education Transfer Curriculum (Cal-GETC)
        - For students with catalog rights before Fall 2025, one of the following:
            - CSU GE Breadth Requirements
            - Intersegmental General Education Transfer Curriculum (IGETC) – CSU option
            - California General Education Transfer Curriculum (Cal-GETC)

    B. A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
2. Obtainment of a minimum grade point average of 2.0. ADTs also require that students must earn a "C" or better (or "P" if taken Pass/No Pass) in all courses required for the major or area of emphasis.

At least 12 units toward the degree must be completed within the Los Rios Community College District.

Visit A Degree With A Guarantee: Associate Degree for Transfer (https://adegreewithaguarantee.com) to learn more.

Certificate Programs

Cosumnes River College offers two types of certificates:

Certificate of Achievement

The Certificate of Achievement certifies that a student has completed all required courses and is prepared to enter the career designated on their certificate. Certificate of Achievement programs are developed to provide vocational training for students who are not necessarily seeking a college degree. Certificates of Achievement require a grade of "C" or better in each course with a minimum of 12 degree-applicable units completed within the Los Rios Community College District. If the certificate requires fewer than 12 units, then students must take the number of units required by the certificate within the Los Rios Community College District. Certificates of Achievement are noted on transcripts.

Certificate of Proficiency

Certificates of Proficiency are intended to certify that students are prepared to meet specific occupational needs, upgrade skills, or advance in an existing career. Certificates of Proficiency require fewer than 16 units with a grade of "C" or better in each course. At least 12 units toward the degree must be completed within the Los Rios Community College District. If the certificate requires fewer than 12 units, then students must take the number of units required by the certificate within the Los Rios Community College District. As long as the units a student takes are degree- or transfer-applicable, they do not necessarily have to be the specific units required for the certificate.

Certificates of Proficiency are not noted on transcripts.

List of Degrees and Certificates

Cosumnes River College offers degree and certificate options. Requirements are identified for each career and general education program. Students must complete the program requirements to earn the desired degree or certificate, regardless of the order of completion.

Accounting

Degree

- AA in Accounting

Certificates of Achievement

- Accounting
- Accounting Clerk
- Accounting, Advanced
- Accounting, Taxation

Advertising / Public Relations

Degree

- AA in Advertising/Public Relations

Agriculture

Degree

- AS in General Agriculture

Certificate of Achievement

- Mechanized Agriculture Technician

Certificate

- General Agriculture

Agriculture Business

Degrees

- AS-T in Agricultural Business
- AS in Agriculture Business

Certificate of Achievement

- Agriculture Business

Allied Health

Degree

- AS in Pre-Health Occupations

Animal Science

Degree

- AS in Equine Science

Anthropology

Degrees

- AA-T in Anthropology
- AS in Anthropology

Architecture

Degree

- AS in Architecture

Certificates of Achievement

- Architectural Technology
- Green Buildings

Architecture Design Technology

Degrees

- AS in Building Information Modeling (BIM)
- AS in Interior Building Architecture

Certificates of Achievement

- Building Information Modeling (BIM)
- Interior Building Architecture

Art

Degrees

- AA in Art - Art History
- AA in Art - Design
- AA in Art - Studio Art
- AA-T in Art History
- AA in Art-Photo
- AA-T in Studio Arts

Automotive Mechanics Technology

Degrees

- AS in Automotive Mechanics Technology
- AS in Automotive Mechanics Technology (Ford ASSET)

Certificates of Achievement

- Automatic Transmissions and Transaxles
- Automatic Transmissions/Transaxles (Ford ASSET)
- Automotive Brakes
- Automotive Brakes (Ford ASSET)
- Automotive Electrical Systems
- Automotive Electrical Systems (Ford ASSET)
- Automotive Emission Control
- Automotive Engine Performance
- Automotive Engine Performance (Ford ASSET)
- Automotive Engine Repair
- Automotive Engine Repair (Ford ASSET)
- Automotive Heating and Air Conditioning
- Automotive Heating and Air Conditioning (Ford ASSET)
- Automotive Mechanics Technology
- Automotive Mechanics Technology (Ford ASSET)
- Automotive Suspension and Steering
- Automotive Suspension and Steering (Ford ASSET)
- Manual Drive Train and Axles (Ford ASSET)
- Small Engine Repair

Biology

Degrees

- AS in Biology
- AS-T in Biology
- AS in Biology: Pre-Nursing Option

Broadcast Journalism

Degree

- AA in Broadcast Journalism

Building Inspection Technology

Degree

- AS in Building Inspection Technology

Certificate of Achievement

- Building Inspection Technology

Business

Degrees

- AS-T in Business Administration 2.0
- AA in Business, General
- AA in Business, Small Business Management/ Entrepreneurship

Certificates of Achievement

- Business Information Professional I
- Business, General
- Business, Office Assistant
- Entrepreneurship
- Small Business Management/Entrepreneurship

Chemistry

Degree

- AS in Chemistry

Communication Studies

Degrees

- AA-T in Communication Studies 2.0
- AA in Communication, Organizational Communication

Certificate of Achievement

- Applied Communication Skills

Computer Information Science

Degrees

- AS in CIS - Computer Science
- AS in Cybersecurity and Information Assurance
- AS in Information Technology Associate
- AS in Management Information Systems
- AS in Web Developer

Certificates of Achievement

- CIS - Computer Programmer-SQL
- CIS - Database Analyst-SQL
- CIS - Database Design
- CIS - Object Oriented Software Development
- CIS - Programming in C/C++
- CIS - Relational Database Administration
- CIS - Web Programming
- CIS - Web Publishing
- Computer Science
- Cyber Defense
- Cybersecurity
- Information Technology Associate
- Information Technology Technician

Construction

Degree

- AS in Construction

Certificates of Achievement

- Construction
- Construction Pre-Apprenticeship
- Solar Installers

Construction Management Technology

Degree

- AS in Construction Management Technology

Certificate of Achievement

- Construction Management Technology

Culinary Arts Management

Degrees

- AA in Culinary Arts Management
- AA in Restaurant and Food Service Entrepreneurship

Certificates of Achievement

- Basic Culinary Services
- Cooking and Supervision

Deaf Culture and American Sign Language Studies

Degree

- AA in Deaf Studies

Diagnostic Medical Sonography

Degree

- AS in Diagnostic Medical Sonography

Certificate of Achievement

- Diagnostic Medical Sonography

Digital Media

Degree

- AA in Digital Media

Certificate of Achievement

- Digital Media

Early Childhood Education

Degrees

- AA in Early Childhood Education
- AS-T in Early Childhood Education for Transfer
- AA in Early Childhood Education, Site Supervisor

Certificates of Achievement

- Early Childhood Education - Master Teacher
- Early Childhood Education - Teacher
- Early Childhood Education, Associate Teacher
- Early Childhood Education, Infant Specialist
- Early Childhood Education, School Age Child Care and Education

Economics

Degree

- AA-T in Economics

Education/Teaching

Degrees

- AA-T in Elementary Teacher Education for Transfer
- AA in Liberal Studies for Elementary Education

Emergency Medical Technology

Certificate of Achievement

- Emergency Medical Technician

Engineering

Degrees

- AS in Engineering - Civil/Mechanical Option
- AS in Engineering - Electrical/Computer Option

English

Degrees

- AA in English
- AA-T in English

English as a Second Language

Certificates

- ESL Listening and Speaking for Academic and Workforce Preparation
- ESL Listening and Speaking for College Success
- ESL Reading for Academic and Workforce Preparation
- ESL Reading for College Success
- ESL Writing for Academic and Workforce Preparation
- ESL Writing for College Success

Film/Digital Cinema Production

Degree

- AA in Film / Digital Cinema Production

Film and Media Studies

Degree

- AA in Film and Media Studies

Fire Technology

Degrees

- AS in Fire Prevention
- AS in Fire Technology

Certificates

- Firefighter Suppression Specialist
- Wildland Fire Technology

General Science

Degree

- AS in General Science

Geography

Degrees

- AS in Environmental Studies & Sustainability
- AS in Geography
- AA-T in Geography

Certificates of Achievement

- Field Data Mapping and Geographic Information Systems (GIS)
- Sustainability

Geology

Degrees

- AS in Geology
- AS-T in Geology

Health Information Technology

Degree

- AS in Health Information Technology

Certificate of Achievement

- Health Information Coding Specialist

History

Degree

- AA-T in History

Honors

Certificate of Achievement

- Honors

Horticulture

Degree

- AS in Horticulture, Sustainable Landscape

Certificates of Achievement

- Horticulture, General Horticulture
- Horticulture, Sustainable Irrigation and Water Management Technology
- Horticulture, Sustainable Landscape
- Horticulture, Sustainable Landscape Design

Humanities

Degrees

- AA in American Studies
- AA in Humanities

Interdisciplinary Studies

Degrees

- AA in Interdisciplinary Studies, Ethnic Studies
- AA in Interdisciplinary Studies, Women's Studies
- AA in Liberal Arts - Arts and Humanities
- AA in Liberal Arts - Communication and Writing
- AS in Liberal Arts - Math and Science
- AA in Liberal Arts - Social and Behavioral Sciences

Journalism

Degrees

- AA in Journalism
- AA-T in Journalism

Kinesiology

Degrees

- AA-T in Kinesiology
- AA in Kinesiology

Management

Degree

- AA in Management

Certificate of Achievement

- Management in Business

Marketing

Degree

- AA in Marketing

Certificate of Achievement

- Marketing

Mathematics and Statistics

Degrees

- AS in Mathematics
- AS-T in Mathematics

Medical Assisting

Degree

- AS in Medical Assisting

Certificates of Achievement

- Medical Assisting
- Medical Assisting, Administrative
- Medical Assisting, Medical Insurance Billing

Music

Degrees

- AA-T in Music
- AA in Music, General

Certificates of Achievement

- Entrepreneurial Arts: Independent Music Instructor
- Entrepreneurial Arts: Music Composition
- Music History

Nutrition

Degrees

- AS-T in Nutrition and Dietetics
- AS in Nutrition and Foods

Certificates of Achievement

- Nutrition and Foods, Community Nutrition
- Regenerative Foodways

Pharmacy Technology

Degree

- AS in Pharmacy Technology

Certificate of Achievement

- Pharmacy Technician

Photography

Degree

- AA in Photography

Certificates of Achievement

- Commercial and Studio Photography
- Fine Art Photography
- Portraiture and Wedding Photography

Physics

Degrees

- AS in Physics
- AS-T in Physics

Political Science

Degree

- AA-T in Political Science

Psychology

Degree

- AA-T in Psychology

Radio Production

Degree

- AA in Radio Production

Certificate of Achievement

- Radio Production

Radio, Television, and Film

Degree

- AS-T in Film, Television and Electronic Media

Real Estate

Degree

- AA in Real Estate

Certificates of Achievement

- Real Estate Broker
- Real Estate Salesperson

Social Justice Studies

Degrees

- AA-T in Social Justice Studies: Race and Ethnicity
- AA-T in Social Justice Studies: Women, Gender and LGBTQ Studies

Social Science

Degree

- AA in Social Science

Social Work/Human Services

Degrees

- AA in Chemical Dependency Studies Degree
- AA in Human Services, General
- AA in Social Work and Human Services

Certificates of Achievement

- Chemical Dependency Studies Certificate
- Human Services, General
- Social Work and Human Services

Sociology

Degree

- AA-T in Sociology

Spanish

Degrees

- AA in Spanish
- AA-T in Spanish

Television Production

Degree

- AA in Television Production

Certificate of Achievement

- Television Production

Theatre and Dance Arts

Degrees

- AA in Theatre Arts
- AA-T in Theatre Arts

Certificate of Achievement

- Theatre for Young Audiences

Veterinary Technology

Degree

- AS in Veterinary Technology

Certificate of Achievement

- Veterinary Technology

Welding

Degree

- AS in Welding Technology

Certificates of Achievement

- Welding Code
- Welding Fabricator
- Welding Technology

Description of Courses

Course Numbering

All courses at Cosumnes River College are comprised of a subject code (sometimes called a course prefix), course number, and course title. Some courses also have a course type identifier and/or a course specialty identifier. Here are descriptions of each component:

Subject Code/Course Prefix
: The subject code is an alphabetical abbreviation for the subject area, between two and five characters long. For example, **ENGL** is for English, and **ENGWR** is for English Writing.

Course Number
: Course numbers are standardized two-, three-, or four-digit numbers. For example, 90, 300, and 1000 are course numbers. Course numbers can tell you important information about the course:
  - Courses numbered 1 to 99 are developmental or basic skills courses. These courses are for credit but are not degree-applicable nor transferable to four-year institutions.
  - Courses numbered 100 to 299 are degree-applicable[1] but are not transferable to four-year institutions.
  - Courses numbered 300 to 499 are transferable to four-year institutions, meeting general education, major, and/or elective credit requirements.
  - Courses numbered **C**1000 and above are transferable to four-year institutions, meeting general education, major, and/or elective credit requirements.
  - Courses numbered 1000 and above (without a "C" in front of the course number) are not degree-applicable nor transferable to four-year institutions.

Course Type Identifier
: Courses that have a "C" in front of their course number belong to the Common Course Numbering (CCN) system (https://crc.losrios.edu/academics/programs-and-majors/course-numbering/common-course-numbering). For example, COMM **C**1000 is a CCN course, while COMM 302 is a local course.

Course Specialty Identifier
: Some courses have additional characters at the end of their course number, such as:
  - E = Embedded support
  - H = Honors course
  - L = Lab-only course
  - S = Support Course

[1] Courses numbered 200 to 299 that were taken between fall 1989 and spring 2003 are not degree-applicable.

Example Courses

Example Course	Subject Code	Course Number	Course Type Identifier	Course Specialty Identifier
ENGL C1000H	ENGL = English	1000 = transferable to four-year institutions, meeting general education, major, and/or elective credit requirements	C = Common Course Number	H = Honors
STAT C1000E	STAT = Statistics	1000 = transferable to four-year institutions, meeting general education, major, and/or elective credit requirements	C = Common Course Number	E = embedded support
COMM C1000	COMM = Communications	1000 = transferable to four-year institutions, meeting general education, major, and/or elective credit requirements	C = Common Course Number	None
PSYC 330	PSYC = Psychology	330 = transferable to four-year institutions, meeting general education, major, and/or elective credit requirements	None	None
ENGWR 299	ENGWR = English Writing	299 = degree-applicable but not transferable to four-year institutions	None	None

Prerequisites, Corequisites, and Advisories

Enrollment Conditions

Many courses and educational programs have enrollment conditions, such as prerequisites, corequisites, or advisories on recommended preparation. These faculty-approved conditions are considered necessary and appropriate to ensure that students

are adequately prepared to succeed in the course or educational program. It is the student's responsibility to meet all enrollment conditions.

Students may challenge a prerequisite requirement through the challenge process (https://crc.losrios.edu/2025-2026-official-catalog/programs-of-study/description-of-courses/prerequisites-corequisites-and-advisories#challenge).

Prerequisite

A prerequisite is a course that a student is **required** to take to demonstrate current readiness for enrollment in another course or educational program. For example, to take ENGWR 301, a student must have already completed ENGL C1000 (formerly ENGWR 300) with a grade of "C" or better.

Corequisite

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

Advisory

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

How to Verify Prerequisites or Corequisites

Verifying Prerequisites

If you are enrolled in a course that has a prerequisite, then you must provide evidence that you have met the prerequisite. Supporting evidence includes:

- A **Los Rios transcript** that verifies that you have earned a "C" or better in the prerequisite course. Current Los Rios students may print an unofficial transcript in eServices (https://ps.losrios.edu/student/signon.html). Instructors also have access to this information on their roster if you took the prerequisite class within Los Rios since 2003 (prior course information cannot be viewed).
- Los Rios English and/or math **placement results**.

If you enroll in a course and do not meet the prerequisite, then the instructor must drop you from the course.

Verifying Corequisites

If you are enrolled in a course that has a corequisite, then you must provide evidence that you meet the corequisite requirement through one of the following:

- Your **personal class schedule** shows you are currently enrolled in the corequisite course.
- A **Los Rios transcript** that shows you have already completed the corequisite course.

How to Challenge Prerequisites or Corequisites

If you do not have the supporting evidence to verify a prerequisite or corequisite (https://crc.losrios.edu/2025-2026-official-catalog/programs-of-study/description-of-courses/prerequisites-corequisites-and-advisories#verify) but you believe that you should qualify to enroll in the course, then you may challenge a prerequisite or corequisite.

Criteria for challenging a prerequisite or corequisite include:

- You have knowledge or ability to succeed in the course with the prerequisite.
- The prerequisite course is not readily available.
- You believe that the prerequisite is discriminatory or being applied in a discriminatory manner.
- You believe that the prerequisite was established in violation of regulations and/or the established district-approved policy and procedures.

To challenge a prerequisite or corequisite:

1. Submit the appropriate departmental Challenge Clearance form and a copy of your unofficial or official transcripts.
    - Complete the appropriate section of the Challenge Clearance form:
        - Complete **Challenge** section if course **does not** appear on pre-approved list of non-Los Rios courses.
        - Complete **Clearance** section if course **does** appear on pre-approved list of non-Los Rios courses.
    - For math, see Math Challenge Process (https://crc.losrios.edu/2025-2026-official-catalog/programs-of-study/description-of-courses/prerequisites-corequisites-and-advisories#math-eng-challenge) below
    - For English, see English Challenge Process (https://crc.losrios.edu/2025-2026-official-catalog/programs-of-study/description-of-courses/prerequisites-corequisites-and-advisories#math-eng-challenge) below
    - For non-math or non-English courses, complete the Pre/Corequisite Verification Form (crc/main/doc/2-admissions/placement/pre-corequisite-verification-non-math-eng.pdf) and submit to either a counselor or the instructor of the course you are requesting to clear the prerequisite or corequisite for. Email the approved/signed form along with any related documentation to admissions@crc.losrios.edu.

To use Advanced Placement (AP) exam results to meet a prerequisite, see Credit for Prior Learning and Alternative Study Options (https://crc.losrios.edu/2025-2026-official-catalog/while-you-are-here/credit-for-prior-learning-and-alternative-study-options).

Math and English Prerequisite Clearance

Prerequisites for all 300-level mathematics courses (MATH and STAT) and English courses (ENGL, ENGWR, ENGED, and ENGCW) must be cleared before enrollment.

Automatic Clearance

You will be automatically cleared to enroll in a math or English class if:

- You are currently enrolled in the appropriate prerequisite course at a Los Rios college (you must earn a grade of "C" or better, or you will be automatically dropped from the higher-level course before the new semester begins).
- You have completed and passed the appropriate prerequisite course at a Los Rios college.
- You have been placed into the math or English course you want to add.

Clearance Through Coursework From Outside of Los Rios

If you completed the equivalent prerequisite course with a grade of "C" or better at a college or university that is on the Los Rios Math Prerequisite Clearance List (shared/doc/admissions-records/prerequisite/math-prerequisite-clearance-list.pdf) or English Prerequisite Clearance List (shared/doc/admissions-records/prerequisite/english-prerequisite-clearance-list.pdf) then:

Note: In-progress coursework cannot be considered to clear a prerequisite for a course. The approval process may take 10 business days or longer during peak enrollment periods, so please plan early!

Math Challenge Process

1. Review the first question on the Math Clearance Challenge Form (crc/main/doc/2-admissions/placement/math-clearance-challenge-form.pdf) and complete the appropriate section on the form.
2. If you don't see your class or AP score on the pre-approved list of non-LRCCD Math prerequisites, then submit the form via email for review to CRC-MathPrereq@crc.losrios.edu.

English Challenge Process

If you are enrolled or plan to enroll in a course that has a pre- or corequisite, then you must provide evidence that you meet the corequisite requirement through one of the following:

1. Review the English Placement and Requisite Clearance Form (crc/main/doc/2-admissions/placement/english-placement-requisite-clearance-form.pdf), complete the appropriate section on the form, and return as directed on the form.
2. If you don't see your class or AP, ERWC, or CAASPP (EAP) score on the pre-approved list of non-LRCCD English coursework/alternate credit, then submit the form via email for review to CRC-EnglishPrereq@crc.losrios.edu.

If you did not find your course on the approved equivalency lists above – but you believe you have the knowledge or ability to succeed in an English or math course through other college/university coursework (or other credentials) – then you may challenge the prerequisite via the challenge process (https://crc.losrios.edu/2025-2026-official-catalog/programs-of-study/description-of-courses/prerequisites-corequisites-and-advisories#challenge).

To Be Arranged Scheduling

Some or all of the class hours for courses may be offered using the "To Be Arranged" (TBA) course scheduling option. Please refer to the class schedule listing for sections of courses for specific TBA weekly or daily class hour requirements that may apply.

Course Prefixes

A

Prefix	Subject Name
ACCT	Accounting
ADAPT	Adapted Physical Education
ADT	Architectural Design Technology
AGB	Agriculture Business
AH	Allied Health
ANSC	Animal Science
ANTH	Anthropology
ARCH	Architecture
ART	Art
ARTH	Art History
ARTNM	Art New Media
ASTR	Astronomy
AMT	Automotive Mechanics Technology

B

Prefix	Subject Name
BIOL	Biology
BIT	Building Inspection Technology
BUS	Business
BUSTEC	Business Technology

C

Prefix	Subject Name
CAM	Culinary Arts Management
CHEM	Chemistry
CISA	Computer Information Sciences - Applications
CISC	Computer Information Sciences - Core
CISD	Computer Information Sciences - Data
CISN	Computer Information Sciences - Network
CISP	Computer Information Sciences - Programming
CISS	Computer Information Sciences - Security
CISW	Computer Information Sciences - Web
CMT	Construction Management Technology
COMM	Communication Studies
CONST	Construction
CSERV	Community Services Education

D

Prefix	Subject Name
DANCE	Dance
DEAF	Deaf Culture and American Sign Language Studies

E

Prefix	Subject Name
ECE	Early Childhood Education
ECON	Economics
EMT	Emergency Medical Technology
ENGCW	English - Creative Writing
ENGED	English - Education
ENGL	English
ENGLB	English - Laboratory
ENGLT	English - Literature
ENGR	Engineering
ENGRD	English - Reading
ENGWR	English - Writing
ESL	English as a Second Language
ESLG	English as a Second Language - Grammar
ESLL	English as a Second Language - Listening
ESLP	English as a Second Language - Pronunciation
ESLR	English as a Second Language - Reading
ESLW	English as a Second Language - Writing
ETHNS	Ethnic Studies

F

Prefix	Subject Name
FCS	Family and Consumer Science
FFS	Fire and Forestry Services
FMS	Film and Media Studies
FT	Fire Technology
FIRE	Firefighter Training Center
FITNS	Fitness

G

Prefix	Subject Name
GEOG	Geography
GEOL	Geology

H

Prefix	Subject Name
HCD	Human/Career Development
HEED	Health Education
HIT	Health Information Technology
HIST	History
HMONG	Hmong
HONOR	Honors
HORT	Horticulture
HSER	Human Services
HUM	Humanities

I

Prefix	Subject Name
INDIS	Interdisciplinary Studies

J

Prefix	Subject Name
JOUR	Journalism

K

Prefix	Subject Name
KINES	Kinesiology

L

Prefix	Subject Name
LIBR	Library

M

Prefix	Subject Name
MAKR	Modern Making
MAT	Mechanized Agriculture Technology
MATH	Mathematics
MATHS	Mathemetics Support
MEDA	Medical Assisting
MGMT	Management
MKT	Marketing
MUFHL	Music - Fundamentals, History, and Literature
MUIVI	Music - Instrumental/Voice Instruction
MUP	Music - Performance
MUSM	Music - Specializations in Music

N

Prefix	Subject Name
NUTRI	Nutrition

P

Prefix	Subject Name
PACT	Personal Activity
PHARM	Pharmacy Technology
PHIL	Philosophy
PHOTO	Photography
PHYS	Physics
PLTS	Plant Science
POLS	Political Science
PSYC	Psychology

R

Prefix	Subject Name
RE	Real Estate
RECR	Recreation
RLST	Religious Studies
RTVF	Radio, Television and Film

S

Prefix	Subject Name
SGVT	Student Government
SJS	Social Justice Studies
SOC	Sociology
SOCSC	Social Sciences
SONOG	Diagnostic Medical Sonography
SPAN	Spanish
SPORT	Sports
STAT	Statistics
SURG	Surgical Technology
SWHS	Social Work/Human Services

T

Prefix	Subject Name
TA	Theatre Arts
TAP	Theatre Arts Performance
TMACT	Team Activity

V

Prefix	Subject Name
VT	Veterinary Technology
VIET	Vietnamese

W

Prefix	Subject Name
WELD	Welding
WEXP	Work Experience

Cross-Listed Courses

When a course is listed under two (or more) different departments in the catalog, the course is referred to as "cross-listed," "cross-referenced," or "same as." The cross-listed course has identical content under both departments' catalog listing.

If two (or more) courses are cross-listed, then a student can only earn credit for one of those courses. Students who are not sure which cross-listed course they should enroll in are encouraged to consult with a counselor.

When a cross-listed course is repeatable, the course may be taken (under either name) the total number of times stated in the catalog descriptions of the cross-listed course.

Course Number	Cross-Listed Course	Additional Cross-Listed Course	Course Title
ANTH 480	HONOR 386	N/A	Honors Biological Anthropology
ANTH 482	HONOR 387	N/A	Honors Biological Anthropology Laboratory
BIOL 485	HONOR 385	N/A	Honors Seminar in Genetics
BUS 320	ECON 320	N/A	Concepts in Personal Finance

Course Number	Cross-Listed Course	Additional Cross-Listed Course	Course Title
CISC 302	JOUR 330	N/A	Computer Familiarization
COMM 480	HONOR 340	N/A	Honors Seminar: Political Campaign Communication
COMM 482	HONOR 341	N/A	Honors Seminar: Persuasion within Social Issues
ECON 320	BUS 320	N/A	Concepts in Personal Finance
ENGLT 488	HONOR 378	N/A	Honors - Literature Adapted into Film
ENGRD 113	ENGWR 109	N/A	Reading and Writing Skills for College
ENGWR 109	ENGRD 113	N/A	Reading and Writing Skills for College
ENGWR 330	JOUR 340	N/A	Writing for Publication
ENGL C1000H	HONOR 375	N/A	Academic Reading and Writing - Honors; Honors College Composition
FMS 305	RTVF 305	N/A	Film History I (1895 to 1949)
FMS 307	RTVF 307	N/A	Film History II (1950 to present)
FMS 488	HONOR 350	N/A	Honors Seminar: Introduction to Critical Theory
FMS 489	HONOR 352	N/A	Honors Seminar: The Films of Alfred Hitchcock
HEED 350	KINES 301	N/A	Personal Wellness
HIST 485	HONOR 366	N/A	Recent United States History - Honors
HONOR 340	COMM 480	N/A	Honors Seminar: Political Campaign Communication
HONOR 341	COMM 482	N/A	Honors Seminar: Persuasion within Social Issues
HONOR 350	FMS 488	N/A	Honors Seminar: Introduction to Critical Theory
HONOR 352	FMS 489	N/A	Honors Seminar: The Films of Alfred Hitchcock
HONOR 363	PHIL 486	N/A	Honors Seminar in Critical Thinking and Composition: Philosophy of Happiness
HONOR 364	PHIL 485	N/A	Honors Seminar: Philosophy of the Martial Arts
HONOR 366	HIST 485	N/A	Recent United States History - Honors
HONOR 367	POLS C1000H	N/A	American Government and Politics - Honor; Introduction to Government: United States – Honors
HONOR 368	POLS 482	N/A	International Political Economy - Honors
HONOR 375	ENGL C1000H	N/A	Academic Reading and Writing - Honors; Honors College Composition
HONOR 378	ENGLT 488	N/A	Honors - Literature Adapted into Film
HONOR 385	BIOL 485	N/A	Honors Seminar in Genetics
HONOR 386	ANTH 480	N/A	Honors Biological Anthropology
HONOR 387	ANTH 482	N/A	Honors Biological Anthropology Laboratory
HONOR 391	MATH 483	N/A	Honors Seminar in Mathematics - Introduction to Mathematical Proof
HONOR 392	MATH 484	N/A	Honors Seminar in Mathematics - Topics in Number Theory
HONOR 393	STAT C1000H	N/A	Introduction to Statistics - Honors; Introduction to Probability and Statistics - Honors
HORT 302	PLTS 310	N/A	Soils, Soil Management, and Plant Nutrition
HORT 303	PLTS 332	N/A	Integrated Pest Management
HSER 300	SWHS 300	N/A	Introduction to Social Work & Human Services
HSER 341	SWHS 341	N/A	Physiology and Pharmacology: Alcohol & Other Drugs
HSER 498	SWHS 498	N/A	Work Experience in Human Services
JOUR 310	RTVF 300	N/A	Mass Media and Society
JOUR 330	CISC 302	N/A	Computer Familiarization

Course Number	Cross-Listed Course	Additional Cross-Listed Course	Course Title
JOUR 340	ENGWR 330	N/A	Writing for Publication
KINES 301	HEED 350	N/A	Personal Wellness
MATH 483	HONOR 391	N/A	Honors Seminar in Mathematics - Introduction to Mathematical Proof
MATH 484	HONOR 392	N/A	Honors Seminar in Mathematics - Topics in Number Theory
MKT 314	RTVF 376	N/A	Advertising
PHIL 352	RLST 301	N/A	Introduction to World Religions
PHIL 485	HONOR 364	N/A	Honors Seminar: Philosophy of the Martial Arts
PHIL 486	HONOR 363	N/A	Honors Seminar in Critical Thinking and Composition: Philosophy of Happiness
PLTS 310	HORT 302	N/A	Soils, Soil Management, and Plant Nutrition
PLTS 332	HORT 303	N/A	Integrated Pest Management
POLS C1000H	HONOR 367	N/A	American Government and Politics - Honor; Introduction to Government: United States - Honors
POLS 482	HONOR 368	N/A	International Political Economy - Honors
RLST 301	PHIL 352	N/A	Introduction to World Religions
RTVF 300	JOUR 310	N/A	Mass Media and Society
RTVF 305	FMS 305	N/A	Film History I (1895 to 1949)
RTVF 307	FMS 307	N/A	Film History II (1950 to present)
RTVF 376	MKT 314	N/A	Advertising
RTVF 378	TA 356	N/A	Acting for the Camera
STAT C1000H	HONOR 393	N/A	Introduction to Statistics - Honors; Introduction to Probability and Statistics - Honors
SWHS 300	HSER 300	N/A	Introduction to Social Work & Human Services
SWHS 341	HSER 341	N/A	Physiology and Pharmacology: Alcohol & Other Drugs
SWHS 498	HSER 498	N/A	Work Experience in Human Services
TA 356	RTVF 378	N/A	Acting for the Camera I

Career and Academic Communities

Career and Academic Communities (CAC) are a collection of degree or certificate programs that lead to related occupations or have similar courses or learning objectives. Career and Academic Communities are designed to help you find a program of study that aligns with your educational and career goals.

Agriculture, Food and Natural Resources

The Agriculture, Food and Natural Resources Career and Academic Community includes programs dedicated to Agriculture, Culinary Arts, Horticulture, and Veterinary Technology. Explore the following programs:

- Agriculture
- Agriculture Business
- Animal Science
- Culinary Arts Management
- Horticulture
- Plant Science
- Veterinary Technology

Arts, Media and Entertainment

The Arts, Media and Entertainment Career Academic Community offers programs in Art, Digital Media, Journalism, Music, Photography, Radio Production, Theatre Arts, and more. Explore the following programs:

- Art
- Broadcast Journalism
- Digital Media
- Film and Media Studies
- Film/Digital Cinema Production
- Journalism
- Music
- Photography
- Radio Production
- Radio, Television and Film Production
- Television Production
- Theatre and Dance Arts

Automotive, Construction and Design Technology

The Automotive, Construction and Design Technology Career Academic Community offers programs in Architecture, Construction, Automotive Mechanics Technology, and Welding. This CAC also offers the Ford ASSET program as part of our automotive mechanics technology program. Explore the following programs:

- Architecture
- Architecture Design Technology
- Automotive Mechanics Technology
- Building Inspection Technology
- Community Services Education
- Construction
- Construction Management Technology
- Modern Making
- Welding

Business and Computer Science

The Business and Computer Science Career Academic Community offers programs in Accounting, Advertising/Public Relations, Entrepreneurship, Information Technology (IT), Cybersecurity, and more. Explore the following programs:

- Accounting
- Business
- Computer Information Science
- Economics
- Management
- Marketing
- Real Estate

English and Language Studies

The English and Language Studies Career Academic Community offers programs in Deaf Studies, English, and Spanish, as well as courses in English as a Second Language (ESL), Hmong, and Vietnamese. Explore the following programs:

- Deaf Culture and American Sign Language Studies
- English
- English as a Second Language
- Hmong
- Spanish
- Vietnamese

Health and Human Services

The Health and Human Services Career Academic Community offers programs in Diagnostic Medical Sonography, Emergency Medical Services (EMT), Fire Technology, Nutrition, Kinesiology, Pharmacy Technology, and more. Explore the following programs:

- Allied Health

- Diagnostic Medical Sonography
- Emergency Medical Technology
- Fire Technology
- Health Information Technology
- Human/Career Development
- Kinesiology
- Medical Assisting
- Nutrition
- Pharmacy Technology
- Recreation
- Social Work/Human Services
- Surgical Technology

Science, Math and Engineering

The Science, Math and Engineering Career Academic Community offers programs in Biology, Chemistry, Engineering, Geology, Mathematics, and Physics. Explore the following programs:

- Biology
- Chemistry
- Engineering
- General Science
- Geography
- Geology
- Mathematics and Statistics
- Physics
- Science

Social and Behavioral Sciences

The Social and Behavioral Sciences Career Academic Community offers programs in Anthropology, Communications Studies, Early Childhood Education, Education and Teaching, History, Humanities, Psychology, Social Science, Sociology, and more. Explore the following programs:

- Anthropology
- Communication Studies
- Early Childhood Education
- Education/Teaching
- Ethnic Studies
- Family and Consumer Science
- History
- Humanities
- Philosophy
- Political Science
- Psychology
- Social Justice Studies
- Social Science
- Sociology

List of Programs

Accounting

The accounting program provides training for entry-level employment in private industry, government accounting or for self-employment as a provider of computer-based bookkeeping and/or tax services. In addition, those individuals already employed in accounting can work toward career advancement by taking additional courses. Generally, employment in this specialization also requires proficiency in computer applications and good communication skills.

Degrees and Certificates Offered

A.A. in Accounting

Accounting Certificate

Accounting Clerk Certificate

Accounting, Advanced Certificate

Accounting, Taxation Certificate

Dean Tyler Rollins
Department Chair Margaret Parilo
Phone (916) 691-7226
Email rollint@crc.losrios.edu

Associate Degree

A.A. in Accounting

This program provides training for entry-level employment in private industry, government accounting, or for self-employment as a provider of computer-based bookkeeping and/or tax services. In addition, those individuals already employed in accounting can work toward career advancement by taking additional courses. Generally, employment in this specialization also requires proficiency in computer applications and good communication skills.
Highlights include:
* A traditional course of study in Accounting Fundamentals, Financial Reporting, Managerial Analytical Techniques, State and Federal Income Taxation, Cost Accounting, and Auditing
* State-of-the-art software and equipment to provide computerized accounting training
* Internships, work experience with local employers for college units, job shadowing, guest speakers from the accounting industry, field trips to accounting offices
* A lab with tutorial assistance

Note to Transfer Students:
If you are interested in transferring to a four-year college or university to pursue a bachelor's degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate's degree in this major may be different from the requirements needed for the Bachelor's degree.

Degree Requirements

Course Code	Course Title	Units
BUSINESS CORE:		
ACCT 301	Financial Accounting	4
ACCT 311	Managerial Accounting	4
ACCT 341	Computerized Accounting	3
BUS 340	Business Law (3)	3
or BUS 345	Law and Society (3)	
ACCT 103	Intermediate Accounting - Part I	4
ACCT 104	Intermediate Accounting - Part II	4
ACCT 111	Cost Accounting	3
A minimum of 4 units from the following:		4
CISA 315	Introduction to Electronic Spreadsheets (2)	
CISA 316	Intermediate Electronic Spreadsheets (2)	
CISA 320	Introduction to Database Management (1)	
CISA 321	Intermediate Database Management (1)	
A minimum of 7 units from the following:		7
ACCT 107	Auditing (3)	
ACCT 121	Payroll Accounting (3)	
ACCT 123	Federal and California Individual Income Taxation (4)	
ACCT 128	Taxation of Corporations, Partnerships, Estates, and Trusts (4)	
ACCT 498	Work Experience in Accounting (0.5 - 4)	
Total Units:		**36**

The Accounting Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus the local CRC General Education Requirement, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

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

- SYNTHESIZE GENERAL ACCOUNTING THEORY AND PRACTICE INTO FINANCIAL RECORDS This includes the ability to: A. Demonstrate a firm understanding and working knowledge of basic accounting terminology and the process by which transactions are analyzed and transformed into financial statements. B. Compute, classify, record, and verify numerical date, both manually and with computing equipment, in order to develop and maintain financial records.
- ANALYZE BUSINESS INFORMATION AND INFER THE RESOLUTION OF KEY ISSUES (ANALYTICAL SKILLS) This includes the ability to: A. Demonstrate intelligent interpretation and use of financial statements in managing and analyzing business operations. B. Demonstrate the ability to identify key issues, research relevant data, and think critically, and analytically about the possible solutions for the financial problem encountered.
- COMPOSE EFFECTIVE ACCOUNTING INFORMATION DOCUMENTS AND COMMUNICATE THEM TO

APPROPRIATE USERS (COMMUNICATION SKILLS) This includes the ability to: A. Create accurate, professional, and appropriate accounting documents and reports for the business entity served. B. Receive and process written and oral financial information and prepare the appropriate response for management, investor, clients, or other fellow professionals. C. Work effectively, individually and as a member of a group.

- INTEGRATE TECHNOLOGY INTO THE DEVELOPMENT OF ACCOUNTING INFORMATION (TECHNOLOGY SKILLS) This includes the ability to: A. Demonstrate effective use of all technology applicable to the accounting field. B. Demonstrate proficiency in the use of accounting software, spreadsheets, and databases applicable to accounting practice and procedures.
- ANALYZE, SUMMARIZE AND INTERPRET FINANCIAL INFORMATION (CRITICAL THINKING SKILLS) This includes the ability to: A. Record, summarize, analyze, and interpret financial activities to permit individuals and organizations to make informed judgments and sensible business decisions. B. Comprehend an unrelated set of financial facts; identify and anticipate problems and find acceptable solutions for the business entity served.
- EVALUATE ACTIONS FOR INTEGRITY AND HONESTY (ETHICS) This includes the ability to: A. Practice high ethical standards in all contacts with employers, clients, co workers, and general public. B. Demonstrate the ability to act with integrity and honesty and choose an ethical course of action.
- SUPPORT ACTIONS THAT IMPROVE THE ABILITY TO INTERACT EFFECTIVELY IN DIVERSE ENVIRONMENTS AND WITH DIVERSE PERSONS. (DIVERSITY) This includes the ability to demonstrate the ability to relate and interact effectively in teams consisting of individuals with differing interest, gender, backgrounds, and professions.

Career Information

Account Clerk; Accounting Technician; Accountant Trainee; Auditor; Bank Employee/Examiner; Certified Public Accountant; Cost Accountant; Insurance Employment; Revenue Agent (FTB/IRS);Tax Preparer; Bookkeeper for: Accounts Receivable, Accounts Payable, General Ledger, Full-Charge Bookkeeper Some career options may require more than two years of college study.

Certificates of Achievement

Accounting Certificate

Certificate Requirements

Course Code	Course Title	Units
ACCT 107	Auditing	3
ACCT 111	Cost Accounting	3
ACCT 301	Financial Accounting	4
ACCT 311	Managerial Accounting	4
ACCT 341	Computerized Accounting	3
BUS 340	Business Law (3)	3[1]
Total Units:		**20**

[1]Business 341 recommended for students intending to enter public accounting professions.

Accounting Clerk Certificate

This Certificate is designed to provide the skills necessary for clerical level positions within an Accounting environment. These positions support Accounting professionals and para-professional positions.

Certificate Requirements

Course Code	Course Title	Units
ACCT 101	Fundamentals of College Accounting (3)	3 - 4
or ACCT 301	Financial Accounting (4)	
ACCT 341	Computerized Accounting	3
ACCT 121	Payroll Accounting	3
CISA 315	Introduction to Electronic Spreadsheets	2
CISA 305	Beginning Word Processing	2
BUS 310	Business Communications (3)	3
or ENGWR 301	College Composition and Literature (3)	
A minimum of 5 units from the following:		5
BUSTEC 101	Computer Keyboarding: 10-Key (1)	
BUSTEC 302	Computer-Keyboarding (2)	
BUS 105	Business Mathematics (3)	
CISA 316	Intermediate Electronic Spreadsheets (2)	
CISA 320	Introduction to Database Management (1)	
ACCT 498	Work Experience in Accounting (0.5 - 4)	
Total Units:		**21 - 22**

Student Learning Outcomes

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

- COMPOSE EFFECTIVE ACCOUNTING INFORMATION DOCUMENTS AND COMMUNICATE THEM TO APPROPRIATE USERS (COMMUNICATION SKILLS) This includes the ability to: A. Create accurate, professional, and appropriate accounting documents and reports for the business entity served. B. Receive and process written and oral financial information and prepare the appropriate response for management, investor, clients, or other fellow professionals. C. Work effectively, individually and as a member of a group.
- INTEGRATE TECHNOLOGY INTO THE DEVELOPMENT OF ACCOUNTING INFORMATION (TECHNOLOGY SKILLS) This includes the ability to: A. Demonstrate effective use of all technology applicable to the accounting field. B. Demonstrate proficiency in the use of accounting software, spreadsheets, and databases applicable to accounting practice and procedures.

- EVALUATE ACTIONS FOR INTEGRITY AND HONESTY (ETHICS) This includes the ability to: A. Practice high ethical standards in all contacts with employers, clients, co workers, and general public. B. Demonstrate the ability to act with integrity and honesty and choose an ethical course of action.

Accounting, Advanced Certificate

This program is designed for a student who wishes to develop advanced levels of Accounting skills but not earn a degree. These requirements match the major requirements of the Accounting Degree but do not include General Education.

Certificate Requirements

Course Code	Course Title	Units
ACCT 301	Financial Accounting	4
ACCT 311	Managerial Accounting	4
ACCT 341	Computerized Accounting	3
BUS 340	Business Law (3)	3
or BUS 345	Law and Society (3)	
ACCT 103	Intermediate Accounting - Part I	4
ACCT 104	Intermediate Accounting - Part II	4
ACCT 111	Cost Accounting	3
A minimum of 4 units from the following:		4
CISA 315	Introduction to Electronic Spreadsheets (2)	
CISA 316	Intermediate Electronic Spreadsheets (2)	
CISA 320	Introduction to Database Management (1)	
A minimum of 7 units from the following:		7
ACCT 107	Auditing (3)	
ACCT 121	Payroll Accounting (3)	
ACCT 123	Federal and California Individual Income Taxation (4)	
ACCT 128	Taxation of Corporations, Partnerships, Estates, and Trusts (4)	
ACCT 498	Work Experience in Accounting (0.5 - 4)	
CISA 321	Intermediate Database Management (1)	
Total Units:		**36**

Student Learning Outcomes

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

- SYNTHESIZE GENERAL ACCOUNTING THEORY AND PRACTICE INTO FINANCIAL RECORDS This includes the ability to: A. Demonstrate a firm understanding and working knowledge of basic accounting terminology and the process by which transactions are analyzed and transformed into financial statements. B. Compute, classify, record, and verify numerical date, both manually and with computing equipment, in order to develop and maintain financial records.
- ANALYZE BUSINESS INFORMATION AND INFER THE RESOLUTION OF KEY ISSUES (ANALYTICAL SKILLS) This includes the ability to: A. Demonstrate intelligent interpretation and use of financial statements in managing and analyzing business operations. B. Demonstrate the ability to identify key issues, research relevant data, and think critically, and analytically about the possible solutions for the financial problem encountered.
- COMPOSE EFFECTIVE ACCOUNTING INFORMATION DOCUMENTS AND COMMUNICATE THEM TO APPROPRIATE USERS (COMMUNICATION SKILLS) This includes the ability to: A. Create accurate, professional, and appropriate accounting documents and reports for the business entity served. B. Receive and process written and oral financial information and prepare the appropriate response for management, investor, clients, or other fellow professionals. C. Work effectively, individually and as a member of a group.
- INTEGRATE TECHNOLOGY INTO THE DEVELOPMENT OF ACCOUNTING INFORMATION (TECHNOLOGY SKILLS) This includes the ability to: A. Demonstrate effective use of all technology applicable to the accounting field. B. Demonstrate proficiency in the use of accounting software, spreadsheets, and databases applicable to accounting practice and procedures.
- ANALYZE, SUMMARIZE AND INTERPRET FINANCIAL INFORMATION (CRITICAL THINKING SKILLS) This includes the ability to: A. Record, summarize, analyze, and interpret financial activities to permit individuals and organizations to make informed judgments and sensible business decisions. B. Comprehend an unrelated set of financial facts; identify and anticipate problems and find acceptable solutions for the business entity served.
- EVALUATE ACTIONS FOR INTEGRITY AND HONESTY (ETHICS) This includes the ability to: A. Practice high ethical standards in all contacts with employers, clients, co workers, and general public. B. Demonstrate the ability to act with integrity and honesty and choose an ethical course of action.
- SUPPORT ACTIONS THAT IMPROVE THE ABILITY TO INTERACT EFFECTIVELY IN DIVERSE ENVIRONMENTS AND WITH DIVERSE PERSONS. (DIVERSITY) This includes the ability to: A. Demonstrate the ability to relate and interact effectively in teams consisting of individuals with differing interest, gender, backgrounds, and professions.

Accounting, Taxation Certificate

This certificate acknowledges student achievement and proficiency in preparing and reviewing the income tax returns of individuals and business entities together with an understanding of necessary federal and state tax administration compliance requirements that are necessary in the policies of the Internal Revenue Service and Franchise Tax Board.

Certificate Requirements

Course Code	Course Title	Units
ACCT 301	Financial Accounting	4
ACCT 341	Computerized Accounting	3
ACCT 121	Payroll Accounting	3
ACCT 123	Federal and California Individual Income Taxation	4

Course Code	Course Title	Units
ACCT 128	Taxation of Corporations, Partnerships, Estates, and Trusts	4
A minimum of 2 units from the following:		2
CISA 315	Introduction to Electronic Spreadsheets (2)	
CISA 316	Intermediate Electronic Spreadsheets (2)	
CISA 320	Introduction to Database Management (1)	
CISA 321	Intermediate Database Management (1)	
Total Units:		**20**

Student Learning Outcomes

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

- ANALYZE BUSINESS INFORMATION AND INFER THE RESOLUTION OF KEY ISSUES (ANALYTICAL SKILLS) This includes the ability to:
 A. Demonstrate intelligent interpretation and use of financial statements in managing and analyzing business operations.
 B. Demonstrate the ability to identify key issues, research relevant data, and think critically, and analytically about the possible solutions for the financial problem encountered.
- COMPOSE EFFECTIVE ACCOUNTING INFORMATION DOCUMENTS AND COMMUNICATE THEM TO APPROPRIATE USERS (COMMUNICATION SKILLS) This includes the ability to:
 A. Create accurate, professional, and appropriate accounting documents and reports for the business entity served.
 B. Receive and process written and oral financial information and prepare the appropriate response for management, investor, clients, or other fellow professionals.
 C. Work effectively, individually and as a member of a group.
- ANALYZE, SUMMARIZE AND INTERPRET FINANCIAL INFORMATION (CRITICAL THINKING SKILLS) This includes the ability to:
 A. Record, summarize, analyze, and interpret financial activities to permit individuals and organizations to make informed judgments and sensible business decisions.
 B. Comprehend an unrelated set of financial facts; identify and anticipate problems and find acceptable solutions for the business entity served.
- EVALUATE ACTIONS FOR INTEGRITY AND HONESTY (ETHICS) This includes the ability to:
 A. Practice high ethical standards in all contacts with employers, clients, co-workers, and the general public.
 B. Demonstrate the ability to act with integrity and honesty and choose an ethical course of action.

Accounting (ACCT) Courses

ACCT 101 Fundamentals of College Accounting

Units: 3
Hours: 54 hours LEC
Prerequisite: None.

This course emphasizes a practical approach to the use of accounts, journals, ledgers, and financial statements. The course is recommended for students who intend to seek employment in a small service or merchandising business and is an excellent preparation course for further study in accounting and business.

ACCT 103 Intermediate Accounting - Part I

Units: 4
Hours: 72 hours LEC
Prerequisite: ACCT 301 with a grade of "C" or better

This course provides a continuing study of the measurement and reporting of the results of operations and the financial condition of profit-directed business entities. Special emphasis will be given to the valuation of assets using both the Financial Accounting Standards (FASB) and International Financial Reporting Standards (IFRS) as authority. This course is not intended for transfer to a four-year college.

ACCT 104 Intermediate Accounting - Part II

Units: 4
Hours: 72 hours LEC
Prerequisite: ACCT 103 with a grade of "C" or better

This course is a continuing study of the measurement and reporting of the results of operations and the financial position of business entities. An emphasis is placed on accounting for investments, stockholder's equity, long-term liabilities, leases and income taxes. This course is not intended for transfer to a four-year college.

ACCT 107 Auditing

Units: 3
Hours: 54 hours LEC
Prerequisite: ACCT 301 with a grade of "C" or better
Advisory: ACCT 103

The course focuses on procedures and practices used in the verification of financial statement balances and accounting records. External auditing functions are emphasized. The types of audits and auditing occupations, as well as the legal liabilities of the auditor are discussed.

ACCT 111 Cost Accounting

Units: 3
Hours: 54 hours LEC
Prerequisite: ACCT 301 with a grade of "C" or better
Advisory: ACCT 311

This course is an introduction to cost accounting methods, including job order, process and standard cost systems. Special attention will be given to management uses of cost accounting. This course is not intended for transfer to a four-year college.

ACCT 121 Payroll Accounting

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ACCT 101

This is a study of payroll and personnel records, procedures and regulations. The course will include a study of the various California and Federal laws pertaining to the computation of earnings and withholdings. Payroll tax payment requirements and preparation of the employer's California and Federal payroll tax reports will be included. A comprehensive simulation project will be completed as part of the course. The project will include one quarterly payroll reporting cycle.

ACCT 123 Federal and California Individual Income Taxation

Units: 4
Hours: 72 hours LEC
Prerequisite: None.
Advisory: ACCT 101 and 301

This course is a study of basic Federal and California income tax regulations with an introduction to more advanced individual income tax topics. The course emphasizes the skills necessary for the preparation of individual income tax returns. Included are filing requirements, determination of taxable income, allowable deductions, tax computation, tax credits, other taxes, payment methods, and audit procedures. This course is recommended for accounting majors and is not part of the State of California CTEC program. As a result, students cannot use this course to meet the eligibility requirements for the California Registered Tax Return Preparer certificate.

ACCT 128 Taxation of Corporations, Partnerships, Estates, and Trusts

Units: 4
Hours: 72 hours LEC
Prerequisite: None.

This course provides a continuing study of federal and state income tax compliance with an emphasis on the taxation of business entities including corporations, partnerships, limited liability companies, S corporations, estates and fiduciary trusts. Included is coverage of related party transactions, filing requirements, differences in book and taxable income, tax computation, available credits, tax elections, and working with the Internal Revenue Service on tax administration matters. This course is designed for persons seeking civil service advancement, those who are currently or will be involved with company accounting operations, and persons engaged in tax preparation. It is recommended for accounting majors.

ACCT 153 Governmental Accounting

Units: 3
Hours: 54 hours LEC
Prerequisite: ACCT 301 with a grade of "C" or better

This course covers accounting and financial reporting for governmental units and institutions with emphasis on the principles of fund accounting and the comprehensive annual financial report as prescribed by the Governmental Accounting Standards Board. Additional topics include governmental budgeting and budgetary controls.

ACCT 160 Volunteer Income Tax Assistance

Units: 2
Hours: 24 hours LEC; 36 hours LAB
Prerequisite: None.

This hands-on course provides training and a service learning opportunity in the preparation of federal and California individual income tax returns. After successfully completing 24 hours of IRS-approved training and passing the IRS individual income tax exam, the student volunteer will provide a minimum of 36 hours of free tax assistance to community clients who meet qualifying criteria for the service as set by the IRS.

This course is intended for the volunteer who will assist individual and family taxpayers with basic tax concerns.

ACCT 161 Volunteer Income Tax Assistance II

Units: 2
Hours: 24 hours LEC; 36 hours LAB
Prerequisite: ACCT 160 with a grade of "C" or better

This hands-on course provides training and a service learning opportunity in the preparation of federal and California individual income tax returns. After successfully completing 24 hours of IRS-approved training and passing the IRS individual income tax exams, the student volunteer will provide a minimum of 36 hours of free tax assistance to community clients who meet the qualifying criteria for the service as set by the IRS.

This course covers the Advanced level which is intended for the volunteer who will assist individual and family taxpayers with more complex tax concerns.

ACCT 162 Volunteer Income Tax Assistance III

Units: 2
Hours: 24 hours LEC; 36 hours LAB
Prerequisite: ACCT 161 with a grade of "C" or better

This hands-on course provides training and a service learning opportunity in the preparation of federal and California individual income tax returns. After successfully completing 24 hours of IRS-approved training and passing the IRS individual income tax exams, the student volunteer will provide a minimum of 36 hours of free tax assistance to community clients who meet qualifying criteria for the service as set by the IRS.

This course covers tax law that pertains to military tax situations and situations involving rental properties and moving expenses. This level prepares the student to assist taxpayers not only across the full VITA spectrum but adds the additional assistance to military personnel and those taxpayers that own a rental property.

ACCT 295 Independent Studies in Accounting

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current

catalog section of "Special Studies" for full details of Independent Studies.

ACCT 299 Experimental Offering in Accounting

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

ACCT 301 Financial Accounting

Units: 4
Hours: 72 hours LEC
Prerequisite: None.
Advisory: ACCT 101, BUS 105, MATH 120, or MATH 125
Transferable: CSU; UC
C-ID: C-ID ACCT 110

This is the study of accounting as an information system. Emphasis is given to understanding the nature and purpose of accounting and its function in business. The principles and concepts underlying transaction analysis and recording; financial statement preparation, disclosures, and analysis; and ethical issues are addressed. The course includes units on inventories, internal control, cash and cash flows, receivables, fixed and intangible assets, current and long-term liabilities, stockholders' equity, income tax, and investments.

ACCT 311 Managerial Accounting

Units: 4
Hours: 72 hours LEC
Prerequisite: ACCT 301 with a grade of "C" or better
Transferable: CSU; UC
C-ID: C-ID ACCT 120

This course is the study of the use and reporting of accounting data for managerial planning, cost control, and decision making purposes. The course includes broad coverage of concepts, classifications, and behaviors of costs. Topics include cost systems, the analysis and use of cost information, cost-volume-profit analysis, contribution margin, profit planning, standard costs, relevant costs, capital budgeting, and statement analysis.

ACCT 341 Computerized Accounting

Units: 3
Hours: 54 hours LEC
Prerequisite: ACCT 101 or 301 with a grade of "C" or better
Advisory: CISC 302
Transferable: CSU

This is a course using the computer to prepare financial statements and other accounting reports used in business. This course emphasizes the areas of study: general ledger, accounts payable, accounts receivable, banking, bank reconciliations, depreciation, fixed assets, inventory, job order and payroll. This course provides practical experience using contemporary computerized accounting software. Consult the class schedule for specific software.

ACCT 495 Independent Studies in Accounting

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

ACCT 498 Work Experience in Accounting

Units: 0.5 - 4
Hours: 27 - 216 hours LAB
Prerequisite: None.
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position or job related to career goals in Accounting.
Transferable: CSU

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in transfer level degree occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and complete 27 hours of related work experience for 0.5 unit. An additional 27 hours of related work experience is required for each additional 0.5 units. 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.

ACCT 499 Experimental Offering in Accounting

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

Advertising/Public Relations

This program is part of Cosumnes River College's offerings in Radio, Television and Film Production and is designed for students interested in careers in public relations and advertising. This program trains students in public relations and advertising theory and exposes them to production techniques for the Internet, radio, television and print media.

Degrees Offered

A.A. in Advertising/Public Relations

Dean Brian Rickel
Phone (916) 691-7171
Email rickelb@crc.losrios.edu

Associate Degree

A.A. in Advertising/Public Relations

This CRC program is part of CRC's offerings in Radio, Television and Film Production and is designed for students interested in careers in public relations and advertising. This program trains students in public relations and advertising theory and exposes them to production techniques for the Internet, radio, television and print media.

Highlights include:
* Instruction and practice in desktop publishing and graphics applications in the department's Apple digital media laboratory or PC computer lab
* Opportunities for practical experience selling and designing ads for campus publications
* Introductory production experience in radio and television advertising, writing and production
* Internship opportunities working in local media including Advertising Agencies, Public Relations firms, TV and Radio stations, post-production houses, corporate and government employers.

Note to Transfer Students:
If you are interested in transferring to a four-year college or university to pursue a bachelor's degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate's degree in this major may be different from the requirements needed for the Bachelor's degree.

Degree Requirements

Course Code	Course Title	Units
CISC 302	Computer Familiarization (2)	2
or JOUR 330	Computer Familiarization (2)	
RTVF 300	Mass Media and Society (3)	3
or JOUR 310	Mass Media and Society (3)	
RTVF 330	Beginning Single Camera Production	3
RTVF 376	Advertising (3)	3
or MKT 314	Advertising (3)	
RTVF 370	Broadcast Writing & Announcing	3
JOUR 300	Newswriting and Reporting	3
JOUR 351	Public Relations Writing and Media Techniques	3
MKT 310	Selling Professionally	3
COMM 341	Organizational Communication	3
A minimum of 6 units from the following:		6
RTVF 312	Beginning Radio and Podcasting (3)	
RTVF 316	Introduction to Radio Workshop (3)	
RTVF 331	Beginning Television Studio Production (3)	
RTVF 360	Introduction to Motion Graphics: Adobe After Effects (3)	
RTVF 380	Broadcast Journalism (3)	
RTVF 498	Work Experience in Radio, Television and Film (0.5 - 4)	
JOUR 340	Writing for Publication (3)	
PHOTO 301	Beginning Photography (3)	
PHOTO 320	Color Photography (3)	
PHOTO 340	Careers in Photography (3)	
COMM C1000	Introduction to Public Speaking (3)	
COMM 363	Introduction to Communication Theory (3)	
Total Units:		**32**

The Advertising/Public Relations Associate in Arts (A.A.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Student Learning Outcomes

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

- write in clear, concise English. (SLO-1)
- research critically, filter the results and present them in a cogent manner. (SLO-2)
- analyze, interpret, and exercise critical judgment in the evaluation of media productions. (SLO-3)
- demonstrate through projects that with the power of a communicator, comes moral and ethical responsibility. (SLO-4)
- produce creative, persuasive messages for a specific target audience. (SLO-5)
- define the role of advertising and marketing communications in achieving organizational objectives, including traditional business practices. (SLO-6)
- plan a complete marketing communication program including situation analysis, research, objective-setting, target audience definition, creative development,

media planning, budgeting, and program outcome evaluation. (SLO-7)

- describe and discuss both traditional and non-traditional media and their uses. (SLO-8)
- employ production skills in those areas important to functioning successfully as an entry-level professional. (SLO-9)

Career Information

Career Options Public Information Officer; Community Relations Specialist; Media Consultant; Public Relations Firm Representative, Media Sales, Copy Writer Some career options may require more than two years of college study.

Agriculture

Agriculture is a vital component of our local, state, and national economies and offers many exciting employment opportunities. In addition to the production of a wide range of valuable agricultural commodities, the Sacramento region is home to numerous multi-national agricultural corporations and statewide governmental agencies. It is also a center for international agricultural trade and commerce.

Degrees and Certificates Offered

A.S. in General Agriculture

Mechanized Agriculture Technician Certificate

Regenerative Foodways Certificate

General Agriculture Certificate

Dean Kris Hubbard

Department Chair Dave Andrews

Phone (916) 691-7614

Email hubbark@crc.losrios.edu

Associate Degree

A.S. in General Agriculture

Agriculture is a vital component of our local, state, and national economies and offers many exciting employment opportunities. In addition to the production of a wide range of valuable agricultural commodities, the Sacramento region is home to numerous multi-national agricultural corporations and statewide governmental agencies. It is also a center for international agricultural trade and commerce. This program is designed for students majoring in Agriculture while also allowing the student to select courses that fit his/her individual needs and desires.

As a General Agriculture major, you will:

*Study a general agriculture curriculum representing all of the departments of the Cosumnes River College agriculture program including: agriculture business, horticulture, welding, veterinary technology and plant science.

*Develop your leadership and communication skills.

*Identify the agricultural career you are most interested in and build a course of study to better qualify you for a profession.

HIGHLIGHTS

*As the only community college agriculture program in the Sacramento region, the CRC General Agriculture program provides an excellent opportunity for individuals who wish to pursue a career in agriculture and receive a General Agriculture Associate of Science degree.

*The faculty in this program works closely with the five California agricultural degree offering universities to provide a quality program for students interested in agriculture business, management and economics.

*The Sacramento region is fortunate to have some of the best high school agriculture programs in California. The faculty in the CRC Ag program works closely with these feeder schools to articulate coursework and facilitate the successful transition of agriculture students from high school to the university.

*Internships in agriculture are available for students interested in work experience opportunities.

NOTE TO TRANSFER STUDENTS: If you are interested in transferring to a four-year college or university to pursue a bachelor's degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate's degree in this major may be different from the requirements needed for the Bachelor's degree.

Degree Requirements

Course Code	Course Title	Units
AGB 310	Agriculture Computer Applications	3[1]
AGB 320	Agriculture Accounting	3
AGB 321	Agriculture Economics	3
AMT 306	Small Engine Repair	3
HORT 300	Introduction to Horticulture	3
PLTS 310	Soils, Soil Management, and Plant Nutrition (3)	3
or HORT 302	Soils, Soil Management, and Plant Nutrition (3)	
ANSC 300	Introduction to Animal Science	3
PLTS 300	Introduction to Plant Science	3
WELD 100	Introduction to Welding & Safety	1.5
A minimum of 2 units from the following:		2
WEXP 498	Work Experience in (Subject) (0.5 - 4)	
Subtotal Units:		**27.5**

Agriculture Business

Course Code	Course Title	Units
AGB 300	Introduction to Agriculture Business	3
AGB 330	Agriculture Sales and Communication	3
AGB 331	Agriculture Marketing	3
Agriculture Business Units:		9
Total Units:		**36.5**

Horticulture

Course Code	Course Title	Units
HORT 305	Plant Identification-Fall Selections	3
HORT 312	Plant Propagation	3
Horticulture Units:		6
Total Units:		**33.5**

Landscape

Course Code	Course Title	Units
HORT 320	Sustainable Landscape Construction	3
HORT 324	Sustainable Landscape Maintenance	3
Landscape Units:		6
Total Units:		**33.5**

Welding

Course Code	Course Title	Units
WELD 110	Shielded Metal Arc Welding Procedures	4
Welding Units:		4
Total Units:		**31.5**

[1]This major requires that you complete all courses in the required program plus one area of concentration.

The General Agriculture Associate in Science (A.S.) degree may be obtained by completion of the required program, plus the local CRC General Education Requirement, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

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

- PSLO 1: Demonstrate knowledge and hands-on experience in the basic concepts of all aspects of agriculture.
- PSLO 2: Demonstrate the ability to logically breakdown aspects of a project/problem and be able to resolve an issue in the agriculture industry.
- PSLO 3: Demonstrate independent & group learning expressing effective communication skills, both orally & written.
- PSLO 4: Participate in leadership opportunities to develop life-long learning traits.

Career Information

Management; Supervision; Finance; Insurance; Government; Marketing; Distribution; International Trade; Sales and Service Nursery Management and Operations; Park Maintenance; Landscape Design, Teaching, Communication; Contracting & Maintenance; Fertilizer & Insecticide Application; Research; Retail/Wholesale; Estimator; Consultant; Government Agency employee; Welding Technician; Inspection; Welding Engineering; Sculpting; Home/Handicraft & Hobby; Construction; Trucking & Automotive Some positions, however, require a four-year degree for which CRC's program is a good base for transfer.

Certificates of Achievement

Mechanized Agriculture Technician Certificate

The Mechanized Agriculture curriculum at Cosumnes River College is designed to meet the need for trained personnel in a broad range of occupational opportunities involved with or related to the Mechanized Agriculture Field.

Certificate Requirements

Course Code	Course Title	Units
CONST 103	OSHA 10 Hour Safety Training	1
AMT 303	Automotive Electrical & Electronic Systems	4
AMT 306	Small Engine Repair	3
WELD 100	Introduction to Welding & Safety	1.5
WELD 129	Gas Tungsten Arc Welding of Stainless Steel (3)	3 - 4
or WELD 113	Flux Core Arc Welding Process (4)	
WEXP 498	Work Experience in (Subject)	0.5 -4
MAT 300	Introduction to Agriculture Mechanics	3
MAT 301	Hydraulic and Pneumatic Power Systems	3
Total Units:		**19 - 23.5**

Student Learning Outcomes

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

- PSLO 1 Demonstrate the correct tools/supplies required to diagnose/repair a malfunction.
- PSLO 2 Evaluate if the path of repair was correct by testing and/or completing a work order/report.
- PSLO 3 Explain the basic theory of the subject matter or system for the course of instruction based on industry standards.
- PSLO 4 Demonstrate basic shop safety practices.

Regenerative Foodways Certificate

The Regenerative Foodways Certificate brings the intersection of food, health, and environment into the classroom. The courses provide hands-on learning in the current fields of sustainable nutrition and regenerative agriculture. Students will explore the benefits of plant-focused eating patterns for both individuals and the planet, learn how to create nourishing meals centered around plants, and discover farming methods that promote fairness and sustainability in food production.

Contact the CRC Nutrition and Foods and/or Horticulture, and/or Ag Counselor regarding transferable courses.

Certificate Requirements

Course Code	Course Title	Units
NUTRI 303	Plant-Based Nutrition	3
NUTRI 331	Plant-Based Food Principles and Preparation	3
HORT 313	Sustainable Agriculture	3
Total Units:		**9**

Student Learning Outcomes

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

- PSLO 1: Demonstrate independent learning and effective communication skills.
- Demonstrate responsibility for personal action and choices.
- Communicate effectively both orally and in writing.
- PSLO 2: Explain the principles of nutrition and its effect on health.
- Relate the dietary causes of chronic diseases.
- Evaluate the role of plant-based foods on health and the environment.
- PSLO 3: Demonstrate a fundamental understanding of health behaviors on nutritional and health status.
- Schematize the effects of personal food choice on health, the environment and public policy.
- PSLO 4: Basic and advanced plant science/horticulture skills development and improvement.
- Demonstrate and apply the theories of sustainable and organic agriculture.
- Demonstrate a fundamental understanding of soils, soil development, soil building and preparation and sustainable soil management.
- Demonstrate a fundamental understanding of hydraulics and irrigation design, installation, and water management principles and practices.
- Create agriculture design concepts based on sound, sustainable soil management, water conservation, construction and maintenance, and integrated pest management best practices.
- PSLO 5: Effectively and accurately prepare and analyze raw ingredients and prepared foods.
- Evaluate food through sensory evaluation of texture, taste, color, presentation, smell and umami.
- Identify optimal cooking procedures/heat transfer to maximize nutrient content as well as the quality of the ingredients and dish as a whole.
- Analyze quality defects in cooked products and specify possible errors in techniques or ingredient selection.
- PSLO 6: Implement proper sanitary and safety techniques.
- Demonstrate appropriate food handling and sanitary techniques.
- Utilize kitchen tools/equipment appropriately.

Career Information

In restaurants, food service facilities, farms, urban farms, sustainable/organic farms, school garden, health education. Some of these career options may require more than the certificate and two years of college study. Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.

Certificate

General Agriculture Certificate

This program is designed to prepare students for entry level employment in Agriculture.

Certificate Requirements

Course Code	Course Title	Units
AGB 300	Introduction to Agriculture Business	3
AGB 310	Agriculture Computer Applications	3
PLTS 310	Soils, Soil Management, and Plant Nutrition (3)	3
or HORT 302	Soils, Soil Management, and Plant Nutrition (3)	
ANSC 300	Introduction to Animal Science	3
PLTS 300	Introduction to Plant Science	3
Total Units:		**15**

Mechanized Agriculture Technology (MAT) Courses

MAT 299 Experimental Offering in Mechanized Agriculture Technology

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

MAT 300 Introduction to Agriculture Mechanics

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Transferable: CSU

This course provides an introduction to basic technical skills required throughout the agricultural and industrial areas. The course includes identification and use of tools and materials, tool sharpening and care, hot and cold metal work, plumbing and pipefitting, electric wiring fundamentals, basic carpentry and woodwork, concrete materials, mixes and estimating.

MAT 301 Hydraulic and Pneumatic Power Systems

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Transferable: CSU

This is an introduction to the principles of hydraulics applied to farm and light industrial equipment. The course includes a study of the technical language of fluid power, including graphical symbols, industrial standards, components, and maintenance of hydraulic units.

MAT 499 Experimental Offering in Mechanized Agriculture Technology

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

Agriculture Business

Agriculture is a vital component of our local, state, and national economies and offers many exciting employment opportunities. In addition to the production of a wide range of valuable agricultural commodities, the Sacramento region is home to numerous multi-national agricultural corporations and statewide governmental agencies. It is also a center for international agricultural trade and commerce.

Degrees and Certificates Offered

A.S.-T. in Agriculture Business

A.S. in Agriculture Business

Agriculture Business Certificate

Dean Kris Hubbard

Department Chair Dave Andrews

Phone (916) 691-7614

Email hubbark@crc.losrios.edu

Associate Degrees for Transfer

A.S.-T. in Agriculture Business

The Associate in Agriculture Business for Transfer degree provides students with a major that fulfills the general requirements of the California State University for transfer to baccalaureate degree programs in Agriculture Business. Students with this degree will receive priority admission with junior status to the California State University system. The Associate in Science in Agriculture Business for Transfer is comprised of lower division coursework typically required by CSU institutions. Students must complete the following Associate Degree for Transfer requirements (Pursuant to SB1440, §66746):
• 60 semester or 90 quarter CSU-transferable units
• the California General Education Transfer Curriculum (Cal-GETC) pattern
• a minimum of 18 semester or 27 quarter units in the major or area of emphasis as determined by the community college district
• obtain a minimum grade point average (GPA) of 2.0
• earn a grade of C or better (or a P if taken Pass/No Pass) in all courses required for the major or area of emphasis

Upon successful completion of the Associate in Science in Agriculture Business for Transfer degree requirements, students will be guaranteed admission to the CSU system with junior status and will not have to repeat lower division coursework.

Degree Requirements

Course Code	Course Title	Units
AGB 321	Agriculture Economics	3
PLTS 310	Soils, Soil Management, and Plant Nutrition (3)	3 - 5
or HORT 302	Soils, Soil Management, and Plant Nutrition (3)	
or CHEM 300	Beginning Chemistry (4)	
or CHEM 305	Introduction to Chemistry (5)	
or CHEM 400	General Chemistry I (5)	
STAT C1000E	Introduction to Statistics (4)	4
or STAT C1000H	Introduction to Statistics - Honors (4)	
ECON 302	Principles of Macroeconomics	3
A minimum of 9 units from the following:		9
AGB 320	Agriculture Accounting (3)	
AGB 330	Agriculture Sales and Communication (3)	
AGB 310	Agriculture Computer Applications (3)	
Total Units:		**22 - 24**

The Associate in Science in Agriculture Business 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 California General Education Transfer Curriculum (Cal-GETC) Requirement.

Enrollment Eligibility

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

- Meet requirements for entering community college.
- Have access to the Internet.
- Have self-discipline, motivation, and the ability to complete required assignments on schedule.

Enrollment Process

Eligible students are selected for the program according to the following steps:

- Admission to the college
- Contact Agriculture Business Counselor regarding the specific transferable requirements for the individual universities.

Student Learning Outcomes

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

- PSLO 1: Demonstrate the ability to think critically and analyze problems and recommend a solution.
- PSLO 2: Analyze, classify, examine, record, and interpret financial information to solve economic and accounting concerns.
- PSLO 3: Examine and apply the concepts and principles underlying economic issues.
- PSLO 4: Apply effective listening skills to comprehend spoken messages, analyze information critically and consider multiple perspectives.

- PSLO 5: Explain the principles of management and how managers differentiate their leadership styles.
- PSLO 6: Differentiate the various functions of marketing.
- PSLO 7: Design a model plan to allocate resources for an agribusiness organization.

Career Information

Agriculture Business Management; Supervision; Finance; Insurance; Government; Marketing; Distribution; International Trade; Sales and Service. NOTE TO TRANSFER STUDENTS: The Associate Degree for Transfer program is designed for students who plan to transfer to a campus of the California State University (CSU). Other than the required core, the courses you choose to complete this degree will depend to some extent on the selected CSU for transfer. In addition, some California General Education Transfer Curriculum (Cal-GETC) requirements can also be completed using courses required for this associate degree for transfer major (known as “double-counting”). Meeting with a counselor to determine the most appropriate course choices will facilitate efficient completion of your transfer requirements. For students wishing to transfer to other universities (UC System, private, or out-of-state), the Associate Degree for Transfer may not provide adequate preparation for upper-division transfer admissions, because many universities require more lower division courses than those in this degree. Even the CSU's that accept this transfer degree may likely require more lower division courses to achieve the Bachelor degree. Specifically, courses in general chemistry, differential equations, linear algebra, and computer programming may better prepare the transfer student for certain universities. It is critical that you meet with a CRC counselor to select and plan the courses for the major, as programs vary widely in terms of the required preparation.

Associate Degrees

A.S. in Agriculture Business

The program is designed to prepare students for transfer to a four-year college/university in agriculture business or immediate employment in an entry-level agriculture business related career.

HIGHLIGHTS
*As the only community college agriculture program in the Sacramento region, the CRC Agriculture Business program provides an excellent opportunity for individuals who wish to pursue a career in agriculture, receive an Agriculture Business Associate in Science degree, or transfer to CSU or UC.

*The faculty in this program works closely with the five California agricultural degree offering universities to provide a quality transfer program for students interested in agriculture business, management and economics.

*The Sacramento region is fortunate to have some of the best high school agriculture programs in California. The faculty in the CRC Ag Business program works closely with these feeder schools to articulate coursework and facilitate the successful transition of agriculture students from high school to the university.

*Internships in Ag Business are available for students interested in work experience opportunities.

Degree Requirements

Course Code	Course Title	Units
AGB 300	Introduction to Agriculture Business	3
AGB 310	Agriculture Computer Applications	3
AGB 320	Agriculture Accounting	3
AGB 321	Agriculture Economics	3
AGB 330	Agriculture Sales and Communication	3
PLTS 310	Soils, Soil Management, and Plant Nutrition (3)	3
or HORT 302	Soils, Soil Management, and Plant Nutrition (3)	
ANSC 300	Introduction to Animal Science	3
PLTS 300	Introduction to Plant Science	3
ACCT 301	Financial Accounting	4
BUS 340	Business Law	3
ECON 302	Principles of Macroeconomics	3
COMM C1000	Introduction to Public Speaking	3
Total Units:		**37**

The Agriculture Business Associate in Science (A.S.) degree may be obtained by completion of 60 transferable, semester units with a minimum overall grade point average (GPA) of 2.0, including (a) a minimum grade of "C" (or "P") for each course in the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

Student Learning Outcomes

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

- PSLO 1:Demonstrate a fundamental understanding of agriculture business principles.
- PSLO 2:Prepare students for transfer to higher learning institutions.
- PSLO 3:Develop effective oral and written communication skills.
- PSLO 4:Demonstrate the ability to think critically and analyze problems.
- PSLO 5:Demonstrate independent learning and effective communication skills.

Career Information

Agriculture Business Management; Supervision; Finance; Insurance; Government; Marketing; Distribution; International Trade; Sales and Service. Some positions require a four-year degree for which CRC's program is a good base for transfer.

Certificate of Achievement

Agriculture Business Certificate

This program is designed to prepare students for entry level employment in agriculture business.

Certificate Requirements

Course Code	Course Title	Units
AGB 300	Introduction to Agriculture Business	3
AGB 310	Agriculture Computer Applications	3
AGB 320	Agriculture Accounting	3
AGB 321	Agriculture Economics	3
AGB 330	Agriculture Sales and Communication	3
PLTS 310	Soils, Soil Management, and Plant Nutrition (3)	3
or HORT 302	Soils, Soil Management, and Plant Nutrition (3)	
ANSC 300	Introduction to Animal Science	3
PLTS 300	Introduction to Plant Science	3
ACCT 301	Financial Accounting	4
BUS 340	Business Law	3
ECON 302	Principles of Macroeconomics	3
COMM C1000	Introduction to Public Speaking	3
Total Units:		**37**

Student Learning Outcomes

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

- PSLO #1 Demonstrate the ability to think critically and analyze problems and recommend a solution.
- PSLO #2 Analyze, classify, examine, record, and interpret financial information to solve economic and accounting concerns.
- Examine and apply the concepts and principles underlying economic issues.
- PSLO #3 Apply effective listening skills to comprehend spoken messages, analyze information critically and consider multiple perspectives.
- PSLO #4 Explain the principles of management and how managers differentiate their leadership styles.

Agriculture Business (AGB) Courses

AGB 300 Introduction to Agriculture Business

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
C-ID: C-ID AG - AB 104

This course provides a survey to the business and economics of the agriculture industry; and, an introduction to the economic aspects of agriculture including the agricultural producer, consumer and food system. The management principles encountered in the day-to-day operation of an agricultural enterprise are stressed as they relate to the decision making process.

AGB 310 Agriculture Computer Applications

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Transferable: CSU; UC
C-ID: C-ID AG - AB 108L

This course introduces computer use in the workplace with emphasis on agribusiness situations. Computer applications including word processing, spreadsheets, databases, and presentation managers will be covered. Also included will be accessing information through the Internet and World Wide Web, telecommunications, an introduction to web page design and other software appropriate to agribusiness.

AGB 320 Agriculture Accounting

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU
C-ID: C-ID AG - AB 128

This course introduces the principles of agriculture accounting systems and types of records, their use and how to compute and use measures of earnings and cost of production to improve agribusiness efficiency. Also included are farm income tax, Social Security, and employee payroll records.

AGB 321 Agriculture Economics

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L4
C-ID: C-ID AG - AB 124

This course introduces the analysis of economic principles of resource allocation, production, cost analysis, and market price equilibrium with primary application to the agricultural sector; supply and demand in commodity pricing under perfect and imperfect competition; and agricultural credit, marketing and policy issues.

AGB 330 Agriculture Sales and Communication

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: COMM C1000
Transferable: CSU
C-ID: C-ID AG - AB 112

This course involves the study of principles and practices of the selling process: selling strategies and approaches, why and how people buy, prospecting, territory management, and customer service. Self-management, communication, and interpersonal skills necessary in developing managerial abilities, leadership qualities, and facilitating teamwork within the agribusiness sector will be explored. Students will gain experience through role-play, formal sales presentations, and job shadowing. The course content is organized to give students an in-depth understanding of the factors and influences that affect the agribusiness industry on a day-to-day

basis. Communication, leadership, and management skills are basic tools necessary for future career development within the agribusiness sector, as well as other aspects of life.

AGB 331 Agriculture Marketing

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU

This course is a survey of marketing aspects of the agriculture industry. Students will acquire an overview of the structure and institutional aspects of the marketing system including global agricultural markets. Student projects will include industry studies of the marketing of selected locally grown commodities.

AGB 495 Independent Studies in Agriculture Business

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

AGB 498 Work Experience in Agriculture Business

Units: 0.5 - 4
Hours: 27 - 216 hours LAB
Prerequisite: None.
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position or job related to career goals in Agriculture Business.
Transferable: CSU

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in transfer level degree occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and complete 27 hours of related work experience for 0.5 unit. An additional 27 hours of related work experience is required for each additional 0.5 units. 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.

AGB 499 Experimental Offering in Agriculture Business

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU

This is the experimental courses description.

Allied Health

This program offers core courses designed for students enrolled in the Health Information Technology, Medical Assisting, Pharmacy Technician, and other Allied Health programs.

Degrees Offered

A.S. in Pre-Health Occupations

Dean Kris Hubbard
Department Chair Cori Burns
Phone (916) 691-7390
Email hubbark@crc.losrios.edu

Associate Degree

A.S. in Pre-Health Occupations

This degree prepares students interested in a variety of Allied Health occupations. The degree will prepare students with a rigorous course of study prior to selecting the program of their chosen career. Students will complete coursework with an emphasis on basic science, healthcare delivery and culturally competent patient care. Students completing the degree will be prepared to enter programs for careers in Diagnostic Medical Sonography, Medical Assisting, Health Information Technology, Nursing and others. Students may also choose to complete this degree in preparation for transfer to a Health Sciences Baccalaureate degree program. Completion of the degree does not guarantee enrollment in any health occupation program.

Degree Requirements

Course Code	Course Title	Units
AH 108	Introduction to Health Occupations	2
AH 311	Medical Language for Health-Care Providers	3
AH 120	Human Disease	3
ANTH 313	Introduction to Cultural Anthropology: Medical Focus (3)	3
or COMM 325	Intercultural Communication (3)	
[BIOL 430	Anatomy and Physiology (5)	3 - 10
and BIOL 431]	Anatomy and Physiology (5)	
or [BIOL 100	Introduction to Concepts of Human Anatomy and Physiology (3)	
or BIOL 102]	Essentials of Human Anatomy and Physiology (4)	
COMM C1000	Introduction to Public Speaking (3)	3
or COMM 321	Interpersonal Communication (3)	
or COMM 331	Group Discussion (3)	
ENGWR 341	Introduction to Technical and Professional Writing	3
FCS 324	Human Development: A Life Span (3)	3
or PSYC 371	Life Span Developmental Psychology (3)	
NUTRI 300	Nutrition	3
PHYS 310	Conceptual Physics	3
AH 498	Work Experience in Allied Health	0.5 -4
Total Units:		**29.5 - 40**

The Pre-Health Occupations Associate in Science (A.S.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Student Learning Outcomes

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

- ARTICULATE CAREER OPTIONS AND NECESSARY EDUCATIONAL PATHWAYS (PSLO #1)
- DESCRIBE THE STRUCTURE AND FUNCTION OF EACH BODY SYSTEM (PSLO #2)
- DEMONSTRATE A WORKABLE KNOWLEDGE OF MEDICAL LANGUAGE (PSLO #3)
- DEMONSTRATE PROFESSIONALISM IN A RANGE OF CLINICAL INTERACTIONS AND SETTINGS (PSLO #4)
- DESCRIBE THE PRINCIPLES OF NUTRITION AND THEIR EFFECT ON HEALTH (PSLO #5)
- DESCRIBE THE ROLE THAT CULTURE AND DIVERSITY PLAY IN PATIENT CARE (PSLO #6)

Allied Health (AH) Courses

AH 108 Introduction to Health Occupations

Units: 2
Hours: 36 hours LEC
Prerequisite: None.

This course provides an introduction to the health care field and to the core foundational skills needed by all health care workers. Topics include types of health care delivery systems and careers, history and trends of health care, law and ethics pertaining to health care, personal qualities of health care workers, confidentiality and reportable incidents, and infection control and safety procedures for health care settings. Students will be introduced to research tools in the campus library and on the Internet. Students will use these tools to research health care careers and relate them to their own interests, values, and abilities. This course is open to all students wishing to explore the health care industry. A field trip to a local health care facility may be required.

AH 120 Human Disease

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Corequisite: AH 311 (formerly AH 110) and BIOL 102 (Corequisites may be taken previously. BIOL 100 or 430/431 are also acceptable in lieu of BIOL 102)

This course is a study of pathological processes imparting basic knowledge to paramedical personnel. The student will study the basic concepts, terminology, etiology and characteristics of pathological processes. Diseases are classified according to both causative agent and the body system to which they relate.

AH 124 Pharmacology for the Health Care Professional

Units: 2
Hours: 36 hours LEC
Prerequisite: None.

This course introduces pharmacology, the knowledge of basic pharmacological terminology and concepts, administration, common generic and trade name medications, with an emphasis on the clinical application of pharmacology of the treatment of disease.

AH 295 Independent Studies in Allied Health

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

AH 299 Experimental Offering in Allied Health

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

AH 311 Medical Language for Health-Care Providers

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU

This course is an orientation to medical language: basic structure of medical terms and their components: prefixes, suffixes, roots, and combining forms with emphasis on analyzation, meaning, spelling, and pronunciation. The course 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. This course was formerly known as AH 110.

AH 498 Work Experience in Allied Health

Units: 0.5 - 4
Hours: 27 - 216 hours LAB
Prerequisite: None.
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position or job related to career goals in Allied Health.
Transferable: CSU

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in transfer level degree occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and complete 27 hours of related work experience for 0.5 unit. An additional 27 hours of related work experience is required for each additional 0.5 units. 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.

Animal Science

This program offers courses designed for students in the Agriculture Business, Veterinary Technology, and Equine Science programs.

Degrees Offered

A.S. in Equine Science

Dean Kris Hubbard
Department Chair Dave Andrews
Phone (916) 691-7614
Email hubbark@crc.losrios.edu

Associate Degree

A.S. in Equine Science

Equine Science is the study of the principles behind the biology, function, and management of the horse. This program prepares students to develop the skills and knowledge that will help them gain a strong and competitive position in the equine industry.

Degree Requirements

Course Code	Course Title	Units
ANSC 300	Introduction to Animal Science	3
ANSC 301	Introduction to Equine Science	3
ANSC 302	Equine Reproduction	2
ANSC 303	Equine Business Management	3
ANSC 304	Livestock Feeding and Nutrition	3
ANSC 305	Equine Health	3
ANSC 306	Basic Equine Handling	1
ANSC 307	Farrier Science	3
AGB 310	Agriculture Computer Applications	3
AGB 320	Agriculture Accounting (3)	3
AGB 330	Agriculture Sales and Communication (3)	3
or AGB 331	Agriculture Marketing (3)	
ANSC 498	Work Experience in Animal Science	0.5 -4
Total Units:		**30.5 - 34**

The Equine Science Associate in Science (A.S.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Student Learning Outcomes

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

- Describe the processes involved and outline major events in the evolution and domestication of the horse.
- Formulate a disease and parasite prevention program for equine.
- Describe career opportunities and requirements for successful employment in the equine industry.
- Relate basic genetic principles to techniques in breeding selection and mating programs.
- Identify anatomy and describe physiology of the male and female equine reproductive tract.
- List and explain the correct use of specialized insemination tools.
- Develop and maintain bookkeeping and record systems.
- Develop a ranch plan for an equine facility, incorporating legal requirements and regulations.
- Identify parts of the equine gastrointestinal system and describe the function of each.
- Implement a sound feeding program based on the type and amount of work performed.
- Assess the function and importance of each nutrient as it pertains to equine nutrition.
- Demonstrate basic handling of the horse including catching, haltering, leading and tying.

Career Information

Many Equine Science graduates aim for a future in horse farm management at breeding facilities, lesson barns, and race and show training stables. Students may also qualify for employment as technologists, consultants, show and race facility managers and staff, high school and community or junior college riding and equine science instructors, government agents, journalists, and sales or service representatives for companies promoting horse feed, health, and care products. Other career opportunities are available through breed associations, humane organizations, agriculture extension services, recreational services, horse publications, and more. Many of these options require more than two years of college study. Classes beyond the associate degree may be required for career options or to fully prepare students for transfer to a university program.

Animal Science (ANSC) Courses

ANSC 300 Introduction to Animal Science

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L5
C-ID: C-ID AG - AS 104

This course provides a survey of the livestock industry, including the supply of animal products and their uses. A special emphasis is placed on the origin, characteristics, adaptation and contributions of farm animals to the agriculture industry. Students analyze the economic trends and career opportunities in animal agriculture.

ANSC 301 Introduction to Equine Science

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L5

A survey of the equine industry including equine evolution, selection, nutrition and feeding, breeding, facilities, handling and health management. Emphasis on sound management practices. This course may include field trips and the instructor may or may not provide transportation.

ANSC 302 Equine Reproduction

Units: 2
Hours: 32 hours LEC; 12 hours LAB
Prerequisite: None.
Transferable: CSU

This course combines the study of basic genetic principles with the study of the anatomical and physiological aspects of reproduction as they relate to equine reproduction, emphasizing genetic principles and reproductive aspects. Artificial insemination, embryo manipulation, and current innovations in productive biotechnology will also be examined. This course may include field trips and off-site laboratories and the instructor may or may not provide transportation.

ANSC 303 Equine Business Management

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU

Fundamentals of equine business operations, including taxes, liability, insurance, software, and facility design. The class will emphasize the skills necessary to manage a ranch, barn, stable, boarding, breeding, or training facility. This course may include field trips and the instructor may or may not provide transportation.

ANSC 304 Livestock Feeding and Nutrition

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Transferable: CSU
C-ID: C-ID AG - AS 132L

The fundamentals of digestion and absorption in both ruminants and non-ruminants are discussed. The nutritive value of feeds as they relate to the formulation of livestock rations will be emphasized including by-product feeding. Includes proper selection, evaluation, and utilization of feeds. This course may include field trips and off-site laboratories and the instructor may or may not provide transportation.

ANSC 305 Equine Health

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC

This course introduces the major organ systems of the horse. Emphasis is on preventive maintenance and necessary managerial practices needed to keep the equine athlete, broodmare or family horse in good health.

ANSC 306 Basic Equine Handling

Units: 1
Hours: 54 hours LAB
Prerequisite: None.
Transferable: CSU; UC

This course offers an introduction to the fundamentals of horse handling, with an emphasis on safety. Course covers identification of equine behavioral patterns, handling skills such as catching, haltering, tying, lunging and round-pen training, and recognizing how human/horse interactions affect equine behavior.

ANSC 307 Farrier Science

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU

This course covers horseshoeing principles and practices, including basic anatomy and physiology of the horse’s limbs and feet, horseshoeing terminology, and guidelines for assessing a proper horseshoeing job. This course focuses on causes, treatment and prevention of common lameness problems.

ANSC 495 Independent Study in Animal Science

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

ANSC 498 Work Experience in Animal Science

Units: 0.5 - 4
Hours: 27 - 216 hours LAB
Prerequisite: None.
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position or job related to career goals in Animal Science.
Transferable: CSU

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in transfer level degree occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the

employer. During the semester, the student is required to participate in a weekly orientation and complete 27 hours of related work experience for 0.5 unit. An additional 27 hours of related work experience is required for each additional 0.5 units. 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.

ANSC 499 Experimental Offering in Animal Science

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU

This is the experimental courses description.

Anthropology

Anthropology is the study of humans. Anthropologists study our species throughout time; focusing on our diverse modern culture and cultural adaptations, our biological classification as a species and our inclusion in the Order Primates, and our species past developments, including our first steps to our first civilizations. The goal of Anthropology is to study the similarities and differences in biological and cultural adaptations and features across the globe throughout our human history.

Degrees Offered

A.A.-T. in Anthropology

A.S. in Anthropology

A.S. in General Science

Dean Emilie Mitchell

Department Chair Amanda Paskey

Phone (916) 691-7656

Email mitchee@crc.losrios.edu

Associate Degrees for Transfer

A.A.-T. in Anthropology

The Associate in Arts in Anthropology for Transfer Degree (AA-T) is designed to meet common lower-division requirements for a major in Anthropology at California State University (CSU) campuses by completion of 60 transferable semester units with a minimum 2.0 GPA, to include the California General Education Transfer Curriculum (Cal-GETC); students must earn a grade of C or better (or "P" is taken Pass/No Pass) in all the courses for the major as described in the Required Program.

Anthropology is the study of humans. Anthropologists study our species throughout time; focusing on our diverse modern culture and cultural adaptations, our biological classification as a species and our inclusion in the Order Primates, and our species' past developments, including our first steps to our first civilizations. The goal of Anthropology is to study the similarities and differences in biological and cultural adaptations and features across the globe throughout our human history.

Anthropology is a holistic discipline, which means that anthropologists study all aspects of humans and our behavior. The field of Anthropology has been broken up into four main sub-fields: Cultural Anthropology, Biological Anthropology, Archaeology and Linguistics. Cultural Anthropology is concerned with the study of human culture and its variations across time and space. Biological Anthropologists aim to study our species from a biological perspective- examining our DNA, relationship to our closest animal relatives, the primates and the fossil evidence of our earliest human ancestors. Archaeology is the study of our past, focused specifically on reconstructing past behavior by looking at objects used by past people. Linguistic Anthropologists study human language and communication.

This degree offers courses that satisfy lower division General Education requirements in both the biological and social sciences, providing students with a solid foundation in anthropology as well as the standard prerequisites for upper division coursework leading to the baccalaureate degree. Students planning to transfer to a four-year school with a major in Anthropology should consult the lower division requirements at the university they plan to attend.

Degree Requirements

Course Code	Course Title	Units
Core:		
ANTH 300	Biological Anthropology	3
ANTH 301	Biological Anthropology Laboratory	1
ANTH 310	Cultural Anthropology (3)	3
or ANTH 313	Introduction to Cultural Anthropology: Medical Focus (3)	
ANTH 323	Introduction to Archaeology	3
STAT C1000E	Introduction to Statistics (4)	3 - 4
or PSYC 330	Introductory Statistics for the Behavioral Sciences (3)	
Anthropology Electives:		
A minimum of 3 units from the following:		3
ANTH 303	Introduction to Forensic Anthropology (3)	
ANTH 316	Global Forces in Culture Change (3)	
ANTH 324	World Prehistory (3)	
ANTH 331	The Anthropology of Religion (3)	
ANTH 332	Native Peoples of California (3)	
ANTH 334	Native Peoples of North America (3)	
ANTH 341	Introduction to Linguistics (3)	
ANTH 374	Birth to Death: The Anthropology of Primate Culture and Behavior (3)	
ANTH 336	Anthropology of Sex, Sexuality and Gender (3)	
Science Electives:		
[[[GEOL 300	Physical Geology (3)	3 - 4
and GEOL 301]	Physical Geology Laboratory (1)	
or [GEOL 305	Earth Science (3)	
and GEOL 306]]	Earth Science Laboratory (1)	
or GEOG 335]	Introduction to Geographic Information Systems Applications (3)	
or PSYC 335	Research Methods in Psychology (3)	
Total Units:		**19 - 21**

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) the California General Education Transfer Curriculum (Cal-GETC) Requirement.

Student Learning Outcomes

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

- DEMONSTRATE UNDERSTANDING OF THE PROCESSES OF SCIENCE, THE SCIENTIFIC METHOD, AND THE RELATIONSHIP BETWEEN SCIENTIFIC RESEARCH AND ESTABLISHED KNOWLEDGE. (PSLO 1)
- Recognize the way in which research leads to generally accepted conclusions and the integration of new research data with the building of a body of scientific knowledge.
- Recognize that the information presented in science textbooks and other established "authorities" is the result of research conducted in the field or the lab and is based on an accumulation of data.
- Design a scientific inquiry.
- CLEARLY EXPRESS SELF WHEN WRITING OR SPEAKING ABOUT ANTHROPOLOGY DEMONSTRATING KNOWLEDGE OF BASIC ANTHROPOLOGICAL TERMINOLOGY AND UNDERSTANDING MAJOR ANTHROPOLOGICAL CONCEPTS. (PSLO 2)
- Produce laboratory exercises or field projects which address background information, procedures, results and analysis of data developed during the event of activity.
- Write essays explaining anthropological processes in clear and concise terms
- DEMONSTRATE BOTH CONTENT KNOWLEDGE AND TEST TAKING SKILLS WHEN COMPLETING ESSAY, OBJECTIVE AND MULTIPLE CHOICE EXAMS. (PSLO 3)
- Demonstrate problem solving abilities in major content areas of Anthropology including evolution, genetics, culture, archaeology and human evolution.
- Analyze the logic of multiple choice questions and choose the correct response from among related items.
- Write clear responses to essay question prompts without including extraneous information or omitting information necessary to provide a clear answer.
- Demonstrate content knowledge in the broad areas of anthropology including evolution, culture, genetics, archaeology and human evolution.
- UTILIZE APPROPRIATE FIELDWORK TECHNIQUES FOR ANTHROPOLOGY. (PSLO 4)
- Conduct participation observation studies.
- Take appropriate field notes while conducting participant observation studies.
- Gather data in an appropriate, non-judgmental manner.
- Perform skeletal measurements.
- Identify major bones and features of both human and non-human primates.
- Design an anthropological experiment.
- Use diagrams, sketches and maps appropriately in field write-ups.
- EVALUATE ANTHROPOLOGICAL DATA, DRAW REASONABLE CONCLUSIONS, RECOGNIZE ETHICAL IMPLICATIONS OF THESE CONCLUSIONS AND APPLY THESE CONCLUSIONS TO PERSONAL, COMMUNITY AND SCIENTIFIC PROBLEMS. (PSLO 5)
- Choose appropriate data to collect in order to address a specific hypothesis.
- Collect data and keep organized records.
- Use basic graphical and statistical analysis of data.
- Reach and express logical conclusions drawn on anthropological data.
- Present data in the form of posters, presentations, and/or written reports how anthropological information is relevant to personal and community issues.
- Recognize the ethical implications of research on human subjects.
- EMPLOY INFORMATION GATHERING TOOLS TO INVESTIGATE ANTHROPOLOGICAL IDEAS. (PSLO 6)
- Use the Internet in order to gather scientific information, including the ability to recognize the relevance and scientific validity (or lack thereof) of information when found.
- Use the library in order to gather scientific information, including the ability to recognize the relevance and scientific validity (or lack thereof) of information when found

Career Information

Anthropologists with baccalaureate or graduate degrees work as archaeological technicians or project directors for private, state or federal organizations, museum management, forensic specialists in police departments and crime labs, primatology and zoo curation, teaching, consultant or analyst for private, government or educational institutions, non-profit organizations, information technologies, tourism, public health services, and social work. NOTE TO TRANSFER STUDENTS: The Associate Degree for Transfer program is designed for students who plan to transfer to a campus of the California State University (CSU). Other than the required core, the courses you choose to complete this degree will depend to some extent on the selected CSU for transfer. In addition, some California General Education Transfer Curriculum (Cal-GETC) requirements can also be completed using courses required for this associate degree for transfer major (known as “double-counting”). Meeting with a counselor to determine the most appropriate course choices will facilitate efficient completion of your transfer requirements. For students wishing to transfer to other universities (UC System, private, or out-of-state), the Associate Degree for Transfer may not provide adequate preparation for upper-division transfer admissions, because many universities require more lower division courses than those in this degree. Even the CSU's that accept this transfer degree may likely require more lower division courses to achieve the Bachelor degree. It is critical that you meet with a CRC counselor to select and plan the courses for the major, as programs vary widely in terms of the required preparation.

Associate Degrees

A.S. in Anthropology

Anthropology is the study of humans. Anthropologists study our species throughout time; focusing on our diverse modern culture and cultural adaptations, our biological classification as a species and our inclusion in the Order Primates, and our species past developments, including our first steps to our first

civilizations. The goal of Anthropology is to study the similarities and differences in biological and cultural adaptations and features across the globe throughout our human history.

Anthropology is a holistic discipline, which means that anthropologists study all aspects of humans and our behavior. The field of Anthropology has been broken up into four main sub-fields: Cultural Anthropology, Physical Anthropology, Archaeology and Linguistics. Cultural Anthropology is concerned with the study of human culture and its variations across time and space. Physical Anthropologists aim to study our species from a biological perspective- examining our DNA, relationship to our closest animal relatives, the primates and the fossil evidence of our earliest human ancestors. Archaeology is the study of our past, focused specifically on reconstructing past behavior by looking at objects used by past people. Linguistic Anthropologists study human language and communication.

The CRC Anthropology program offers courses that satisfy lower division General Education requirements in both the physical and social sciences. In addition, the program offers an Associate Degree in Anthropology that provides students with a solid foundation in anthropology as well as the standard prerequisites for upper division coursework leading to the baccalaureate degree. Students planning to transfer to a four-year school with a major in Anthropology should consult the lower division requirements at the university they plan to attend.

Degree Requirements

Course Code	Course Title	Units
Fall, Spring or Summer Term:		
ANTH 300	Biological Anthropology	3
Fall, Spring or Summer Term:		
ANTH 301	Biological Anthropology Laboratory	1
Fall, Spring or Summer Term:		
ANTH 310	Cultural Anthropology (3)	3
or ANTH 313	Introduction to Cultural Anthropology: Medical Focus (3)	
Spring Semester:		
ANTH 323	Introduction to Archaeology	3
Check with department for schedule:		
PSYC 330	Introductory Statistics for the Behavioral Sciences (3)	3 - 4
or STAT C1000E	Introduction to Statistics (4)	
Check with department for schedule:		
A minimum of 6 units from the following:		6
ANTH 303	Introduction to Forensic Anthropology (3)	
ANTH 316	Global Forces in Culture Change (3)	
ANTH 324	World Prehistory (3)	
ANTH 331	The Anthropology of Religion (3)	
ANTH 332	Native Peoples of California (3)	
ANTH 334	Native Peoples of North America (3)	
ANTH 341	Introduction to Linguistics (3)	
ANTH 374	Birth to Death: The Anthropology of Primate Culture and Behavior (3)	
ANTH 495	Independent Studies in Anthropology (1 - 3)	
A minimum of 3 units from the following:		3
Any other Anthropology course listed above		
BIOL 350	Environmental Biology (3)	
BIOL 430	Anatomy and Physiology (5)	
COMM 325	Intercultural Communication (3)	
GEOG 310	Human Geography: Exploring Earth's Cultural Landscapes (3)	
GEOG 331	Exploring Maps and Geographic Technologies (3)	
GEOG 335	Introduction to Geographic Information Systems Applications (3)	
MUFHL 330	World Music (3)	
NUTRI 310	Cultural Foods of the World (3)	
PHIL 352	Introduction to World Religions (3)	
SOC 321	Race, Ethnicity and Inequality in the United States (3)	
Total Units:		**22 - 23**

The Anthropology Associate in Science (A.S.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Student Learning Outcomes

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

- DEMONSTRATE UNDERSTANDING OF THE PROCESSES OF SCIENCE, THE SCIENTIFIC METHOD, AND THE RELATIONSHIP BETWEEN SCIENTIFIC RESEARCH AND ESTABLISHED KNOWLEDGE. (PSLO 1)
- Recognize the way in which research leads to generally accepted conclusions and the integration of new research data with the building of a body of scientific knowledge.
- Recognize that the information presented in science textbooks and other established "authorities" is the result of research conducted in the field or the lab and is based on an accumulation of data.
- Design a scientific inquiry.
- CLEARLY EXPRESS SELF WHEN WRITING OR SPEAKING ABOUT ANTHROPOLOGY DEMONSTRATING KNOWLEDGE OF BASIC ANTHROPOLOGICAL TERMINOLOGY AND UNDERSTANDING MAJOR ANTHROPOLOGICAL CONCEPTS. (PSLO 2)
- Produce laboratory exercises or field projects which address background information, procedures, results and analysis of data developed during the event of activity.
- Write essays explaining anthropological processes in clear and concise terms.

- DEMONSTRATE BOTH CONTENT KNOWLEDGE AND TEST TAKING SKILLS WHEN COMPLETING ESSAY, OBJECTIVE AND MULTIPLE CHOICE EXAMS. (PSLO 3)
- Demonstrate problem solving abilities in major content areas of Anthropology including evolution, genetics, culture, archaeology and human evolution.
- Analyze the logic of multiple choice questions and choose the correct response from among related items.
- Write clear responses to essay question prompts without including extraneous information or omitting information necessary to provide a clear answer.
- Demonstrate content knowledge in the broad areas of anthropology including evolution, culture, genetics, archaeology and human evolution.
- UTILIZE APPROPRIATE FIELDWORK TECHNIQUES FOR ANTHROPOLOGY. (PSLO 4)
- Conduct participation observation studies.
- Take appropriate field notes while conducting participant observation studies.
- Gather data in an appropriate, non-judgmental manner.
- Perform skeletal measurements.
- Identify major bones and features of both human and non-human primates.
- Design an anthropological experiment.
- Use diagrams, sketches and maps appropriately in field write-ups.
- EVALUATE ANTHROPOLOGICAL DATA, DRAW REASONABLE CONCLUSIONS, RECOGNIZE ETHICAL IMPLICATIONS OF THESE CONCLUSIONS AND APPLY THESE CONCLUSIONS TO PERSONAL, COMMUNITY AND SCIENTIFIC PROBLEMS. (PSLO 5)
- Choose appropriate data to collect in order to address a specific hypothesis.
- Collect data and keep organized records.
- Use basic graphical and statistical analysis of data.
- Reach and express logical conclusions drawn on anthropological data.
- Present data in the form of posters, presentations, and/or written reports how anthropological information is relevant to personal and community issues.
- Recognize the ethical implications of research on human subjects.
- EMPLOY INFORMATION GATHERING TOOLS TO INVESTIGATE ANTHROPOLOGICAL IDEAS. (PSLO 6)
- Use the Internet in order to gather scientific information, including the ability to recognize the relevance and scientific validity (or lack thereof) of information when found.
- Use the library in order to gather scientific information, including the ability to recognize the relevance and scientific validity (or lack thereof) of information when found.
- STUDENTS WILL EMBRACE CULTURAL DIVERSITY. (PSLO 7)
- Apply the concept of cultural relativism to real world situations.
- Develop the perspective of "global citizen" to encourage respect for the world's people and environment.
- Recognize factors of human biological and cultural variation.
- Celebrate the varied trajectory of our species from prehistory and into the future.

Career Information

Anthropologists with baccalaureate or graduate degrees work as archaeological technicians or project directors for private, state or federal organizations, museum management, forensic specialists in police departments and crime labs, primatology and zoo curation, teaching, consultant or analyst for private, government or educational institutions, non-profit organizations, information technologies, tourism, public health services, and social work.

A.S. in General Science

Areas of Study include:

- Biological Anthropology
- Astronomy
- Biology
- Chemistry
- Engineering
- Physical Geography
- Geology
- Physics

Eighteen (18) units of transfer-level course work in science are required. Two laboratory courses must be included: one in the physical sciences and one in the biological sciences. Courses may be selected from astronomy, biology, chemistry, geology, physical geography, biological anthropology, and physics. The student, in consultation with a counselor, should choose science courses to meet their program, transfer, or general education requirements.

Students interested in transferring to a four-year university with a science major are encouraged to complete a science AS or AS-T degree such as Anthropology, Biology, Chemistry, Engineering, Geography, Geology, or Physics. This General Science degree may not include the majors-level transfer courses needed for many science majors. Students are strongly recommended to see a counselor for guidance.

Degree Requirements

Course Code	Course Title	Units
Life Science with Lab :		
A minimum of 4 units from the following:		4
ANTH 300	Biological Anthropology (3)	
and ANTH 301	Biological Anthropology Laboratory (1)	
ANTH 480	Honors Biological Anthropology (3)	
and ANTH 482	Honors Biological Anthropology Laboratory (1)	
BIOL 308	Contemporary Biology (3)	
and BIOL 309	Contemporary Biology Laboratory (1)	

Course Code	Course Title	Units
BIOL 400	Principles of Biology (5)	
BIOL 410	Principles of Botany (5)	
BIOL 420	Principles of Zoology (5)	
BIOL 430	Anatomy and Physiology (5)	
BIOL 431	Anatomy and Physiology (5)	
BIOL 440	General Microbiology (4)	
Physical Science with Lab:		
A minimum of 3 units from the following:		3
ASTR 300	Introduction to Astronomy (3)	
and ASTR 400	Astronomy Laboratory (1)	
CHEM 300	Beginning Chemistry (4)	
CHEM 305	Introduction to Chemistry (5)	
CHEM 306	Introduction to Organic and Biological Chemistry (5)	
CHEM 309	Integrated General, Organic, and Biological Chemistry (5)	
CHEM 400	General Chemistry I (5)	
CHEM 401	General Chemistry II (5)	
CHEM 420	Organic Chemistry I (5)	
CHEM 421	Organic Chemistry II (5)	
GEOG 300	Physical Geography: Exploring Earth's Environmental Systems (3)	
and GEOG 301	Physical Geography Laboratory (1)	
GEOL 300	Physical Geology (3)	
and GEOL 301	Physical Geology Laboratory (1)	
GEOL 305	Earth Science (3)	
and GEOL 306	Earth Science Laboratory (1)	
GEOL 310	Historical Geology (3)	
and GEOL 311	Historical Geology Laboratory (1)	
ENGR 304	How Things Work (3)	
PHYS 350	General Physics (4)	
PHYS 360	General Physics (4)	
PHYS 370	Introductory Physics - Mechanics and Thermodynamics (5)	
PHYS 380	Introductory Physics - Electricity and Magnetism, Light and Modern Physics (5)	
PHYS 411	Mechanics of Solids and Fluids (4)	
PHYS 421	Electricity and Magnetism (4)	
PHYS 431	Heat, Waves, Light and Modern Physics (4)	
Additional Science Courses :		
A minimum of 11 units from the following:		11[1]
ANTH 300	Biological Anthropology (3)	
ANTH 301	Biological Anthropology Laboratory (1)	
ANTH 480	Honors Biological Anthropology (3)	
ANTH 482	Honors Biological Anthropology Laboratory (1)	
ASTR 300	Introduction to Astronomy (3)	

Course Code	Course Title	Units
ASTR 400	Astronomy Laboratory (1)	
BIOL 308	Contemporary Biology (3)	
BIOL 309	Contemporary Biology Laboratory (1)	
BIOL 342	The New Plagues: New and Ancient Infectious Diseases Threatening World Health (3)	
BIOL 350	Environmental Biology (3)	
BIOL 352	Conservation Biology (3)	
BIOL 400	Principles of Biology (5)	
BIOL 410	Principles of Botany (5)	
BIOL 420	Principles of Zoology (5)	
BIOL 430	Anatomy and Physiology (5)	
BIOL 431	Anatomy and Physiology (5)	
BIOL 440	General Microbiology (4)	
CHEM 300	Beginning Chemistry (4)	
CHEM 305	Introduction to Chemistry (5)	
CHEM 306	Introduction to Organic and Biological Chemistry (5)	
CHEM 309	Integrated General, Organic, and Biological Chemistry (5)	
CHEM 400	General Chemistry I (5)	
CHEM 401	General Chemistry II (5)	
CHEM 420	Organic Chemistry I (5)	
CHEM 421	Organic Chemistry II (5)	
ENGR 304	How Things Work (3)	
GEOG 300	Physical Geography: Exploring Earth's Environmental Systems (3)	
GEOG 301	Physical Geography Laboratory (1)	
GEOG 305	Global Climate Change (3)	
GEOG 306	Weather and Climate (3)	
GEOL 300	Physical Geology (3)	
GEOL 301	Physical Geology Laboratory (1)	
GEOL 305	Earth Science (3)	
GEOL 306	Earth Science Laboratory (1)	
GEOL 310	Historical Geology (3)	
GEOL 311	Historical Geology Laboratory (1)	
GEOL 330	Introduction to Oceanography (3)	
GEOL 390	Field Studies in Geology (1 - 4)	
PHYS 310	Conceptual Physics (3)	
PHYS 350	General Physics (4)	
PHYS 360	General Physics (4)	
PHYS 370	Introductory Physics - Mechanics and Thermodynamics (5)	
PHYS 380	Introductory Physics - Electricity and Magnetism, Light and Modern Physics (5)	
PHYS 411	Mechanics of Solids and Fluids (4)	
PHYS 421	Electricity and Magnetism (4)	
PHYS 431	Heat, Waves, Light and Modern Physics (4)	
Total Units:		**18**

[1]Courses used in A or B above will not count towards C, except units exceeding the 4 or 3 unit minimum in A and B. For example, a student completing the 5 unit CHEM 309 under B could apply 2 of those units towards C. A total of 18 science units is required.

The General Science Associate in Science (A.S.) degree may be obtained by completion of the required program, plus the local CRC General Education Requirement, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

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

- explain the core perspectives of the scientific method and apply it to at least one scientific discipline. (PSLO 1)
- solve introductory problems of a conceptual and/or numerical nature of at least one scientific discipline. (PSLO 2)
- accurately apply the basic vocabulary and concepts of at least one scientific discipline verbally and in writing. (PSLO 3)
- recognize the use and misuse of scientific concepts in society including politics and the media. (PSLO 4)

Anthropology (ANTH) Courses

ANTH 300 Biological Anthropology

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligibility for ENGL C1000 (formerly known as ENGWR 300) or equivalent skills as demonstrated through the assessment process.
Transferable: CSU; UC
General Education: Local GE L5; Cal-GETC Area 5B
C-ID: C-ID ANTH 110

This course is an introduction to the science of biological anthropology, and analyzes the human place in nature. Applying principles of genetics and evolution, this course will explore modern human variation and how we evolved, including the unique role of culture. The course also covers the classification and distribution of living and extinct human populations, how we determine the geological age of our ancestors, and our relationship to non-human primates such as monkeys and apes. Topics covered in this course include: the scientific method, principles and mechanisms of genetics and heredity, geological dating methods, classification of humans and our near relatives, social organization and behavior of living primates, comparative skeletal anatomy of humans and non-human primates. Local field trips may be required.

ANTH 301 Biological Anthropology Laboratory

Units: 1
Hours: 54 hours LAB
Prerequisite: None.
Corequisite: ANTH 300
Transferable: CSU; UC
General Education: Cal-GETC Area 5C
C-ID: C-ID ANTH 115L

This course is an introductory laboratory course designed to provide students with an opportunity to become familiar with the methods of the science of biological anthropology while investigating topics in laboratory and field situations. Topics covered in the course are: the scientific method, sources of biological variation and forces of evolution, human osteology (bone identification), human variation, taxonomy and comparative osteology of the primates, comparative behavior, and the fossil evidence for human evolution. A field trip to the local zoo may be included. This course is designed as a companion course to Anthropology 300 - Biological Anthropology.

ANTH 303 Introduction to Forensic Anthropology

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ANTH 301 or BIOL 100 or BIOL 102, and eligibility for ENGL C1000 (formerly known as ENGWR 300) or equivalent skills as demonstrated by the assessment process
Transferable: CSU; UC
General Education: Local GE L5; Cal-GETC Area 5B

This course provides an overview of forensic anthropology, which is an applied field of biological anthropology. Forensic anthropologists answer questions of medicolegal significance by applying techniques designed for the analysis of human skeletal remains. This course will focus on the introductory techniques used for human skeletal identification and trauma analysis. This identification will provide understanding of the broader aspects of applied anthropology and its role working with law enforcement agencies, human rights issues as well as ethical considerations.

ANTH 310 Cultural Anthropology

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligibility for ENGL C1000 (formerly known as ENGWR 300) or the equivalent skills demonstrated through the assessment process.
Transferable: CSU; UC
General Education: Local GE L4; Cal-GETC Area 4
C-ID: C-ID ANTH 120

This course is an introduction to the cultures and customs of human groups throughout the world with the aim of understanding how cultures function based on their world views. Topics include subsistence methods, religious belief systems, linguistics, economics, political organization, kinship, gender, marriage and family systems, social stratification, and globalization. This course stresses anthropological concepts such as culture, cultural relativism, holism, ethnocentrism, cross-cultural comparisons, world view, culture change, fieldwork, ethics and theory. A field trip may be required at the discretion of the instructor.

ANTH 313 Introduction to Cultural Anthropology: Medical Focus

Units: 3
Hours: 54 hours LEC
Prerequisite: None.

Advisory: Eligibility for ENGL C1000 (formerly known as ENGWR 300) or the equivalent skills demonstrated through the assessment process.
Transferable: CSU; UC
General Education: Local GE L4; Cal-GETC Area 4
C-ID: C-ID ANTH 120

This course is an introduction to the cultures and customs of human groups throughout the world with the aim of understanding how cultures function based on their world views. Topics include subsistence methods, religious belief systems, linguistics, economics, political organization, kinship, gender, marriage and family systems, social stratification, and globalization. This course emphasizes the intersection of culture and medical practices, perspectives on healing and health, and the notion that biology and culture matter equally in the human experience of disease. Through ethnographic examples the course stresses anthropological concepts such as culture, cultural relativism, holism, ethnocentrism, cross-cultural comparisons, world view, culture change, fieldwork, ethics and theory. This Introduction to Cultural Anthropology course is highly recommended for students pursuing degrees in the health fields. This class is not intended for students who have already completed Anthropology 310. A field trip may be required at the discretion of the instructor.

ANTH 316 Global Forces in Culture Change

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligibility for ENGWR 300 or the equivalent skills demonstrated through the assessment process.
Transferable: CSU; UC
General Education: Local GE L4; Cal-GETC Area 4

The course will focus on how global forces in culture change have an impact on groups of people within the United States and non-western cultures, such as European colonialism (including the slave trade), minority and indigenous people activism, and a redefinition of male and female roles with migration. The course considers such global forces as modernization, development, trade and finance, tourism, migration and refugees, transnationalism, ethnicity and diasporas, technology and digital media, and tribal cultures. Culture change will be illustrated through various ethnographic examples and includes issues such as women's issues, AIDS/HIV, underemployment, famine, terrorism, the digital divide, and overpopulation.

ANTH 323 Introduction to Archaeology

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L4; Cal-GETC Area 4
C-ID: C-ID ANTH 150

This course is an introduction to the concepts, methods and theoretical perspectives employed in the scientific study of archaeology. Emphasis will be placed on how data is retrieved from the archaeological record, and how it can be used to address questions about the development and evolution of human social systems. Topics will include archaeological theory, survey and excavation methods, laboratory analysis, reconstructing past environments, and drawing conclusions about the past from archaeological data. This course will draw upon examples from the New World as well as archaeological examples worldwide. A field trip may be required.

ANTH 324 World Prehistory

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L4; Cal-GETC Area 4

This course is a broad survey of world prehistory, from an archaeological perspective. Patterns of culture change will be examined beginning at the emergence of human culture through the development of domestication of plants and animals, to the development of literate societies capable of recording their own history (in writing). Included are major cultural developments on every continent, emphasizing similarities and differences in the nature and timing of key technological, cultural, and social changes. The course will be focused around several key developments in human societies including the transition out of the last ice age, domestication of plants and animals, the establishment of "complex" societies, and the development of important technologies, including pottery and writing. Methodologies for learning about the past, major archaeological discoveries, important personalities, and contributions to the modern world are discussed in the context of understanding the strengths and limitations of a scientific approach to human prehistory.

ANTH 331 The Anthropology of Religion

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligibility for ENGL C1000 (formerly known as ENGWR 300) or the equivalent skills demonstrated through the assessment process.
Transferable: CSU; UC
General Education: Local GE L3; Local GE L4; Cal-GETC Area 4

This course is a cross-cultural study of the forms and functions of supernatural beliefs and associated rituals in various societies around the world. Emphasis of the course is on understanding beliefs and rituals within their social contexts and on broad comparisons to derive insight into the general functions of beliefs and rituals in human life. Students who have already completed ANTH 330 should not enroll in this course.

ANTH 332 Native Peoples of California

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L4; Cal-GETC Area 4

This course provides a study of the many cultures of the different native inhabitants of California from the prehistoric period through the present time, introducing the diversity and complexity of aboriginal California. Topics include native ecological adaptations, material culture, social structure, language, religion and mythology, ideology and worldview, and response to change. The course critically examines the impact of Native Californian cultures on each other as well as interactions between Native Californians and other Native Americans, Americans, Europeans, Africans, Asians, Pacific

Islanders, and others. Perspectives on changes in traditional life and Native Californians' current position in American society will be included as well as contributions of Native Californians to the cultures of the Americas. A field trip may be required.

ANTH 334 Native Peoples of North America

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L4; Cal-GETC Area 4

This course is an introductory survey of the cultures of the different native inhabitants of North America from the prehistoric period through the present time. Topics include native ecological adaptations, material culture, social structure, language, religion and mythology, ideology and worldview, and response to change. The course critically examines the impact of Native American cultures on each other as well as the interactions between Native Americans and Europeans, Africans, Asians, Pacific Islanders and others. Perspectives on changes in traditional life and Native Americans' current positions in North American societies will be included as well as contributions of Native Americans to the cultures of the Americas. A field trip may be required.

ANTH 336 Anthropology of Sex, Sexuality and Gender

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ANTH 300 (Physical Anthropology) or ANTH 310 (Cultural Anthropology) with a grade of "C" or better, and eligibility for ENGL C1000 (Academic Reading and Writing - formerly known as ENGWR 300: College Composition).
Transferable: CSU; UC
General Education: Local GE L4; Cal-GETC Area 4

This course provides an introductory overview of anthropological perspectives on sex, sexuality and gender, drawing from all four sub-fields (archaeology, cultural, linguistic, and physical). Topics will include cross-cultural comparisons of the diversity of sex, sexuality, and gender, comparisons of sexual behavior among extinct human ancestors and non-human primates such as monkeys and apes, drawing conclusions about the past from archaeological data, examining the nature/nurture debate, and examining evolutionary perspectives related to sex, sexuality and gender. A field trip may be required at the discretion of the instructor.

ANTH 341 Introduction to Linguistics

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligibility for ENGL C1000 (formerly known as ENGWR 300) or the equivalent skills as demonstrated through the assessment process.
Transferable: CSU; UC
General Education: Local GE L3; Local GE L4; Cal-GETC Area 4
C-ID: C-ID ANTH 130

This course explores the role of language in social interaction and world view. It examines minority languages and dialects, bilingualism, literacy and the social motivation of language change through technology, globalization, and colonialism. The student will also be introduced to the analytical techniques of linguistics, the universal structures of language, and the demonstration of their relevance to language in sociocultural issues.

ANTH 374 Birth to Death: The Anthropology of Primate Culture and Behavior

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L4; Local GE L5; Cal-GETC Area 4

This course will provide an overview of the life cycle of all primates, including humans, from an anthropological perspective. The basic biology behind the human life cycle will be examined and compared to nonhuman primates. Human and nonhuman primate life histories will be examined cross-culturally and will be compared and contrasted in light of their evolution and origins. The class will stress how cultural practices interact and support optimal reproductive behavior. Topics will include gestation and birth, adolescence, mating strategies and group structure, adulthood and senescence.

ANTH 480 Honors Biological Anthropology

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Enrollment Limitation: Enrollment is limited to Honors Program students. Details about the Honors Program can be found in the front of the Catalog and on the CRC website.
Transferable: CSU; UC
General Education: Local GE L5; Cal-GETC Area 5B

This course is an introduction to the science of biological anthropology, and analyzes the human place in nature. Applying principles of genetics and evolution, this course will explore modern human variation and how we evolved, including the unique role of culture. The course also covers the classification and distribution of living and extinct human populations, how we determine the geological age of our ancestors, and our relationship to non-human primates such as monkeys and apes. Topics covered in this course include: the scientific method, principles and mechanisms of genetics and heredity, geological dating methods, classification of humans and our near relatives, social organization and behavior of living primates, comparative skeletal anatomy of humans and non-human primates. Local field trips may be required.
This honors course offers rigorous preparation in critical thinking, and analytic reading and writing skills for students intending to transfer to a four-year college or university. It provides an opportunity to engage contemporary biological and anthropological issues through small group discussion, a structured sequence of papers and reading analysis requiring higher-level thinking tasks, and collaborative projects. Research projects require extensive analysis of topics such as ethics in biological anthropology, fossil hominin taxonomy placement and primate conservation. Paper requirements are designed to challenge and motivate. This course is not open to

students who have completed ANTH 300. Enrollment is limited to Honors Program students. Details about the Honors Program can be found in the front of the Catalog and on the CRC website. This course is the same as Honor 386. This course, under either name (ANTH 480 or HONOR 386), may be taken only one time for credit.

ANTH 482 Honors Biological Anthropology Laboratory

Units: 1
Hours: 54 hours LAB
Prerequisite: None.
Corequisite: ANTH 300 or 480
Enrollment Limitation: Enrollment is limited to Honors Program students. Details about the Honors Program can be found in the front of the Catalog and on the CRC website.
Transferable: CSU; UC
General Education: Cal-GETC Area 5C

This course is an introductory laboratory course designed to provide students with an opportunity to become familiar with the methods of the science of biological anthropology while investigating topics in laboratory and field situations. Topics covered in the course are: the scientific method, sources of biological variation and forces of evolution, human osteology (bone identification), human variation, taxonomy and comparative osteology of the primates, comparative behavior, and the fossil evidence for human evolution. A field trip to the local zoo may be included. This course is designed as a companion course to Anthropology 300 - Biological Anthropology, Anthropology 480-Honors Biological Anthropology and Honors 386-Honors Biological Anthropology. This honors course offers rigorous preparation in critical thinking, and analytic reading and writing skills for students intending to transfer to a four-year college or university. It provides an opportunity to engage contemporary biological and anthropological issues through small group discussion, debates and activities, reading analysis requiring higher-level thinking tasks, and collaborative projects. This course will also provide in depth opportunities for students to complete extensive hands-on study of pertinent fossil material. This course is not open to students who have completed ANTH 301. Enrollment is limited to Honors Program students. Details about the Honors Program can be found in the front of the Catalog and on the CRC website. This course is the same as Honor 387. This course, under either name (ANTH 482 or HONOR 387), may be taken only one time for credit.

ANTH 495 Independent Studies in Anthropology

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

ANTH 499 Experimental Offering in Anthropology

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU; UC (UC Transfer Note: Credit for variable topics courses is given only after a review of the scope and content of the course by the enrolling UC campus.)

This is the experimental courses description.

Architecture

This program offers students study and job-related experience in architectural drafting, construction techniques, design, rendering, and energy systems as well as opportunities to develop skills necessary for employment in the professional field of architecture. Transfer programs are articulated with California State Polytechnic University at San Luis Obispo, the University of California at Berkeley, and New School of Architecture and Design.

Degrees and Certificates Offered

A.S. in Architecture

Architectural Technology Certificate

Green Buildings Certificate

Dean Ashu Mishra
Department Chair Jason Ellis LEED AP
Phone (916) 525-4319
Email mishraa@crc.losrios.edu

Associate Degree

A.S. in Architecture

The objective of this program is to develop design and job-related skills necessary for entry into the professional field of architecture. The curriculum focuses on development of critical thinking and problem solving abilities as a means to creative thinking. College preparation for a career in architecture spans several disciplines and includes the development of knowledge and competencies in areas such as: architectural history and design; visual communication and drawing; computer modeling and rendering; construction methods and materials; energy systems and an understanding of human needs and sociology as they relate to the built environment.

HIGHLIGHTS
*Participation in architecturally-related events such as the Design Village Competition at Cal Poly San Luis Obispo.
*Field trips to a variety of architectural sites for study and appreciation of the built environment.
*Special studies in environmental sustainability and energy conscious design.
*Liaison with professional organizations such as the American Institute of Architects (AIA) and the Construction Specification Institute (CSI).

Degree Requirements

Course Code	Course Title	Units
ARCH 300	Introduction to Design Professions	2
ARCH 310	History of Architecture	3
ARCH 320	Architectural Design and Communication I	3.5
ARCH 321	Architectural Design and Communication II	3.5
ARCH 322	Architectural Design and Communication III	3.5
ARCH 325	Architectural Digital Design and Communication I	3
ARCH 326	Architectural Digital Design and Communication II	3
ARCH 329	Architectural Working Drawings	4
ARCH 330	Design Fundamentals	3.5
ARCH 332	Design Awareness	3
ARCH 334	Advanced Design in Three Dimensions	3
ARCH 342	Introduction to Green Buildings	3
CMT 310	Materials of Construction	3
Total Units:		**41**

The Architecture Associate in Science (A.S.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Student Learning Outcomes

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

- PSLO #1: Have the necessary technical knowledge and reasoning skills to identify, articulate, record information, assess evidence, investigate precedents and solve problems pertaining to the built environment and perform the tasks required within the architecture and environmental design professions. This includes the ability to use basic formal organizational and environmental principles; build abstract relationships to inform two and three-dimensional design; and understand the impact of ideas based on research, analysis of multiple theoretical, social, political, economic, cultural and environmental contexts.
- PSLO #2: Have the necessary communication skills, using a diverse range of techniques and media to think about and convey architectural ideas including writing; analytical and envisioning drawing; speaking to peers and groups; computer modeling and physical model-making.
- PSLO #3: Be able to comprehend the technical aspects of design, systems, sustainability, constructability, and materials, and be able to apply this comprehension to architectural solutions. This includes: 1. Site Design: Ability to respond to site determinants such as context and planning issues in the development of a project design. 2. Life Safety: Ability to apply basic principles of life-safety systems and exiting. 3. Environmental Systems: Understanding the principles of environmental control systems and sustainable design. 4. Structural Systems: Understanding the basic principles of structural behavior in withstanding gravity and lateral loads and the appropriate structural alternatives. 5. Building Envelope Systems: Understanding of the basic principles of building materials and characteristics in the appropriate selection relative to performance, aesthetics, moisture control, energy and durability.

- PSLO #4: ave the values of ethics and understanding of historical, cultural, human, aesthetic, environmental, public health and social issues to be able to affect creative change. This includes understanding the diverse needs, values, behavioral norms, physical abilities, social and spatial patterns that characterize different cultures and individuals.
- PSLO #5: Be able to work effectively as a team member or as an individual.
- PSLO #6: Have the professional attitude and desire for life-long learning. This includes developing habits of research, precedent, and independent learning.

Career Information

Architecture; Building Information Modeler; Inspection; Planning; Construction Administration. Some career options may require more than two years of college study. Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.

Certificates of Achievement

Architectural Technology Certificate

The objective of this certificate is to develop design and job-related skills necessary for entry into the professional field of architecture. The curriculum focuses on development of critical thinking and problem solving abilities as a means to creative thinking. College preparation for a career in architecture spans several disciplines and includes the development of knowledge and competencies in areas such as: architectural design; visual communication and drawing; computer modeling and rendering; construction methods and materials; energy systems and an understanding of human needs and sociology as they relate to the built environment.

Certificate Requirements

Course Code	Course Title	Units
ARCH 300	Introduction to Design Professions	2
ARCH 320	Architectural Design and Communication I	3.5
ARCH 321	Architectural Design and Communication II	3.5
ARCH 322	Architectural Design and Communication III	3.5
ARCH 325	Architectural Digital Design and Communication I	3
ARCH 326	Architectural Digital Design and Communication II	3
ARCH 329	Architectural Working Drawings	4
ARCH 330	Design Fundamentals	3.5
ARCH 332	Design Awareness	3
ARCH 334	Advanced Design in Three Dimensions	3
ARCH 342	Introduction to Green Buildings	3
CMT 310	Materials of Construction	3
Total Units:		**38**

Student Learning Outcomes

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

- PSLO #1: Have the necessary technical knowledge and reasoning skills to identify, articulate, record information, assess evidence, investigate precedents and solve problems pertaining to the built environment and perform the tasks required within the architecture and environmental design professions. This includes the ability to use basic formal organizational and environmental principles; build abstract relationships to inform two and three-dimensional design; and understand the impact of ideas based on research, analysis of multiple theoretical, social, political, economic, cultural and environmental contexts.
- PSLO #2: Have the necessary communication skills, using a diverse range of techniques and media to think about and convey architectural ideas including writing; analytical and envisioning drawing; speaking to peers and groups; computer modeling and physical model-making.
- PSLO #3: Be able to comprehend the technical aspects of design, systems, sustainability, constructability, and materials, and be able to apply this comprehension to architectural solutions. This includes: 1. Site Design: Ability to respond to site determinants such as context and planning issues in the development of a project design. 2. Life Safety: Ability to apply basic principles of life-safety systems and exiting. 3. Environmental Systems: Understanding the principles of environmental control systems and sustainable design. 4. Structural Systems: Understanding the basic principles of structural behavior in withstanding gravity and lateral loads and the appropriate structural alternatives. 5. Building Envelope Systems: Understanding of the basic principles of building materials and characteristics in the appropriate selection relative to performance, aesthetics, moisture control, energy and durability.
- PSLO #4: Have the values of ethics and understanding of historical, cultural, human, aesthetic, environmental, public health and social issues to be able to affect creative change. This includes understanding the diverse needs, values, behavioral norms, physical abilities, social and spatial patterns that characterize different cultures and individuals.
- PSLO #5: Be able to work effectively as a team member or as an individual.
- PSLO #6: Have the professional attitude and desire for life-long learning. This includes developing habits of research, precedent, and independent learning.

Career Information

Architecture; Building Information Modeler; Inspection; Planning; Construction Administration. Some career options may require more than an Architectural Technology certificate. Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.

Green Buildings Certificate

The purpose of this certificate is to develop job skills and an understanding of green strategies for high performance buildings and livable communities. It is focused at students and

professionals in the fields of architecture; construction; building management; construction management; building inspection; design technology; landscape; and planning, who want to acquire a comprehensive knowledge of an integrated, economic life-cycle approach to the design of the built environment. It includes study of green rating systems, material choices and environmental strategies for a livable, sustainable future.

Certificate Requirements

Course Code	Course Title	Units
ARCH 342	Introduction to Green Buildings	3
CMT 310	Materials of Construction	3
A minimum of 12 units from the following:		12
ARCH 332	Design Awareness (3)	
ARCH 334	Advanced Design in Three Dimensions (3)	
ADT 320	Architectural Design Technology - Building Information Modeling (BIM) I (3)	
ADT 322	Architectural Design Technology - Building Information Modeling (BIM) II (3)	
BIT 150	California Energy Code – Building Energy Efficiency Standards (3)	
CONST 143	Solar Photovoltaic Systems (3)	
ECON 306	Environmental Economics (3)	
GEOG 302	Environmental Studies & Sustainability (3)	
GEOG 305	Global Climate Change (3)	
GEOG 306	Weather and Climate (3)	
Total Units:		**18**

Student Learning Outcomes

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

- PSLO 1: Establish meaningful ethical, social and environmental objectives for buildings and communities based on the values of energy and resource conscious design.
- Compare and contrast societal and economic implications of utilizing renewable and non-renewable energy sources.
- Compare and contrast the effect of contextual issues and evaluate their impact on energy consumption, environment and the beneficial experience of interior and exterior spaces.
- PSLO 2: Identify and articulate issues related to the choice of various building, landscape and environmental systems; ideate responsive solutions; and compare the alternatives in making effective, sustainable decisions.
- Analyze and calculate energy use to make informed, environmentally-sound and economic choices to satisfy human needs for comfort and aesthetics.
- Explain the concepts of resource conservation and waste reduction and make sustainable design choices related to materials and construction.
- Develop a comprehensive understanding of green rating systems, livable communities strategies and the ability to apply these concepts in decision-making.
- PSLO 3: Demonstrate independent learning, teamwork and continuing education habits that will help to encourage a life long pursuit of knowledge.
- To use a team work process to identify issues, analyze criteria, research and apply learned principles to synthesize solutions to specific design projects.
- To demonstrate habits of visual note making and independent research by developing a sketch and notebook to record learning.

Career Information

This certificate helps to develop the knowledge base related to sustainable green buildings and environments for the careers of architecture, construction, construction management, building inspection, horticulture, landscape architecture and architectural design technology.

Architecture (ARCH) Courses

ARCH 300 Introduction to Design Professions

Units: 2
Hours: 36 hours LEC
Prerequisite: None.
Transferable: CSU; UC

This course is a comprehensive study of the professions related to the built environment including architecture, landscape architecture, construction management, construction, city and urban planning, interior design, building inspection, environmental and energy planning. Guest speakers from various design and construction professions will engage students in discussions related to their professional practice and the necessary preparation in education and experience. Each student will evaluate his/her interest and potential of success in the areas of his/her choice. The course will include an overview of architectural history, an introduction to some of the major architects and class discussion of current issues in the environmental design professions. Additional topics in the class will include: transfer, licensing requirements and environmental design vocabulary.

ARCH 310 History of Architecture

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligibility for ENGWR 101
Transferable: CSU; UC

This course studies the architecture design theories and practices of the late 19th and 20th century to the present including the Beaux Arts, Art Nouveau, Expressionism, De Stijl international style, Fascist Ideologies, Regionism, Post World War II Amalgamations of Twentieth Century idioms and recent reactions to contemporary standardization.

ARCH 320 Architectural Design and Communication I

Units: 3.5
Hours: 54 hours LEC; 27 hours LAB
Prerequisite: None.
Corequisite: ARCH 325
Transferable: CSU; UC

This course is an introduction to the concepts and processes associated with two and three-dimensional design. A series of design projects are used to discover principles and concepts of design while simultaneously addressing the skills associated with representing envisioned ideas, objects and environments. This includes the development of freehand sketching, manual drafting and graphic skills for communication of analysis and design concepts. Students should previously or concurrently enroll in ARCH 325 to learn methods for digital construction of design and drawing projects assigned in ARCH 320.

ARCH 321 Architectural Design and Communication II

Units: 3.5
Hours: 54 hours LEC; 27 hours LAB
Prerequisite: None.
Corequisite: ARCH 326
Advisory: It is advisable that students enrolling in this course should have completed Arch 320 and 325 or a computer modeling course, in order to have abilities at computer modeling and to understand basic drawing types of orthographic, paraline and perspective.
Transferable: CSU; UC

This course is a continuation and development of the content and issues introduced in ARCH 320 plus the principles, concepts, methods and skills pertaining to the construction of shadows and reflections, physical model building, entourage and color theory. A series of design projects are used to discover principles and concepts of design while simultaneously addressing the skills associated with representing envisioned ideas, objects and environments. This includes the development of physical model making, freehand sketching, manual drafting and graphic skills for communication of analysis and design concepts. Students should previously or concurrently enroll in ARCH 326 to learn methods for digital construction of design and drawing projects assigned in ARCH 321.

ARCH 322 Architectural Design and Communication III

Units: 3.5
Hours: 54 hours LEC; 27 hours LAB
Prerequisite: None.
Advisory: It is advisable that students enrolling in this course should have completed Arch 320 or Arch 321 in order to have abilities at design, computer modeling and to understand basic drawing types of orthographic, paraline and perspective.
Transferable: CSU

This course is a continuation and development of the content and issues introduced in ARCH 320 and 321 plus the issues, concepts, processes and skills pertaining to the analysis and design of architectural form, space and organizations. A series of design projects are used to discover principles and concepts of design while simultaneously addressing the skills associated with representing envisioned ideas, objects and environments. This includes the development of freehand sketching, computer modeling, architectural delineation and graphic skills for communication of analysis and design concepts.

ARCH 325 Architectural Digital Design and Communication I

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Corequisite: ARCH 320
Transferable: CSU

This is a studio course to explore principles, concepts, methods and skills pertaining to the digital construction of drawings employing orthographic, axonometric, oblique, and lineal perspective drawing systems to represent ideas, objects and environments.

ARCH 326 Architectural Digital Design and Communication II

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Corequisite: ARCH 321
Advisory: ARCH 325 with a grade of "C" or better
Transferable: CSU

This course is a continuation and development of the content and issues introduced in ARCH 325, plus the principles, concepts, methods and skills pertaining to the digital construction of shadows, digital model building, entourage and color theory.

ARCH 329 Architectural Working Drawings

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: It is advised that students taking this have completed a Building Information Modeling (BIM) course or have completed Arch 321 and Arch 326.
Transferable: CSU

This course provides an introduction to residential design and construction documents. Students will design a residence and produce a complete set of architectural working drawings.

ARCH 330 Design Fundamentals

Units: 3.5
Hours: 54 hours LEC; 27 hours LAB
Prerequisite: ARCH 320 with a grade of "C" or better
Transferable: CSU; UC

This course develops an understanding of design fundamentals in terms of materiality and the theories, concepts, creative problem solving processes, and skills pertaining to the analysis and design of architectural form, space and organizations to communicate intended concepts and meanings.

ARCH 332 Design Awareness

Units: 3
Hours: 54 hours LEC; 18 hours LAB

Prerequisite: ARCH 320 and 321 with grades of "C" or better
Advisory: ARCH 330
Transferable: CSU; UC

This course examines design problems and the environment by providing theories, concepts, processes, studies and skills pertaining to space, form, structure, context, materials, climate, livability and sustainability. The course covers sustainability as a determinant that shapes and impacts the built environment.

ARCH 334 Advanced Design in Three Dimensions

Units: 3
Hours: 54 hours LEC; 18 hours LAB
Prerequisite: ARCH 332 with a grade of "C" or better
Advisory: ARCH 320 and 330
Transferable: CSU

This course is a continuation of the content in ARCH 332 that emphasizes design process, with a focus on advanced design in terms of three dimensional design and design problems pertaining to the environment. The course studies the theories, concepts, processes and skills pertaining to space, form, structure, context, structure, materials, climate, and livability, as well as sustainability as determinants that shape and impact the built environment.

ARCH 342 Introduction to Green Buildings

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU

This course is the study of theory and application of climate, energy use and thermal comfort as determinants of architectural form in envelope load dominated buildings. Emphasis is placed on sustainable architectural methods and topics related to resource conservation and waste reduction; site analysis; sun access; sun shading; daylighting; lighting, ventilating, cooling and heating for envelope-load dominated buildings; and sound in buildings. The course enhances students' knowledge base and preparation for design classes ARCH 332 and ARCH 334.

This course replaces the ARCH 340 and 341 two-course sequence, and is therefore not open to a student that has received credit for both ARCH 340 and 341.

ARCH 495 Independent Studies in Architecture

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

ARCH 498 Work Experience in Architecture

Units: 0.5 - 4
Hours: 27 - 216 hours LAB
Prerequisite: None.
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position or job related to career goals in Architecture.
Transferable: CSU

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in transfer level degree occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and complete 27 hours of related work experience for 0.5 unit. An additional 27 hours of related work experience is required for each additional 0.5 units. 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.

ARCH 499 Experimental Offering in Architecture

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU

This is the experimental courses description.

Architecture Design Technology

The Interior Building Architecture Program provides students with a background in Architectural Drafting. Students who successfully complete the suggested program will be capable of doing detail and layout work normally expected of the drafting aide or technician. The program is designed to provide transfer opportunities in the Environmental Design and/or Construction Management disciplines as well as opportunities for students to qualify for employment in a variety of positions within related industries.

Degrees and Certificates Offered

A.S. in Building Information Modeling (BIM)

A.S. in Interior Building Architecture

Building Information Modeling (BIM) Certificate

Green Buildings Certificate

Interior Building Architecture Certificate

Dean Ashu Mishra

Department Chair Jason Ellis LEED AP

Phone (916) 525-4319

Email mishraa@crc.losrios.edu

Associate Degrees

A.S. in Building Information Modeling (BIM)

This Degree program provides students with a background in Computer-Aided Drafting & Design (CADD) and Building Information Modeling (BIM) for application to the architectural building space and design of buildings, interior space analysis and design to facilitate selection of materials & products promoting energy conservation, ecologically sustainable building space and building design using Green Building/LEED point principles.

Students who successfully complete the suggested program will be capable of performing pre-modeling (massing), modeling, and developing drawing documents normally expected of architects, designers, and drafting technicians.

The program is designed to provide job market skills, and college transfer skill opportunities within the Architectural Design disciplines and/or Construction Management as well as opportunities for students to qualify for employment in a variety of positions within the related industries. Additionally, this program offers opportunities for working professionals to take these courses for professional development to update and improve their skills in the Building Information Modeling field.

Note: It is highly recommended that each student keep a complete record of semester work/projects (i.e., a portfolio) to present for evaluation by university/college program advisors and/or employers.

This degree program utilizes various Building Information Modeling (BIM) software components, such as Revit Architecture, MEP, and Structure to prepare students for careers and college transfer in the area of Interior Building Architecture, Architecture, and Building Information Modeling (BIM), with an emphasis in the Architectural Technology area.

Highlights: State-of-the-Art computer lab and software.

Degree Requirements

Course Code	Course Title	Units
ADT 300	Architectural Sketching and Modeling I	3
ADT 302	Architectural Sketching and Modeling II	3
ADT 310	Architectural Computer-Aided Drawing I	3
ADT 314	Architectural 3D Modeling	3
ADT 320	Architectural Design Technology - Building Information Modeling (BIM) I	3
ADT 324	Architectural Design Technology - Building Information Modeling (BIM) III	3
ADT 322	Architectural Design Technology - Building Information Modeling (BIM) II	3
ADT 326	Architectural Design Technology - Building Information Modeling (BIM) IV	3
ADT 498	Work Experience in Architecture Design Technology	0.5 -4
Total Units:		**24.5 - 28**

The Building Information Modeling (BIM) Associate in Science (A.S.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Student Learning Outcomes

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

- SLO #1: Research, evaluate and apply energy conservation, ergonomic considerations, American Disabilities Act (ADA), ecologically sustainable design solution and principles (Green Building/LEED) to design projects.
- SLO #2: Formulate, categorize and identify Green Building/LEED certified materials and systems for use in residential and commercial projects.
- SLO #3: Organize, categorize and illustrate the development of initial models into architectural design documents, individually or through work group methods.
- SLO #4: Demonstrate, summarize and recall visual and verbal note taking methods and apply the information into models and finalized residential and commercial project designs.
- SLO #5: Assess, compose and analyze architectural graphic information effectively to create solutions from a criteria matrix, bubble diagram and block diagramming methods.
- SLO #6: Choose, assemble and distinguish the necessary skills in developing marketable BIM/CADD skills for university transfer and the job market, through

measurable methods in project development and presentations.

Career Information

Architectural Draftsperson, Designer/Technician, Planning Assistant, CADD Technician, BIM Technician, Facilities/Space Planner.

A.S. in Interior Building Architecture

This Associate Science program utilizes CADD and Building Information Modeling (BIM) software to prepare students for careers in the area of Interior Building Architecture, Architecture, with an emphasis in Architectural Design. Students who successfully complete the suggested program will be capable of performing pre-modeling (massing), modeling, and developing drawing documents normally expected of architects, designers, and technicians.
The program is designed to provide job market skills, college transfer opportunities in the Interior Building Architecture, Architecture and/or Construction Management disciplines as well as opportunities for students to qualify for employment in a variety of positions within related industries. Additionally, this program offers opportunities for working professionals to take these courses for professional development to update and improve their skills in the interior building architecture field.

NOTE: It is highly recommended that each student keep a complete record of work to present for evaluation by university/college program advisors and/or employers.

This degree program utilizes CADD and Building Information Modeling software components, such as Revit Architecture, MEP, and Structure to prepare students for careers in Interior Building Architecture, Architecture, Building Information Modeling (BIM), with an emphasis in Architectural Technology field.

Highlights: State-of-the-art computer lab and software.

Degree Requirements

Course Code	Course Title	Units
ADT 300	Architectural Sketching and Modeling I	3
ADT 302	Architectural Sketching and Modeling II	3
ADT 310	Architectural Computer-Aided Drawing I	3
ADT 314	Architectural 3D Modeling	3
ADT 320	Architectural Design Technology - Building Information Modeling (BIM) I	3
ADT 322	Architectural Design Technology - Building Information Modeling (BIM) II	3
ARCH 329	Architectural Working Drawings	4
CMT 112	Construction Estimating	3
Total Units:		**25**

The Interior Building Architecture Associate in Science (A.S.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Student Learning Outcomes

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

- SLO #1: Research, evaluate and apply energy conservation, ergonomic considerations, American Disabilities Act (ADA), ecologically sustainable design solution and principles (Green Building/LEED) to design projects.
- SLO #2: Formulate, categorize and identify Green Building/LEED certified materials and systems for use in residential and commercial projects.
- SLO #3: Organize, categorize and illustrate the development of initial models into architectural design documents, individually or through work group methods.
- SLO #4: Demonstrate, summarize and recall visual and verbal note taking methods and apply the information into models and finalized residential and commercial project designs.
- SLO #5: Assess, compose and analyze architectural graphic information effectively to create solutions from a criteria matrix, bubble diagram and block diagramming methods.
- SLO #6: Choose, assemble and distinguish the necessary skills in developing marketable BIM/CADD skills for university transfer and the job market, through measurable methods in project development and presentations.

Career Information

Architectural Draftsperson, Designer/Technician, Planning Assistant, CADD Technician, BIM Technician, Facilities/Space Planner.

Certificates of Achievement

Building Information Modeling (BIM) Certificate

This Certificate program provides students with a background in Computer-Aided Drafting & Design (CADD) and Building Information Modeling (BIM) for application to the architectural building space and design of buildings, interior space analysis and design to facilitate selection of materials & products promoting energy conservation, ecologically sustainable building space and building design using Green Building/LEED point principles.

Students who successfully complete the suggested certificate will be capable of performing pre-modeling (massing), modeling, and developing drawing documents normally expected of architects, designers and drafting technicians.

The program is designed to provide job market skills and opportunities within the Architectural Design disciplines and/or Construction Management as well as opportunities for students to qualify for employment in a variety of positions within the related industries. Additionally, this certificate offers opportunities for working professionals to take these courses for professional development to update and improve their skills in the Building Information Modeling (BIM)field.

This certificate program utilizes various Building Information Modeling (BIM) software components, such as Revit Architecture, MEP, and Structure to prepare students for careers in the job market in the area of Interior Building, Architecture, Architecture, Building Information Modeling (BIM), with an emphasis in the Architectural Technology field.

NOTE: Highlights - State-of-the-Art computer lab and software.

Certificate Requirements

Course Code	Course Title	Units
ADT 300	Architectural Sketching and Modeling I	3
ADT 302	Architectural Sketching and Modeling II	3
ADT 310	Architectural Computer-Aided Drawing I	3
ADT 314	Architectural 3D Modeling	3
ADT 320	Architectural Design Technology - Building Information Modeling (BIM) I	3
ADT 322	Architectural Design Technology - Building Information Modeling (BIM) II	3
ADT 498	Work Experience in Architecture Design Technology	0.5 -4
Total Units:		**18.5 - 22**

Student Learning Outcomes

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

- SLO #1: Research, evaluate and apply energy conservation, ergonomic considerations, American Disabilities Act (ADA), ecologically sustainable design solution and principles (Green Building/LEED) to design projects.
- SLO #2: Formulate, categorize and identify Green Building/LEED certified materials and systems for use in residential and commercial projects.
- SLO #3: Organize, categorize and illustrate the development of initial models into architectural design documents, individually or through work group methods.
- SLO #4: Demonstrate, summarize and recall visual and verbal note taking methods and apply the information into models and finalized residential and commercial project designs.
- SLO #5: Assess, compose and analyze architectural graphic information effectively to create solutions from a criteria matrix, bubble diagram and block diagramming methods.
- SLO #6: Choose, assemble and distinguish the necessary skills in developing marketable BIM/CADD skills for university transfer and the job market, through measurable methods in project development and presentations.

Career Information

Architectural Draftsperson, Designer/Technician, Planning Assistant, CADD Technician, BIM Technician, Facilities/Space Planner.

Green Buildings Certificate

The purpose of this certificate is to develop job skills and an understanding of green strategies for high performance buildings and livable communities. It is focused at students and professionals in the fields of architecture; construction; building management; construction management; building inspection; design technology; landscape; and planning, who want to acquire a comprehensive knowledge of an integrated, economic life-cycle approach to the design of the built environment. It includes study of green rating systems, material choices and environmental strategies for a livable, sustainable future.

Certificate Requirements

Course Code	Course Title	Units
ARCH 342	Introduction to Green Buildings	3
CMT 310	Materials of Construction	3
A minimum of 12 units from the following:		12
ARCH 332	Design Awareness (3)	
ARCH 334	Advanced Design in Three Dimensions (3)	
ADT 320	Architectural Design Technology - Building Information Modeling (BIM) I (3)	
ADT 322	Architectural Design Technology - Building Information Modeling (BIM) II (3)	
BIT 150	California Energy Code – Building Energy Efficiency Standards (3)	
CONST 143	Solar Photovoltaic Systems (3)	
ECON 306	Environmental Economics (3)	
GEOG 302	Environmental Studies & Sustainability (3)	
GEOG 305	Global Climate Change (3)	
GEOG 306	Weather and Climate (3)	
Total Units:		**18**

Student Learning Outcomes

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

- PSLO 1: Establish meaningful ethical, social and environmental objectives for buildings and communities based on the values of energy and resource conscious design.
- Compare and contrast societal and economic implications of utilizing renewable and non-renewable energy sources.
- Compare and contrast the effect of contextual issues and evaluate their impact on energy consumption, environment and the beneficial experience of interior and exterior spaces.
- PSLO 2: Identify and articulate issues related to the choice of various building, landscape and environmental systems; ideate responsive solutions; and compare the alternatives in making effective, sustainable decisions.
- Analyze and calculate energy use to make informed, environmentally-sound and economic choices to satisfy human needs for comfort and aesthetics.

- Explain the concepts of resource conservation and waste reduction and make sustainable design choices related to materials and construction.
- Develop a comprehensive understanding of green rating systems, livable communities strategies and the ability to apply these concepts in decision-making.
- PSLO 3: Demonstrate independent learning, teamwork and continuing education habits that will help to encourage a life long pursuit of knowledge.
- To use a team work process to identify issues, analyze criteria, research and apply learned principles to synthesize solutions to specific design projects.
- To demonstrate habits of visual note making and independent research by developing a sketch and notebook to record learning.

Career Information

This certificate helps to develop the knowledge base related to sustainable green buildings and environments for the careers of architecture, construction, construction management, building inspection, horticulture, landscape architecture and architectural design technology.

Interior Building Architecture Certificate

This certificate program utilizes CADD and Building Information Modeling (BIM) software to prepare students for careers in the area of Interior Building Architecture with an emphasis in Architectural Design.

Students who successfully complete the suggested program will be capable of performing pre-modeling (massing), modeling, and developing drawing documents normally expected of architects, designers and drafting technicians.

The program is designed to provide job market skills and opportunities within the Architectural Design disciplines and/or Construction Management as well as opportunities for students to qualify for employment in a variety of positions within the related industries. Additionally, this program offers opportunities for working professionals to take these courses for professional development to update and improve their skills in the interior building architecture field.

Note: It is highly recommended that each student keep a complete record of semester work/projects (i.e., a portfolio) to present for evaluation by employers.

This degree program utilizes various Building Information Modeling (BIM) software components, such as Revit MEP and Structure to prepare students for careers in Interior Building Architecture, Architecture,Building Information Modeling (BIM), with an emphasis in the Architectural Technology area.

Highlights: State-of-the-Art computer lab and software.

Certificate Requirements

Course Code	Course Title	Units
ADT 300	Architectural Sketching and Modeling I	3
ADT 302	Architectural Sketching and Modeling II	3
ADT 310	Architectural Computer-Aided Drawing I	3
ADT 320	Architectural Design Technology - Building Information Modeling (BIM) I	3
ADT 322	Architectural Design Technology - Building Information Modeling (BIM) II	3
ARCH 320	Architectural Design and Communication I	3.5
ARCH 321	Architectural Design and Communication II	3.5
CMT 310	Materials of Construction	3
Total Units:		**25**

Student Learning Outcomes

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

- SLO #1: Research, evaluate and apply energy conservation, ergonomic considerations, American Disabilities Act (ADA), ecologically sustainable design solution and principles (Green Building/LEED) to design projects.
- SLO #2: Formulate, categorize and identify Green Building/LEED certified materials and systems for use in residential and commercial projects.
- SLO #3: Organize, categorize and illustrate the development of initial models into architectural design documents, individually or through work group methods.
- SLO #4: Demonstrate, summarize and recall visual and verbal note taking methods and apply the information into models and finalized residential and commercial project designs.
- SLO #5: Assess, compose and analyze architectural graphic information effectively to create solutions from a criteria matrix, bubble diagram and block diagramming methods.
- SLO #6: Choose, assemble and distinguish the necessary skills in developing marketable BIM/CADD skills for university transfer and the job market, through measurable methods in project development and presentations.

Career Information

Architectural Draftsperson, Designer/Technician, Planning Assistant, CADD Technician, BIM Technician, Facilities/Space Planner.

Architecture Design Technology (ADT) Courses

ADT 300 Architectural Sketching and Modeling I

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Transferable: CSU

This course instructs students from the beginning level of hand sketching, instrument drawing of architectural graphic and

digital modeled images. The course is designed for understanding how to draw existing structures, new structures and interior spaces, Green Building Design-Sustainability environments of Interior Building Architecture, Building Information Modeling, and Building Construction. It guides students from hand sketched graphic concepts through digital modeling in formulating project forms, and spaces. A software application, such as SketchUp® will be utilized at the end of the course as the primary tool for the development of framing plans for an
introduction to ADT 302 course.

ADT 301 Introduction to Architectural Design Technology

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Transferable: CSU

Introduction to Architectural Design Technology (ADT) is a foundational course for students interested in a career within the Architecture, Engineering and Construction (AEC) industry. The course covers introductory skills needed for success in completing the ADT degree. Students will explore the role of the architectural / building technologist in the AEC industry and the current best practices for use of technology in building design and construction. Upon completion of this course, students will be able to identify potential roles for employment and will be able to utilize various tools and instruments to create freehand, technical and digital drawings for communication of various types of graphics and drawings required in industry. A completed portfolio of work will be required.

ADT 302 Architectural Sketching and Modeling II

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: ADT 300 and 300
Transferable: CSU
C-ID: C-ID ARTS 205

This course instructs students at an intermediate level of sketching, 3D digital design, Green Building-LEED® (Leadership in Energy and Environmental Design) principles in building design, Green Building-LEED® material certification, selection and application to models, 3D surface modeling and site development. The course is designed to facilitate further development to refining the student's design and research skills by specifying, certifying, and applying Green Building-LEED® materials and design concept principles to structures, interior architectural elements, site selection and development. A software application such as SketchUp® will be utilized as the primary software to refine and further develop detail concepts and techniques in 3D-digital modeling.

ADT 304 Office & Commercial Space Planning

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Transferable: CSU

This course instructs students at the basic to intermediate level in office, commercial and residential space planning, Title 24 and general building code requirements. Concepts covered will develop skills in space programming, criteria schematics and matrices, bubble diagrams, space planning and layout, building materials, code requirements and applications to the design model.

ADT 310 Architectural Computer-Aided Drawing I

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: ADT 300 and 302
Transferable: CSU

This course covers the introductory study in Architectural Computer-Aided Drawing/Design with specific emphasis in the architectural field. Course subject areas will include but not be limited to identifying CADD components, working in the Windows environment, creating and saving files, entity geometry, editing features, MLine 'Styles', Layer convention properties, text/font 'Styles', layering creation, dimensioning and dimension 'Styles', Model and Paper Space environments, plotting, and Plot 'Styles'. The subject content will cover the development of architectural floor plans, foundation plans & foundation 'details', electrical plans, subdivision plans and others drawings as they relate to the architectural field of study. Students will learn how to develop professional architectural drawing file documentation through the preparation and plotting (printing) presentation.

ADT 314 Architectural 3D Modeling

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: ADT 310, 310, 312, and 312 with grades of "C" or better; Under special circumstances, such as prior outside experience, a student may take ADT 314 prior to taking ADT 312 but must obtain the instructor's permission. These courses are sequential prerequisites for this course.
Advisory: ADT 312 and 312
Transferable: CSU; UC

This course covers the introduction to 3-dimensional modeling and rendering for building structures and spatial analysis studies, Green Building/LEED® (Leadership in Energy and Environmental Design) material and guidelines application. Course subject areas will include shapes, splines, meshes, light, shadows, models, materials, scene creation, animations, and creating exterior and interior architectural and construction objects with software such as 3ds Max Design®.

ADT 320 Architectural Design Technology - Building Information Modeling (BIM) I

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: ADT 310
Transferable: CSU

This course instructs students in the beginning level of Building Information Modeling as it relates to parametric building modeling for architectural interiors and building space using

software such as AutoDesk's Revit® Architecture. The content is a first level introduction course to data-generated Parametric Building Modeling for architectural design and drawing, also known as Building Information Modeling (BIM). Professionals in the design/construction field may have work and/or academic experience to waive any prerequisites.

ADT 322 Architectural Design Technology - Building Information Modeling (BIM) II

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: ADT 320 (Architectural Design Technology - Building Information Modeling (BIM) I) with a grade of "C" or better; or skills equivalent to ADT 320 with proficiency determined by the instructor.
Transferable: CSU

This course instructs students to the intermediate level of parametric modeling and management of architectural interiors and exteriors, building space management/design using software such as Autodesk's Revit®. The content is a second level course introduction to data-generated parametric building modeling "document drawing", also known as Building Information Management that surpasses pencil and CADD generated architectural drawings.

ADT 324 Architectural Design Technology - Building Information Modeling (BIM) III

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: ADT 322 (Architectural Design Technology - Building Information Modeling (BIM) II) with a grade of "C" or better; or skills equivalent to ADT 322 with proficiency determined by the instructor.
Advisory: ADT 320 with a grade of "C" or better
Transferable: CSU

This course instructs students in the intermediate level of Building Information Modeling as it relates to parametric modeling and Green Building/LEED® (Leadership in Energy and Environmental Design) for 'Building Systems' drawing and design using software such as AutoDesk's Revit® MEP. The content is a first level introduction course of data-generated Parametric Building Modeling software for Mechanical, Electrical, and Plumbing systems; illustrating how the MEP (Mechanical-Electrical-Plumbing) software drawing designs integrate with Revit® Architecture and/or Revit® Structure.

ADT 326 Architectural Design Technology - Building Information Modeling (BIM) IV

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: ADT 322, or skills equivalent to ADT 322 with proficiency determined by the instructor.
Advisory: ADT 310 and 320; Students' knowledge and/or skills may be evaluated by the instructor on an individual basis, in lieu of the two Advisory Courses listed.
Transferable: CSU

This course instructs students in the intermediate level of Building Information Modeling as it relates to parametric modeling and Green Building/LEED® (Leadership in Energy and Environmental Design) guidelines for structural drawing and design using software such as AutoDesk's Revit® Structure. The content is a first level introduction course of data-generated Parametric Building Modeling software for Structures; illustrating how the Structure software drawing designs integrate with Revit® Architecture and/or Revit® MEP.

ADT 495 Independent Studies in Architectural Design Technology

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

ADT 498 Work Experience in Architecture Design Technology

Units: 0.5 - 4
Hours: 27 - 216 hours LAB
Prerequisite: None.
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position or job related to career goals in Architecture Design Technology.
Transferable: CSU

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in transfer level degree occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and complete 27 hours of related work experience for 0.5 unit. An additional 27 hours of related work experience is required for each additional 0.5 units. 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.

ADT 499 Experimental Offering in Architecture Design Technology

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU

This is the experimental courses description.

Art

CRC's art curriculum offers introductory and intermediate level courses in painting, figure drawing, digital art, drawing, sculpture, ceramics, printmaking and design, as well as courses in art appreciation and art history. Through the program's art theory and art practice classes, students develop an awareness and understanding of the materials, tools, rationale and significance of art in society. The art curriculum's critical thinking and technical skills components encourage students to utilize independent thought processes and problem solving.

Degrees and Certificates Offered

A.A.-T. in Art History

A.A.-T. in Studio Arts

A.A. in Art - Art History

A.A. in Art - Design

A.A. in Art - Studio Art

A.A. in Art-Photo

Fine Art Photography Certificate

Dean Brian Rickel

Department Chair Robin Johnson

Phone (916) 691-7171

Email robin.johnson@crc.losrios.edu

Associate Degrees for Transfer

A.A.-T. in Art History

The Associate in Arts in Art History for Transfer Degree (AA-T) is designed to provide a seamless transfer pathway for students interested in pursuing at least one Art History degree option in the California State University (CSU) system. The degree is comprised of lower division coursework typically required by CSU institutions.

Students must complete the following Associate Degree for Transfer (ADT) requirements:

(1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
(A) The California General Education Transfer Curriculum (Cal-GETC).
(B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

(2) Obtainment of a minimum grade point average of 2.0.

ADTs also require that students must earn a “C” or better in all courses required for the major or area of emphasis. A “P” (Pass) grade is also an acceptable grade for courses in the major if the course is taken on a Pass/No Pass basis.

Upon successful completion of the degree requirements, students will be guaranteed admission to the CSU system with junior status and will not have to repeat lower division coursework. Students are encouraged to meet with a counselor to develop their educational plans as degree options and general education requirements vary for each university.

Degree Requirements

Course Code	Course Title	Units
ARTH 303	Art Survey: Ancient to 14th Century	3
ARTH 309	Art Survey: Renaissance to 19th Century	3
ARTH 311	Art Survey: Modern Art	3
ART 300	Drawing and Composition I	3
A minimum of 3 units from the following:		3
ARTH 328	Survey of African Art (3)	
or ARTH 332	Asian Art (3)	
or ARTH 333	Introduction to Islamic Art (3)	
A minimum of 3 units from the following:		3
ART 320	Design: Fundamentals (3)	
or ART 304	Figure Drawing I (3)	
or ART 372	Sculpture (3)	
or ART 361	Printmaking: Survey (3)	
A minimum of 3 units from the following:		3
Choose a minimum of three units from below that was not chosen above.		
ARTH 312	Women in Art (3)	
or ARTH 328	Survey of African Art (3)	
or ARTH 332	Asian Art (3)	
or ARTH 333	Introduction to Islamic Art (3)	
or ART 320	Design: Fundamentals (3)	
or ART 304	Figure Drawing I (3)	
or ART 301	Digital Drawing and Composition (3)	
or ART 372	Sculpture (3)	
or ART 361	Printmaking: Survey (3)	
or ART 327	Painting I (3)	
Total Units:		**21**

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) the California General Education Transfer Curriculum (Cal-GETC) Requirement.

Student Learning Outcomes

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

- assess and evaluate the contributions of artists throughout history and analyze art and architecture within the context of their functions and meanings (SLO #1).
- discuss works of art publicly (SLO #2).
- identify and evaluate works of art or architecture according to their appropriate style, region, and time frame (SLO #3).
- research and assess theoretical information concerning the meanings and purposes of art and architecture, use

scholarly sources, and express thoughts clearly in writing (SLO #4).

- develop an appreciation for the arts, cultural practices, and history of people of the past and demonstrate how art and architecture is a reflection of that history (SLO #5).

Career Information

The AA-T in Art History can provide students with the foundational knowledge necessary for transfer to a 4-year Bachelor of Arts (BA) degree program. Career opportunities for students who have earned BA degrees in Art History include but are not limited to: registrars, preparators, and curatorial staff in art museums and galleries; 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. Some careers may require additional training. NOTE TO TRANSFER STUDENTS: The Associate in Arts in Art History for Transfer program is designed for students who plan to transfer to a campus of the California State University (CSU). Other than the required core, the courses you choose to complete this degree will depend to some extent on the selected CSU for transfer. In addition, some California General Education Transfer Curriculum (Cal-GETC) requirements can also be completed using courses required for this associate degree for transfer major (known as “double-counting”). Meeting with a counselor to determine the most appropriate course choices will facilitate efficient completion of your transfer requirements. For students wishing to transfer to other universities (UC System, private, or out-of-state), the Associate Degree for Transfer may not provide adequate preparation for upper-division transfer admissions; it is critical that you meet with a CRC counselor to select and plan the courses for the major, as programs vary widely in terms of the required preparation.

A.A.-T. in Studio Arts

Completion of this degree provides a foundation in studio art methods. Program offerings include coursework in art history, 2-D, and 3-D studio practices. The Associate in Arts in Studio Art for Transfer Degree (AA-T) is designed to provide a seamless transfer pathway for students interested in pursuing at least one art studio degree option in the California State University (CSU) system. The degree is comprised of lower division coursework typically required by CSU institutions.

Students must complete the following Associate Degree for Transfer (ADT) requirements:

(1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
(A) The California General Education Transfer Curriculum (Cal-GETC).
(B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

(2) Obtainment of a minimum grade point average of 2.0.

ADTs also require that students must earn a “C” or better in all courses required for the major or area of emphasis. A “P” (Pass) grade is also an acceptable grade for courses in the major if the course is taken on a Pass/No Pass basis

Upon successful completion of the degree requirements, students will be guaranteed admission to the CSU system with junior status and will not have to repeat lower division coursework. Students are encouraged to meet with a counselor to develop their educational plans as degree options and general education requirements vary for each university.

Degree Requirements

Course Code	Course Title	Units
ART 300	Drawing and Composition I	3
ART 320	Design: Fundamentals	3
ART 370	Three Dimensional Design	3
ARTH 309	Art Survey: Renaissance to 19th Century	3
Art History Elective:		
A minimum of 3 units from the following:		3
ARTH 303	Art Survey: Ancient to 14th Century (3)	
ARTH 332	Asian Art (3)	
ARTH 311	Art Survey: Modern Art (3)	
Studio Art Electives:		
A minimum of 9 units from the following:		9
Select three courses, each from a different category listed below.		
Drawing		
ART 302	Drawing and Composition II (3)	
ART 304	Figure Drawing I (3)	
Color Theory		
ART 323	Design: Color Theory (3)	
Painting		
ART 327	Painting I (3)	
ART 336	Watercolor Painting (3)	
Printmaking		
ART 361	Printmaking: Survey (3)	
Sculpture		
ART 372	Sculpture (3)	
Ceramics		
ART 402	Beginning Clay Sculpture (3)	
Photography		
PHOTO 301	Beginning Photography (3)	
Total Units:		**24**

The Associate in Arts in Studio 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) the California General Education Transfer Curriculum (Cal-GETC) Requirement.

Student Learning Outcomes

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

- differentiate major historical movements and developments in the visual arts. PSLO #1

- compose or design works of art that utilize a combination of technique, materials, visual ideas, and experiences. PSLO #2
- construct and document an initial portfolio of artworks for professional presentation. PSLO #3
- critique artworks using correct terminology related to concepts, materials, and techniques. PSLO #4
- evaluate form, image, and artistic creation of visual artworks from different traditions, cultures, and civilizations. PSLO #5

Career Information

Individuals with baccalaureate 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, digital 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. Many careers may require training beyond the baccalaureate level. NOTE TO TRANSFER STUDENTS: The Associate Degree for Transfer program is designed for students who plan to transfer to a campus of the California State University (CSU). Other than the required core, the courses you choose to complete this degree will depend to some extent on the selected CSU for transfer. In addition, some California General Education Transfer Curriculum (Cal-GETC) requirements can also be completed using courses required for this associate degree for transfer major (known as “double-counting”). Meeting with a counselor to determine the most appropriate course choices will facilitate efficient completion of your transfer requirements. For students wishing to transfer to other universities (UC System, private, or out-of-state), the Associate Degree for Transfer may not provide adequate preparation for upper-division transfer admissions; it is critical that you meet with a CRC counselor to select and plan the courses for the major, as programs vary widely in terms of the required preparation.

Associate Degrees

A.A. in Art - Art History

CRC's art curriculum offers introductory and intermediate level courses in painting, watercolor, computer art, drawing, sculpture, ceramics, printmaking and design, as well as courses in art appreciation and art history. Through the program's art theory and art practice classes, students develop an awareness and understanding of the materials, tools, rationale and significance of art in society. The art curriculum's critical thinking and technical skills components encourage students to utilize independent thought processes and problem solving. This program provides transfer and employment opportunities as well as personal enrichment for students.

The art faculty is composed of professional artists with diverse specializations encompassing the spectrum of the classes offered.

HIGHLIGHTS

*Art faculty who have exhibited regionally, nationally and internationally

*Opportunities to explore artistic pursuits in two- and three-dimensional media using a wide variety of materials and techniques

*Regularly scheduled trips to major museums

*Guest lectures and demonstrations

*New state-of-the-art facility

NOTE TO TRANSFER STUDENTS: If you are interested in transferring to a four-year college or university to pursue a bachelor’s degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate’s degree in this major may be different from the requirements needed for the Bachelor’s degree.

Degree Requirements

Course Code	Course Title	Units
ARTH 303	Art Survey: Ancient to 14th Century	3
ARTH 309	Art Survey: Renaissance to 19th Century	3
ARTH 311	Art Survey: Modern Art	3
Plus three (3) courses selected from:		
A minimum of 9 units from the following:		9
ARTH 312	Women in Art (3)	
ARTH 332	Asian Art (3)	
ARCH 310	History of Architecture (3)	
HUM 300	Classical Humanities (3)	
HUM 310	Modern Humanities (3)	
HUM 320	Asian Humanities (3)	
HUM 332	American Humanities (3)	
Plus one (1) studio course selected from:		
A minimum of 3 units from the following:		3
ART 300	Drawing and Composition I (3)	
ART 304	Figure Drawing I (3)	
ART 320	Design: Fundamentals (3)	
ART 327	Painting I (3)	
ART 336	Watercolor Painting (3)	
ARCH 320	Architectural Design and Communication I (3.5)	
Special Projects - select either ART 494 or ART 499:		
A minimum of 2 units from the following:		2
ART 494	Topics in Art (0.5 - 4)	
or ART 499	Experimental Offering in Art (0.5 - 4)	
Total Units:		**23**

The Art - Art History Associate in Arts (A.A.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Student Learning Outcomes

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

- demonstrate an appreciation of artistic endeavors, cultural expressions, ideas and/or institutions through non-empirical, analytic, interpretive studies and critical thinking projects (SLO #1).
- manage the ability to discuss works of art publicly (SLO #2).
- structure an historical, geographical and chronological context of art (SLO #3).
- express clearly personal analyses and interpretations of arts, ideas, techniques, skills, and/or institutions, and will properly use the vocabulary appropriate to the field (SLO #4).
- choose and apply a variety of scholarly sources for research and express thoughts clearly in writing (SLO #5).
- develop an appreciation for the arts and cultural practices of people of the past (SLO #6).

Career Information

Painter; Sculptor; Ceramist; Art Instructor; Illustrator; Printmaker; Computer Publishing Specialist; Graphic Designer; Gallery Director; Graphic Artist; Computer Artist Some career options may require more than two years of college study.

A.A. in Art - Design

CRC's art curriculum offers introductory and intermediate level courses in painting, watercolor, digital art, drawing, sculpture, ceramics, printmaking and design, as well as courses in art appreciation and art history. Through the program's art theory and art practice classes, students develop an awareness and understanding of the materials, tools, rationale and significance of art in society. The art curriculum's critical thinking and technical skills components encourage students to utilize independent thought processes and problem solving. This program provides transfer and employment opportunities as well as personal development for students. With a choice of acquiring an A.A. degree in one of three areas related to art the student can tailor the program to their interests. The A.A. degree in Art-History allows the student to focus on the history, theory and research of art products, architecture and artifacts. The A.A. degree in Art-Studio Art is designed for the student wanting to develop their individual technical skill, conceptual abilities and creative processes emphasizing 2-D or 3-D art forms. The A.A. degree in Art-Design allows the student to focus on the application of art technical skills and the creative process as it relates to the applied arts, e.g. graphic design, product design, architecture, web design, interior design, etc.

The art faculty is composed of professional artists with diverse specializations encompassing the spectrum of the classes offered.

HIGHLIGHTS

*Art faculty who have exhibited regionally, nationally and internationally

*Opportunities to explore artistic pursuits in two- and three-dimensional media using a wide variety of materials and techniques

*Regularly scheduled trips to major museums

*Guest lectures and demonstrations

*New state-of-the-art facility

NOTE TO TRANSFER STUDENTS: If you are interested in transferring to a four-year college or university to pursue a bachelor's degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate's degree in this major may be different from the requirements needed for the Bachelor's degree.

Degree Requirements

Course Code	Course Title	Units
ART 300	Drawing and Composition I	3
ART 304	Figure Drawing I	3
ART 320	Design: Fundamentals	3
ART 323	Design: Color Theory	3
ART 370	Three Dimensional Design	3
Restricted Electives:		
A minimum of 6 units from the following:		6
ART 325	Introduction to Graphic Design (3)	
ARTNM 324	Digital Design (3)	
ART 301	Digital Drawing and Composition (3)	
or ART 338	Introduction to Digital Painting I (3)	
Art History Electives:		
A minimum of 3 units from the following:		3
ARTH 303	Art Survey: Ancient to 14th Century (3)	
ARTH 309	Art Survey: Renaissance to 19th Century (3)	
ARTH 311	Art Survey: Modern Art (3)	
ARTH 312	Women in Art (3)	
ARTH 332	Asian Art (3)	
Total Units:		**24**

The Art - Design Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus the local CRC General Education Requirement, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

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

- demonstrate physical skills/dexterity within a discipline. SLO #1
- manage the ability to discuss works of art publicly. SLO #2
- structure an historical, geographical and chronological context of art. SLO #3
- investigate self-analysis and external analysis techniques through the activity of "critique". SLO #4
- formulate a conceptual framework for the future by applying analytical skills. SLO #5

- choose and apply a variety of informational resources for research. SLO #6

Career Information

Painter; Sculptor; Ceramist; Art Instructor; Illustrator; Printmaker; Digital Publishing Specialist; Graphic Designer; Gallery Director; Curator; Graphic Artist; Digital Artist Some career options may require more than two years of college study.

A.A. in Art - Studio Art

CRC's art curriculum offers introductory and intermediate level courses in painting, watercolor, digital art, drawing, sculpture, ceramics, printmaking and design, as well as courses in art appreciation and art history. Through the program's art theory and art practice classes, students develop an awareness and understanding of the materials, tools, rationale and significance of art in society. The art curriculum's critical thinking and technical skills components encourage students to utilize independent thought processes and problem solving. This program provides transfer and employment opportunities as well as personal development for students. With a choice of acquiring an A.A. degree in one of three areas related to art the student can tailor the program to their interests. The A.A. degree in Art-History allows the student to focus on the history, theory and research of art products, architecture and artifacts. The A.A. degree in Art-Studio Art is designed for the student wanting to develop their individual skill, conceptual and creative processes emphasizing 2-D or 3-D art forms. The A.A. degree in Art-Design allows the student to focus on the application of art skills and the creative process as it relates to the applied arts, e.g. graphic design, product design, architecture, web design, interior design, etc.

The art faculty is composed of professional artists with diverse specializations encompassing the spectrum of the classes offered.

HIGHLIGHTS

*Art faculty who have exhibited regionally, nationally and internationally

*Opportunities to explore artistic pursuits in two- and three-dimensional media using a wide variety of materials and techniques

*Regularly scheduled trips to major museums

*Guest lectures and demonstrations

*New state-of-the-art facility

NOTE TO TRANSFER STUDENTS: If you are interested in transferring to a four-year college or university to pursue a bachelor’s degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate’s degree in this major may be different from the requirements needed for the Bachelor’s degree.

Degree Requirements

Course Code	Course Title	Units
ART 300	Drawing and Composition I	3
ART 304	Figure Drawing I	3
ART 320	Design: Fundamentals	3
ART 370	Three Dimensional Design	3
A minimum of 6 units from the following:		6
ARTH 303	Art Survey: Ancient to 14th Century (3)	
ARTH 309	Art Survey: Renaissance to 19th Century (3)	
ARTH 311	Art Survey: Modern Art (3)	
ARTH 312	Women in Art (3)	
ARTH 328	Survey of African Art (3)	
ARTH 332	Asian Art (3)	
ARTH 333	Introduction to Islamic Art (3)	
Take two (2) Art History courses selected from:		
A minimum of 12 units from the following:		12
ART 301	Digital Drawing and Composition (3)	
ART 302	Drawing and Composition II (3)	
ART 305	Figure Drawing II (3)	
ART 312	Portrait Drawing (3)	
ART 324	Collage and Assemblage (3)	
ART 327	Painting I (3)	
ART 328	Painting II (3)	
ART 330	Mural Painting (3)	
ART 336	Watercolor Painting (3)	
ART 337	Intermediate Watercolor Painting (3)	
ART 361	Printmaking: Survey (3)	
ART 362	Printmaking: Intaglio (3)	
ART 364	Printmaking: Relief (3)	
ART 372	Sculpture (3)	
ART 402	Beginning Clay Sculpture (3)	
ART 404	Intermediate Clay Sculpture (3)	
ART 338	Introduction to Digital Painting I (3)	
ARTNM 324	Digital Design (3)	
ARTNM 420	3D Modeling and Texturing I - Introduction (3)	
ART 443	Art Gallery Operations (3)	
Plus four (4) courses from chosen emphasis of 2-D or 3-D art forms:		
ART 394	Wheel Thrown Ceramics, Beginning	3
ART 395	Wheel Thrown Ceramics, Intermediate	3
ART 396	Wheel Thrown Ceramics, Advanced	3
Total Units:		**39**

The Art - Studio Art Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus the local CRC General Education Requirement, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

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

- demonstrate physical skills/dexterity within a discipline. SLO #1
- manage the ability to discuss works of art publicly. SLO #2
- structure an historical, geographical and chronological context of art. SLO #3
- investigate self-analysis and external analysis techniques through the activity of "critique". SLO #4
- formulate a conceptual framework for the future by applying analytical skills. SLO #5
- choose and apply a variety of informational resources for research. SLO #6

Career Information

Painter; Sculptor; Ceramist; Art Instructor; Illustrator; Printmaker; Digital Publishing Specialist; Graphic Designer; Gallery Director; Curator; Graphic Artist; Digital Artist Some career options may require more than two years of college study.

A.A. in Art-Photo

The art-photography program is designed to teach students fine art photography with an emphasis in black and white film based processes. Critical analysis, history and current theories in photography are also requirements.

Students planning to prepare for a four-year degree in Photography should consult the lower division requirements of the university to which they plan to transfer.

Degree Requirements

Course Code	Course Title	Units
ART 300	Drawing and Composition I	3
PHOTO 301	Beginning Photography (3)	3
PHOTO 420	History of Photography (3)	3
PHOTO 310	Intermediate Photography (3)	3
ARTH 300	Art Appreciation (3)	3
ART 304	Figure Drawing I (3)	3
or ART 361	Printmaking: Survey (3)	
PHOTO 320	Color Photography (3)	3
PHOTO 360	Large Format Photography (3)	3
PHOTO 365	Alternative Process Photography (3)	3
or PHOTO 364	Advanced Black and White Photography (3)	
Total Units:		**27**

The Art-Photo Associate in Arts (A.A.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Student Learning Outcomes

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

- SLO #1 Produce a portfolio that conveys creative self expression.
- SLO #2 Work with silver based and alternative processes in black and white photography.
- SLO #3 Use a variety of film based cameras, including medium and large format.
- SLO #4 Describe the history of photography.
- SLO #5 Recount current trends in photographic theories and aesthetics.

Career Information

Fine art photographer, gallery worker, museum worker, curator or general photographer. Some career options may require more than two years of college study. Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.

Certificate of Achievement

Fine Art Photography Certificate

The fine art photography program is designed for students who want to enter a career path in fine art photography. Students will use a variety of cameras and formats to produce images in both color and black and white. Personal expression and creativity, history and contemporary issues in photography and visual communication will also be emphasized.

Certificate Requirements

Course Code	Course Title	Units
PHOTO 301	Beginning Photography (3)	3
PHOTO 310	Intermediate Photography (3)	3
or PHOTO 364	Advanced Black and White Photography (3)	
PHOTO 320	Color Photography	3
PHOTO 360	Large Format Photography (3)	3
PHOTO 365	Alternative Process Photography (3)	3
or PHOTO 366	Advanced Alternative Process Photography (3)	
PHOTO 400	Digital Imaging (3)	3
PHOTO 420	History of Photography (3)	3
A minimum of 3 units from the following:		3
PHOTO 260	The Eastern Sierra Landscape, Yosemite Valley (2)	
PHOTO 272	Lightroom (1.5)	
PHOTO 273	Video Capture with DSLRs (1.5)	
PHOTO 275	Digital Applications for Alternative Processes (1.5)	
PHOTO 277	Creating a Digital Portfolio (1.5)	
PHOTO 350	Photojournalism (3)	
PHOTO 278	Flash Photography (1.5)	

Course Code	Course Title	Units
Total Units:		**24**

Student Learning Outcomes

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

- PSLO #1 communicate visual ideas in a variety of formats
- PSLO #2 describe important historical and contemporary movements in photography
- PSLO #3 produce a portfolio of images emphasizing personal creativity and self expression

Career Information

freelance photographer, editorial photographer, photojournalist, gallery apprentice, museum apprentice, teacher

Art (ART) Courses

ART 300 Drawing and Composition I

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Course Family: Drawing Fundamentals
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L3
C-ID: C-ID ARTS 110

This course covers the fundamentals of drawing emphasizing the use of line, shape, value, perspective, space, and composition. It introduces and uses various drawing media and techniques for drawing. This is a foundation requirement for all art students. Field trips may be required which might be subject to an entrance fee.

ART 301 Digital Drawing and Composition

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Course Family: Drawing Fundamentals
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L3

This course is designed to address the traditional qualities of creative drawing and the unique properties of drawings produced using computer technology. The course includes problems in observation and expression and the translating of these experiences into graphic terms by exploration of gesture, line, texture, shape, volume, space, perspective, light, and shadow. Field trips may be planned.

ART 302 Drawing and Composition II

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Course Family: Drawing Fundamentals
Prerequisite: ART 300 with a grade of "C" or better
Transferable: CSU; UC
C-ID: C-ID ARTS 205

This studio course utilizes the skills acquired in ART 300 to pursue more complex problems. The student will initiate and execute a series of related works. Field trips may be required which might be subject to an entrance fee.

ART 304 Figure Drawing I

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Course Family: Figure Studies
Prerequisite: ART 300 with a grade of "C" or better
Transferable: CSU; UC
C-ID: C-ID ARTS 200

This studio class offers drawing from the human figure. There will be lectures and discussion on proportion, anatomy, and the relationship of the figure to space and composition. Students may wish to challenge the prerequisite by presenting to the instructor a portfolio of their work. Field trips may be required which might be subject to an entrance fee.

ART 305 Figure Drawing II

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Course Family: Figure Studies
Prerequisite: ART 304 and 304 with grades of "C" or better
Transferable: CSU; UC
C-ID: C-ID ARTS 200

This studio course offers intermediate drawing from the human figure. There will be more sophisticated lectures and discussions on proportion, anatomy, and the relationship of the figure to space and composition. A local field trip to a museum or gallery may be assigned.

ART 312 Portrait Drawing

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L3

This course is an introduction to and exploration of the human face as a subject in art. Focus will be placed on the development of skills needed to portray specific individuals rather than a generalized image. This is primarily a practice course including elements of the history and traditions of portraiture as well as anatomy.

ART 320 Design: Fundamentals

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L3
C-ID: C-ID ARTS 100

This course is comprised of lectures and projects concentrating on the elements of design (line, shape, color, texture, form, space) and the principles of organization (such as unity, variety, contrast, balance, emphasis, etc.) as applicable to both the fine and applied arts. In-person or virtual field trips that might require entrance fees may occur for this course.

ART 323 Design: Color Theory

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L3

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

ART 324 Collage and Assemblage

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L3

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

ART 325 Introduction to Graphic Design

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: ART 320 with a grade of "C" or better, or placement through the assessment process.
Transferable: CSU

This is an introduction to the visual communication arts. The course will cover a series of creative problems designed to analyze letterform and image and demonstrate impact on visual perception. The student will be introduced to the terminology of traditional and digital tools and the visual language of graphic design. Field trips may be required for this course.

ART 327 Painting I

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Course Family: Painting
Prerequisite: None.
Advisory: ART 300
Transferable: CSU; UC
C-ID: C-ID ARTS 210

This is an introduction to the tools, materials, and techniques of painting. Coursework includes exercises in light and color theory, description of form, color and spatial development, and composition. In-person or virtual field trips that might require entrance fees may occur for this course. We will explore objective and non-objective forms and apply both historical and contemporary methods in our approaches.

ART 328 Painting II

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Course Family: Painting
Prerequisite: ART 327 with a grade of "C" or better
Transferable: CSU; UC

This is an intermediate studio painting course for the student who wishes to develop greater technical skills and problem-solving ability in a more independent framework. The student will initiate and execute progressively complex problems and assignments. In-person or virtual field trips that might require entrance fees may be required.

ART 330 Mural Painting

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Course Family: Painting
Prerequisite: None.
Transferable: CSU; UC

This course is a comparative survey of the use of mural painting as an interactive, public art form used throughout the world and across time. This course examines the process of creating a mural painting by analyzing a site, researching, planning, and executing murals in public spaces and working collaboratively with others. Field trips are required to execute the work on location if applicable.

ART 336 Watercolor Painting

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Course Family: Painting
Prerequisite: None.
Transferable: CSU; UC

This is an introduction to transparent watercolor painting. The class covers media, methods of brush painting, representational and non-representational composition, color relationships, and creative resolutions to watercolor problems. Field trips may be required for this course.

ART 337 Intermediate Watercolor Painting

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Course Family: Painting
Prerequisite: ART 336 with a grade of "C" or better
Transferable: CSU; UC
General Education: Local GE L3

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

ART 338 Introduction to Digital Painting I

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Course Family: Painting
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L3

This course is an introduction to the tools, materials, and techniques of painting using digital software to create and manipulate images. Coursework includes exercises in light and color theory, description of form, color and spatial development, and composition. The fundamental skills of drawing and painting will be applied to individual portfolio quality projects. Field trips may be required which might be subject to an entrance fee.

ART 361 Printmaking: Survey

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Course Family: Printmaking
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L3
C-ID: C-ID ARTS 220

This is a printmaking survey course which may include relief (wood and linoleum), Intaglio (etching and drypoint), stencil (silkscreening) and monoprint processes. Field trips may be required.

ART 362 Printmaking: Intaglio

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Course Family: Printmaking
Prerequisite: None.
Transferable: CSU; UC

This course studies the techniques of Intaglio processes including hard ground etching, soft ground etching, aquatint, drypoint, engraving and/or mezzotint. Field trips are required.

ART 364 Printmaking: Relief

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Course Family: Printmaking
Prerequisite: None.
Transferable: CSU; UC

This course presents the techniques of wood and linoleum cutting and printing by hand and by press. Field trips are required.

ART 370 Three Dimensional Design

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L3
C-ID: C-ID ARTS 101

This is a studio course covering the analysis of historical and contemporary designs and the resolution of technical and conceptual problems (using a variety of media such as: wood, fabric, glass, etc.) by the creation of 3-dimensional forms. Form, color, space, composition, and other formal values will be considered. This course may include visits to nearby museums and/or galleries.

ART 372 Sculpture

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Course Family: Sculpture
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L3

This is a basic practice class in the expressive use of form and color in space. It uses various sculptural methods such as additive and subtractive media like clay and plaster, as well as constructive media like wood and metal. Found objects, recycled materials, light, sound, and other new media may be explored. Creative effort, development of individual expression, new ideas, and knowledge of technical processes will be stressed. Content will be developed by using both historical and contemporary approaches. Field trips may be required which might be subject to an entrance fee.

ART 394 Wheel Thrown Ceramics, Beginning

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Transferable: CSU; UC

This course is an introductory class in wheel-thrown ceramics. The course will provide students with a broad understanding of the ceramics process, from clay composition to fired-glazed wares. Alternative firing processes are explored, such as Raku, pit firing, and sawdust firing. Students at all skill levels may enroll in the class.

ART 395 Wheel Thrown Ceramics, Intermediate

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: ART 394 with a grade of "C" or better, or placement through the assessment process.
Transferable: CSU; UC

This course is an intermediate class in wheel thrown ceramics. The course will provide students with opportunities to further explore the technical and creative processes of ceramic pottery-making, such as, Raku and primitive firing processes and experimentation of different surface treatments.

ART 396 Wheel Thrown Ceramics, Advanced

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: ART 395 with a grade of "C" or better
Transferable: CSU; UC

This course is an advanced class in wheel thrown ceramics. The class will provide students with individual approaches to create their own unique pottery forms. Emphasis will be placed on more aesthetic approaches to pottery-making. Students will be able to express individual artistic concepts and ideas through pottery forms using various advanced ceramic techniques, which include glazing, firing, and surface treatment.

ART 402 Beginning Clay Sculpture

Units: 3
Hours: 36 hours LEC; 54 hours LAB

Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L3

This course is an introduction to the basic handbuilding techniques and methods of creating ceramic sculpture. The class includes glazing and firing processes used in clay sculpture. Lectures and group discussions will be conducted in connection with the course.

ART 404 Intermediate Clay Sculpture

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: ART 402 with a grade of "C" or better
Transferable: CSU; UC

This course is an intermediate class in ceramic sculpture handbuilding techniques and methods. The class will include glazing, surface treatment and various firing processes used in clay sculpture. Focus will be placed on in-depth examination of contemporary ceramic sculpture.

ART 430 Art and Children

Units: 3
Hours: 45 hours LEC; 27 hours LAB
Prerequisite: None.
Transferable: CSU
General Education: Local GE L3

This is a course that investigates the relationship of children and art emphasizing the three aspects of art: seeing and analyzing visual relationships, developing techniques of producing works of art, and exploring historical and contemporary art objects. The framework for developing art curriculum that is age and grade level appropriate will be outlined. Suggested for recreational leadership, preschool or elementary teachers, and caregivers. Field trips may be scheduled.

ART 443 Art Gallery Operations

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Course Family: Gallery Management
Prerequisite: None.
Enrollment Limitation: Two college art courses from art studio (ART) or art history (ARTH).
Transferable: CSU

This first-semester course involves gallery preparation and maintenance as students learn gallery fundamentals in the visual arts. Included are experiences in planning and installing exhibitions, inventory and maintenance of art, participation in staffing and docent activities, and gallery and student outreach programs. A field trip to a museum or gallery is required.

ART 494 Topics in Art

Units: 0.5 - 4
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Transferable: CSU

This course is designed to give students an opportunity to study topics not included in current course offerings.

ART 495 Independent Studies in Art

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

ART 499 Experimental Offering in Art

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU; UC (Credit for variable topics courses is given only after a review of the scope and content of the course by the enrolling UC campus.)

This is the experimental courses description.

Art History (ARTH) Courses

ARTH 300 Art Appreciation

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGWR 301 with a grade of "C" or better
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3A
C-ID: C-ID ARTH 100

This is an overview of the visual arts including: drawing, sculpture, artifacts, architecture, painting, and printmaking. We will examine the materials, methods, and design principles of creating. This course is recommended as a basis for the understanding of art. Local field trips may be required.

ARTH 303 Art Survey: Ancient to 14th Century

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3A
C-ID: C-ID ARTH 110

This course was formerly known as ARTH 303 Art Survey: Ancient to 14th Century.

This course traces the developments in art from prehistoric times through the 14th Century. Emphasis will be given to artifacts, architecture, painting, and sculpture.

ARTH 307 Italian Renaissance Art

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGWR 301 or ENGL C1001
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3A

This course introduces the visual arts and architecture of Italy in the Renaissance, from duecento (13th century) through cinquecento (16th century). Topics include the relationship between the visual arts and culture and artists and their works from the periods and styles known as the Proto-Renaissance, Renaissance, High Renaissance, and Mannerism. Relationships between Italy and other cultures, including New World civilizations, are also made.

ARTH 309 Art Survey: Renaissance to 19th Century

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGL C1000 with a grade of "C" or better
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3A
C-ID: Part of C-ID ARTH 120

This course covers the architecture, sculpture, artifacts, painting and graphic art of world cultures, in particular of Western art from the Renaissance period through the 19th Century. This is a required class for art history major students.

ARTH 311 Art Survey: Modern Art

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3A
C-ID: C-ID ARTH 150; Part of C-ID ARTH 120

This course covers diverse art forms including painting, sculpture and architecture in Europe and America from the 19th, 20th, and 21st centuries. Styles discussed will include Neoclassicism, Romanticism, Realism, Impressionism, Post-Impressionism, Symbolism, Art Nouveau and all the major Modern art movements of the 20th century such as Fauvism, Cubism, Expressionism, Dada, Surrealism, American Modernism, Pop Art, Happenings, Conceptual and Installation Art. This class will also cover Post-Modernism, Neo-Expressionism, Video Installations, and Globalization. A field trip to an art museum is required. Students may choose between an in-person field trip to an art museum or a virtual museum tour. Links to such virtual museum tours will be provided by the instructor.

ARTH 312 Women in Art

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3A

This is a survey course of women's art from the Middle Ages to the present; including the art of both European and non-European cultures. ARTH 312 is presented through slide lectures and discussion, which will include historical and cultural context, limitations imposed by society, and the differences and similarities of other artists in each period.

ARTH 324 Art of the Americas

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3A

This course focuses on the study of the indigenous arts and cultures of the Americas before the arrival of Columbus in the New World. Emphasis is on the Pre-Contact peoples of Meso-America and South America, such as the Aztec, Maya, and Inca cultures, and their contributions to colonial and modern art forms.

ARTH 325 Native American Art History

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3A

This course studies the arts and culture of Native peoples of North America. It discusses the artistic traditions of native peoples of the Ancient and Eastern Woodlands, the Plains, the Southwest, California, the Northwest Coast, and the Arctic and Subarctic regions as well as examples of contemporary Native American art. Comparisons will be made between individual Native American cultures and between Native and Euro-centric cultures.

ARTH 328 Survey of African Art

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3A; Cal-GETC Area 3B

This course is an introduction to the art and architecture of Africa in terms of its cultural and philosophical background; its materials and techniques; its aesthetic considerations; and its impact on 20th Century Western art.

ARTH 332 Asian Art

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGL C1000 with a grade of "C" or better
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3A
C-ID: C-ID ARTH 130

This course is an introduction to and comparative survey of the major forms and trends in the arts, architecture and artifacts of Asia from the Neolithic to the contemporary. The role of secular and religious ideas and ideals are examined, the similarities and differences among the cultures are assessed and the contributions to world culture will be appraised to create understanding, appreciation and tolerance. A regional or local field trip may be required.

ARTH 333 Introduction to Islamic Art

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC

General Education: Local GE L3; Cal-GETC Area 3A; Cal-GETC Area 3B

This is a survey course that studies works of art and architecture produced by artists of Muslim countries and regions from the period of the early caliphates (c. 700) to the heights of the Islamic empires (c. 1700.) It provides fundamental information on the formation of Islamic art, its history and philosophy but also deals with the relationships between the Islamic, Asian, and Western artistic traditions. This course includes but is not limited to visual examples from the Middle East, Iran, India, North Africa and Spain.

ARTH 499 Experimental Offering in Art History

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU; UC (Credit for variable topics courses is given only after a review of the scope and content of the course by the enrolling UC campus.)

This is the experimental courses description.

Art New Media (ARTNM) Courses

ARTNM 302 Digital Basics for Art New Media

Units: 1.5
Hours: 18 hours LEC; 27 hours LAB
Prerequisite: None.
Transferable: CSU

This course is an introduction to the digital environment for Art New Media. Topics of Mac OS, digital vocabulary, scanning, saving and file formats will be included. Distinctions between vector, bitmap, and page layout applications will be made using Adobe Illustrator, Adobe Photoshop, Adobe InDesign and/or Painter.

ARTNM 324 Digital Design

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: ART 300, ART 320, CISC 302, or JOUR 330
Transferable: CSU; UC
C-ID: C-ID ARTS 250

This course is an introduction to computer-based design using the basic operating principles of vector graphics software. Design skills and the tools of the software application will be applied to produce an individual portfolio of projects. In-person field trips may be required that might require an entrance fee. Virtual online field trips may be substituted in a Distance Education format.

ARTNM 420 Introduction to 3D Modeling

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: ART 320 and 370 with grades of "C" or better
Transferable: CSU; UC

This course introduces computer-generated three-dimensional, or CG 3D, modeling using industry standard software. The primary focus of this course is modeling using polygons, surfaces, and curves to produce quality demo reel renders of the models. Objects range from simplistic primitive shapes to sophisticated models of animals and plants. Software application tools, such as Autodesk Maya and Pixologic Zbrush, are applied to produce content for use in 3D printing, film, game, fine art, broadcast, medical and industrial animation, and more.

ARTNM 495 Independent Studies in Art New Media

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

ARTNM 499 Experimental Offering in Art New Media

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU; UC (Credit for variable topics courses is given only after a review of the scope and content of the course by the enrolling UC campus.)

This is the experimental courses description.

Automotive Mechanics Technology

The Automotive Mechanics Technology program emphasizes developing skills required for efficient diagnosis, maintenance, and repair of the automobile and its components. This program and its instructors are Automotive Service Excellence (ASE) certified. The college offers both theoretical and practical training relating to all phases of the automobile.

The Automotive Mechanics Technology and Ford ASSET programs are certified by the ASE (Automotive Service Excellence) Education Foundation (formerly NATEF) as Master Automobile Service Technology programs.

ASE Education Foundation (https://www.aseeducationfoundation.org/)
1503 Edwards Ferry Rd., NE
Suite 401 Leesburg, VA 20176
(703) 669-6650, (703) 669-6677
info@ASEeducationFoundation.org

Degrees and Certificates Offered

A.S. in Automotive Mechanics Technology
A.S. in Automotive Mechanics Technology (Ford ASSET)
Automatic Transmissions and Transaxles Certificate
Automatic Transmissions/Transaxles (Ford ASSET) Certificate
Automotive Brakes Certificate
Automotive Brakes (Ford ASSET) Certificate
Automotive Electrical Systems Certificate
Automotive Electrical Systems (Ford ASSET) Certificate
Automotive Emission Control Certificate
Automotive Engine Performance Certificate
Automotive Engine Performance (Ford ASSET) Certificate
Automotive Engine Repair Certificate
Automotive Engine Repair (Ford ASSET) Certificate
Automotive Heating and Air Conditioning Certificate
Automotive Heating and Air Conditioning (Ford ASSET) Certificate
Automotive Mechanics Technology Certificate
Automotive Mechanics Technology (Ford ASSET) Certificate
Automotive Suspension and Steering Certificate
Automotive Suspension and Steering (Ford ASSET) Certificate
Manual Drive Train and Axles (Ford ASSET) Certificate
Small Engine Repair Certificate

Dean Ashu Mishra
Department Chair Brian Noel
Phone (916) 525-4319
Email mishraa@crc.losrios.edu

Associate Degrees

A.S. in Automotive Mechanics Technology

This program emphasizes developing skills required for efficient diagnosis, maintenance, and repair of the automobile and its components. Completion of this degree also represents completion of a National Automotive Technicians Education Foundation (NATEF) accredited Master Automotive Service Technology (MAST) program. Instructors for this program are Automotive Service Excellence (ASE) certified as required by NATEF standards.

Upon successful completion of the program, students are qualified for placement as technicians in the automotive industry. Students may apply units earned by successful completion of Automotive Mechanics Technology courses to one or more of the specialized certificates and/or the Associate Degree in Automotive Mechanics Technology.

HIGHLIGHTS
*One of the best equipped shops in Northern California for hands-on training
*Graduates routinely pass ASE and State Smog Certification exams
*A facility chosen as part of the GM, Ford and Chrysler Technical Training Network
*NATEF MAST program
*ASE Certified instructors
*Class sizes with an excellent teacher/student ratio

Degree Requirements

Course Code	Course Title	Units
AMT 300	Automotive Fundamentals and Shop Procedures	4
AMT 303	Automotive Electrical & Electronic Systems	4
AMT 304	Automotive Manual Drive Train and Axles	3
AMT 310	Engine Performance	3
AMT 314	Wheel Alignment	3
AMT 316	Automotive Brakes	3
AMT 322	Engine Repair	3
AMT 324	Electronic Fuel Injection	3
AMT 326	Automotive Heating and Air Conditioning	3
AMT 330	Automatic Transmissions/Transaxles	3
AMT 332	Automotive Computerized Controls	3
A minimum of 5 units from the following:		5
AMT 301	Automotive Service Management (3)	
AMT 306	Small Engine Repair (3)	
AMT 498	Work Experience in Automotive Mechanics Technology (0.5 - 4)	
A minimum of 3 units from the following:		3
AMT 321	Advanced Automotive Electrical & Hybrid Vehicle Systems (3)	
AMT 328	Light Duty Diesel Engine Performance (3)	
AMT 340	Emission Control Inspection and Repair (5)	

Course Code	Course Title	Units
Total Units:		**43**

The Automotive Mechanics Technology Associate in Science (A.S.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Student Learning Outcomes

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

- PSLO 1: Understand the fundamental purpose, components, and operation of major automotive systems to include gasoline engines, automatic transmissions and transaxles, manual transmissions, drivetrains, and axles, suspension and steering systems, brake systems, electrical and electronic systems, heating and air conditioning systems, and engine performance systems.
- PSLO 2: Understand the proper use of tools, equipment, and publications used for automotive diagnosis and repair.
- Understand typical automotive shop hierarchy, structure, and standard procedures.
- Prepare and write repair orders to include: customer information, vehicle identifying information, customer concerns, related service history, cause, and correction.
- PSLO 3: Diagnose engine mechanical concerns, conduct diagnostic testing procedures, and perform the procedures and techniques involved in typical engine repairs and overhauls.
- PSLO 4: Demonstrate the ability to diagnose, service, and repair automatic transmissions and transaxles.
- PSLO 5: Demonstrate the ability to diagnose and repair manual transmissions, transaxles, and drive train concerns.
- PSLO 6: Demonstrate the ability to diagnose and repair automotive suspension and steering concerns.
- PSLO 7: Demonstrate the ability to diagnose and repair automotive brake systems.
- PSLO 8: Demonstrate the ability to diagnose and repair automotive electrical and electronic concerns.
- PSLO 9: Demonstrate the ability to diagnose and repair automotive heating, ventilation, and air conditioning (HVAC) system concerns.
- PSLO 10: Demonstrate the ability to diagnose, service, and repair gasoline engine performance systems and their components.
- Verify the outcome of the repair through a test drive analysis or system self-test.

Career Information

Auto Technician; Auto/Truck Specialist; Automotive Microcomputer Programmer & Operator; Field Service/Sales Representative; Inventory Controls Manager; Tune-up & Electrical Specialist. ASE certified in the areas of Brakes, Electrical/Electronic Systems, Engine Performance, Suspension and Steering, Automatic Transmission/Transaxle, Engine Repair, Heating and Air Conditioning, and Manual Drive Train and Axles. Courses in the general automotive program are designed to emphasize skills development in efficient diagnosis, maintenance, and repair of the automobile. A wide variety of makes and models of vehicles are used in laboratory practice. Students can enter the General Program in Automotive Mechanics Technology at any semester, summer, fall, or spring. Certificate programs as well as an A.S. degree in Automotive Mechanics Technology are available.

A.S. in Automotive Mechanics Technology (Ford ASSET)

The Ford Automotive Student Service Education Training (ASSET) Program is a two-year Associate's Degree program in Automotive Mechanics Technology. This program is designed to help students develop the skills necessary to efficiently and accurately maintain, diagnose, and service/repair all major systems of the automobile.

The Ford ASSET Program is a partnership between Cosumnes River College (CRC) and Ford Motor Company. Ford ASSET is the only program that includes an in dealership cooperative work experience component. Students will rotate between school and the dealership for the duration of the two-year program, giving them invaluable hands-on experience while they learn.

Courses within the Ford ASSET program allow students to earn Service Technician Specialty Training (STST) certifications from Ford Motor Company in the following areas:
• New Ford/Lincoln Technician
• Field Service Actions
• Electrical Systems
• Brake Systems
• Steering & Suspension
• Climate Control
• Automatic Transmissions
• Manual Transmission and Drivetrain
• Gasoline Engine Repair
• Gasoline Engine Performance
• Diesel Engine Repair
• Diesel Engine Performance
• Electronic Systems
• High Voltage Systems
• High Voltage Battery Repair

Instructors for this program are Ford STST certified as required by Ford Motor Company standards.

Completion of this degree also represents completion of an ASE Education Foundation accredited Master Automotive Service Technology (MAST) program. Instructors for this program are Automotive Service Excellence (ASE) certified as required by ASE Education Foundation standards.

Upon successful completion of this program, students will be highly certified Ford/Lincoln Service Technicians. Students may apply units earned by the successful completion of this program to one or more of the specialized certificates as well as the Associate's degree.

Degree Requirements

Course Code	Course Title	Units
First Year - Fall Semester:		

Course Code	Course Title	Units
AMT 370	Ford ASSET Automotive Fundamentals and Dealership Practices	4
AMT 371	Ford ASSET Automotive Electrical/Electronic Systems	3
AMT 372	Ford ASSET Automotive Brake Systems	3
A minimum of 3 units from the following:		3
AMT 133	Ford ASSET Practicum One (0.5 - 4)	
First Year - Spring Semester:		
AMT 374	Ford ASSET Automotive Suspension and Steering	3
AMT 375	Ford ASSET Automotive Wheel Alignment	3
AMT 376	Ford ASSET Automotive Heating and Air Conditioning	3
A minimum of 3 units from the following:		3
AMT 134	Ford ASSET Practicum Two (0.5 - 4)	
First Year - Summer Semester:		
AMT 378	Ford ASSET Automatic Transmissions/Transaxles	3
AMT 130	Ford ASSET Advanced Automatic Transmission Diagnosis	1.5
AMT 379	Ford ASSET Automotive Engine Repair	3
AMT 385	Ford ASSET Automotive Manual Drive Train and Axles	1.5
Second Year - Fall Semester:		
AMT 381	Ford ASSET Electronic Engine Control	4
AMT 382	Ford ASSET Gasoline Engine Performance	3
AMT 383	Ford ASSET Advanced Gasoline Engine Performance	3
A minimum of 3 units from the following:		3
AMT 135	Ford ASSET Practicum Three (0.5 - 4)	
Second Year - Spring Semester:		
AMT 131	Ford ASSET Diesel Engine Performance	3
AMT 137	Ford ASSET Advanced Electronics	3
AMT 138	Ford ASSET High Voltage Vehicle Systems	3
A minimum of 3 units from the following:		3
AMT 136	Ford ASSET Practicum Four (0.5 - 4)	
Total Units:		**59**

The Automotive Mechanics Technology (Ford ASSET) Associate in Science (A.S.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Enrollment Eligibility

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

- Completion of an application for the Ford ASSET Program (can be found at http://www.crc.losrios.edu/cars).
- Possess a valid driver's license with a driving record that is suitable for the sponsoring dealership's insurance requirements.
- Meet sponsoring dealership hiring requirements which may include submitting to a drug test and/or criminal background check.

Enrollment Process

Eligible students are selected for the program according to the following steps:

- Only students who meet the stated eligibility requirements will be considered for the program.
- Students who meet all necessary eligibility requirements are selected from the applicant pool in the order in which they are received.

Student Learning Outcomes

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

- PSLO 1: Understand the fundamental purpose, components, and operation of major automotive systems to include gasoline engines, automatic transmissions and transaxles, manual transmissions, drivetrains, and axles, suspension and steering systems, brake systems, electrical and electronic systems, heating and air conditioning systems, and engine performance systems.
- PSLO 2: Understand the proper use of tools, equipment, and publications used for automotive diagnosis and repair.
- Understand typical new car dealership hierarchy, structure, and standard procedures.
- Prepare and write repair orders to include: customer information, vehicle identifying information, customer concerns, related service history, cause, and correction.
- PSLO 3: Diagnose engine mechanical concerns, conduct diagnostic testing procedures, and perform the procedures and techniques involved in typical engine repairs and overhauls.
- PSLO 4: Demonstrate the ability to diagnose, service, and repair automatic transmissions and transaxles.
- PSLO 5: Demonstrate the ability to diagnose and repair manual transmissions, transaxles, and drive train concerns.
- PSLO 6: Demonstrate the ability to diagnose and repair automotive suspension and steering concerns.
- PSLO 7: Demonstrate the ability to diagnose and repair automotive brake systems.
- PSLO 8: Demonstrate the ability to diagnose and repair automotive electrical and electronic concerns.
- PSLO 9: Demonstrate the ability to diagnose and repair automotive heating, ventilation, and air conditioning (HVAC) system concerns.
- PSLO 10: Demonstrate the ability to diagnose, service, and repair gasoline engine performance systems and their components.
- Verify the outcome of the repair through a test drive analysis or system self-test.

Career Information

• Automotive Technician • Light Duty Diesel Technician • Ford/Lincoln Specialized Technician (in any of the Service Technician Specialty Training [STST] areas) • Ford/Lincoln Engine Master Technician • Ford/Lincoln Chassis Master Technician • Ford/Lincoln Drivetrain Master Technician • Ford/Lincoln Senior Master Technician Students who successfully complete the program will: • Earn an Associate's degree in Automotive Mechanics Technology. • Be granted Ford Service Technician Specialty Training (STST) credentials. • Be prepared for Automotive Service Excellence (ASE) certification in all Automobile series areas.

Certificates of Achievement

Automatic Transmissions and Transaxles Certificate

The curriculum is designed for students interested in seeking employment in the diagnosis and repair of automatic transmissions/transaxles.

Certificate Requirements

Course Code	Course Title	Units
AMT 300	Automotive Fundamentals and Shop Procedures	4
AMT 303	Automotive Electrical & Electronic Systems	4
AMT 304	Automotive Manual Drive Train and Axles	3
AMT 330	Automatic Transmissions/Transaxles	3
Total Units:		**14**

Student Learning Outcomes

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

- Identify components and systems that require periodic inspection and/or maintenance.
- Explain the proper use of service publications used in diagnostic procedures.
- Recognize electronic principles and how they relate to particular automotive systems.
- Perform the necessary repair procedure for a certain set electrical/electronic diagnostic problems.
- Understand the operation of clutches, manual transmissions, transaxles, transfer cases, drive shafts, and axle assemblies (powertrain).
- Demonstrate the ability to diagnose manual powertrain concerns.
- Understand theory and operation of automatic transmissions/transaxles.
- Demonstrate the ability to repair automatic transmissions/transaxles.

Automatic Transmissions/Transaxles (Ford ASSET) Certificate

This certificate represents a subset of the Ford Automotive Student Service Education Training (ASSET) Program and is intended for students wishing to specialize in automatic transmissions and transaxles. This certificate is designed to help students develop the skills necessary to efficiently and accurately maintain, diagnose, and service/repair automatic transmissions and transaxles.

Certificate Requirements

Course Code	Course Title	Units
AMT 370	Ford ASSET Automotive Fundamentals and Dealership Practices	4
AMT 371	Ford ASSET Automotive Electrical/Electronic Systems	3
AMT 378	Ford ASSET Automatic Transmissions/Transaxles	3
AMT 130	Ford ASSET Advanced Automatic Transmission Diagnosis	1.5
A minimum of 3 units from the following:		3
AMT 498	Work Experience in Automotive Mechanics Technology (0.5 - 4)	
Total Units:		**14.5**

Enrollment Eligibility

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

- Eligibility for ENGWR 101.
- Eligibility for MATH 100.
- Possess a valid driver’s license with a driving record that is suitable for the sponsoring dealership’s insurance requirements.
- Able to operate a vehicle equipped with a manual transmission.
- Meet sponsoring dealership hiring requirements which may include submitting to a drug test and/or criminal background check.
- Completion of an application for the Ford ASSET Program (can be found at http://www.crc.losrios.edu/cars).

Enrollment Process

Eligible students are selected for the program according to the following steps:

- Students are selected from the applicant pool in the order in which they are received.
- Only students who meet the stated eligibility requirements will be considered for the program.

Student Learning Outcomes

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

- SLO 1: Understand the proper use of tools, equipment, and publications used for automotive diagnosis and repair.
- Understand typical new car dealership hierarchy, structure, and standard procedures.

- Prepare and write repair orders to include: customer information, vehicle identifying information, customer concerns, related service history, cause, and correction.
- SLO 2: Understand the fundamental purpose, components, and operation of automatic transmissions and transaxles.
- SLO 3: Demonstrate the ability to diagnose, service, and repair automatic transmissions and transaxles.
- Verify the outcome of the repair through a test drive analysis or system self-test.

Career Information

• Automotive Maintenance / Light Repair Technician • Automatic Transmission Technician • Ford/Lincoln Specialized Technician (in Service Technician Specialty Training [STST] area 37-Automatic Transmissions)

Automotive Brakes Certificate

This curriculum is designed for students interested in seeking employment in the repair and installation of automotive brakes systems.

Certificate Requirements

Course Code	Course Title	Units
AMT 300	Automotive Fundamentals and Shop Procedures	4
AMT 303	Automotive Electrical & Electronic Systems	4
AMT 310	Engine Performance	3
AMT 316	Automotive Brakes	3
AMT 332	Automotive Computerized Controls	3
Total Units:		**17**

Student Learning Outcomes

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

- Describe the fundamentals of automotive systems to include engine operation and repair, automatic transmissions/transaxles, manual drive train and axles, suspension and steering, brakes, electrical and electronic systems, heating and air conditioning, and engine performance.
- Describe the fundamentals of diagnosing automotive systems.
- Explain how to perform fundamental diagnostic procedures as outlined in manufacture service publications.
- Describe the theory and operation of Automotive Electrical/Electronic Systems.
- Recall and apply step-by-step diagnostic procedures.
- Repair automotive electrical/electronic systems relating to Brake Systems.
- Understand theory and operation of automotive brake systems.
- Explain the operation of conventional, anti-lock, traction control and electronic stability assist brake systems.
- Demonstrate the ability to repair automotive brake systems.
- Explain theory and operations of automotive computerized controls.
- Perform inspection, testing, disassembly, component replacement, reassembly, and confirmation of repair on automotive computerized control systems.

Automotive Brakes (Ford ASSET) Certificate

This certificate represents a subset of the Ford Automotive Student Service Education Training (ASSET) Program and is intended for students wishing to specialize in automotive brake systems. This certificate is designed to help students develop the skills necessary to efficiently and accurately maintain, diagnose, and service/repair automotive brake systems.

Certificate Requirements

Course Code	Course Title	Units
AMT 370	Ford ASSET Automotive Fundamentals and Dealership Practices	4
AMT 371	Ford ASSET Automotive Electrical/Electronic Systems	3
AMT 372	Ford ASSET Automotive Brake Systems	3
A minimum of 3 units from the following:		3
AMT 498	Work Experience in Automotive Mechanics Technology (0.5 - 4)	
Total Units:		**13**

Enrollment Eligibility

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

- Eligibility for ENGWR 101.
- Eligibility for MATH 100.
- Possess a valid driver’s license with a driving record that is suitable for the sponsoring dealership’s insurance requirements.
- Able to operate a vehicle equipped with a manual transmission.
- Meet sponsoring dealership hiring requirements which may include submitting to a drug test and/or criminal background check.
- Completion of an application for the Ford ASSET Program (can be found at http://www.crc.losrios.edu/cars).

Enrollment Process

Eligible students are selected for the program according to the following steps:

- Students are selected from the applicant pool in the order in which they are received.
- Only students who meet the stated eligibility requirements will be considered for the program.

Student Learning Outcomes

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

- SLO 1: Understand the proper use of tools, equipment, and publications used for automotive diagnosis and repair.
- Understand typical new car dealership hierarchy, structure, and standard procedures.
- Prepare and write repair orders to include: customer information, vehicle identifying information, customer concerns, related service history, cause, and correction.
- SLO 2: Understand the fundamental purpose, components, and operation of automotive brake systems.
- SLO 3: Demonstrate the ability to diagnose and repair automotive brake systems.
- Verify the outcome of the repair through a test drive analysis or system self-test.

Career Information

• Automotive Maintenance / Light Repair Technician • Brake System Technician • Ford/Lincoln Specialized Technician (in Service Technician Specialty Training [STST] area 38-Brakes)

Automotive Electrical Systems Certificate

This curriculum is designed for students interested in seeking employment in the diagnosis and repair of automotive electrical systems.

Certificate Requirements

Course Code	Course Title	Units
AMT 300	Automotive Fundamentals and Shop Procedures	4
AMT 303	Automotive Electrical & Electronic Systems	4
AMT 310	Engine Performance	3
AMT 321	Advanced Automotive Electrical & Hybrid Vehicle Systems	3
AMT 332	Automotive Computerized Controls	3
Total Units:		**17**

Student Learning Outcomes

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

- Describe the fundamentals of automotive systems to include engine operation and repair, automatic transmissions/transaxles, manual drive train and axles, suspension and steering, brakes, electrical and electronic systems, heating and air conditioning, and engine performance.
- Explain how to perform fundamental diagnostic procedures as outlined in manufacture service publications.
- Describe the theory and operation of Automotive Electrical/Electronic Systems.
- Perform the necessary repair procedure for a certain set electrical/electronic diagnostic problems.
- Describe the theory and the operation of automotive ignition systems.
- Apply test procedures on automotive ignition systems and components
- Describe the theory and operation of Electronic Control Systems.
- Diagnose automotive electronic control system concerns.
- Explain the relationships between input sensors, processing and output sensors.
- Perform the necessary repair procedures for a certain set of automotive computerized control diagnostic problems.

Automotive Electrical Systems (Ford ASSET) Certificate

This certificate represents a subset of the Ford Automotive Student Service Education Training (ASSET) Program and is intended for students wishing to specialize in automotive electrical systems. This certificate is designed to help students develop the skills necessary to efficiently and accurately maintain, diagnose, and service/repair automotive electrical systems.

Certificate Requirements

Course Code	Course Title	Units
AMT 370	Ford ASSET Automotive Fundamentals and Dealership Practices	4
AMT 371	Ford ASSET Automotive Electrical/Electronic Systems	3
AMT 381	Ford ASSET Electronic Engine Control	4
A minimum of 3 units from the following:		3
AMT 498	Work Experience in Automotive Mechanics Technology (0.5 - 4)	
Total Units:		**14**

Enrollment Eligibility

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

- Eligibility for ENGWR 101.
- Eligibility for MATH 100.
- Possess a valid driver’s license with a driving record that is suitable for the sponsoring dealership’s insurance requirements.
- Able to operate a vehicle equipped with a manual transmission.
- Meet sponsoring dealership hiring requirements which may include submitting to a drug test and/or criminal background check.
- Completion of an application for the Ford ASSET Program (can be found at http://www.crc.losrios.edu/cars).

Enrollment Process

Eligible students are selected for the program according to the following steps:

- Students are selected from the applicant pool in the order in which they are received.
- Only students who meet the stated eligibility requirements will be considered for the program.

Student Learning Outcomes

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

- SLO 1: Understand the proper use of tools, equipment, and publications used for automotive diagnosis and repair.
- Understand typical new car dealership hierarchy, structure, and standard procedures.
- Prepare and write repair orders to include: customer information, vehicle identifying information, customer concerns, related service history, cause, and correction.
- SLO 2: Understand the fundamental purpose, components, and operation of automotive electrical and electronic systems.
- SLO 3: Demonstrate the ability to diagnose, service, and repair automotive electrical and electronic systems.
- Verify the outcome of the repair through a test drive analysis or system self-test.

Career Information

• Automotive Technician (Electrical Specialist) • Ford/Lincoln Specialized Technician (in Service Technician Specialty Training [STST] area 34-Electrical Systems)

Automotive Emission Control Certificate

This curriculum is designed for students who are interested in seeking employment in the inspection, diagnosis, and/or repair of automotive emission control systems. Students completing this program may be eligible to pursue licensing as a California SMOG Check Inspector and/or California SMOG Check Repair Technician.

Certificate Requirements

Course Code	Course Title	Units
AMT 300	Automotive Fundamentals and Shop Procedures	4
AMT 303	Automotive Electrical & Electronic Systems	4
AMT 310	Engine Performance	3
AMT 324	Electronic Fuel Injection	3
AMT 332	Automotive Computerized Controls	3
AMT 340	Emission Control Inspection and Repair	5[1]
Total Units:		**22**

[1]A current advanced emission control smog license will meet the requirement for AMT 340. ASE (Automotive Service Excellence) Certification in A6, A8, and L1 will meet requirements for AMT 303, 310, 332. No units will be earned for requirements met through licensing or certification exams. In these cases fewer total units are required.

Student Learning Outcomes

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

- Recognize electronic principles and how they relate to particular automotive systems.
- Diagnose automotive engine performance concerns.
- Demonstrate the ability to diagnose electronic fuel injection.
- Diagnose automotive computerized control concerns.
- Identify the fundamentals of automotive emission systems to include electrical, vacuum, computerized vehicle emission components, emission regulations, emission testing, emission reduction systems, and emission inspection/diagnostic equipment.

Automotive Engine Performance Certificate

This curriculum is designed for students who are interested in seeking employment in the inspection, maintenance, diagnosis, and repair of automotive engine performance systems.

Certificate Requirements

Course Code	Course Title	Units
AMT 300	Automotive Fundamentals and Shop Procedures	4
AMT 303	Automotive Electrical & Electronic Systems	4
AMT 306	Small Engine Repair (3)	3
or AMT 322	Engine Repair (3)	
AMT 310	Engine Performance	3
AMT 321	Advanced Automotive Electrical & Hybrid Vehicle Systems	3
AMT 324	Electronic Fuel Injection	3
AMT 332	Automotive Computerized Controls (3)	3 - 5
or AMT 340	Emission Control Inspection and Repair (5)	
Total Units:		**23 - 25**

Student Learning Outcomes

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

- Recognize electronic principles and how they relate to particular automotive systems.
- Explain the proper use of technical service publications used in the diagnostic procedure.
- Repair automotive engine performance systems.
- Describe theory and the operation of automotive ignition systems.
- Diagnose automotive electronic control system concerns.

- Diagnose engine mechanical concerns and conduct diagnostic testing procedures.
- Understand theory and operation of electronic fuel injection.
- Perform the necessary repair procedures for a certain set of automotive computerized control diagnostic problems.
- Identify the fundamentals of automotive emission systems to include electrical, vacuum, computerized vehicle emission components, emission regulations, emission testing, emission reduction systems, and emission inspection/diagnostic equipment.

Automotive Engine Performance (Ford ASSET) Certificate

This certificate represents a subset of the Ford Automotive Student Service Education Training (ASSET) Program and is intended for students wishing to specialize in gasoline engine performance systems. This certificate is designed to help students develop the skills necessary to efficiently and accurately maintain, diagnose, and service/repair gasoline engine performance systems.

Certificate Requirements

Course Code	Course Title	Units
AMT 371	Ford ASSET Automotive Electrical/Electronic Systems	3
AMT 381	Ford ASSET Electronic Engine Control	4
AMT 382	Ford ASSET Gasoline Engine Performance	3
AMT 383	Ford ASSET Advanced Gasoline Engine Performance	3
Total Units:		**13**

Enrollment Eligibility

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

- Eligibility for ENGWR 101.
- Eligibility for MATH 100.
- Possess a valid driver’s license with a driving record that is suitable for the sponsoring dealership’s insurance requirements.
- Able to operate a vehicle equipped with a manual transmission.
- Meet sponsoring dealership hiring requirements which may include submitting to a drug test and/or criminal background check.
- Completion of an application for the Ford ASSET Program (can be found at http://www.crc.losrios.edu/cars).

Enrollment Process

Eligible students are selected for the program according to the following steps:

- Students are selected from the applicant pool in the order in which they are received.
- Only students who meet the stated eligibility requirements will be considered for the program.

Student Learning Outcomes

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

- SLO 1: Understand the proper use of tools, equipment, and publications used for automotive diagnosis and repair.
- Demonstrate the use of special tools necessary to repair gasoline engine performance systems and their components.
- Prepare and write repair orders to include: customer information, vehicle identifying information, customer concerns, related service history, cause, and correction.
- SLO 2: Understand the fundamental purpose, components, and operation of gasoline engine performance systems.
- SLO 3: Demonstrate the ability to diagnose, service, and repair gasoline engine performance systems and their components.
- Verify the outcome of the repair through a test drive analysis or system self-test.

Career Information

• Automotive Technician (Drivability Specialist) • Ford/Lincoln Specialized Technician (in Service Technician Specialty Training [STST] area 31-Gasoline Engine Performance)

Automotive Engine Repair Certificate

This curriculum is designed for students interested in seeking employment in the engine overhaul and engine repair field.

Certificate Requirements

Course Code	Course Title	Units
AMT 300	Automotive Fundamentals and Shop Procedures	4
AMT 306	Small Engine Repair	3
AMT 322	Engine Repair	3
A minimum of 3 units from the following:		3
Any other Automotive Mechanics Technology course		
Total Units:		**13**

Student Learning Outcomes

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

- SLO 1: Understand the proper use of tools, equipment, and publications used for automotive diagnosis and repair.

- Understand typical automotive repair shop hierarchy, structure, and standard procedures.
- Prepare and write repair orders to include: customer information, vehicle identifying information, customer concerns, related service history, cause, and correction.
- SLO 2: Understand the fundamental purpose, components, and operation of automotive engines.
- SLO 3: Diagnose engine mechanical concerns, conduct diagnostic testing procedures, and perform the procedures and techniques involved in typical engine repairs and overhauls.
- Verify the outcome of the repair through a test drive analysis or system self-test.

Automotive Engine Repair (Ford ASSET) Certificate

This certificate represents a subset of the Ford Automotive Student Service Education Training (ASSET) Program and is intended for students wishing to specialize in automotive engine repair. This certificate is designed to help students develop the skills necessary to efficiently and accurately maintain, diagnose, and service/repair automotive engines.

Certificate Requirements

Course Code	Course Title	Units
AMT 370	Ford ASSET Automotive Fundamentals and Dealership Practices	4
AMT 379	Ford ASSET Automotive Engine Repair	3
AMT 382	Ford ASSET Gasoline Engine Performance	3
A minimum of 3 units from the following:		3
AMT 498	Work Experience in Automotive Mechanics Technology (0.5 - 4)	
Total Units:		**13**

Enrollment Eligibility

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

- Eligibility for ENGWR 101.
- Eligibility for MATH 100.
- Possess a valid driver’s license with a driving record that is suitable for the sponsoring dealership’s insurance requirements.
- Able to operate a vehicle equipped with a manual transmission.
- Meet sponsoring dealership hiring requirements which may include submitting to a drug test and/or criminal background check.
- Completion of an application for the Ford ASSET Program (can be found at http://www.crc.losrios.edu/cars).

Enrollment Process

Eligible students are selected for the program according to the following steps:

- Students are selected from the applicant pool in the order in which they are received.
- Only students who meet the stated eligibility requirements will be considered for the program.

Student Learning Outcomes

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

- SLO 1: Understand the proper use of tools, equipment, and publications used for automotive diagnosis and repair.
- Understand typical new car dealership hierarchy, structure, and standard procedures.
- Prepare and write repair orders to include: customer information, vehicle identifying information, customer concerns, related service history, cause, and correction.
- SLO 2: Understand the fundamental purpose, components, and operation of automotive engines.
- SLO 3: Diagnose engine mechanical concerns, conduct diagnostic testing procedures, and perform the procedures and techniques involved in typical engine repairs and overhauls.
- Verify the outcome of the repair through a test drive analysis or system self-test.

Career Information

• Automotive Technician (Engine Repair Specialist) • Ford/Lincoln Specialized Technician (in Service Technician Specialty Training [STST] area 32-Gasoline Engine Repair)

Automotive Heating and Air Conditioning Certificate

This curriculum is designed for students interested in seeking employment in the automotive heating and air conditioning repair/installation field.

Certificate Requirements

Course Code	Course Title	Units
AMT 300	Automotive Fundamentals and Shop Procedures	4
AMT 303	Automotive Electrical & Electronic Systems	4
AMT 310	Engine Performance	3
AMT 326	Automotive Heating and Air Conditioning	3
AMT 332	Automotive Computerized Controls	3
Total Units:		**17**

Student Learning Outcomes

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

- Describe the fundamentals of diagnosing automotive systems.

- Explain the proper use of service publications used in diagnostic procedures.
- Recognize electronic principles and how they relate to particular automotive systems.
- Perform the necessary repair procedure for a certain set electrical/electronic diagnostic problems.
- Understand the basic operation of automotive air conditioning (A/C) and engine cooling systems.
- Repair automotive air conditioning (A/C) and cooling systems.

Automotive Heating and Air Conditioning (Ford ASSET) Certificate

This certificate represents a subset of the Ford Automotive Student Service Education Training (ASSET) Program and is intended for students wishing to specialize in automotive heating and air conditioning systems. This certificate is designed to help students develop the skills necessary to efficiently and accurately maintain, diagnose, and service/repair automotive heating and air conditioning systems.

Certificate Requirements

Course Code	Course Title	Units
AMT 370	Ford ASSET Automotive Fundamentals and Dealership Practices	4
AMT 371	Ford ASSET Automotive Electrical/Electronic Systems	3
AMT 376	Ford ASSET Automotive Heating and Air Conditioning	3
AMT 379	Ford ASSET Automotive Engine Repair	3
Total Units:		**13**

Enrollment Eligibility

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

- Eligibility for ENGWR 101.
- Eligibility for MATH 100.
- Possess a valid driver's license with a driving record that is suitable for the sponsoring dealership's insurance requirements.
- Able to operate a vehicle equipped with a manual transmission.
- Meet sponsoring dealership hiring requirements which may include submitting to a drug test and/or criminal background check.
- Completion of an application for the Ford ASSET Program (can be found at http://www.crc.losrios.edu/cars).

Enrollment Process

Eligible students are selected for the program according to the following steps:

- Students are selected from the applicant pool in the order in which they are received.
- Only students who meet the stated eligibility requirements will be considered for the program.

Student Learning Outcomes

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

- SLO 1: Understand the proper use of tools, equipment, and publications used for automotive diagnosis and repair.
- Understand typical new car dealership hierarchy, structure, and standard procedures.
- Prepare and write repair orders to include: customer information, vehicle identifying information, customer concerns, related service history, cause, and correction.
- SLO 2: Understand the fundamental purpose, components, and operation of automotive heating and air conditioning systems.
- SLO 3: Demonstrate the ability to diagnose and repair automotive heating, ventilation, and air conditioning (HVAC) system concerns.
- Verify the outcome of the repair through a test drive analysis or system self-test.

Career Information

• Automotive Maintenance / Light Repair Technician • Automotive HVAC Technician • Ford/Lincoln Specialized Technician (in Service Technician Specialty Training [STST] area 35-Climate Control)

Automotive Mechanics Technology Certificate

This one-year curriculum is designed for students who are seeking basic job entry skills for employment in the automotive field. Subsequent certificates and/or an Associate degree in Automotive Mechanics Technology can be earned without the need to repeat courses completed as part of this certificate. Completion of this certificate also represents completion of a National Automotive Technicians Education Foundation (NATEF) accredited Master Automotive Service Technology (MAST) program. Instructors for this program are Automotive Service Excellence (ASE) certified as required by NATEF standards.

Certificate Requirements

Course Code	Course Title	Units
AMT 300	Automotive Fundamentals and Shop Procedures	4
AMT 303	Automotive Electrical & Electronic Systems	4
AMT 304	Automotive Manual Drive Train and Axles	3
AMT 310	Engine Performance	3
AMT 314	Wheel Alignment	3
AMT 316	Automotive Brakes	3

Course Code	Course Title	Units
AMT 322	Engine Repair	3
AMT 324	Electronic Fuel Injection	3
AMT 326	Automotive Heating and Air Conditioning	3
AMT 330	Automatic Transmissions/Transaxles	3
AMT 332	Automotive Computerized Controls	3
A minimum of 5 units from the following:		5
AMT 301	Automotive Service Management (3)	
AMT 306	Small Engine Repair (3)	
AMT 498	Work Experience in Automotive Mechanics Technology (0.5 - 4)	
A minimum of 3 units from the following:		3
AMT 321	Advanced Automotive Electrical & Hybrid Vehicle Systems (3)	
AMT 328	Light Duty Diesel Engine Performance (3)	
AMT 340	Emission Control Inspection and Repair (5)	
Total Units:		**43**

Student Learning Outcomes

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

- PSLO 1: Understand the fundamental purpose, components, and operation of major automotive systems to include gasoline engines, automatic transmissions and transaxles, manual transmissions, drivetrains, and axles, suspension and steering systems, brake systems, electrical and electronic systems, heating and air conditioning systems, and engine performance systems.
- PSLO 2: Understand the proper use of tools, equipment, and publications used for automotive diagnosis and repair.
- Understand typical automotive shop hierarchy, structure, and standard procedures.
- Prepare and write repair orders to include: customer information, vehicle identifying information, customer concerns, related service history, cause, and correction.
- PSLO 3: Diagnose engine mechanical concerns, conduct diagnostic testing procedures, and perform the procedures and techniques involved in typical engine repairs and overhauls.
- PSLO 4: Demonstrate the ability to diagnose, service, and repair automatic transmissions and transaxles.
- PSLO 5: Demonstrate the ability to diagnose and repair manual transmissions, transaxles, and drive train concerns.
- PSLO 6: Demonstrate the ability to diagnose and repair automotive suspension and steering concerns.
- PSLO 7: Demonstrate the ability to diagnose and repair automotive brake systems.
- PSLO 8: Demonstrate the ability to diagnose and repair automotive electrical and electronic concerns.
- PSLO 9: Demonstrate the ability to diagnose and repair automotive heating, ventilation, and air conditioning (HVAC) system concerns.
- PSLO 10: Demonstrate the ability to diagnose, service, and repair gasoline engine performance systems and their components.
- Verify the outcome of the repair through a test drive analysis or system self-test.

Career Information

Auto Technician; Auto/Truck Specialist; Automotive Microcomputer Programmer & Operator; Field Service/Sales Representative; Inventory Controls Manager; Tune-up & Electrical Specialist. ASE certified in the areas of Brakes, Electrical/Electronic Systems, Engine Performance, Suspension and Steering, Automatic Transmission/Transaxle, Engine Repair, Heating and Air Conditioning, and Manual Drive Train and Axles.

Automotive Mechanics Technology (Ford ASSET) Certificate

The Ford Automotive Student Service Education Training (ASSET) Program is a two-year program in Automotive Mechanics Technology. This program is designed to help students develop the skills necessary to efficiently and accurately maintain, diagnose, and service/repair all major systems of the automobile.

The Ford ASSET Program is a partnership between Cosumnes River College (CRC) and Ford Motor Company. Ford ASSET is the only program that includes an in dealership cooperative work experience component. Students will rotate between school and the dealership for the duration of the two-year program, giving them invaluable hands-on experience while they learn.

Courses within the Ford ASSET program allow students to earn Service Technician Specialty Training (STST) certifications from Ford Motor Company in the following areas:
- Electrical Systems
- Brake Systems
- Steering & Suspension
- Climate Control
- Automatic Transmissions
- Gasoline Engine Repair
- Gasoline Engine Performance
- Diesel Engine Repair
- Diesel Engine Performance
- Manual Transmissions

Instructors for this program are Ford STST certified as required by Ford Motor Company standards.

Completion of this certificate also represents completion of a National Automotive Technicians Education Foundation (NATEF) accredited Master Automotive Service Technology (MAST) program. Instructors for this program are Automotive Service Excellence (ASE) certified as required by NATEF standards.

Upon successful completion of this program, students are well qualified for placement as service technicians in Ford and/or Lincoln dealerships. Students may apply units earned by the successful completion of this program to one or more of the specialized certificates as well as the Associate's degree.

Certificate Requirements

Course Code	Course Title	Units
AMT 370	Ford ASSET Automotive Fundamentals and Dealership Practices	4
AMT 371	Ford ASSET Automotive Electrical/Electronic Systems	3
AMT 372	Ford ASSET Automotive Brake Systems	3
A minimum of 3 units from the following:		3
AMT 498	Work Experience in Automotive Mechanics Technology (0.5 - 4)	
AMT 374	Ford ASSET Automotive Suspension and Steering	3
AMT 375	Ford ASSET Automotive Wheel Alignment	3
AMT 376	Ford ASSET Automotive Heating and Air Conditioning	3
A minimum of 3 units from the following:		3
AMT 498	Work Experience in Automotive Mechanics Technology (0.5 - 4)	
AMT 378	Ford ASSET Automatic Transmissions/Transaxles	3
AMT 130	Ford ASSET Advanced Automatic Transmission Diagnosis	1.5
AMT 379	Ford ASSET Automotive Engine Repair	3
AMT 385	Ford ASSET Automotive Manual Drive Train and Axles	1.5
AMT 381	Ford ASSET Electronic Engine Control	4
AMT 382	Ford ASSET Gasoline Engine Performance	3
AMT 383	Ford ASSET Advanced Gasoline Engine Performance	3
A minimum of 3 units from the following:		3
AMT 498	Work Experience in Automotive Mechanics Technology (0.5 - 4)	
AMT 131	Ford ASSET Diesel Engine Performance	3
AMT 340	Emission Control Inspection and Repair	5
A minimum of 3 units from the following:		3
AMT 498	Work Experience in Automotive Mechanics Technology (0.5 - 4)	
Total Units:		**58**

Enrollment Eligibility

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

- Eligibility for ENGWR 101.
- Eligibility for MATH 100.
- Possess a valid driver’s license with a driving record that is suitable for the sponsoring dealership’s insurance requirements.
- Able to operate a vehicle equipped with a manual transmission.
- Meet sponsoring dealership hiring requirements which may include submitting to a drug test and/or criminal background check.
- Completion of an application for the Ford ASSET Program (can be found at http://www.crc.losrios.edu/cars).

Enrollment Process

Eligible students are selected for the program according to the following steps:

- Students are selected from the applicant pool in the order in which they are received.
- Only students who meet the stated eligibility requirements will be considered for the program.

Student Learning Outcomes

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

- PSLO 1: Understand the fundamental purpose, components, and operation of major automotive systems to include gasoline engines, automatic transmissions and transaxles, manual transmissions, drivetrains, and axles, suspension and steering systems, brake systems, electrical and electronic systems, heating and air conditioning systems, and engine performance systems.
- PSLO 2: Understand the proper use of tools, equipment, and publications used for automotive diagnosis and repair.
- Understand typical new car dealership hierarchy, structure, and standard procedures.
- Prepare and write repair orders to include: customer information, vehicle identifying information, customer concerns, related service history, cause, and correction.
- PSLO 3: Diagnose engine mechanical concerns, conduct diagnostic testing procedures, and perform the procedures and techniques involved in typical engine repairs and overhauls.
- PSLO 4: Demonstrate the ability to diagnose, service, and repair automatic transmissions and transaxles.
- PSLO 5: Demonstrate the ability to diagnose and repair manual transmissions, transaxles, and drive train concerns.
- PSLO 6: Demonstrate the ability to diagnose and repair automotive suspension and steering concerns.
- PSLO 7: Demonstrate the ability to diagnose and repair automotive brake systems.
- PSLO 8: Demonstrate the ability to diagnose and repair automotive electrical and electronic concerns.
- PSLO 9: Demonstrate the ability to diagnose and repair automotive heating, ventilation, and air conditioning (HVAC) system concerns.
- PSLO 10: Demonstrate the ability to diagnose, service, and repair gasoline engine performance systems and their components.
- Verify the outcome of the repair through a test drive analysis or system self-test.

Career Information

• Automotive Technician • Light Duty Diesel Technician • Ford/Lincoln Specialized Technician (in any of the Service Technician Specialty Training [STST] areas) • Ford/Lincoln Engine Master Technician • Ford/Lincoln Chassis Master Technician • Ford/Lincoln Drivetrain Master Technician • Ford/Lincoln Senior Master Technician Students who successfully complete the

program will: • Earn a certificate in Automotive Mechanics Technology. • Be granted Ford Service Technician Specialty Training (STST) credentials. • Be prepared for Automotive Service Excellence (ASE) certification in all Automobile series areas. • Be eligible to sit for testing for both the California SMOG Inspector and SMOG Repair licenses.

Automotive Suspension and Steering Certificate

This curriculum is designed for students interested in seeking employment in the automotive suspension, steering, or wheel alignment fields.

Certificate Requirements

Course Code	Course Title	Units
AMT 300	Automotive Fundamentals and Shop Procedures	4
AMT 303	Automotive Electrical & Electronic Systems	4
AMT 310	Engine Performance	3
AMT 314	Wheel Alignment	3
AMT 332	Automotive Computerized Controls	3
Total Units:		**17**

Student Learning Outcomes

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

- Explain the proper use of service publications used in diagnostic procedures.
- Recognize electronic principles and how they relate to particular automotive systems.
- Diagnose vehicle alignment angle concerns.
- Explain theory and operations of automotive computerized controls.

Automotive Suspension and Steering (Ford ASSET) Certificate

This certificate represents a subset of the Ford Automotive Student Service Education Training (ASSET) Program and is intended for students wishing to specialize in automotive suspension and steering systems. This certificate is designed to help students develop the skills necessary to efficiently and accurately maintain, diagnose, and service/repair automotive suspension and steering systems.

Certificate Requirements

Course Code	Course Title	Units
AMT 370	Ford ASSET Automotive Fundamentals and Dealership Practices	4
AMT 371	Ford ASSET Automotive Electrical/Electronic Systems	3
AMT 374	Ford ASSET Automotive Suspension and Steering	3
AMT 375	Ford ASSET Automotive Wheel Alignment	3
Total Units:		**13**

Enrollment Eligibility

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

- Eligibility for ENGWR 101.
- Eligibility for MATH 100.
- Possess a valid driver's license with a driving record that is suitable for the sponsoring dealership's insurance requirements.
- Able to operate a vehicle equipped with a manual transmission.
- Meet sponsoring dealership hiring requirements which may include submitting to a drug test and/or criminal background check.
- Completion of an application for the Ford ASSET Program (can be found at http://www.crc.losrios.edu/cars).

Enrollment Process

Eligible students are selected for the program according to the following steps:

- Students are selected from the applicant pool in the order in which they are received.
- Only students who meet the stated eligibility requirements will be considered for the program.

Student Learning Outcomes

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

- SLO 1: Understand the proper use of tools, equipment, and publications used for automotive diagnosis and repair.
- Understand typical new car dealership hierarchy, structure, and standard procedures.
- Prepare and write repair orders to include: customer information, vehicle identifying information, customer concerns, related service history, cause, and correction.
- SLO 2: Understand the fundamental purpose, components, and operation of automotive suspension and steering systems.
- SLO 3: Demonstrate the ability to diagnose and repair automotive suspension and steering systems.
- Verify the outcome of the repair through a test drive analysis or system self-test.

Career Information

• Automotive Maintenance / Light Repair Technician • Ford/Lincoln Specialized Technician (in Service Technician Specialty Training [STST] area 33-Steering and Suspension)

Manual Drive Train and Axles (Ford ASSET) Certificate

This certificate represents a subset of the Ford Automotive Student Service Education Training (ASSET) Program and is intended for students wishing to specialize in manual transmissions/transaxles, drive trains, and axles. This

certificate is designed to help students develop the skills necessary to efficiently and accurately maintain, diagnose, and service/repair manual transmissions/transaxles, drive trains, and axles.

Certificate Requirements

Course Code	Course Title	Units
AMT 370	Ford ASSET Automotive Fundamentals and Dealership Practices	4
AMT 378	Ford ASSET Automatic Transmissions/Transaxles	3
AMT 385	Ford ASSET Automotive Manual Drive Train and Axles	1.5
A minimum of 3 units from the following:		3
AMT 498	Work Experience in Automotive Mechanics Technology (0.5 - 4)	
Total Units:		**11.5**

Enrollment Eligibility

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

- Eligibility for ENGWR 101.
- Eligibility for MATH 100.
- Possess a valid driver's license with a driving record that is suitable for the sponsoring dealership's insurance requirements.
- Able to operate a vehicle equipped with a manual transmission.
- Meet sponsoring dealership hiring requirements which may include submitting to a drug test and/or criminal background check.
- Completion of an application for the Ford ASSET Program (can be found at http://www.crc.losrios.edu/cars).

Enrollment Process

Eligible students are selected for the program according to the following steps:

- Students are selected from the applicant pool in the order in which they are received.
- Only students who meet the stated eligibility requirements will be considered for the program.

Student Learning Outcomes

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

- SLO 1: Understand the proper use of tools, equipment, and publications used for automotive diagnosis and repair.
- Understand typical new car dealership hierarchy, structure, and standard procedures.
- Prepare and write repair orders to include: customer information, vehicle identifying information, customer concerns, related service history, cause, and correction.
- SLO 2: Understand the fundamental purpose, components, and operation of manual transmissions/transaxles, drive trains, and axles.
- SLO 3: Demonstrate the ability to diagnose and repair manual transmissions, transaxles, and drive train concerns.
- Verify the outcome of the repair through a test drive analysis or system self-test.

Career Information

• Automotive Technician (Clutch Specialist) • Manual Transmission Technician • Ford/Lincoln Specialized Technician (in Service Technician Specialty Training [STST] area 36-Manual Transmissions)

Small Engine Repair Certificate

This curriculum is designed for students who are interested in obtaining skills necessary for the repair of small engines used in industry, home maintenance, landscape maintenance and recreation.

Certificate Requirements

Course Code	Course Title	Units
AMT 303	Automotive Electrical & Electronic Systems	4
AMT 306	Small Engine Repair	3
AMT 310	Engine Performance	3
AMT 324	Electronic Fuel Injection	3
Total Units:		**13**

Student Learning Outcomes

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

- Recognize electronic principles and how they relate to particular automotive systems.
- Perform the necessary repair procedure for a certain set electrical/electronic diagnostic problems.
- Diagnose small engine operation concerns.
- Assess and repair small engine systems.
- Understand theory and operation of electronic fuel injection.
- Demonstrate the ability to repair electronic fuel injection systems.

Automotive Mechanics Technology (AMT) Courses

AMT 101 Bureau of Automotive Repair (BAR) Emissions Update

Units: 1
Hours: 18 hours LEC
Prerequisite: None.
Advisory: Individuals taking this course should have a current or expired California Smog Check Inspection and/or Repair License.

This Bureau of Automotive Repair (BAR) Emissions Update Course is an 18 hour course which meets the mandatory bi-annual educational update requirement for license renewal of Emission Repair technicians in the State of California. Technicians may take this course up to two years prior to license expiration.

This course may be taken more than once for credit in order to meet mandatory bi-annual educational update requirements for license renewal of Emission Repair technicians in the State of California.

AMT 130 Ford ASSET Advanced Automatic Transmission Diagnosis

Units: 1.5
Hours: 27 hours LEC
Prerequisite: None.
Enrollment Limitation: Students taking this course must be enrolled in the Ford Automotive Student Service Education Training (ASSET) program due to prerequisite Ford Motor Company training requirements.

This course is offered to students enrolled in the Ford Automotive Student Service Education Training (ASSET) program. This course provides a review of electronically controlled automatic transmissions and transaxles to include electronic control system theory, hydraulic/mechanical system theory, electronic testing procedures, hydraulic testing procedures, mechanical testing procedures, module programming and configuration, and adaptive shift strategies. Students who successfully complete this course may be eligible for Ford Service Technician Specialty Training (STST) certification.

AMT 131 Ford ASSET Diesel Engine Performance

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: AMT 371 with a grade of "C" or better
Enrollment Limitation: Students taking this course must be enrolled in the Ford Automotive Student Service Education Training (ASSET) program due to prerequisite Ford Motor Company training requirements.

This course is offered to students enrolled in the Ford Automotive Student Service Education Training (ASSET) program. This course provides a review of light duty diesel engine performance systems to include diesel engine theory, air induction systems, fuel systems, starting aid systems, emission controls, and exhaust after-treatment systems. Students who successfully complete this course may be eligible for Ford Service Technician Specialty Training (STST) certification.

AMT 133 Ford ASSET Practicum One

Units: 0.5 - 4
Hours: 27 - 216 hours LAB
Prerequisite: None.
Corequisite: AMT 371 and 372
Enrollment Limitation: Students taking this course must be enrolled in the Ford Automotive Student Service Education Training (ASSET) program due to prerequisite Ford Motor Company training requirements.

This course consists of supervised experience in an automotive repair service setting performing the tasks and responsibilities of an automotive service technician. Those duties include, but are not limited to, diagnosis and repair of electrical/electronic systems,and diagnosis and repair of automotive brake systems. This course is for students who are currently enrolled in the Ford ASSET program and have completed or are currently enrolled in AMT 371: Ford ASSET Automotive Electrical/Electronic Systems and AMT 372: Ford ASSET Automotive Brake Systems

AMT 134 Ford ASSET Practicum Two

Units: 0.5 - 4
Hours: 27 - 216 hours LAB
Prerequisite: None.
Corequisite: AMT 374, 375, and 376
Enrollment Limitation: Students taking this course must be enrolled in the Ford Automotive Student Service Education Training (ASSET) program due to prerequisite Ford Motor Company training requirements.

This course consists of supervised experience in an automotive repair service setting performing the tasks and responsibilities of an automotive service technician. Those duties include, but are not limited to, diagnosis and repair of steering and suspension systems,and diagnosis and repair of automotive heating, ventilation and air conditioning (HVAC) systems. This course is for students who are currently enrolled in the Ford ASSET program and have completed or are currently enrolled in AMT 374: Ford ASSET Automotive Suspension and Steering, AMT 375: Ford ASSET Automotive Wheel Alignment, and AMT 376: Ford ASSET Automotive Heating and Air Conditioning

AMT 135 Ford ASSET Practicum Three

Units: 0.5 - 4
Hours: 27 - 216 hours LAB
Prerequisite: AMT 378 or 379 with a grade of "C" or better
Enrollment Limitation: Students taking this course must be enrolled in the Ford Automotive Student Service Education Training (ASSET) program due to prerequisite Ford Motor Company training requirements.

This course consists of supervised experience in an automotive repair service setting performing the tasks and responsibilities of an automotive service technician. Those duties include, but are not limited to, the diagnosis and repair of automotive powertrain systems and components. This course is for students who are currently enrolled in the Ford ASSET program and have completed or are currently enrolled in AMT 378: Ford ASSET Automatic Transmissions/Transaxles and/or AMT 379: Ford ASSET Automotive Engine Repair.

AMT 136 Ford ASSET Practicum Four

Units: 0.5 - 4
Hours: 27 - 216 hours LAB
Prerequisite: AMT 382 with a grade of "C" or better
Enrollment Limitation: Students taking this course must be enrolled in the Ford Automotive Student Service Education Training (ASSET) program due to prerequisite Ford Motor Company training requirements.

This course consists of supervised experience in an automotive repair service setting performing the tasks and responsibilities of an automotive service technician. Those duties include, but are not limited to, diagnosing and repairing automotive engine

performance systems. This course is for students who are currently enrolled in the Ford ASSET program and have completed AMT 382: Ford ASSET Gasoline Engine Performance.

AMT 137 Ford ASSET Advanced Electronics

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: AMT 371 with a grade of "C" or better
Enrollment Limitation: Students taking this course must be enrolled in the Ford Automotive Student Service Education Training (ASSET) program due to prerequisite Ford Motor Company training requirements.

This course is offered to students enrolled in the Ford Automotive Student Service Education Training (ASSET) program. This course covers theory and operation, diagnosis, and repair of advanced electronic systems, advanced driver assistance systems, networking and multiplexing systems, and module programming. Students who successfully complete this course may be eligible for Ford Service Technician Specialty Training (STST) certification.

AMT 138 Ford ASSET High Voltage Vehicle Systems

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: AMT 371 with a grade of "C" or better
Enrollment Limitation: Students taking this course must be enrolled in the Ford Automotive Student Service Education Training (ASSET) program due to prerequisite Ford Motor Company training requirements.

This course is offered to students enrolled in the Ford Automotive Student Service Education Training (ASSET) program. This course covers the theory and operation of Full Hybrid Electric Vehicles (FHEV), Plug-In Hybrid Electric Vehicles (PHEV), and Battery Electric Vehicles (BEV). High voltage safety will be covered, as well as diagnosis and repair of high voltage batteries and systems. Theory, diagnosis, and repair of electric drive assemblies will also be covered. Students who successfully complete this course may be eligible for Ford Service Technician Specialty Training (STST) certification.

AMT 294 Topics in Automotive Mechanics Technology

Units: 0.5 - 4
Hours: 9 - 72 hours LEC
Prerequisite: None.

This course covers special topics not included in current automotive offerings in a timely manner. Topics may be offered in workshops or seminar presentations on timely subjects or targeted for specific audiences.

AMT 295 Independent Studies in Automotive Mechanics Technology

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

AMT 299 Experimental Offering in Automotive Mechanics Technology

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

AMT 300 Automotive Fundamentals and Shop Procedures

Units: 4
Hours: 45 hours LEC; 81 hours LAB
Prerequisite: None.
Transferable: CSU

This course includes a basic study of vehicles and their mechanical systems including vehicle purchase, vehicle maintenance, vehicle safety systems and the principles and operation of the automotive engine, engine support systems, the drive train, steering, suspension and brakes. This class also explores consumers' legal rights concerning vehicle purchase, repair, replacement and recalls. Hand tools, shop equipment and shop procedures will be demonstrated to familiarize the students with the automotive industry.

AMT 301 Automotive Service Management

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU

This course provides a survey of automotive service operations, management strategies, economic importance, regulatory responsibilities, customer relations, and employment opportunities in the automotive service industry.

AMT 303 Automotive Electrical & Electronic Systems

Units: 4
Hours: 45 hours LEC; 81 hours LAB
Prerequisite: None.
Advisory: AMT 300
Transferable: CSU

This course is a study of the fundamental principles of electricity as used by the auto technician. Construction and function of automotive electrical/ electronic components and systems will be discussed, including storage batteries, charging and starting systems, lighting, and accessory systems.

AMT 304 Automotive Manual Drive Train and Axles

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: AMT 300
Transferable: CSU

This course covers the principles of operations of automotive power trains, including diagnosis and overhaul techniques of clutches, manual transmission/transaxles, transfer cases, drive lines and differentials.

AMT 306 Small Engine Repair

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: AMT 300
Transferable: CSU

This course focuses on operation and repair of small four-cycle engines. Special emphasis is placed on design and operation principles of internal combustion engines that support the student's understanding of automotive engines.

AMT 310 Engine Performance

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: AMT 300, 306, or 322 with a grade of "C" or better
Advisory: AMT 303
Transferable: CSU

This course covers basic principles of the internal combustion engine and its related components, with an emphasis on complete electrical and fuel systems. The course will include the use of advanced types of testing equipment.

AMT 314 Wheel Alignment

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: AMT 300
Transferable: CSU

This course offers an in-depth examination of alignment equipment and different vehicle manufacturer's alignment systems. It will cover diagnosis and repair of Wheel/Tire Systems, Steering Systems, Suspension Systems, and Wheel Alignment.

AMT 316 Automotive Brakes

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: AMT 300
Transferable: CSU

This course covers the principles of operation of automotive brakes and anti-lock brake systems, including diagnosis and overhaul techniques of power brake system components.

AMT 321 Advanced Automotive Electrical & Hybrid Vehicle Systems

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: AMT 303 with a grade of "C" or better
Transferable: CSU

This course is a study of the principles of electronic systems serviced by the automotive technician. Construction and function of automotive electronic components and systems will be discussed, including general system diagnosis, driver information systems, vehicle communication networks, hybrid vehicle propulsion technology and controls, and electronic accessory systems.

AMT 322 Engine Repair

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: AMT 300 and 306
Transferable: CSU

This course focuses on the theory and operation of typical automotive internal combustion engines, as well as their diagnosis and repair. Major emphasis will be placed on proper diagnostic techniques. All major aspects of engine repair will be covered, and while many engine overhaul / rebuilding procedures will be performed, the course is centered around engine repairs, not engine rebuilding.

AMT 324 Electronic Fuel Injection

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: AMT 303 with a grade of "C" or better
Advisory: AMT 310
Transferable: CSU

This course focuses on the theory and operation, service, diagnostic procedures, and repair of electronic fuel injection systems. This course includes the various types of electronic fuel injection systems and the diagnostic equipment currently used in the automotive industry. In addition, also covered in this course are the theory and operation, and service of intake and exhaust systems, and forced induction systems such as superchargers and turbochargers.

AMT 326 Automotive Heating and Air Conditioning

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: AMT 303 with a grade of "C" or better
Transferable: CSU

This course is a study of installation, operation and repair of vehicle air conditioning systems, cooling systems, and heating systems. The course will include a study of the systems for proper functioning of systems including heat transfer and air flow.

AMT 328 Light Duty Diesel Engine Performance

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: AMT 303 with a grade of "C" or better
Advisory: AMT 300
Transferable: CSU

This course introduces the student to light duty diesel engine performance systems to include diesel engine theory, air induction systems, fuel systems, starting aid systems, emission controls, and exhaust after-treatment systems.

AMT 330 Automatic Transmissions/ Transaxles

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: AMT 300 and 304
Transferable: CSU

This course is a study of the fundamentals and theory of automatic transmissions/transaxles. The laboratory experience will include inspection, diagnosis and adjustments.

AMT 332 Automotive Computerized Controls

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: AMT 303 with a grade of "C" or better
Advisory: AMT 310
Transferable: CSU

This course focuses on the study of automotive computerized controls and their application to the engine, chassis and braking systems. Students will learn how on board computers interact with modern vehicle systems.

AMT 340 Emission Control Inspection and Repair

Units: 5
Hours: 72 hours LEC; 54 hours LAB
Prerequisite: AMT 303 and 310 with grades of "C" or better; AMT 371 and AMT 381 are included in the Ford ASSET Program and can be utilized to meet requisite requirements in lieu of the standard requisites. Current ASE certification in A-6 and A-8 meet equivalency for enrollment in AMT 340 per State of California, Bureau of Automotive Repair Statute.
Advisory: AMT 324 and 332
Transferable: CSU

This course includes inspection, testing, diagnosis, and service of automotive emission control systems. The course is required for all students who plan to become licensed as a Smog Check Inspector. The course meets BAR Level 1 & 2 training requirements.Upon successful completion of this course, students are eligible to take the State of California Smog Check Inspector licensing exam and may be eligible to take the State of California Smog Check Repair Technician licensing exam.

AMT 370 Ford ASSET Automotive Fundamentals and Dealership Practices

Units: 4
Hours: 72 hours LEC
Prerequisite: None.
Enrollment Limitation: Students taking this course must be enrolled in the Ford Automotive Student Service Education Training (ASSET) program. Some training materials utilized in this course require access to restricted Ford Motor Company websites obtained via enrollment in the Ford Automotive Student Service Education Training (ASSET) program and establishment of a Ford/Lincoln dealership sponsorship.
Transferable: CSU

This course is offered to students enrolled in the Ford Automotive Student Service Education Training (ASSET) program. This course provides an introduction into the theory and operation of major automotive systems including: gasoline engines, electrical systems, transmissions and drivetrains, steering, suspension, and brakes. Common automotive hand tools, power tools, and equipment will also be introduced and demonstrated to familiarize students with a typical automotive shop. Typical new-car dealership hierarchy and structure along with standard practices will be investigated. Students who successfully complete this course may be eligible for Ford Service Technician Specialty Training (STST) certification.

AMT 371 Ford ASSET Automotive Electrical/Electronic Systems

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Enrollment Limitation: Students taking this course must be enrolled in the Ford Automotive Student Service Education Training (ASSET) program due to prerequisite Ford Motor Company training requirements.
Transferable: CSU

This course is offered to students enrolled in the Ford Automotive Student Service Education Training (ASSET) program. This course is a study of the fundamental principles of electricity and electronic systems as used by the automotive technician. Construction and function of automotive electrical and electronic components will be discussed, including batteries, starting systems, charging systems, lighting systems, and power accessories. Students who successfully complete this course may be eligible for Ford Service Technician Specialty Training (STST) certification.

AMT 372 Ford ASSET Automotive Brake Systems

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Enrollment Limitation: Students taking this course must be enrolled in the Ford Automotive Student Service Education Training (ASSET) program. Some training materials utilized in this course require access to restricted Ford Motor Company websites obtained via enrollment in the Ford Automotive Student Service Education Training (ASSET) program and establishment of a Ford/Lincoln dealership sponsorship.
Transferable: CSU

This course is offered to students enrolled in the Ford Automotive Student Service Education Training (ASSET) program. This course covers the theory, diagnosis, and repair of automotive brake systems, including anti-lock braking systems (ABS). Students who successfully complete this course may be eligible for Ford Service Technician Specialty Training (STST) certification.

AMT 374 Ford ASSET Automotive Suspension and Steering

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: AMT 302, 302, and 371 with grades of "C" or better

Enrollment Limitation: Students taking this course must be enrolled in the Ford Automotive Student Service Education Training (ASSET) program due to prerequisite Ford Motor Company training requirements.
Transferable: CSU

This course is offered to students enrolled in the Ford Automotive Student Service Education Training (ASSET) program. This course covers theory, diagnosis, and repair of automotive steering and suspension systems. Wheels, tires, and related systems will also be discussed, including power steering systems and electronically controlled steering and suspension systems. Students who successfully complete this course may be eligible for Ford Service Technician Specialty Training (STST) certification.

AMT 375 Ford ASSET Automotive Wheel Alignment

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: AMT 302, 302, and 371 with grades of "C" or better
Corequisite: AMT 312 and 374
Enrollment Limitation: Students taking this course must be enrolled in the Ford Automotive Student Service Education Training (ASSET) program due to prerequisite Ford Motor Company training requirements.
Transferable: CSU

This course is offered to students enrolled in the Ford Automotive Student Service Education Training (ASSET) program. This course covers various automotive wheel alignment equipment and procedures. Wheel alignment diagnosis and repair will be performed as well as maintenance and repair of related systems. Students who successfully complete this course may be eligible for Ford Service Technician Specialty Training (STST) certification.

AMT 376 Ford ASSET Automotive Heating and Air Conditioning

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: AMT 302, 302, and 371 with grades of "C" or better
Enrollment Limitation: Students taking this course must be enrolled in the Ford Automotive Student Service Education Training (ASSET) program due to prerequisite Ford Motor Company training requirements.
Transferable: CSU

This course is offered to students enrolled in the Ford Automotive Student Service Education Training (ASSET) program. This course covers the theory, diagnosis, and repair of automotive heating and air conditioning systems, including air management sub-systems and an overview of engine cooling systems. Proper handling of common automotive refrigerants in accordance with EPA regulations will also be covered. Students who successfully complete this course may be eligible for Ford Service Technician Specialty Training (STST) certification.

AMT 378 Ford ASSET Automatic Transmissions/Transaxles

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: AMT 302, 302, and 371 with grades of "C" or better
Enrollment Limitation: Students taking this course must be enrolled in the Ford Automotive Student Service Education Training (ASSET) program due to prerequisite Ford Motor Company training requirements.
Transferable: CSU

This course is offered to students enrolled in the Ford Automotive Student Service Education Training (ASSET) program. This course covers the theory, diagnosis, and repair of automatic transmissions and transaxles. Proper maintenance and service will also be covered. Students who successfully complete this course may be eligible for Ford Service Technician Specialty Training (STST) certification.

AMT 379 Ford ASSET Automotive Engine Repair

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: AMT 302, 302, and 371 with grades of "C" or better
Enrollment Limitation: Students taking this course must be enrolled in the Ford Automotive Student Service Education Training (ASSET) program due to prerequisite Ford Motor Company training requirements.
Transferable: CSU

This course is offered to students enrolled in the Ford Automotive Student Service Education Training (ASSET) program. This course covers the theory, diagnosis, and repair of automotive engines. Proper maintenance and service will also be covered. Complete engine overhaul procedures will be examined, but the primary focus will be on typical engine repairs. Students who successfully complete this course may be eligible for Ford Service Technician Specialty Training (STST) certification.

AMT 381 Ford ASSET Electronic Engine Control

Units: 4
Hours: 63 hours LEC; 27 hours LAB
Prerequisite: AMT 302, 302, and 371 with grades of "C" or better
Enrollment Limitation: Students taking this course must be enrolled in the Ford Automotive Student Service Education Training (ASSET) program due to prerequisite Ford Motor Company training requirements.
Transferable: CSU

This course is offered to students enrolled in the Ford Automotive Student Service Education Training (ASSET) program. This course is a study of Ford Electronic Engine Control systems, their components, and their relationship to other vehicle systems. Students who successfully complete this course may be eligible for Ford Service Technician Specialty Training (STST) certification.

AMT 382 Ford ASSET Gasoline Engine Performance

Units: 3
Hours: 36 hours LEC; 54 hours LAB

Prerequisite: AMT 302, 302, and 371 with grades of "C" or better
Enrollment Limitation: Students taking this course must be enrolled in the Ford Automotive Student Service Education Training (ASSET) program due to prerequisite Ford Motor Company training requirements.
Transferable: CSU

This course is offered to students enrolled in the Ford Automotive Student Service Education Training (ASSET) program. This course offers a thorough examination of basic gasoline engine performance systems to include ignition systems, fuel systems, and emission controls. System maintenance, diagnosis, and repair will also be covered, including the use of specialized test equipment. Students who successfully complete this course may be eligible for Ford Service Technician Specialty Training (STST) certification.

AMT 383 Ford ASSET Advanced Gasoline Engine Performance

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: AMT 302, 302, and 371 with grades of "C" or better
Enrollment Limitation: Students taking this course must be enrolled in the Ford Automotive Student Service Education Training (ASSET) program due to prerequisite Ford Motor Company training requirements.
Transferable: CSU

This course is offered to students enrolled in the Ford Automotive Student Service Education Training (ASSET) program. This course offers an advanced analysis of gasoline engine performance systems to include ignition systems, fuel systems, and emission controls. New technologies and advances in these systems will be highlighted. This course places emphasis on advanced diagnostic techniques, use of specialized test equipment, and diagnostic strategies to be utilized when standard manufacturer's procedures are unable to properly diagnose or repair the vehicle. Students who successfully complete this course may be eligible for Ford Service Technician Specialty Training (STST) certification.

AMT 385 Ford ASSET Automotive Manual Drive Train and Axles

Units: 1.5
Hours: 18 hours LEC; 27 hours LAB
Prerequisite: AMT 371 with a grade of "C" or better
Enrollment Limitation: Students taking this course must be enrolled in the Ford Automotive Student Service Education Training (ASSET) program due to prerequisite Ford Motor Company training requirements.
Transferable: CSU

This course is offered to students enrolled in the Ford Automotive Student Service Education Training (ASSET) program. This course covers the theory, diagnosis, and repair of clutches, manual transmissions and transaxles, transfer cases, drive lines, and differentials. Proper maintenance and service will also be covered. Students who successfully complete this course may be eligible for Ford Service Technician Specialty Training (STST) certification.

AMT 495 Independent Studies in Automotive Mechanics Technology

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

AMT 498 Work Experience in Automotive Mechanics Technology

Units: 0.5 - 4
Hours: 27 - 216 hours LAB
Prerequisite: None.
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position or job related to career goals in Automotive Mechanics Technology.
Transferable: CSU

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in transfer level degree occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and complete 27 hours of related work experience for 0.5 unit. An additional 27 hours of related work experience is required for each additional 0.5 units. 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.

AMT 499 Experimental Offering In Automotive Mechanics Technology

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU

This is the experimental courses description.

Biology

What do Ebola, hemophilia, DNA fingerprinting, sequoias, cuttlefish, intertidal zones, and global climate change have in common? These are a few examples of the diverse topics that are explored in biology, which is the scientific study of living organisms including their structure, function, evolution, and interactions with other organisms and the environment. The CRC Biology Department offers a variety of courses that are organized into the following three areas:

- Clinically related courses for students pursuing careers in nursing and allied health (BIOL 100, 102, 430, 431, 439 and 440)
- The first two years of a Biology major for those transferring to Bachelor's Degree programs in fields related to the life sciences (BIOL 400, 410, and 420)
- General education courses for non-science majors who want to gain an understanding of the biological world (BIOL 308, 309, 342, 350, 352, 390, and 485)

Students who transfer to four-year universities report high satisfaction with the education they received at CRC.

Degrees Offered

A.S.-T. in Biology

A.S. in Biology

A.S. in Biology: Pre-Nursing Option

A.S. in General Science

Dean Banafsheh Amini

Department Chair Jason Patterson

Phone (916) 691-7204

Email patterj2@crc.losrios.edu

Associate Degrees for Transfer

A.S.-T. in Biology

The Associate in Science in Biology for Transfer Degree is designed to prepare students for a seamless transfer into the CSUsystem to complete a baccalaureate degree in Biology or a similar major. Students with this degree will receive priority admission with junior status to the California State University system. The Associate in Science in Biology for Transfer is comprised of lower division coursework typically required by CSU institutions. Students must complete the following Associate Degree for Transfer requirements (Pursuant to SB1440, §66746):

• Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University.
• The California General Education Transfer Curriculum (Cal-GETC) pattern.
• A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
• Obtainment of a minimum grade point average of 2.0.
• A grade of “C” (or “P”) or better in all courses required for the major.

Completion of the AS-T degree may not prepare students to transfer to University of California biology programs that may have different requirements. If a student intends to transfer to University of California, additional courses in chemistry, physics, and math may be required.

Note to Transfer Students:
The Associate Degree for Transfer program is designed for students who plan to transfer to a campus of the California State University (CSU). Other than the required core, the courses you choose to complete this degree will depend to some extent on the selected CSU for transfer. In addition, some Cal-GETC requirements can also be completed using courses required for this associate degree for transfer major (known as “double-counting”). Meeting with a counselor to determine the most appropriate course choices will facilitate efficient completion of a student’s transfer requirements. For students wishing to transfer to other universities (UC System, private, or out-of-state), the Associate Degree for Transfer may not provide adequate preparation for upper-division transfer admissions, because many universities require more lower division courses than those in this degree. Even the CSU's that accept this transfer degree may likely require additional lower division courses to achieve the Bachelor degree. It is critical that students meet with a CRC counselor to select and plan the courses for the major, as programs vary widely in terms of the required preparation.

Degree Requirements

Course Code	Course Title	Units
BIOL 400	Principles of Biology	5
BIOL 410	Principles of Botany	5
BIOL 420	Principles of Zoology	5
CHEM 400	General Chemistry I	5
CHEM 401	General Chemistry II	5
MATH 355	Calculus for Biology and Medicine I (4)	4 - 5
or MATH 400	Calculus I (5)	
PHYS 350	General Physics	4
PHYS 360	General Physics	4
Total Units:		**37 - 38**

The Associate in Science in Biology for Transfer (AS-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) the California General Education Transfer Curriculum (Cal-GETC) Requirement.

Student Learning Outcomes

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

- PSLO 1: Demonstrate understanding of the processes of science, the scientific method, and the relationship between scientific research and established knowledge.
- PSLO 2: Express one's self clearly when writing or speaking about biology, demonstrating knowledge of basic biological terminology and understanding of major biological concepts.

- PSLO 3: Demonstrate subject area competency through formative and summative assessments including projects, class discussions, portfolios, quizzes, exams, written reports, and/or presentations.
- PSLO 4: Choose and utilize appropriate laboratory techniques proficiently.
- PSLO 5: Evaluate biological data, draw reasonable conclusions, recognize the ethical implications of these conclusions, and apply these conclusions to personal, community, and scientific problems.
- PSLO 6: Employ information-gathering tools to investigate biological ideas.

Career Information

Research, Teaching, or Industrial Laboratory Careers in Molecular Biology, Microbiology, Biotechnology, Genetics, Wildlife Biology, Marine Biology, Pharmacy, Nutrition, Medicine, Dentistry, Veterinary, Optometry, etc. Some career options require more than two years of college study. Classes beyond the associate degree may be required for some career options or to fully prepare students for transfer to a university program.

Associate Degrees

A.S. in Biology

What do antibiotic resistance, hemophilia, DNA fingerprinting, sequoias, cuttlefish, intertidal zones, and global climate change have in common? These are a few examples of the diverse topics that are explored in biology, which is the scientific study of living organisms including their structure, function, evolution, and interactions with other organisms and with the environment.

Highlights of the program include:
• Extensive hands-on learning approach in laboratory courses that provide students with opportunities to use modern equipment and techniques.
• Small class sizes taught by enthusiastic biology professors who set high standards but who demonstrate how to achieve those standards.
• A high level of satisfaction with the education received at CRC is reported by students who transfer to 4-year universities.
• A Mathematics, Engineering and Science Achievement (MESA) program to help students develop academic and leadership skills.

Note to Transfer Students:
This degree is intended to prepare students for transfer to a University of California campus or other four-year institutions. It is critical that you meet with a counselor from your desired transfer institution to select and plan the courses for your major. Some UC programs may require calculus-based (not trigonometry based) physics with lab before graduation. Additionally, some UC programs may require statistics prior to graduation.

Colleges and universities vary widely in their requirements for degrees. The courses that CRC requires for an Associate's degree may be different from the requirements for a Bachelor's degree. Therefore, you are strongly encouraged to meet with both a CRC counselor and a counselor from your desired transfer institution in order to understand the lower division requirements for the program at the college or university you plan to attend.

Degree Requirements

Course Code	Course Title	Units
BIOL 400	Principles of Biology	5
BIOL 410	Principles of Botany	5
BIOL 420	Principles of Zoology	5
CHEM 400	General Chemistry I	5
CHEM 401	General Chemistry II	5
CHEM 420	Organic Chemistry I	5
CHEM 421	Organic Chemistry II	5
[MATH 355	Calculus for Biology and Medicine I (4)	8 - 10
and MATH 356]	Calculus for Biology and Medicine II (4)	
or [MATH 400	Calculus I (5)	
and MATH 401]	Calculus II (5)	
Total Units:		**43 - 45**

The Biology Associate in Science (A.S.) degree may be obtained by completion of the required program, plus the local CRC General Education Requirement, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

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

- PSLO 1: Demonstrate understanding of the processes of science, the scientific method, and the relationship between scientific research and established knowledge.
- PSLO 2: Express oneself clearly when writing or speaking about biology, demonstrating knowledge of basic biological terminology and understanding of major biological concepts.
- PSLO 3: Demonstrate subject area competency through formative and summative assessments including projects, class discussions, portfolios, quizzes, exams, written reports, and/or presentations.
- PSLO 4: Choose and utilize appropriate laboratory techniques proficiently.
- PSLO 5: Evaluate biological data, draw reasonable conclusions, recognize the ethical implications of these conclusions, and apply these conclusions to personal, community, and scientific problems.
- PSLO 6: Employ information-gathering tools to investigate biological ideas.

Career Information

Research, Teaching, or Industrial Laboratory Careers in Molecular Biology, Microbiology, Biotechnology, Genetics, Wildlife Biology, Marine Biology, Pharmacy, Nutrition, Medicine, Dentistry, Veterinary, Optometry, etc. These career options require more than two years of college study. Classes beyond the associate degree may be required for career options or to fully prepare students for transfer to a university program.

A.S. in Biology: Pre-Nursing Option

CRC's Biology, Pre-nursing option offers courses which satisfy general education requirements in Life Sciences, are prerequisites for a degree in Veterinary Technology, Medical Assisting, Health Information Technology, and Nursing, and prepare students for transfer opportunities to four-year programs in nursing, physical therapy, and programs leading to careers in allied health fields.

Highlights of the program include:
* Extensive laboratory experience
* Day and evening sections of pre-nursing classes
* A friendly faculty who have studied biology in diverse environments
* A Mathematics, Engineering and Science Achievement (MESA) program

Note: This degree is designed for students intending to transfer to a nursing program at a 4-year college or university. It does not prepare the student for immediate employment as a nurse. Students earning a nursing degree will need to complete several lower division nursing classes after transferring.

Degree Requirements

Course Code	Course Title	Units
BIOL 440	General Microbiology	4
BIOL 430	Anatomy and Physiology	5
BIOL 431	Anatomy and Physiology	5
CHEM 305	Introduction to Chemistry	5
NUTRI 300	Nutrition	3
FCS 324	Human Development: A Life Span	3
PSYC C1000	Introduction to Psychology (3)	3
Total Units:		**28**

The Biology: Pre-Nursing Option Associate in Science (A.S.) degree may be obtained by completion of the required program, plus the local CRC General Education Requirement, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

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

- PSLO 1: Demonstrate understanding of the processes of science, the scientific method, and the relationship between scientific research and established knowledge.
- PSLO 2: Express oneself clearly when writing or speaking about biology, demonstrating knowledge of basic biological terminology and understanding of major biological concepts.
- PSLO 3: Demonstrate subject area competency through formative and summative assessments including projects, class discussions, portfolios, quizzes, exams, written reports, and/or presentations.
- PSLO 4: Choose and utilize appropriate laboratory techniques proficiently.
- PSLO 5: Evaluate biological data, draw reasonable conclusions, recognize the ethical implications of these conclusions, and apply these conclusions to personal, community, and scientific problems.
- PSLO 6: Employ information-gathering tools to investigate biological ideas.

Career Information

Nursing, Physician's Assistant, Physical Therapy, etc. Some career options require more than two years of college study. Classes beyond the associate degree may be required for some career options or to fully prepare students for transfer to a university program.

A.S. in General Science

Areas of Study include:

- Biological Anthropology
- Astronomy
- Biology
- Chemistry
- Engineering
- Physical Geography
- Geology
- Physics

Eighteen (18) units of transfer-level course work in science are required. Two laboratory courses must be included: one in the physical sciences and one in the biological sciences. Courses may be selected from astronomy, biology, chemistry, geology, physical geography, biological anthropology, and physics. The student, in consultation with a counselor, should choose science courses to meet their program, transfer, or general education requirements.

Students interested in transferring to a four-year university with a science major are encouraged to complete a science AS or AS-T degree such as Anthropology, Biology, Chemistry, Engineering, Geography, Geology, or Physics. This General Science degree may not include the majors-level transfer courses needed for many science majors. Students are strongly recommended to see a counselor for guidance.

Degree Requirements

Course Code	Course Title	Units
Life Science with Lab :		
A minimum of 4 units from the following:		4
ANTH 300	Biological Anthropology (3)	
and ANTH 301	Biological Anthropology Laboratory (1)	
ANTH 480	Honors Biological Anthropology (3)	
and ANTH 482	Honors Biological Anthropology Laboratory (1)	
BIOL 308	Contemporary Biology (3)	
and BIOL 309	Contemporary Biology Laboratory (1)	
BIOL 400	Principles of Biology (5)	
BIOL 410	Principles of Botany (5)	
BIOL 420	Principles of Zoology (5)	
BIOL 430	Anatomy and Physiology (5)	
BIOL 431	Anatomy and Physiology (5)	
BIOL 440	General Microbiology (4)	

Course Code	Course Title	Units
Physical Science with Lab:		
A minimum of 3 units from the following:		3
ASTR 300	Introduction to Astronomy (3)	
and ASTR 400	Astronomy Laboratory (1)	
CHEM 300	Beginning Chemistry (4)	
CHEM 305	Introduction to Chemistry (5)	
CHEM 306	Introduction to Organic and Biological Chemistry (5)	
CHEM 309	Integrated General, Organic, and Biological Chemistry (5)	
CHEM 400	General Chemistry I (5)	
CHEM 401	General Chemistry II (5)	
CHEM 420	Organic Chemistry I (5)	
CHEM 421	Organic Chemistry II (5)	
GEOG 300	Physical Geography: Exploring Earth's Environmental Systems (3)	
and GEOG 301	Physical Geography Laboratory (1)	
GEOL 300	Physical Geology (3)	
and GEOL 301	Physical Geology Laboratory (1)	
GEOL 305	Earth Science (3)	
and GEOL 306	Earth Science Laboratory (1)	
GEOL 310	Historical Geology (3)	
and GEOL 311	Historical Geology Laboratory (1)	
ENGR 304	How Things Work (3)	
PHYS 350	General Physics (4)	
PHYS 360	General Physics (4)	
PHYS 370	Introductory Physics - Mechanics and Thermodynamics (5)	
PHYS 380	Introductory Physics - Electricity and Magnetism, Light and Modern Physics (5)	
PHYS 411	Mechanics of Solids and Fluids (4)	
PHYS 421	Electricity and Magnetism (4)	
PHYS 431	Heat, Waves, Light and Modern Physics (4)	
Additional Science Courses :		
A minimum of 11 units from the following:		11[1]
ANTH 300	Biological Anthropology (3)	
ANTH 301	Biological Anthropology Laboratory (1)	
ANTH 480	Honors Biological Anthropology (3)	
ANTH 482	Honors Biological Anthropology Laboratory (1)	
ASTR 300	Introduction to Astronomy (3)	
ASTR 400	Astronomy Laboratory (1)	
BIOL 308	Contemporary Biology (3)	
BIOL 309	Contemporary Biology Laboratory (1)	
BIOL 342	The New Plagues: New and Ancient Infectious Diseases Threatening World Health (3)	
BIOL 350	Environmental Biology (3)	
BIOL 352	Conservation Biology (3)	
BIOL 400	Principles of Biology (5)	
BIOL 410	Principles of Botany (5)	
BIOL 420	Principles of Zoology (5)	
BIOL 430	Anatomy and Physiology (5)	
BIOL 431	Anatomy and Physiology (5)	
BIOL 440	General Microbiology (4)	
CHEM 300	Beginning Chemistry (4)	
CHEM 305	Introduction to Chemistry (5)	
CHEM 306	Introduction to Organic and Biological Chemistry (5)	
CHEM 309	Integrated General, Organic, and Biological Chemistry (5)	
CHEM 400	General Chemistry I (5)	
CHEM 401	General Chemistry II (5)	
CHEM 420	Organic Chemistry I (5)	
CHEM 421	Organic Chemistry II (5)	
ENGR 304	How Things Work (3)	
GEOG 300	Physical Geography: Exploring Earth's Environmental Systems (3)	
GEOG 301	Physical Geography Laboratory (1)	
GEOG 305	Global Climate Change (3)	
GEOG 306	Weather and Climate (3)	
GEOL 300	Physical Geology (3)	
GEOL 301	Physical Geology Laboratory (1)	
GEOL 305	Earth Science (3)	
GEOL 306	Earth Science Laboratory (1)	
GEOL 310	Historical Geology (3)	
GEOL 311	Historical Geology Laboratory (1)	
GEOL 330	Introduction to Oceanography (3)	
GEOL 390	Field Studies in Geology (1 - 4)	
PHYS 310	Conceptual Physics (3)	
PHYS 350	General Physics (4)	
PHYS 360	General Physics (4)	
PHYS 370	Introductory Physics - Mechanics and Thermodynamics (5)	
PHYS 380	Introductory Physics - Electricity and Magnetism, Light and Modern Physics (5)	
PHYS 411	Mechanics of Solids and Fluids (4)	
PHYS 421	Electricity and Magnetism (4)	
PHYS 431	Heat, Waves, Light and Modern Physics (4)	
Total Units:		**18**

[1]Courses used in A or B above will not count towards C, except units exceeding the 4 or 3 unit minimum in A and B. For example, a student completing the 5 unit CHEM 309 under B could apply 2 of those units towards C. A total of 18 science units is required.

The General Science Associate in Science (A.S.) degree may be obtained by completion of the required program, plus the local CRC General Education Requirement, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

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

- explain the core perspectives of the scientific method and apply it to at least one scientific discipline. (PSLO 1)
- solve introductory problems of a conceptual and/or numerical nature of at least one scientific discipline. (PSLO 2)
- accurately apply the basic vocabulary and concepts of at least one scientific discipline verbally and in writing. (PSLO 3)
- recognize the use and misuse of scientific concepts in society including politics and the media. (PSLO 4)

Biology (BIOL) Courses

BIOL 100 Introduction to Concepts of Human Anatomy and Physiology

Units: 3
Hours: 54 hours LEC
Prerequisite: None.

This introductory course provides an overview of the basic anatomy and physiology of all body systems. It is designed as a non-transferable course for the Medical Assisting Programs and other related programs, and may be useful for other health-related technologies and for strengthening or developing a vocabulary in human anatomy and physiology.

BIOL 102 Essentials of Human Anatomy and Physiology

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: None.

This introductory course provides an overview of the basic anatomy and physiology of all body systems. It is designed as a non-transferable course and meets the minimum requirements for Medical Assisting, Health Information Technology, Emergency Medical Technician, Pharmacy Technology, Licensed Vocational Nursing, and other health-related technologies. It is also useful for strengthening or developing a vocabulary in human anatomy and physiology.

BIOL 295 Independent Studies in Biology

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

BIOL 299 Experimental Offering in Biology

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

BIOL 300 The Foundations of Biology

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligibility for ENGWR 300
Transferable: CSU; UC (Transfer Credit Limitations: 1) BIOL 300, 307, 308, and 310 combined: maximum transfer credit is one course; 2) No credit for BIOL 300, BIOL 307, BIOL 308 or BIOL 310 if taken after BIOL 400, BIOL 420, BIOL 430 or BIOL 431)
General Education: Local GE L5; Cal-GETC Area 5B

This course is a survey of major topics in the biological sciences for the non-science major with an emphasis on human biology. Units covered include cell structure and chemistry, metabolism, Mendelian and molecular genetics, genetic engineering, anatomy and physiology of humans, evolution, and ecology. Students interested in a general elective biology course are strongly advised to take either BIOL 300, BIOL 307, BIOL 308, or BIOL 310 since some transfer institutions will provide credit for only one of the four courses. 300-level biology courses may not be accepted by your transfer institution if taken after a 400-level biology course.

BIOL 302 Concepts of Human Anatomy and Physiology

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGL C1000 with a grade of "C" or better
Transferable: UC (effective Fall 2026)

This introductory course provides an overview of the basic anatomy and physiology of all body systems and is designed for students pursuing Medical Assisting, Health Information Technology, and related programs. This course also satisfies the anatomy and physiology requirement for the Pre-Health Occupations A.S. degree and the GE Life/Biological Science requirement for CSU and UC Transfer. Students interested in strengthening or developing a vocabulary in human anatomy and physiology may also find this course useful.

BIOL 307 Biology of Organisms

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: Eligibility for ENGWR 300
Transferable: CSU; UC (Transfer Credit Limitations: 1) BIOL 300, 307, 308, and 310 combined: maximum transfer credit is one course; 2) No credit for BIOL 300, BIOL 307, BIOL 308 or BIOL 310 if taken after BIOL 400, BIOL 420, BIOL 430 or BIOL 431)
General Education: Local GE L5; Cal-GETC Area 5B; Cal-GETC Area 5C

This is a general biology course focusing on a survey of the plant and animal kingdoms with an emphasis on evolution and biodiversity. The course covers the general principles of biology including: methods of science, cell organization, genetics, evolution, ecology, biodiversity, and anatomy. These principles are explored in more depth through the examination of additional topics which may include: disease and epidemiology, physiological ecology, biotechnology, population growth and

regulation, ecosystem ecology, and conservation biology. The course is designed for non-science majors and is especially useful for liberal studies, elementary education, environmental studies, recreation, and similar majors. Students interested in a general elective biology course are strongly advised to take either BIOL 300, BIOL 307, BIOL 308, or BIOL 310 since some transfer institutions will provide credit for only one of the four courses. 300-level biology courses may not be accepted by your transfer institution if taken after a 400-level biology course.

BIOL 308 Contemporary Biology

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ESLR 320 and ESLW 310, OR ESL 325 with a grade of C or better; OR eligibility for ENGRD 310 AND ENGWR 101.
Transferable: CSU; UC (Transfer Credit Limitations: 1) BIOL 300, 307, 308, and 310 combined: maximum transfer credit is one course; 2) No credit for BIOL 300, BIOL 307, BIOL 308 or BIOL 310 if taken after BIOL 400, BIOL 420, BIOL 430 or BIOL 431)
General Education: Local GE L5; Cal-GETC Area 5B

This course is a survey of biological science intended to equip the student to think and act intelligently with respect to contemporary issues in biology. Biological topics are introduced in a framework of natural selection. The course is for those not intending to major in biological sciences, particularly liberal studies majors. Genetics is a significant focus of the course, as are origin of cellular life, cellular physiology, and diversity of organisms. An optional laboratory illustrating these introduced principles is offered as a separate, one-unit course (Biol 309).

BIOL 309 Contemporary Biology Laboratory

Units: 1
Hours: 54 hours LAB
Prerequisite: None.
Corequisite: BIOL 308; BIOL 308 may be taken during a previous semester. Grade of "C" or better required if taken previously.
Advisory: Eligibility for ENGL C1000 (formerly known as ENGWR 300) or completion of ESL 130 with a "C" or better.
Transferable: CSU; UC
General Education: Cal-GETC Area 5C

This course is an optional laboratory accompaniment to BIOL 308. The sessions will illustrate biological phenomena and their relationship to contemporary concerns and discoveries in biology.

BIOL 310 General Biology

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: Eligibility for ENGWR 300
Transferable: CSU; UC (TTransfer Credit Limitations: 1) BIOL 300, 307, 308, and 310 combined: maximum transfer credit is one course; 2) No credit for BIOL 300, BIOL 307, BIOL 308 or BIOL 310 if taken after BIOL 400, BIOL 420, BIOL 430 or BIOL 431)
General Education: Local GE L5; Cal-GETC Area 5B; Cal-GETC Area 5C

This is a survey of biological science with an emphasis on human biology. This course is intended for non-science majors. Topics covered include scientific inquiry, cell structure, transmission and molecular genetics, major organ systems, evolution, and ecology. Major biological principles are explored in each topic, but an emphasis is placed on human issues. The laboratory activities are designed to further investigate and illuminate each topic area. Students interested in a general elective biology course are strongly advised to take either BIOL 300, BIOL 307, BIOL 308, or BIOL 310 since some transfer institutions will provide credit for only one of the four courses. 300-level biology courses may not be accepted by your transfer institution if taken after a 400-level biology course.

BIOL 342 The New Plagues: New and Ancient Infectious Diseases Threatening World Health

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGRD 312 and ENGL C1000
Transferable: CSU; UC
General Education: Local GE L5; Local GE L7B; Cal-GETC Area 5B

This course will cover general biological concepts and the epidemiology and pathology of selected pathogens such as prions, viruses, bacteria, protozoa, and helminthes threatening public health on a global scale. The course explores the influence of human behavior and activities on the emergence of new infectious agents and the re-emergence of ancient plagues.

BIOL 349 Applied Microbiology: Scientific Literacy through Practical Uses of Microbiology

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: BIOL 308, 342, 400, or 440 with a grade of "C" or better
Transferable: CSU (effective Fall 2026)

In this course, students will explore the non-infectious-disease applications of microbiology as a means for learning scientific literacy and critical thinking. Students will learn microbiology fundamentals, including relevant genetics and biochemistry, as it is applied to a range of topics such as bioremediation, medicine and fuel production, and genetically modified organisms (GMOs). The course emphasizes the roles of microorganisms in ecosystems, industry, and human health beyond infectious diseases, such as the human microbiome, environmental sustainability, and gene editing. Students will analyze scientific evidence, evaluate controversial issues like antibiotic resistance and GMOs, and connect scientific concepts to societal and environmental challenges. This course is intended for any science or non-science majors interested in gaining scientific literacy by exploring how microbiology affects our everyday lives.

BIOL 350 Environmental Biology

Units: 3
Hours: 54 hours LEC
Prerequisite: None.

Advisory: ENGRD 312; or equivalent skills demonstrated through the assessment process.
Transferable: CSU; UC
General Education: Local GE L5; Cal-GETC Area 5B

This course provides an overview of ecosystems and natural resources. Major topics covered include ecological principles, ecosystem functioning, conservation biology, resource use and management, pollution and other human-caused environmental impacts. This course provides the background needed to understand major global and regional issues such as acid rain, global warming, hazardous waste disposal, deforestation and endangered species recovery. This course is especially useful for Environmental Science, Ecology, Recreation, and Political Science majors. Field trips, attendance at public meetings and/or a semester project may be required.

BIOL 352 Conservation Biology

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L5; Cal-GETC Area 5B

This introductory course covers biological and ecological principles involved in understanding and analyzing environmental problems and exploring scientifically sound conservation techniques. Major topics include the nature of science, basic principles of ecology, genetics and evolution, patterns of biodiversity and extinction, and the interdependence between humans and our environment. This course places emphasis on scientific processes and methodology and the application of science to conservation issues. Field trips and/or a semester project may be required.

BIOL 400 Principles of Biology

Units: 5
Hours: 54 hours LEC; 108 hours LAB
Prerequisite: Chem 400 OR Chem 305 with a grade of "C" or better AND Intermediate Algebra (or equivalent in high school) or higher with a C or better or eligibility for transfer-level mathematics.
Advisory: Eligibility for ENGL C1000 (formerly known as ENGWR 300).
Transferable: CSU; UC (1) No credit for BIOL 300 or 307 if taken after BIOL 400, 420, 430, or 431; 2) No credit for BIOL 310 if taken after BIOL 400; 3) No transfer credit for BIOL 462, if taken after BIOL 400)
General Education: Local GE L5; Cal-GETC Area 5B; Cal-GETC Area 5C
C-ID: C-ID BIOL 190; Part of C-ID BIOL 135S

This course introduces universal biological principles, including biological molecules, enzymes, cell structure and function, biochemistry, Mendelian and molecular genetics, ecology and evolution. BIOL 400 is recommended for science majors and students in pre-professional programs.

BIOL 410 Principles of Botany

Units: 5
Hours: 54 hours LEC; 108 hours LAB
Prerequisite: BIOL 400 with a grade of "C" or better
Advisory: Eligibility for ENGL C1000 (formerly known as ENGWR 300).
Transferable: CSU; UC
General Education: Local GE L5; Cal-GETC Area 5B; Cal-GETC Area 5C
C-ID: C-ID BIOL 155; Part of C-ID BIOL 130S; Part of C-ID BIOL 135S

This course is intended for science majors and builds upon and applies concepts developed in cell and molecular biology (BIOL 400). This is an introduction to the diversity, taxonomy, life cycles, and evolutionary trends of cyanobacteria, algae, fungi, and plants. Emphasis is on the comparative anatomy, morphology, physiology, development, systematics, evolution, and ecology of plants. Field trips may be required.

BIOL 420 Principles of Zoology

Units: 5
Hours: 54 hours LEC; 108 hours LAB
Prerequisite: BIOL 400 with a grade of "C" or better
Advisory: Eligibility for ENGL C1000 (formerly known as ENGWR 300).
Transferable: CSU; UC (1) No credit for BIOL 300 and 307 if taken after BIOL 400, 420, 430, or 431)
General Education: Local GE L5; Cal-GETC Area 5B; Cal-GETC Area 5C
C-ID: C-ID BIOL 150; Part of C-ID BIOL 130S; Part of C-ID BIOL 135S

This course is an introduction to zoology with particular emphasis on comparative anatomy and physiology of vertebrates and invertebrates. The basic principles of evolution, taxonomy, embryology, morphology, physiology, behavior and ecology will be covered. A field trip may be required.

BIOL 430 Anatomy and Physiology

Units: 5
Hours: 54 hours LEC; 108 hours LAB
Prerequisite: CHEM 305, 309, or 400 with a grade of "C" or better
Transferable: CSU; UC (Transfer Credit Limitations: No credit for BIOL 300 and 307 if taken after BIOL 400, 420, 430, or 431)
General Education: Local GE L5; Cal-GETC Area 5B; Cal-GETC Area 5C
C-ID: Part of C-ID BIOL 115S

This is the first course in a two-course sequence. It is an introductory course in which the basic principles of human anatomy and physiology are presented in an integrated fashion. This course covers anatomical terminology, basic organic chemistry, histology, and the integumentary, skeletal, muscular and nervous systems. Both BIOL 430 and BIOL 431 must be taken to study all of the major organ systems.

BIOL 431 Anatomy and Physiology

Units: 5
Hours: 54 hours LEC; 108 hours LAB
Prerequisite: BIOL 430 with a grade of "C" or better
Transferable: CSU; UC (1) BIOL 300, 307 and 310 combined: maximum transfer credit is one course; no credit for BIOL 300 and 307 if taken after BIOL 400, 420, 430, or 431)
General Education: Local GE L5; Cal-GETC Area 5B; Cal-GETC Area 5C
C-ID: Part of C-ID BIOL 115S

This is the second course in a two-course sequence, and is an introductory course in which the basic principles of human anatomy and physiology are presented in an integrated

fashion. This course covers the cardiovascular, respiratory, lymphatic/immune, digestive, urinary, endocrine and reproductive systems. Both BIOL 430 and BIOL 431 must be taken to study all of the major organ systems.

BIOL 439 Human Cadaver Dissection

Units: 1
Hours: 12 hours LEC; 18 hours LAB
Prerequisite: None.
Advisory: BIOL 420 or 430 with a grade of "C" or better
Transferable: CSU; UC

The Human Cadaver Dissection course is a one-unit, intensive course for nursing, medical, physical therapy, sonography, chiropractic, or other health-related majors. Using a regional approach, students will study the structure of the human body through the dissection of cadavers. Students will gain experience in dissection techniques, more fully understand relationships between organs, and discuss physiological concepts as they pertain to anatomy. Maintaining a detailed lab notebook is an integral part of the course. This course may be taken one time for credit.

BIOL 440 General Microbiology

Units: 4
Hours: 54 hours LEC; 72 hours LAB
Prerequisite: CHEM 305, 309, or 400 with a grade of "C" or better
Transferable: CSU; UC
General Education: Local GE L5; Cal-GETC Area 5B; Cal-GETC Area 5C

This course introduces the concepts of microbiology with an emphasis on forms, modes of growth, cell specialization, mutual, commensal and parasitic relationships of bacteria, fungi, molds, protozoans and viruses. Topics will be correlated with medical and health applications to animals and human beings.

BIOL 485 Honors Seminar in Genetics

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L5; Cal-GETC Area 5B

This course offers honors students the opportunity to study, critique, and discuss advanced topics in genetics such as genetically modified foods, whole-genome rapid sequencing, gene therapies for human disease, and a variety of reproductive technologies. Furthermore, this course includes the study of Mendelian inheritance, the roles of chromosomes and genes in human disease, how genes direct development, the relationship between genes, environment and behavior, and the contribution of genes to human diversity. Students will engage with each other to discuss ethical, legal and social issues during class discussions, and analyze scientific literature in written reports. Enrollment is limited to Honors students. Details about the Honors Program can be found in the Catalog and on the CRC website. This course is the same as HONOR 385. This course, under either name, may be taken a total of one time for credit.

BIOL 495 Independent Studies in Biology

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

BIOL 498 Work Experience in Biology

Units: 0.5 - 4
Hours: 27 - 216 hours LAB
Prerequisite: None.
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position or job related to career goals in Biology.
Transferable: CSU

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in transfer level degree occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and complete 27 hours of related work experience for 0.5 unit. An additional 27 hours of related work experience is required for each additional 0.5 units. 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.

BIOL 499 Experimental Offering in Biology

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU; UC (Credit for variable topics courses is given only after a review of the scope and content of the course by the enrolling UC campus.)

This is the experimental courses description.

Biology - Field Studies (BIOLFS) Courses

Broadcast Journalism

This Cosumnes River College program introduces students to the field of broadcast journalism and prepares them for jobs, internships or transfer to a four-year institution.

Degrees Offered

A.A. in Broadcast Journalism

Dean Brian Rickel
Department Chair Mun Kang
Phone (916) 691-7171
Email kangm@crc.losrios.edu

Associate Degree

A.A. in Broadcast Journalism

This CRC program introduces students to the field of broadcast journalism and prepares them for jobs, internships or transfer to a four-year institution.

Highlights include:
* Practical experience in the digital TV studio and campus radio station
* Internship opportunities in local radio and TV stations
* Practical experience creating news packages
* Practical experience as an on-camera TV reporter/anchor or as a radio broadcaster

Note to Transfer Students:
If you are interested in transferring to a four-year college or university to pursue a bachelor's degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate's degree in this major may be different from the requirements needed for the Bachelor's degree.

Degree Requirements

Course Code	Course Title	Units
RTVF 300	Mass Media and Society	3
JOUR 300	Newswriting and Reporting	3
RTVF 331	Beginning Television Studio Production	3
RTVF 362	Digital Non-Linear Video Editing	3
RTVF 330	Beginning Single Camera Production	3
RTVF 312	Beginning Radio and Podcasting	3
RTVF 370	Broadcast Writing & Announcing	3
RTVF 380	Broadcast Journalism	3
A minimum of 6 units from the following:		6
JOUR 351	Public Relations Writing and Media Techniques (3)	
JOUR 410	College Media Production I (3)	
RTVF 315	Voice and Diction for Broadcasting (3)	
RTVF 319	Beginning Audio Production (3)	
RTVF 360	Introduction to Motion Graphics: Adobe After Effects (3)	
RTVF 376	Advertising (3)	
RTVF 498	Work Experience in Radio, Television and Film (0.5 - 4)	
PHOTO 301	Beginning Photography (3)	
COMM 480	Honors Seminar: Political Campaign Communication (3)	
Total Units:		**30**

The Broadcast Journalism Associate in Arts (A.A.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Student Learning Outcomes

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

- Write in clear, concise English. (PSLO-1)
- Structure and craft messages in ways appropriate for specific audiences, including through a variety of technical skills for use in multi-media, internet, television, film or radio delivery. (PSLO-2)
- Research critically, filter the results, and present them in a cogent manner. (PSLO-3)
- Investigate and gather information for use in public presentation using library, internet, and personal interviews. (PSLO-4)
- Produce examples of professional-level work including writing, announcing and on-air performance. (PSLO-5)
- Demonstrate through projects that with the power of a communicator comes moral and ethical responsibility. (PSLO-6)
- Demonstrate a hands-on ability to perform the professional level critical thinking needed for work in television, radio and other media broadcasting. (PSLO-7)
- Recognize and overcome biases, prejudices and limited viewpoints (including his or her own) so that he or she can communicate effectively in a diverse world. (PSLO-8)

Career Information

Career Options News Broadcaster; Sportscaster; Announcer; News writer, News Producer; Journalist; Multi-Media writer; Internet Information specialist. Some career options may require more than two years of college study. Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.

Building Inspection Technology

This CRC program has been developed to prepare individuals for employment in building inspection. Graduates may be employed by contractors, government agencies, architects, finance companies and developers. A wide variety of employment opportunities exist in the fast-growing construction industry in the Sacramento Valley.

Degrees and Certificates Offered

A.S. in Building Inspection Technology

A.S. in Fire Prevention

Building Inspection Technology Certificate

Green Buildings Certificate

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Associate Degrees

A.S. in Building Inspection Technology

This CRC program has been developed to prepare individuals for employment in building inspection. Graduates may be employed by contractors, government agencies, architects, finance companies and developers.

A wide variety of employment opportunities exist in the fast-growing construction industry in the Sacramento Valley.

HIGHLIGHTS

*Field trips to a variety of construction sites to study inspection technologies and code interpretations (Instructor Option)

*Association with instructors who are county and city building officials and inspectors

Degree Requirements

Course Code	Course Title	Units
BIT 100	Introduction to the International Building Code	3
BIT 101	Introduction to the International Residential Code	3
BIT 112	Building Inspection Principles for Disabled Access	3
BIT 120	Mechanical I/Plumbing Code Requirements	3
BIT 121	Mechanical II / H.V.A.C. Code Requirements	3
BIT 140	Residential Electrical Code Requirements	3
CMT 310	Materials of Construction	3
A minimum of 18 units from the following:		18
BIT 102	Plan Reading and Non-Structural Plan Review (3)	
BIT 104	International Building Code - Fire & Life Safety (3)	
BIT 106	Introduction to Special Inspection- Concrete, Masonry, Steel, and Soils (3)	
BIT 130	Introduction to Inspection of Wood Frame Construction (3)	
BIT 141	Commercial Electrical Code Requirements (3)	
BIT 150	California Energy Code – Building Energy Efficiency Standards (3)	
BIT 154	California Green Building Standards Code (3)	
Total Units:		**39**

The Building Inspection Technology Associate in Science (A.S.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Student Learning Outcomes

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

- Interpret the model building codes: Interpret the model building codes and summarize the origins and evolution of building codes in this country. Identify the origin and organization of the model building codes. Interpret code requirements for plans, permits and inspections. Diagnose code compliance with a minimum of 80% accuracy, congruent with industry certification. (PSLO 1)
- Analyze a set of construction drawings to determine completeness/code compliance: Analyze a set of construction drawings to determine completeness and code compliance. Develop a thorough understanding of the organization and purpose of construction drawings. Recognize deficiencies in a set of construction drawings submitted for plan review. (PSLO 2)
- Develop skills and competencies: Develop skills and competencies for effective and competitive workforce performance. (PSLO 3)
- Apply specific and measurable career and /or workforce learning objectives: Apply specific and measurable career and/or workforce learning objective through classroom study and independent assignments. (PSLO 4)
- Ensure that the program is consistent with the college SLO’s: Ensure that the program is consistent with the college SLO’s and is providing the students and community with a valuable and meaningful service. (PSLO 5)

Career Information

Building Inspector; Plan Checker; Construction Supervisor; Foreman; Construction Management; Government Building Official. Some career options may require more than two years of college study. Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.

A.S. in Fire Prevention

The fire service is one of the most dynamic employers in the country. This CRC program is designed to provide the student with updated skills and knowledge necessary to complete and successfully apply for fire service positions. The curriculum serves as an in-service program as well as a pre-employment program for students seeking employment or advancement in the profession of fire prevention.

Degree Requirements

Course Code	Course Title	Units
FT 300	Fire Protection Organization	3
FT 301	Fire Prevention Technology	3
FT 302	Fire Protection Equipment and Systems	3
FT 303	Building Construction for Fire Protection	3
FT 304	Fire Behavior and Combustion	3
FT 498	Work Experience in Fire Technology	0.5 -4
A minimum of 9 units from the following:		9[1]
BIT 100	Introduction to the International Building Code (3)	
BIT 102	Plan Reading and Non-Structural Plan Review (3)	
BIT 104	International Building Code - Fire & Life Safety (3)	
BIT 130	Introduction to Inspection of Wood Frame Construction (3)	
Total Units:		**24.5 - 28**

[1]The student must have 1-4 units of work experience in Fire Prevention to receive a degree.

The Fire Prevention Associate in Science (A.S.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Student Learning Outcomes

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

- PSLO #1: Comprehend the qualifications for entry level skills, the discipline and evaluation process, fire service structure, history, and culture for the field of fire prevention.
- PSLO #2: Identify and comprehend laws, regulations, codes, standards and the regulatory and advisory organizations that influence fire prevention operations.
- PSLO #3: Analyze and determine the causes of fire, extinguishing agents, stages of fire, fire development, and methods of heat transfer.
- PSLO #4: Identify and describe the common types of building construction and conditions associated with structural collapse.
- PSLO #5: Differentiate between fire detection and fire suppression systems.

Career Information

Fire Inspector, Fire Investigator, Plans Examiner, Building Inspector, Fire Prevention Specialist/Officer, Public Education Specialist/Officer, Manager, Firefighter Some Career Opportunities may require more than two years of college study. Classes beyond the associate degree may be required to fulfill some career opportunities for preparation for transfer to a university program.

Certificates of Achievement

Building Inspection Technology Certificate

This CRC program has been developed to prepare individuals for employment in building inspection. Graduates may be employed by contractors, government agencies, architects, finance companies and developers.

A wide variety of employment opportunities exist in the fast-growing construction industry in the Sacramento Valley.

HIGHLIGHTS

*Field trips to a variety of construction sites to study inspection technologies and code interpretations (Instructor Option)

*Association with instructors who are county and city building officials and inspectors

Certificate Requirements

Course Code	Course Title	Units
BIT 100	Introduction to the International Building Code	3
BIT 101	Introduction to the International Residential Code (3)	3
BIT 112	Building Inspection Principles for Disabled Access	3
BIT 120	Mechanical I/Plumbing Code Requirements	3
BIT 121	Mechanical II / H.V.A.C. Code Requirements	3
BIT 140	Residential Electrical Code Requirements	3
CMT 310	Materials of Construction	3
A minimum of 12 units from the following:		12
BIT 102	Plan Reading and Non-Structural Plan Review (3)	
BIT 104	International Building Code - Fire & Life Safety (3)	
BIT 106	Introduction to Special Inspection- Concrete, Masonry, Steel, and Soils (3)	
BIT 130	Introduction to Inspection of Wood Frame Construction (3)	
BIT 141	Commercial Electrical Code Requirements (3)	
BIT 150	California Energy Code – Building Energy Efficiency Standards (3)	
BIT 154	California Green Building Standards Code (3)	
Total Units:		**33**

Student Learning Outcomes

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

- Interpret the model building codes: Interpret the model building codes and summarize the origins and evolution of building codes in this country. Identify the origin and organization of the model building codes. Interpret code requirements for plans, permits and inspections. Diagnose code compliance with a minimum of 80% accuracy, congruent with industry certification. (PSLO 1)
- Analyze a set of construction drawings to determine completeness/code compliance: Analyze a set of construction drawings to determine completeness and code compliance. Develop a thorough understanding of the organization and purpose of construction drawings. Recognize deficiencies in a set of construction drawings submitted for plan review. (PSLO 2)
- Develop skills and competencies: Develop skills and competencies for effective and competitive workforce performance. (PSLO 3)
- Apply specific and measurable career and /or workforce learning objectives: Apply specific and measurable career and/or workforce learning objective through classroom study and independent assignments. (PSLO 4)
- Ensure that the program is consistent with the college SLO's: Ensure that the program is consistent with the college SLO's and is providing the students and community with a valuable and meaningful service. (PSLO 5)

Career Information

Building Inspector; Plan Checker; Construction Supervisor; Foreman; Construction Management; Government Building Official. Some career options may require more than two years of college study. Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.

Green Buildings Certificate

The purpose of this certificate is to develop job skills and an understanding of green strategies for high performance buildings and livable communities. It is focused at students and professionals in the fields of architecture; construction; building management; construction management; building inspection; design technology; landscape; and planning, who want to acquire a comprehensive knowledge of an integrated, economic life-cycle approach to the design of the built environment. It includes study of green rating systems, material choices and environmental strategies for a livable, sustainable future.

Certificate Requirements

Course Code	Course Title	Units
ARCH 342	Introduction to Green Buildings	3
CMT 310	Materials of Construction	3
A minimum of 12 units from the following:		12
ARCH 332	Design Awareness (3)	
ARCH 334	Advanced Design in Three Dimensions (3)	
ADT 320	Architectural Design Technology - Building Information Modeling (BIM) I (3)	
ADT 322	Architectural Design Technology - Building Information Modeling (BIM) II (3)	
BIT 150	California Energy Code – Building Energy Efficiency Standards (3)	
CONST 143	Solar Photovoltaic Systems (3)	
ECON 306	Environmental Economics (3)	
GEOG 302	Environmental Studies & Sustainability (3)	
GEOG 305	Global Climate Change (3)	
GEOG 306	Weather and Climate (3)	
Total Units:		**18**

Student Learning Outcomes

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

- PSLO 1: Establish meaningful ethical, social and environmental objectives for buildings and communities based on the values of energy and resource conscious design.
- Compare and contrast societal and economic implications of utilizing renewable and non-renewable energy sources.
- Compare and contrast the effect of contextual issues and evaluate their impact on energy consumption, environment and the beneficial experience of interior and exterior spaces.
- PSLO 2: Identify and articulate issues related to the choice of various building, landscape and environmental systems; ideate responsive solutions; and compare the alternatives in making effective, sustainable decisions.
- Analyze and calculate energy use to make informed, environmentally-sound and economic choices to satisfy human needs for comfort and aesthetics.
- Explain the concepts of resource conservation and waste reduction and make sustainable design choices related to materials and construction.
- Develop a comprehensive understanding of green rating systems, livable communities strategies and the ability to apply these concepts in decision-making.
- PSLO 3: Demonstrate independent learning, teamwork and continuing education habits that will help to encourage a life long pursuit of knowledge.
- To use a team work process to identify issues, analyze criteria, research and apply learned principles to synthesize solutions to specific design projects.
- To demonstrate habits of visual note making and independent research by developing a sketch and notebook to record learning.

Career Information

This certificate helps to develop the knowledge base related to sustainable green buildings and environments for the careers of architecture, construction, construction management,

building inspection, horticulture, landscape architecture and architectural design technology.

Building Inspection Technology (BIT) Courses

BIT 100 Introduction to the International Building Code

Units: 3
Hours: 54 hours LEC
Prerequisite: None.

This basic course is designed to provide background material on which the International Building Code was founded and the legal basis for the code. Emphasis will be placed on the development and proper use of the code.

BIT 101 Introduction to the International Residential Code

Units: 3
Hours: 54 hours LEC
Prerequisite: None.

This course is designed to provide a thorough understanding of residential construction requirements for building plan review and inspection. The course will cover the portions of the International Residential Code that the State of California has adopted. Emphasis will be placed on the development and proper use of the code.

BIT 102 Plan Reading and Non-Structural Plan Review

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ADT 300 and BIT 100

This course provides a thorough understanding of the plan reading and non-structural plan review process undertaken by building departments prior to plan approval.

BIT 104 International Building Code - Fire & Life Safety

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: BIT 100 and CMT 300

This course covers the use and application of the International Building Code for construction inspection.

BIT 106 Introduction to Special Inspection- Concrete, Masonry, Steel, and Soils

Units: 3
Hours: 54 hours LEC
Prerequisite: None.

This course covers the Special Inspection requirements of chapter seventeen (17) in the International Building Code. The course will provide the technical knowledge and information necessary for Building Inspectors to oversee and approve Special Inspections performed by Special Inspectors on concrete, masonry, structural steel and soils.

BIT 110 Engineering and Structural Principles for Building Construction

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: BIT 100

This course covers the basic engineering and structural principles used in the construction industry. This course includes civil engineering, plan reading, site layout, mechanics of materials, soil fundamentals, and the construction and inspection of structural systems.

BIT 112 Building Inspection Principles for Disabled Access

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: BIT 100

This is a course designed to examine the state regulations that govern the design and construction of public buildings, publicly funded living accommodations, hotels and motels, and multi-family dwellings for individuals with mobility and sensory impairments. The course is designed specifically for building inspectors to develop knowledge and skills in disabled access inspections.

BIT 120 Mechanical I/Plumbing Code Requirements

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: CMT 300

This course covers the use and interpretation of the Uniform Plumbing Code, legal and administrative enforcement procedures, field inspection techniques and procedures, methods and techniques used in plumbing installations, emerging technologies.

BIT 121 Mechanical II / H.V.A.C. Code Requirements

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: CMT 300

This course covers the use and interpretation of the Uniform Mechanical Code, and legal and administrative enforcement procedures used in mechanical installations, emerging trends and technologies.

BIT 130 Introduction to Inspection of Wood Frame Construction

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: BIT 100

This is a basic course designed to provide a thorough understanding of wood frame construction requirements for building plan review and inspection. The course will cover inspections for floor, roof and wall framing, and wall bracing for seismic and wind design. Simple beam calculations will be made.

BIT 140 Residential Electrical Code Requirements

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: BIT 100

This course includes a review of basic electricity and electrical principles for building inspection. This course is limited to the electrical code requirements for residential structures. The course will cover the use and interpretation of the electrical requirements found in the International Residential Code, legal and administrative enforcement procedures, field inspection techniques and procedures, methods and techniques used in electrical installations and emerging technologies.

BIT 141 Commercial Electrical Code Requirements

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: BIT 140

This course is an in-depth study of the National Electrical Code (NEC) as it relates to commercial and industrial construction and includes text adopted into the California Building Standards Code (Title 24). Study will include the most critical aspects of the National Electrical Code for electrical wiring systems found in commercial and industrial installations.

BIT 150 California Energy Code – Building Energy Efficiency Standards

Units: 3
Hours: 54 hours LEC
Prerequisite: None.

This course introduces the interpretation and use of the California Energy Code, and legal and administrative enforcement procedures with emphasis on heating, ventilating, air conditioning and related installations.

BIT 154 California Green Building Standards Code

Units: 3
Hours: 54 hours LEC
Prerequisite: None.

The purpose of this course is to introduce students to the history, purpose, proper use and interpretation of the California Green Building Standards Code. The California Green Building Standards Code was adopted by the State of California in July of 2010 and continues to evolve with each new code cycle. These standards will be felt across all of the industry's occupations, from architects and designers to builders and inspectors. This course fills elective requirements in the BIT degree, as well as the Green Building Certificate.

BIT 295 Independent Studies in Building Inspection Technology

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

BIT 298 Work Experience in Building Inspection Technology

Units: 0.5 - 4
Hours: 27 - 216 hours LAB
Prerequisite: None.
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position or job related to career goals in Building Inspection Technology.

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in associate degree level or certificate occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and complete 27 hours of related work experience for 0.5 unit. An additional 27 hours of related work experience is required for each additional 0.5 units. 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.

BIT 299 Experimental Offering in Building Inspection Technology

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

Business

Cosumnes River College's business programs are designed to provide an entrance into an exciting career. Many opportunities are available which can lead to immediate employment and/or career advancement. CRC offers a variety of degrees and certificates to meet students' present and future needs. Whether it is one class or a step toward a degree, there are a variety of options.

Degrees and Certificates Offered

A.S.-T. in Business Administration 2.0

A.A. in Business, General

A.A. in Business, Small Business Management/Entrepreneurship

A.A. in Culinary Arts Management

A.A. in Restaurant and Food Service Entrepreneurship

Business Information Professional I Certificate

Business, General Certificate

Business, Office Assistant Certificate

Entrepreneurship Certificate

Small Business Management/Entrepreneurship Certificate

Dean Tyler Rollins

Department Chair Eric Granquist

Phone (916) 691-7226

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Associate Degrees for Transfer

A.S.-T. in Business Administration 2.0

The Associate in Science in Business Administration 2.0 for Transfer degree provides students with a major that fulfills the general requirements of the California State University for transfer to baccalaureate degree programs in business administration. Students with this degree will receive priority admission with junior status to the California State University system. The Associate in Science in Business Administration 2.0 for Transfer degree is comprised of lower division coursework typically required by CSU institutions. Students must complete the following Associate Degree for Transfer requirements (Pursuant to SB1440, §66746):
• 60 semester or 90 quarter CSU-transferable units
• the California General Education Transfer Curriculum (Cal-GETC) pattern
• a minimum of 18 semester or 27 quarter units in the major or area of emphasis as determined by the community college district
• obtain a minimum grade point average (GPA) of 2.0
• earn a grade of C or better (or P for Pass/No Pass courses) in all courses required for the major or area of emphasis

Upon successful completion of the Associate in Science in Business Administration 2.0 for Transfer degree requirements, students will be guaranteed admission to the CSU system with junior status and will not have to repeat lower division coursework.

Each California State University may have slightly different requirements for transfer so it is critical for students to work with their counselors to develop individual academic plans.

Degree Requirements

Course Code	Course Title	Units
ACCT 301	Financial Accounting	4
ACCT 311	Managerial Accounting	4
ECON 302	Principles of Macroeconomics	3
ECON 304	Principles of Microeconomics	3
BUS 340	Business Law (3)	3
BUS 300	Introduction to Business (3)	3
ECON 310	Statistics for Business and Economics (3)	3 - 4
or PSYC 330	Introductory Statistics for the Behavioral Sciences (3)	
or STAT C1000E	Introduction to Statistics (4)	
or STAT C1000H	Introduction to Statistics - Honors (4)	
MATH 341	Calculus for Business and Economics (4)	4 - 5
or MATH 343	Modern Business Mathematics (4)	
or MATH 355	Calculus for Biology and Medicine I (4)	
or MATH 400	Calculus I (5)	
Total Units:		**27 - 29**

The Associate in Science in Business Administration 2.0 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 California General Education Transfer Curriculum (Cal-GETC) Requirement.

Student Learning Outcomes

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

- P-SLO 1: Identify and explain the major functional areas of business organizations including management, marketing, finance, and accounting.
- P-SLO 2: Develop leadership skills that are effective in managing a multicultural workforce.
- P-SLO 3: Analyze practical business problems and utilize research and critical thinking to evaluate and recommend alternative solutions.
- P-SLO 4: Apply accounting principles and concepts in making decisions about business operations.
- P-SLO 5: Integrate management principles in relationship to finance, personnel, products, services and information.
- P-SLO 6: Communicate effectively verbally and in writing in various business settings.
- P-SLO 7: Apply commonly used computer application programs to create relevant business documents.

Career Information

Successful completion of a baccalaureate degree in business administration may lead to positions: in Accountancy, Accounting Information Systems, Entrepreneurship, Finance, Management, Human Resources and Organizational Behavior, International Business, Marketing, Management Information Systems, Operations Management, Public Administration, Real Estate and Land Use, Risk Management and Insurance.

Associate Degrees

A.A. in Business, General

This program provides an overview of business fundamentals for students interested in most business occupations. The program is also recommended for general government service occupations.

This degree is intended for students who wish to complete an A.A. degree in Business. Please consult with an academic counselor if you wish to obtain an A.A. degree and transfer to a CSU university as a business degree major.

Degree Requirements

Course Code	Course Title	Units
BUS 300	Introduction to Business	3
BUS 340	Business Law	3
ACCT 301	Financial Accounting	4
ECON 302	Principles of Macroeconomics	3
ECON 304	Principles of Microeconomics	3
MKT 300	Principles of Marketing	3
A minimum of 6 units from the following:		6[1]
BUS 310	Business Communications (3)	
BUS 320	Concepts in Personal Finance (3)	
BUS 330	Managing Diversity in the Workplace (3)	
BUS 350	Small Business Management/Entrepreneurship (3)	
ECON 310	Statistics for Business and Economics (3)	
STAT C1000E	Introduction to Statistics (4)	
A minimum of 3 units from the following:		3
ACCT 311	Managerial Accounting (4)	
BUS 345	Law and Society (3)	
MGMT 372	Human Relations and Organizational Behavior (3)	
RE 300	California Real Estate Principles (3)	
BUS 495	Independent Studies in Business (0.5 - 4)	
BUS 498	Work Experience in Business (0.5 - 4)	
A minimum of 3 units from the following:		3
CISC 310	Introduction to Computer Information Science (3)	
CISA 305	Beginning Word Processing (2)	
CISA 315	Introduction to Electronic Spreadsheets (2)	
CISA 320	Introduction to Database Management (1)	
Total Units:		**31**

[1]Students may select ECON 310 or STAT C1000 (formerly STAT 300), but not both.

The Business, General Associate in Arts (A.A.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Student Learning Outcomes

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

- Identify and explain the major functional areas of the business organizations including management, marketing, finance, and accounting.
- 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.

A.A. in Business, Small Business Management/Entrepreneurship

The Small Business Management/Entrepreneurship 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.

Degree Requirements

Course Code	Course Title	Units
BUSINESS CORE:		
BUS 300	Introduction to Business	3
BUS 340	Business Law	3
ACCT 301	Financial Accounting	4
ECON 302	Principles of Macroeconomics	3
MKT 300	Principles of Marketing	3
BUS 215	Entrepreneurial Opportunity and Business Planning	3
BUS 350	Small Business Management/Entrepreneurship	3
A minimum of 6 units from the following:		6
BUS 310	Business Communications (3)	
BUS 330	Managing Diversity in the Workplace (3)	
BUS 320	Concepts in Personal Finance (3)	
ECON 304	Principles of Microeconomics (3)	
MKT 310	Selling Professionally (3)	
MGMT 362	Techniques of Management (3)	
A minimum of 3 units from the following:		3

Course Code	Course Title	Units
CISC 310	Introduction to Computer Information Science (3)	
CISA 305	Beginning Word Processing (2)	
CISA 315	Introduction to Electronic Spreadsheets (2)	
CISA 320	Introduction to Database Management (1)	
Total Units:		**31**

The Business, Small Business Management/Entrepreneurship Associate in Arts (A.A.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Student Learning Outcomes

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

- Evaluate the feasibility of success when starting a new business venture.
- Research and compose a business plan that can be used for planning as well as financing.
- Employ appropriate management, finance, accounting, and marketing techniques required in operating a business.
- Develop effective oral and written communication skills that can be applied in various business settings.
- Demonstrate the ability to comprehend, apply, and evaluate standards of ethical behavior in various business settings.
- Formulate original ideas and concepts in addition to integrating the ideas of others into the problem solving process.

A.A. in Culinary Arts Management

This program provides training for management track employment in commercial culinary service operations. Courses begin at entry-level training; advanced courses build upon skills acquired in pre-requisite courses.

The program includes coursework in culinary arts, food and equipment use and identification, culinary sanitation, nutrition, management techniques, marketing, legal control, financial analysis and entrepreneurship. Students will apply those skills with training in lab courses and work experience.

Sanitation training is offered as an integral part of each certificate and degree, and is certified by the National Restaurant Association as well as Sacramento County Environmental Health Division.

Both the Basic Culinary Services Certificate and the Cooking and Supervision Certificate are embedded within this program. Students who complete all program requirements for the Culinary Arts Management A.A. Degree will be eligible to graduate with both certificates and their degree.

To participate in production labs, students must be able to lift and carry objects up to 50 Lbs. Students must have the ability to use knives and other hand tools.

Degree Requirements

Course Code	Course Title	Units
First Semester:		
CAM 300	Survey of Food Service Careers and Career Skills	3
First Semester:		
CAM 306	Culinary Sanitation & Safety	2
Second Semester:		
CAM 301	Food Theory and Preparation	4[1]
Second Semester:		
CAM 321	Culinary Computations	3
Fall (Semester 3 or 4):		
CAM 310	Quantity Food Production	4
Spring (Semester 3 or 4):		
CAM 316	Micro-Entrepreneurship in Food Service	4
Fall (Semester 3 or 4):		
CAM 332	Culinary Financial Management	3
Fall, Spring, or Summer (Semester 3 or 4):		
A minimum of 4 units from the following:		4
CAM 498	Work Experience in Culinary Arts Management (0.5 - 4)	
Any Semester:		
BUS 300	Introduction to Business	3
First Semester, Area II(a) Requirement:		
BUS 310	Business Communications (3)	3
or ENGWR 341	Introduction to Technical and Professional Writing (3)	
Any Semester:		
BUS 340	Business Law	3
Any Semester:		
BUS 350	Small Business Management/Entrepreneurship (3)	3
or MGMT 362	Techniques of Management (3)	
Any Semester:		
MKT 330	Internet Marketing	3
Any Semester, Area IV Requirement :		
HORT 313	Sustainable Agriculture (3)	3
or HORT 300	Introduction to Horticulture (3)	
or ENGR 304	How Things Work (3)	
Any Semester, Area III(b) Requirement:		
NUTRI 300	Nutrition	3
Any Semester, Area V(b)and Area VI Requirements:		
NUTRI 310	Cultural Foods of the World (3)	3
or BUS 330	Managing Diversity in the Workplace (3)	
Total Units:		**51**

[1]CAM 300, 306, and 301 serve as prerequisite courses for many higher level courses.

The Culinary Arts Management Associate in Arts (A.A.) degree may be obtained by completion of the required program, and

either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Student Learning Outcomes

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

- Demonstrate the ability to use professional written and oral communication skills necessary to communicate to a variety of audiences.
- Demonstrate awareness, understanding, and skills necessary to live and work in a diverse world.
- Demonstrate necessary mathematical principles for foodservice production and management tasks.
- Understand and practice proper sanitation and safety procedures critical to the foodservice industry.
- Demonstrate the ability to develop, examine, question, and explore perspectives or alternatives to problems within the foodservice industry.
- Demonstrate proficiency in a variety of managerial skills necessary for foodservice managers and entrepreneurs.
- Exhibit a basic understanding of nutrition and the relationship between nutrition and food preparation.
- Demonstrate basic knowledge of cooking techniques and procedures.
- Practice professional ethics, provide leadership, demonstrate personal and global responsibility and work effectively as a team member.

Career Information

Culinary Manager; Culinary Supervisor; Cook; Kitchen Manager; Restaurant Manager; Caterer; Food Service Worker.

A.A. in Restaurant and Food Service Entrepreneurship

This program provides training and education for those wishing to own a restaurant or other food service venture. The various elements involved in starting and operating a small business are covered as well as training in food theory and production, safety and sanitation, and business practices.

The Basic Culinary Services Certificate; and the Cooking and Supervision Certificate; and the Small Business Management/ Entrepreneurship Certificate are embedded within this program. Students who complete all program requirements for the Restaurant and Food Service Entrepreneurship A.A. Degree will be eligible to graduate with all three certificates and their degree.

To participate in production labs, students must be able to lift and carry objects up to 50 Lbs. Students must have the ability to use knives and other hand tools.

Degree Requirements

Course Code	Course Title	Units
First Semester:		
CAM 300	Survey of Food Service Careers and Career Skills	3
First Semester:		
CAM 306	Culinary Sanitation & Safety	2
Second Semester:		
CAM 301	Food Theory and Preparation	4
Second Semester:		
CAM 321	Culinary Computations	3
Fall (Semester 3 or 4):		
CAM 310	Quantity Food Production	4
Spring (Semester 3 or 4):		
CAM 316	Micro-Entrepreneurship in Food Service	4
Fall (Semester 3 or 4):		
CAM 332	Culinary Financial Management	3
Offered Only Fall Semester in Odd Years:		
BUS 215	Entrepreneurial Opportunity and Business Planning	3
Offered Fall and Spring Semesters :		
BUS 300	Introduction to Business	3
Offered Fall and Spring Semesters :		
BUS 340	Business Law	3
Offered Fall, Spring, and Summer Semesters:		
BUS 350	Small Business Management/ Entrepreneurship	3
Offered Fall, Spring, and Summer Semesters :		
MKT 300	Principles of Marketing	3
Offered Fall and Spring Semesters :		
ACCT 301	Financial Accounting (4)	3 - 4
or BUS 320	Concepts in Personal Finance (3)	
Any Semester, Area III(b) Requirement:		
NUTRI 300	Nutrition	3
Any Semester, Area V(b)and Area VI Requirements:		
NUTRI 310	Cultural Foods of the World (3)	3
or BUS 330	Managing Diversity in the Workplace (3)	
Offered Fall, Spring, and Summer :		
BUS 310	Business Communications (3)	3
or ENGWR 341	Introduction to Technical and Professional Writing (3)	
Any Semester, Area IV Requirement:		
HORT 313	Sustainable Agriculture (3)	3
or HORT 300	Introduction to Horticulture (3)	
or ENGR 304	How Things Work (3)	
Total Units:		**53 - 54**

The Restaurant and Food Service Entrepreneurship Associate in Arts (A.A.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Student Learning Outcomes

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

- Understand and practice proper sanitation and safety procedures critical to the food service industry.
- Demonstrate critical thinking skills needed to assess and correct problems within food preparation, production, presentation and service.
- Develop effective oral and written communication skills that can be applied in various business settings.
- Demonstrate basic knowledge of cooking techniques and procedures.
- Exhibit a basic understanding of nutrition
- Demonstrate skill and comprehension in entrepreneurship as indicated by course outcomes.
- Transform an entrepreneurial idea into a viable business concept.
- Employ appropriate management, finance, accounting, and marketing techniques required in operating a business.
- Demonstrate the ability to think critically and analyze problems.
- Evaluate the feasibility of success when starting a new business venture.
- Research and compose a business plan that includes all facets of starting and managing a business.
- Express ideas and facts clearly and completely.

Career Information

Small Business Owner- Restaurant and Food Service field. Restaurant manager.

Certificates of Achievement

Business Information Professional I Certificate

The Business Information Professional I Certificate prepares students for entry-level office, computer, and administrative support positions in a variety of industries. This certification includes courses in: oral and written business communications; computer application skills, including beginning Excel, Word, and Outlook; the fundamentals of computer systems; and critical thinking and problem-solving. This is a collaborative certificate between ARC, CRC, and FLC. Certificate candidates must meet with counseling to ensure local unit requirements are met. Courses are available at multiple colleges. Students can reference the required course list to find more information regarding the courses available at each college. This certificate can be completed 100% online.

Certificate Requirements

Course Code	Course Title	Units
ENGL C1000	Academic Reading and Writing (3)	3
or BUS 100	English for the Professional (3)	
or BUS 310	Business Communications (3)	
MATH 300	Introduction to Mathematical Ideas (3)	3
or BUS 105	Business Mathematics (3)	
CISA 126	Outlook: Basics	1[1]
BUSTEC 305	Introduction to Business Information Technology (3)	3
BUSTEC 307	Computer Keyboarding and Skill Building	3
CISC 302	Computer Familiarization (2)	2[2]
CISA 305	Beginning Word Processing	2[3]
CISA 315	Introduction to Electronic Spreadsheets (2)	2[4]
CISA 340	Presentation Graphics (2)	2[5]
BUS 498	Work Experience in Business (0.5 -4)	0.5 - 4[6]
or CISC 498	Work Experience in Computer Information Science - Core (0.5 -4)	
Total Units:		**21.5 - 25**

[1]Substitute course, BUSTEC 126 - Outlook: Basics is available at Folsom Lake College, or Course CISA 126 - Outlook: Basics is available at American River College.

[2]Substitute course(s), CISC 300 - Computer Familiarization, is available at American River College and Sacramento City College, BUSTEC 309 - Computer Familiarization is available at Folsom Lake College.

[3]Substitute course, BUSTEC 360 - Word Processing Beyond the Essentials, is available at Folsom Lake College.

[4]Substitute course, BUSTEC 362 - Comprehensive Electronic Spreadsheets, is available at Folsom Lake College.

[5]Substitute course, BUSTEC 366 - Electronic Presentations, is available at Folsom Lake College.

[6]Substitute course, BUSTEC 498 - Work Experience in Business Technology, is available at Folsom Lake College.

Student Learning Outcomes

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

- PSLO #1: DEMONSTRATE COMMON OFFICE APPLICATION SKILLS.
- Demonstrate proficiency in business technology applications.
- Construct projects efficiently generating solutions using various workplace computer programs and shortcuts.
- PSLO #2: DEMONSTRATE COMMON OFFICE ADMINISTRATION SKILLS.
- Demonstrate proficiency in business administration skills.

- Integrate the features of working with tasks and schedules to organize both professional and personal information.
- PSLO #3: DEMONSTRATE BASIC OFFICE COMMUNICATION SKILLS.
- Demonstrate proficiency in business communication skills.
- Identify techniques to send, receive and manage email messages.
- PSLO #4: EXAMINE CUSTOMER SERVICE NEEDS AND REQUIREMENTS
- Apply customer service skills in a business environment and provide a positive customer service experience.
- Analyze the extent to which customer service is facilitated by the effective use of technology.

Career Information

Students who successfully complete the Business Information Professional Certificate are prepared for entry-level positions in office, computer, and administrative support positions in a variety of industries.

Business, General Certificate

The Certificate of Achievement in Business provides an overview of the various disciplines in business. It is intended to meet the needs of students who wish to develop, retrain or upgrade skills for work in a business setting. Students wanting to earn the A.A. degree in Business, General, can do so by taking additional courses beyond the 18 units required in this certificate. Please seek advice from your counselor to verify the correct courses to take towards the A.A degree.

Certificate Requirements

Course Code	Course Title	Units
BUS 300	Introduction to Business	3
BUS 340	Business Law	3
MKT 300	Principles of Marketing	3
ECON 302	Principles of Macroeconomics	3
ACCT 301	Financial Accounting	4
A minimum of 3 units from the following:		3
BUS 350	Small Business Management/Entrepreneurship (3)	
BUS 320	Concepts in Personal Finance (3)	
BUS 310	Business Communications (3)	
BUS 330	Managing Diversity in the Workplace (3)	
ECON 304	Principles of Microeconomics (3)	
CISC 310	Introduction to Computer Information Science (3)	
Total Units:		**19**

Student Learning Outcomes

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

- P-SLO 1: Skills/Knowledge: Identify and explain the major functional areas of business organizations including management, marketing, economics, and accounting.
- P-SLO 2: Critical Thinking Skills: Analyze practical business problems utilize critical thinking and research skills in the evaluation of alternative solution.
- P-SLO 3: Critical Thinking Skills: Apply concepts and principles in business law, management, marketing, finance, and economics to making decisions about business operations.

Career Information

Business occupations General government service occupations.

Business, Office Assistant Certificate

This Certificate of Achievement is designed to provide students with general knowledge in business and an in-depth knowledge of a variety of business technology applications. Program topics include: keyboarding/word processing, integrated office applications, organization and supervision of office activities, office procedures, and business communications.

Certificate Requirements

Course Code	Course Title	Units
BUSTEC 101	Computer Keyboarding: 10-Key	1
BUSTEC 120	Skills for Today's Office	1
BUSTEC 303	Computer-Keyboard Formatting	2
BUSTEC 304	Computer-Keyboard Speed-and-Accuracy Building	2[1]
CISA 305	Beginning Word Processing	2
CISA 315	Introduction to Electronic Spreadsheets	2
CISC 302	Computer Familiarization	2
BUS 100	English for the Professional	3
A minimum of 3 units from the following:		3
BUS 300	Introduction to Business (3)	
BUS 310	Business Communications (3)	
CISC 310	Introduction to Computer Information Science (3)	
CISA 340	Presentation Graphics (2)	
CISC 308	Exploring Computer Environments and the Internet (1)	
BUSTEC 302	Computer-Keyboarding (2)	
Total Units:		**18**

[1]BUSTEC 304 may be replaced by keyboarding speed verification at 40 wpm or better

Student Learning Outcomes

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

- P-SLO 1: Skills/Knowledge: Demonstrate skill and comprehension in respective subject areas as indicated by course outcomes
- Use word processing, spreadsheet, database, presentation, and electronic communication software to effectively support the office environment.

- Demonstrate keyboarding skills which represent industry-standard speed and accuracy
- P-SLO 2: Critical Thinking Skills: Demonstrate the ability to think critically and analyze problems .
- Analyze and demonstrate effective business procedures and office management strategies
- Incorporate technological, communication, and problem-solving skills in the business setting

Career Information

Clerk, Administrative Assistant, Office Assistant, Data-entry Specialist.

Entrepreneurship Certificate

This certificate is designed for current and potential entrepreneurs. It provides an introductory and organized course of study that enables students to develop their entrepreneurial skills, recognize opportunities, and learn the basics of starting and managing a small business.

Certificate Requirements

Course Code	Course Title	Units
BUS 215	Entrepreneurial Opportunity and Business Planning	3
BUS 300	Introduction to Business	3
BUS 350	Small Business Management/Entrepreneurship	3
Total Units:		**9**

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

Small Business Management/ Entrepreneurship Certificate

The Certificate of Achievement in Small Business Management/ Entrepreneurship is designed for current and potential entrepreneurs. It provides an introductory and organized course of study that enables students to develop their entrepreneurial skills, recognize opportunities, and learn the various aspects of starting and managing a small business. Students wanting to earn the A.A. degree in Small Business Management/Entrepreneurship can do so by taking additional courses beyond the 18 units required for this certificate. Please seek advice from your counselor to verify the correct courses to take towards the A.A degree.

Certificate Requirements

Course Code	Course Title	Units
BUS 215	Entrepreneurial Opportunity and Business Planning	3
BUS 300	Introduction to Business	3
BUS 350	Small Business Management/Entrepreneurship	3
MKT 300	Principles of Marketing	3
BUS 340	Business Law	3
A minimum of 3 units from the following:		3
ACCT 301	Financial Accounting (4)	
BUS 310	Business Communications (3)	
BUS 320	Concepts in Personal Finance (3)	
CISC 310	Introduction to Computer Information Science (3)	
ECON 304	Principles of Microeconomics (3)	
Total Units:		**18**

Student Learning Outcomes

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

- P-SLO 1: Skills/Knowledge: Demonstrate skill and comprehension in entrepreneurship as indicated by course outcomes
- Transform an entrepreneurial idea into a viable business concept
- Employ appropriate management, finance, accounting, and marketing techniques required in operating a business.
- P-SLO 2: Critical Thinking Skills: Demonstrate the ability to think critically and analyze problems
- Evaluate the feasibility of success when starting a new business venture.
- Research and compose a business plan that includes all facets of starting and managing a business
- P-SLO 3: Communication: Express ideas and facts clearly and completely
- Develop effective oral and written communication skills that can be applied in various business settings

Career Information

Business Owner Employer creating jobs/career opportunities for others

Business (BUS) Courses

BUS 100 English for the Professional

Units: 3
Hours: 54 hours LEC
Prerequisite: or ESLR 320 and ESLW 320.
Advisory: BUSTEC 302 and 303

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 through analyzing written communication and composing and organizing paragraphs into effective business documents. Computer skills are needed to format business documents and search the Internet for information. Proofreading skills are stressed throughout the course. The course is recommended for all business majors during their first semester.

BUS 105 Business Mathematics

Units: 3
Hours: 54 hours LEC
Prerequisite: None.

This course is a review of basic mathematical skills and introduces equations and formulas in solving for unknowns. Applications of mathematics in business include such areas as banking, commercial discounts, retail and wholesale markup-markdown, payroll computations, simple and compound interest, bank discount, present value, taxes, insurance, depreciation, and financial statements. This course is recommended for every major in business.

BUS 215 Entrepreneurial Opportunity and Business Planning

Units: 3
Hours: 54 hours LEC
Prerequisite: None.

This course provides students with insight and knowledge into developing their entrepreneurial opportunity and creating a business plan for it. Students will research entrepreneurial ideas and determine how to turn an idea into a successful startup enterprise given the current and anticipated demographic, technological and social climates. Students will also be offered an organized, step-by-step approach to preparing a business plan. Once students are able to assess the feasibility of their own business ideas based on their personal strengths, skills, and financial goals, they will develop and produce a comprehensive business plan. Students will analyze the organization and management of a new business and map out how to execute a new business venture. The plan will enable the students to solve problems "on paper" before they become operational or money problems.

Students with little entrepreneurial experience or have business idea they would like to pursue will benefit from this course.

BUS 295 Independent Studies in Business

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

BUS 299 Experimental Offering in Business

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

BUS 300 Introduction to Business

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L4
C-ID: C-ID BUS 110

This course provides a survey of all business areas, including accounting, law, human resources, management, marketing, economics and finance. The course is designed to be taken by all beginning students interested in business. It is a core requirement for business majors. This course provides an overview often very helpful in assisting students' selection of a specific career in the field of business.

BUS 310 Business Communications

Units: 3
Hours: 54 hours LEC
Prerequisite: BUS 100 and 100 with grades of "C" or better
Advisory: Ability to key 30 or more words a minute and use a current office-level word processing program.
Transferable: CSU
General Education: Local GE L1A

This course is designed to emphasize the use of communication theory in planning and composing various types of effective business letters and reports. The course stresses style, appearance, grammar, punctuation, tone, vocabulary and reader appeal. Interpersonal communication and listening, cross-cultural communication, electronic communication technology, and ethical and legal guidelines are included. A formal report with graphics is required.

BUS 320 Concepts in Personal Finance

Same As: ECON 320
Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: BUS 105
Transferable: CSU
General Education: Local GE L4; Local GE L7B

This course is designed to assist individuals in analyzing their financial affairs. Elements and conceptual basis of financial planning, analysis, and decision making in areas of budgeting, taxes, borrowing, money management, insurance, investments, and retirement will be examined with an emphasis on principles to develop students’ economic decision making. Students will be using mathematical concepts as well as reading and interpreting written and oral instructions. The course provides a solid base for a career in financial planning services. This
course is the same as ECON 320, and only one may be taken for credit.

BUS 330 Managing Diversity in the Workplace

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU
General Education: Local GE L4

This course examines the leadership skills and abilities needed to manage a multicultural workforce. A primary focus is placed upon the workplace impact of various historical, social, and cultural experiences/perspectives related to gender, age, ethnicity, and disability. Workforce issues related to the diversity of the American consumer and global consumer impact on the United States are analyzed.

BUS 340 Business Law

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
C-ID: C-ID BUS 125

This course focuses on the law and its relationship to the environment of business. The course covers the legal system; court process and procedures; alternative dispute resolution; government regulation of business; constitutional law; contracts, both under the common and the Uniform Commercial Code (U.C.C.); torts; business organizations; property rights; and agency and employment law. While covering a broad range of substantive laws related to business, the course also stresses critical thinking and analytical evaluation of legal issues surrounding business including ethics and social responsibility.

BUS 345 Law and Society

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L4; Cal-GETC Area 4

This course is an introduction to the American legal system emphasizing the nature, purpose, sources and functioning of American law but including some comparative analysis of other historical and contemporary legal systems. It stresses the evolution of legal concepts as a reflection of the social environment and the role of the judiciary. A theoretical rather than practical viewpoint is used through analysis of selected cases and legislation in the areas of individualism, socioeconomic groups, the family, the economy, crime, criminal procedure and punishment, church and state separation, the environment, and torts. This course should not be taken in place of BUS 340 when required.

BUS 350 Small Business Management/ Entrepreneurship

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU

This class 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, meeting legal requirements, understanding marketing concepts, and other topics of interest to the entrepreneur.

BUS 354 Students in Free Enterprise

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU

This course provides students with an overview of what it takes to be successful in business through implementation of group projects and business leadership practices. Students will complete community based business projects, focusing on business and project planning, team building, communications, preparing and processing information, and leadership. Students will plan, implement, and evaluate each
project and then compose an annual report and deliver a professional presentation that will be evaluated by a selection of industry and business leaders at a regional competition, Students in Free Enterprise (SIFE). Students receive instruction in the areas of entrepreneurship, small business management, business planning, project management,
oral and written presentation skills. This course emphasizes activities and techniques that develop competencies needed to become a successful business leader. This course is designed to prepare students for the SIFE competition; therefore it may be taken a maximum
of four times for credit.

BUS 495 Independent Studies in Business

Units: 0.5 - 4
Hours: 27 - 216 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

BUS 498 Work Experience in Business

Units: 0.5 - 4
Hours: 27 - 216 hours LAB
Prerequisite: None.
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position or job related to career goals in Business.
Transferable: CSU

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in transfer level degree occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and complete 27 hours of

related work experience for 0.5 unit. An additional 27 hours of related work experience is required for each additional 0.5 units. 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.

BUS 499 Experimental Offering in Business

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU

This is the experimental courses description.

Business Technology (BUSTEC) Courses

BUSTEC 101 Computer Keyboarding: 10-Key

Units: 1
Hours: 18 hours LEC
Prerequisite: None.

This course introduces the numeric keypad and develops the ability to key information into a computer with speed and accuracy.

BUSTEC 110 Business Procedures for Professional Success

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: BUSTEC 302 or equivalent, BUSTEC 303 and BUS 100

This course develops skills associated with the business professional, including specialized procedures in electronic workplaces. Students learn critical thinking, problem solving, teamwork, supervision skills, administrative procedures, and information-processing technologies. Specific areas include the 21st century workplace; business technology; business communication; records management; meetings, travel, and financial documents; and the business professional's career. The course emphasizes developing a work-site team through effective communications, dependability, interpreting various management responsibilities, and motivational techniques. Recommended for all management information science and business students.

BUSTEC 120 Skills for Today's Office

Units: 1
Hours: 18 hours LEC; 18 hours LAB
Prerequisite: None.
Advisory: BUSTEC 302 or keyboarding speed verification at 25 wam or better, and CISA 305 and 315.

This is a course designed to build upon previous wordprocessing and spreadsheet training in the computer science/business area, and complete the training necessary to perform effectively and become a skilled employee in the modern, computerized office. The course includes preparing and processing information: wordprocessing, spreadsheet, and database documents; communicating via fax, e-mail, voicemail, Internet, and telephone; and using copiers and other office equipment. Students will simulate office situations. This course emphasizes activities and techniques that enhance competencies needed in today's office.

BUSTEC 299 Experimental Offering in Business Technology

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

BUSTEC 302 Computer-Keyboarding

Units: 2
Hours: 36 hours LEC
Prerequisite: None.
Transferable: CSU

This intensive introductory computer-keyboard course emphasizes operating alphabetic, numeric, and symbol keys by touch. It includes computer-keyboarding techniques, speed-and-accuracy development, proofreading proficiency, communication skills, essential computerkeyboarding information, and use of basic features of a current office level word processing program. Workplace etiquette and common organizational duties are introduced and reinforced throughout the course. This course is not open to students who have received credit for BUSTEC 306.

BUSTEC 303 Computer-Keyboard Formatting

Units: 2
Hours: 36 hours LEC
Prerequisite: BUSTEC 302 with a grade of "C" or better
Transferable: CSU

This intensive computer-keyboard formatting course emphasizes application of the following formatting concepts: horizontal and vertical centering, business letter styles, memorandums, tables, and reports. The course includes developing proofreading proficiency, reinforcing communication skills, developing speed and accuracy, and using the features of a current office-level word processing program. Workplace etiquette and common organizational duties are introduced and reinforced throughout the course. This course is not open to students
who have received credit for BUSTEC 306.

BUSTEC 304 Computer-Keyboard Speed-and-Accuracy Building

Units: 2
Hours: 36 hours LEC
Prerequisite: BUSTEC 302 with a grade of "C" or better
Transferable: CSU

This course builds upon previous computer-keyboard skills and stresses speed-and accuracy techniques. It includes skills assessment and individually prescribed improvement plans. The student will be reading and interpreting written and oral

instructions. Students who feel that they have skills equivalent to the prerequisite are encouraged to apply for credit by examination for BUSTEC 302.

BUSTEC 305 Introduction to Business Information Technology

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU

This course prepares business professionals to use office systems, technologies, and sustainable procedures to support today's digital work environments. Topics include the use of business-related hardware and software, business communication, electronic calendars, project management, records management, business document preparation, cloud-based applications, information storage, and team collaboration. Critical thinking, problem-solving, administrative procedures, and information processing technologies are used to complete assignments and activities applicable in a business environment. Skills learned in this course provide a foundation in information and communications technology used in administrative, business, and management positions. This course is not open to students who have previously taken BUSTEC 110. This course is part of the collaborative degree program Business Information Professional I. This course is only offered at American River College and Folsom Lake College.

BUSTEC 307 Computer Keyboarding and Skill Building

Units: 3
Hours: 44 hours LEC; 30 hours LAB
Prerequisite: None.
Advisory: CISC 302 with a grade of "C" or better
Transferable: CSU

This intensive introductory computer-keyboard course emphasizes operating alphabetic, numeric, and symbol keys by touch. It includes computer-keyboarding techniques, speed-and-accuracy development, proofreading proficiency, and the use of essential computer-keyboarding information. Students will need access to a computer, the Internet, and an active Los Rios email account. This course is part of the collaborative certificate Business Information Professional I. This course is only offered at Folsom Lake College.

BUSTEC 332 Advanced Business Applications

Units: 3
Hours: 54 hours LEC
Prerequisite: CISA 305 and 315 with grades of "C" or better
Transferable: CSU

This course is an advanced business application course focusing on document processing, spreadsheets, and databases. In this course students will learn to use advanced software application features including: templates, macros, custom fields, pivot tables and charts, mail merge, and logical operations and functions. Hands-on business projects are based on current office systems and incorporate problem-solving skills and real-world business simulations.

BUSTEC 370 Business Information Technology Capstone

Units: 3
Hours: 54 hours LEC
Prerequisite: BUSTEC 305, CISA 305, and CISA 315 with grades of "C" or better
Advisory: ENGL C1000 and MATH 300; The following courses can also serve as advisories in place of ENGWR 300: ENGWR 480 (Honors College Composition) or HONOR 375 (Honors College Composition).
Transferable: CSU

The Business Information Technology Capstone course serves as the culminating experience for students in the field of business information technology. Building upon foundational knowledge acquired throughout their academic journey, this course integrates theoretical concepts with practical applications to prepare students for real-world challenges in the rapidly evolving business landscape.

BUSTEC 499 Experimental Offering in Business Technology

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU

This is the experimental courses description.

Chemistry

The chemistry curriculum consists of a series of chemistry courses designed to meet transfer requirements for chemical, physical, and biological science majors, a series of courses intended for students majoring in fields other than chemistry, biology, or physical science, and a course designed specifically for students who require preparation or review of the more basic chemical concepts. All chemistry courses at Cosumnes River College include a practical component where students conduct hands-on chemical experimentation in a modern, well-equipped laboratory.

Degrees Offered

A.S. in Chemistry

A.S. in General Science

Dean Banafsheh Amini

Department Chair Stephen McDowell

Phone (916) 691-7204

Email mcdowes@crc.losrios.edu

Associate Degrees

A.S. in Chemistry

The Chemistry Program at CRC consists of: a series of courses designed to meet transfer requirements for chemical, physical and biological science majors; a series of courses intended for students majoring in fields other than chemistry, biology, or physical science; and a course designed specifically for students who require preparation or review of the more basic chemical concepts.

All chemistry courses at CRC include a practical component where students conduct hands-on chemical experimentation in a modern, well-equipped laboratory.

HIGHLIGHTS
*An outstanding chemistry faculty striving to maintain an excellent and well-respected chemistry program
*Ample contact with the instructor and the relaxed atmosphere that only a limited class size can offer
*A Mathematics, Engineering and Science Achievement (MESA) program

This degree is designed to meet common lower division requirements for a major in chemistry.

Degree Requirements

Course Code	Course Title	Units
CHEM 400	General Chemistry I	5
CHEM 401	General Chemistry II	5
CHEM 420	Organic Chemistry I	5
CHEM 421	Organic Chemistry II	5
MATH 400	Calculus I	5
MATH 401	Calculus II	5
MATH 402	Calculus III	5
PHYS 411	Mechanics of Solids and Fluids	4
PHYS 421	Electricity and Magnetism	4
PHYS 431	Heat, Waves, Light and Modern Physics	4
Total Units:		**47**

The Chemistry Associate in Science (A.S.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Career Information

Biochemist; Chemist; Pharmacist; Chemical Engineer; Chemical Technology; Physician; Dentist; Veterinarian; Allied Health Professional; Biologist; Physicist; Geologist; Geochemist; Oceanographer. Some career options require more than two years of college study. Classes beyond the associate degree may be required to fully prepare students for transfer to a university program.

A.S. in General Science

Areas of Study include:

- Biological Anthropology
- Astronomy
- Biology
- Chemistry
- Engineering
- Physical Geography
- Geology
- Physics

Eighteen (18) units of transfer-level course work in science are required. Two laboratory courses must be included: one in the physical sciences and one in the biological sciences. Courses may be selected from astronomy, biology, chemistry, geology, physical geography, biological anthropology, and physics. The student, in consultation with a counselor, should choose science courses to meet their program, transfer, or general education requirements.

Students interested in transferring to a four-year university with a science major are encouraged to complete a science AS or AS-T degree such as Anthropology, Biology, Chemistry, Engineering, Geography, Geology, or Physics. This General Science degree may not include the majors-level transfer courses needed for many science majors. Students are strongly recommended to see a counselor for guidance.

Degree Requirements

Course Code	Course Title	Units
Life Science with Lab :		
A minimum of 4 units from the following:		4
ANTH 300	Biological Anthropology (3)	
and ANTH 301	Biological Anthropology Laboratory (1)	
ANTH 480	Honors Biological Anthropology (3)	

Course Code	Course Title	Units
and ANTH 482	Honors Biological Anthropology Laboratory (1)	
BIOL 308	Contemporary Biology (3)	
and BIOL 309	Contemporary Biology Laboratory (1)	
BIOL 400	Principles of Biology (5)	
BIOL 410	Principles of Botany (5)	
BIOL 420	Principles of Zoology (5)	
BIOL 430	Anatomy and Physiology (5)	
BIOL 431	Anatomy and Physiology (5)	
BIOL 440	General Microbiology (4)	
Physical Science with Lab:		
A minimum of 3 units from the following:		3
ASTR 300	Introduction to Astronomy (3)	
and ASTR 400	Astronomy Laboratory (1)	
CHEM 300	Beginning Chemistry (4)	
CHEM 305	Introduction to Chemistry (5)	
CHEM 306	Introduction to Organic and Biological Chemistry (5)	
CHEM 309	Integrated General, Organic, and Biological Chemistry (5)	
CHEM 400	General Chemistry I (5)	
CHEM 401	General Chemistry II (5)	
CHEM 420	Organic Chemistry I (5)	
CHEM 421	Organic Chemistry II (5)	
GEOG 300	Physical Geography: Exploring Earth's Environmental Systems (3)	
and GEOG 301	Physical Geography Laboratory (1)	
GEOL 300	Physical Geology (3)	
and GEOL 301	Physical Geology Laboratory (1)	
GEOL 305	Earth Science (3)	
and GEOL 306	Earth Science Laboratory (1)	
GEOL 310	Historical Geology (3)	
and GEOL 311	Historical Geology Laboratory (1)	
ENGR 304	How Things Work (3)	
PHYS 350	General Physics (4)	
PHYS 360	General Physics (4)	
PHYS 370	Introductory Physics - Mechanics and Thermodynamics (5)	
PHYS 380	Introductory Physics - Electricity and Magnetism, Light and Modern Physics (5)	
PHYS 411	Mechanics of Solids and Fluids (4)	
PHYS 421	Electricity and Magnetism (4)	
PHYS 431	Heat, Waves, Light and Modern Physics (4)	
Additional Science Courses :		
A minimum of 11 units from the following:		11[1]
ANTH 300	Biological Anthropology (3)	

Course Code	Course Title	Units
ANTH 301	Biological Anthropology Laboratory (1)	
ANTH 480	Honors Biological Anthropology (3)	
ANTH 482	Honors Biological Anthropology Laboratory (1)	
ASTR 300	Introduction to Astronomy (3)	
ASTR 400	Astronomy Laboratory (1)	
BIOL 308	Contemporary Biology (3)	
BIOL 309	Contemporary Biology Laboratory (1)	
BIOL 342	The New Plagues: New and Ancient Infectious Diseases Threatening World Health (3)	
BIOL 350	Environmental Biology (3)	
BIOL 352	Conservation Biology (3)	
BIOL 400	Principles of Biology (5)	
BIOL 410	Principles of Botany (5)	
BIOL 420	Principles of Zoology (5)	
BIOL 430	Anatomy and Physiology (5)	
BIOL 431	Anatomy and Physiology (5)	
BIOL 440	General Microbiology (4)	
CHEM 300	Beginning Chemistry (4)	
CHEM 305	Introduction to Chemistry (5)	
CHEM 306	Introduction to Organic and Biological Chemistry (5)	
CHEM 309	Integrated General, Organic, and Biological Chemistry (5)	
CHEM 400	General Chemistry I (5)	
CHEM 401	General Chemistry II (5)	
CHEM 420	Organic Chemistry I (5)	
CHEM 421	Organic Chemistry II (5)	
ENGR 304	How Things Work (3)	
GEOG 300	Physical Geography: Exploring Earth's Environmental Systems (3)	
GEOG 301	Physical Geography Laboratory (1)	
GEOG 305	Global Climate Change (3)	
GEOG 306	Weather and Climate (3)	
GEOL 300	Physical Geology (3)	
GEOL 301	Physical Geology Laboratory (1)	
GEOL 305	Earth Science (3)	
GEOL 306	Earth Science Laboratory (1)	
GEOL 310	Historical Geology (3)	
GEOL 311	Historical Geology Laboratory (1)	
GEOL 330	Introduction to Oceanography (3)	
GEOL 390	Field Studies in Geology (1 - 4)	
PHYS 310	Conceptual Physics (3)	
PHYS 350	General Physics (4)	
PHYS 360	General Physics (4)	
PHYS 370	Introductory Physics - Mechanics and Thermodynamics (5)	
PHYS 380	Introductory Physics - Electricity and Magnetism, Light and Modern Physics (5)	
PHYS 411	Mechanics of Solids and Fluids (4)	
PHYS 421	Electricity and Magnetism (4)	

Course Code	Course Title	Units
PHYS 431	Heat, Waves, Light and Modern Physics (4)	
Total Units:		**18**

[1]Courses used in A or B above will not count towards C, except units exceeding the 4 or 3 unit minimum in A and B. For example, a student completing the 5 unit CHEM 309 under B could apply 2 of those units towards C. A total of 18 science units is required.

The General Science Associate in Science (A.S.) degree may be obtained by completion of the required program, plus the local CRC General Education Requirement, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

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

- explain the core perspectives of the scientific method and apply it to at least one scientific discipline. (PSLO 1)
- solve introductory problems of a conceptual and/or numerical nature of at least one scientific discipline. (PSLO 2)
- accurately apply the basic vocabulary and concepts of at least one scientific discipline verbally and in writing. (PSLO 3)
- recognize the use and misuse of scientific concepts in society including politics and the media. (PSLO 4)

Chemistry (CHEM) Courses

CHEM 300 Beginning Chemistry

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: Elementary Algebra or higher with a C or better or eligibility for transfer-level mathematics.
Transferable: CSU; UC (1) No credit for CHEM 300 if taken after CHEM 306)
General Education: Local GE L5; Cal-GETC Area 5A; Cal-GETC Area 5C
C-ID: C-ID CHEM 101

This course covers an introduction to fundamental chemical concepts, problem-solving and laboratory skills. CHEM 300 is designed for students needing a comprehensive review of or intensive preparation in chemistry. This course is primarily intended to prepare students for CHEM 400.

CHEM 305 Introduction to Chemistry

Units: 5
Hours: 72 hours LEC; 54 hours LAB
Prerequisite: Elementary Algebra or higher with a C or better or eligibility for transfer-level mathematics.
Transferable: CSU; UC (1) CHEM 305, 306, 400, and 401 combined: maximum transfer credit is one series; 2) No transfer credit for CHEM 305 if taken after CHEM 400)
General Education: Local GE L5; Cal-GETC Area 5A; Cal-GETC Area 5C
C-ID: C-ID CHEM 101

This is a general chemistry course intended for students majoring in the allied health fields, such as nursing, physical therapy, dental hygiene, veterinary technology, and environmental technology. This course emphasizes the fundamental principles of chemistry: types of matter, physical and chemical processes, atomic and molecular structure, stoichiometry, properties and theories of gases, properties of solutions, acids and bases, equilibria, oxidation-reduction and an introduction to organic functional groups as they pertain to medicine or biological systems.

CHEM 306 Introduction to Organic and Biological Chemistry

Units: 5
Hours: 72 hours LEC; 54 hours LAB
Prerequisite: CHEM 305 with a grade of "C" or better
Transferable: CSU; UC (1) CHEM 305, 306, 400, and 401 combined: maximum transfer credit is one series)
General Education: Local GE L5; Cal-GETC Area 5A; Cal-GETC Area 5C
C-ID: C-ID CHEM 102

The organic chemistry portion of this course emphasizes the major classes of organic compounds: their structure, physical and chemical properties related to biological systems, and nomenclature. Some clinical and pharmacological aspects are also discussed. The biochemistry portion of this course emphasizes the structure and function of carbohydrates, proteins, and lipids in biological systems. Special topics include enzymes and enzyme regulation, drugs and their bioavailability and metabolism.

CHEM 309 Integrated General, Organic, and Biological Chemistry

Units: 5
Hours: 72 hours LEC; 54 hours LAB
Prerequisite: Elementary Algebra or higher with a C or better or eligibility for transfer-level mathematics.
Advisory: Eligibility for ENGL C1000 (formerly known as ENGWR 300); Successful completion of high school Chemistry.
Transferable: CSU; UC
General Education: Local GE L5; Cal-GETC Area 5A; Cal-GETC Area 5C

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. This course satisfies the requirements of those health-career programs that require one semester of chemistry. Students who had chemistry in high school and retained some of 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 and CHEM 306 sequence.

CHEM 400 General Chemistry I

Units: 5
Hours: 54 hours LEC; 108 hours LAB
Prerequisite: Intermediate Algebra or higher with a "C" or better or eligibility for transfer-level mathematics to meet the Math prerequisite AND one of the following to meet the Chemistry prerequisite: CHEM 300 or CHEM 305 or CHEM 309 with a "C" or better, OR one year of high school chemistry with lab with grade of “C” or better in both semesters.

Transferable: CSU; UC (1) CHEM 305, 306, 400 and 401 combined: maximum transfer credit is one series)
General Education: Local GE L5; Cal-GETC Area 5A; Cal-GETC Area 5C
C-ID: C-ID CHEM 110; Part of C-ID CHEM 120S

This is a general college chemistry course intended for students majoring in the scientific disciplines, including chemistry, biology, physics, geology and engineering. This course emphasizes the fundamental principles of chemistry. Topics include chemical measurement, physical and chemical processes, nomenclature, atomic structure, quantum theory, stoichiometry, molecular structure, bonding theory, physical properties of gases, thermochemistry, modern materials, and properties of solutions.

CHEM 401 General Chemistry II

Units: 5
Hours: 54 hours LEC; 108 hours LAB
Prerequisite: CHEM 400 with a grade of "C" or better
Transferable: CSU; UC (1) CHEM 305, 306, 400, and 401 combined: maximum transfer credit is one series)
General Education: Local GE L5; Cal-GETC Area 5A; Cal-GETC Area 5C
C-ID: Part of C-ID CHEM 120S

This course is a continuation of the two-semester series in general college chemistry. Topics presented in the course include kinetics, equilibrium, acid/base chemistry, thermodynamics, electrochemistry, radiochemistry, coordination chemistry, and an introduction to organic chemistry. Laboratory exercises include qualitative and quantitative analysis techniques.

CHEM 420 Organic Chemistry I

Units: 5
Hours: 54 hours LEC; 108 hours LAB
Prerequisite: CHEM 401 with a grade of "C" or better
Transferable: CSU; UC
General Education: Local GE L5; Cal-GETC Area 5A; Cal-GETC Area 5C
C-ID: C-ID CHEM 150; Part of C-ID CHEM 160S

This course surveys the principles of organic chemistry intended for chemistry and biological science majors or those students interested in the medical and related professions. Units covered include chemistry of alkanes/cycloalkanes, alkenes, alkyl halides, alcohols with emphasis on physical and chemical properties, nomenclature, stereochemistry, reaction mechanisms (SN1, SN2, E1, and E2) and spectroscopy (FT-IR and MS). Laboratory work includes characterization of organic molecules using analytical instrumentation such as FTIR, GC, and GC/MS. Modern separation and purification techniques are also introduced
such as HPLC, Packed-column GC, and Capillary GC, as well as traditional techniques such as distillation, liquid-liquid extraction, recrystallization, column chromatography, and thin-layer chromatography.

CHEM 421 Organic Chemistry II

Units: 5
Hours: 54 hours LEC; 108 hours LAB
Prerequisite: CHEM 420 with a grade of "C" or better
Transferable: CSU; UC
General Education: Local GE L5; Cal-GETC Area 5A; Cal-GETC Area 5C
C-ID: Part of C-ID CHEM 160S

This course is a continuation of CHEM 420. Units covered include an in-depth study of the physical and chemical properties of aromatic compounds, aldehydes, ketones, amines, carboxylic acids and its derivatives. A special emphasis is placed on structural analysis/elucidation of these compounds by the various spectroscopic techniques. In addition, an introduction to pericyclic reactions and biomolecules is presented.

CHEM 495 Independent Studies in Chemistry

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

CHEM 499 Experimental Offering in Chemistry

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU

This is the experimental courses description.

Communication Studies

The role of communication in the workplace today has grown in importance, and workplace communication competencies are increasingly in demand. 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 as necessary is the ability to work effectively as a member of a team. A competitive workplace requires employees to exercise competence in interview skills, professional presentations, written communication, group problem solving, intercultural interactions, conflict management, and analytical reasoning. This transferable degree gives students a foundation that can be used in any career path, increasing one's preparation for employment and transferability to a university.

Degrees and Certificates Offered

A.A.-T. in Communication Studies 2.0

A.A. in Communication, Organizational Communication

Applied Communication Skills Certificate

Dean Emilie Mitchell

Department Chair Daniel T. DuBray

Phone (916) 691-7656

Email mitchee@crc.losrios.edu

Associate Degrees for Transfer

A.A.-T. in Communication Studies 2.0

The AA for Transfer in Communication Studies prepares students for graduation from Cosumnes River College as well as transfer to a four-year university, including lower division preparation for the major. Courses required for the degree provide students with a practical and theoretical foundation in the discipline and offer a critical perspective on human communication in a various contexts. Students completing this program will explore the history and interdisciplinary nature of human communication, develop communication competency for a variety of contexts, compose and critically evaluate oral, written and visual messages for diverse audiences, construct and defend arguments in support of a thesis, as well as demonstrate individual responsibility and integrity in all communication interactions.

Degree Requirements

Course Code	Course Title	Units
COMM C1000	Introduction to Public Speaking	3
COMM 321	Interpersonal Communication	3
Group A: Communication Studies:		
A minimum of 9 units from the following:		9[1]
COMM 311	Argumentation and Debate (3)	
COMM 315	Persuasion (3)	
COMM 325	Intercultural Communication (3)	
COMM 331	Group Discussion (3)	
COMM 363	Introduction to Communication Theory (3)	
JOUR 310	Mass Media and Society (3)	
or RTVF 300	Mass Media and Society (3)	
Group B: Communication and Other Disciplines:		
A minimum of 3 units from the following:		3[2]
ANTH 310	Cultural Anthropology (3)	
ENGL C1001	Critical Thinking and Writing (3)	
JOUR 300	Newswriting and Reporting (3)	
PSYC C1000	Introduction to Psychology (3)	
SOC 300	Introductory Sociology (3)	
JOUR 310	Mass Media and Society (3)	
or RTVF 300	Mass Media and Society (3)	
COMM 311	Argumentation and Debate (3)	
COMM 315	Persuasion (3)	
COMM 325	Intercultural Communication (3)	
COMM 331	Group Discussion (3)	
COMM 341	Organizational Communication (3)	
COMM 361	The Communication Experience (3)	
COMM 363	Introduction to Communication Theory (3)	
Total Units:		**18**

[1]If the JOUR 310 or RTVF 300 course is used to complete the Group A requirement, it is not eligible to satisfy the Group B requirement. JOUR 310 or RTVF 300 course(s) cannot be double counted for Group A and Group B.

[2]Any COMM course not used to complete the Group A requirement may be used to satisfy the Group B requirement. A COMM course cannot be double counted for Group A and Group B.

The Associate in Arts in Communication Studies 2.0 for Transfer (AA-T) degree may be obtained by completion of 60 transferable, semester units with a minimum overall grade point average (GPA) of 2.0, including (a) a minimum grade of "C" (or "P") for each course in the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

Student Learning Outcomes

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

- Design and relate messages clearly for effective and appropriate oral communication (PSLO-1).
- Apply effective listening skills to comprehend spoken messages, analyze information critically and consider multiple perspectives (PSLO-2).
- Compose ideas clearly in effective, appropriate and well-organized written messages (PSLO-3).
- Assess individual responsibility within one's ability to influence ethical, effective and appropriate communication among diverse settings and people (PSLO-4).

- Define and identify various theoretical perspectives across the discipline of communication studies (PSLO-5).

Career Information

Transfer: Courses offered by the Communication Department meet a wide range of lower division transfer requirements for CSU and UC universities. The department offers many courses designed to prepare students for transfer to a variety of disciplines including Business, Communication Studies, Criminal Justice, Education, Liberal Arts, Pre-Law, Mass Media, Management, Psychology, Sociology, and Social Work. Upon completion of a baccalaureate degree after transfer, students will gain opportunities for employment and promotion in fields including Public Information; Human Resources Development; Corporate Training; Motivational Speaking; Political Speech Writing; Radio & Television; Advertising; Public Relations; College & University Instruction; Organizational Administration; Negotiation & Mediation Services; Writing for Publication; Personnel Management; Customer Service; Social Science Research; Corporate Imaging; Campaign Management; Marketing; Community Relations; and Grant Writing. NOTE TO TRANSFER STUDENTS: The Associate Degree for Transfer program is designed for students who plan to transfer to a California State University (CSU) campus. Other than the required core, the courses you choose to complete this degree will depend to some extent on the selected CSU for transfer. In addition, some CSU-GE Breadth or IGETC requirements can also be completed using courses required for this associate degree for transfer major (known as “double-counting”). Meeting with a counselor to determine the most appropriate course choices will facilitate efficient completion of your transfer requirements. For students wishing to transfer to other universities (UC System, private, or out-of-state), the Associate Degree for Transfer may not provide adequate preparation for upper-division transfer admissions; it is critical that you meet with a CRC counselor to select and plan the courses for the major, as programs vary widely in terms of the required preparation. The Associate in Science in Communication Studies for Transfer is comprised of lower division coursework typically required by CSU institutions. Students must complete the following Associate Degree for Transfer requirements (Pursuant to SB1440, Padilla, 2010; and §66746): • 60 semester or 90 quarter CSU-transferable units • the California State University-General Education-Breadth pattern (CSU GE-Breadth); OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern • a minimum of 18 semester or 27 quarter units in the major or area of emphasis as determined by the community college district • obtain a minimum grade point average (GPA) of 2.0 • earn a grade of C or better (or P for Pass/No Pass courses) in all courses required for the major or area of emphasis

Associate Degrees

A.A. in Communication, Organizational Communication

The role of communication in the workplace today has grown in importance, and workplace communication competencies are increasingly in demand. 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 as necessary is the ability to work effectively as a member of a team. A competitive workplace requires employees to exercise competence in interview skills, professional presentations, written communication, group problem solving, intercultural interactions, conflict management, and analytical reasoning. This transferable degree gives students a foundation that can be used in any career path, increasing one's preparation for employment and transferability to a university.

HIGHLIGHTS

*Transfer requirements simultaneously met while pursuing degree

*Many of the courses required for this degree can also be used to fulfill transfer general education requirements for the CSU system.

*Our courses are interdisciplinary in nature. Communication Studies offers students an opportunity to explore coursework in oral communication, critical thinking, social sciences, multicultural studies, and living skills.

*Students will find this background helpful and applicable to their everyday pursuits. Students intending to transfer to a university will have a solid base of courses that will interface with further, focused study in a major. For those wishing to pursue a university degree in the field of communication, degrees can be earned with emphasis in the following areas:

- Mass Media Studies
- Broadcast Electronic Communication Arts
- Organizational Communication
- Intercultural Communication
- Visual Communication
- Rhetoric
- Group Communication
- Interpersonal Communication

NOTE TO TRANSFER STUDENTS: If you are interested in transferring to a four-year college or university to pursue a bachelor’s degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate’s degree in this major may be different from the requirements needed for the Bachelor’s degree.

Degree Requirements

Course Code	Course Title	Units
Core Courses:		
COMM C1000	Introduction to Public Speaking	3
COMM 311	Argumentation and Debate	3
COMM 321	Interpersonal Communication	3
COMM 325	Intercultural Communication	3
COMM 331	Group Discussion	3
JOUR 310	Mass Media and Society (3)	3
or RTVF 300	Mass Media and Society (3)	
Communication in Organizations (6 units):		
COMM 341	Organizational Communication	3
COMM 315	Persuasion (3)	3[1]
or BUS 330	Managing Diversity in the Workplace (3)	

Course Code	Course Title	Units
or SGVT 315	Dynamics of Leadership (3)	
Written Communication (6 units):		
ENGL C1000	Academic Reading and Writing	3
ENGL C1001	Critical Thinking and Writing (3)	3
or BUS 310	Business Communications (3)	
or JOUR 300	Newswriting and Reporting (3)	
or JOUR 301	Advanced Newswriting and Reporting (3)	
Total Units:		**30**

[1]Or 3 units earned through any department approved internship - internships may be arranged through the CRC Co-op Work Experience program, and credit may be received by enrolling in COMM 498 or WEXP 498, Work Experience in Communication Studies.

The Communication, Organizational Communication Associate in Arts (A.A.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Student Learning Outcomes

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

- Design and relate messages clearly for effective and appropriate oral communication (PSLO-1).
- Apply effective listening skills to comprehend spoken messages, analyze information critically and consider multiple perspectives (PSLO-2).
- Compose ideas clearly in effective, appropriate and well-organized written messages (PSLO-3).
- Analyze and formulate critical thinking within the evidence and reasoning of spoken and written messages (PSLO-4).
- Assess individual responsibility within one's ability to influence ethical, effective and appropriate communication among diverse settings and people (PSLO-5).
- Define and identify various theoretical perspectives across the discipline of communication studies (PSLO-6).

Career Information

Public Information; Human Resources Development; Corporate Training; Motivational Speaking; Political Speech Writing; Radio & Television; Advertising; Public Relations; College & University Instruction; Organizational Administration; Negotiation & Mediation Services; Writing for Publication; Personnel Management; Customer Service; Social Science Research; Corporate Imaging; Campaign Management; Marketing; Community Relations; Grant Writing

Certificate of Achievement

Applied Communication Skills Certificate

This certificate program provides the communication skills necessary for entry-level positions in business, and helps improve managerial attributes with an emphasis on abilities to communicate effectively, efficiently and appropriately in organizational settings. Students with this certificate are prepared to design messages based on analysis of the intended audience and cultural context, apply effective listening skills, analyze persuasive messages, and demonstrate effective oral presentation skills. The certificate prepares students with the skills necessary to demonstrate proficiency in different communication settings by identifying and appraising factors that affect organizational communication structures in small group, interpersonal and intercultural settings.

Certificate Requirements

Course Code	Course Title	Units
A minimum of 15 units from the following:		15[1]
COMM C1000	Introduction to Public Speaking (3)	
COMM 311	Argumentation and Debate (3)	
COMM 315	Persuasion (3)	
COMM 321	Interpersonal Communication (3)	
COMM 325	Intercultural Communication (3)	
COMM 331	Group Discussion (3)	
COMM 341	Organizational Communication (3)	
COMM 361	The Communication Experience (3)	
Total Units:		**15**

[1]It is recommended that one of the courses completed should meet the general education requirement of oral communication, which is either Communication 301, or 331, or 361.

Student Learning Outcomes

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

- Design and relate messages clearly for effective and appropriate oral communication (SLO-1).
- Apply effective listening skills to comprehend spoken messages, analyze information critically and consider multiple perspectives (SLO-2).
- Compose ideas clearly in effective, appropriate and well-organized written messages (SLO-3).
- Assess individual responsibility within one's ability to influence ethical, effective and appropriate communicate among diverse settings and people (SLO-4).

Career Information

Public Information; Human Resources Development; Corporate Training; Motivational Speaking; Political Speech Writing; Radio & Television; Advertising; Public Relations; College & University Instruction; Organizational Administration; Negotiation & Mediation Services; Writing for Publication; Personnel

Management; Customer Service; Social Science Research; Corporate Imaging; Campaign Management; Marketing; Community Relations; Grant Writing Some careers may require more than two years of study.

Communication (COMM) Courses

COMM C1000 Introduction to Public Speaking

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L1B; Cal-GETC Area 1C
C-ID: C-ID COMM 110

This course was formerly known as COMM 301 Introduction to Public Speaking.

In this course, students learn and apply foundational rhetorical theories and techniques of public speaking in a multicultural democratic society. Students discover, develop, and critically analyze ideas in public discourse through research, reasoning, organization, composition, delivery to a live audience and evaluation of various types of speeches, including informative and persuasive speeches. Formally known as COMM 301. Not open to students who have already completed COMM 301, or who have successfully passed the honors version of the course, COMM C1000H, formerly known as COMM 481.

COMM 311 Argumentation and Debate

Units: 3
Hours: 54 hours LEC
Prerequisite: ENGL C1000 with a grade of "C" or better
Transferable: CSU; UC
General Education: Local GE L1B; Cal-GETC Area 1B
C-ID: C-ID COMM 120

This course introduces students to argumentation, critical evaluation of evidence, and reasoning in the context of debate. A series of writing assignments will focus on the skills of critical thinking, rhetoric, and the sophistication of argumentative skills. Intended as a practical course, the fundamentals of proposition analysis, case building, and dissent are discussed and applied within written communication and oral presentation. Video-recording equipment may be used as an aid to the student’s self-analysis and improvement. Access to a computer with online capabilities may be required and computer access is available on campus.

COMM 315 Persuasion

Units: 3
Hours: 54 hours LEC
Prerequisite: ENGL C1000 with a grade of "C" or better
Transferable: CSU; UC
General Education: Local GE L1B; Cal-GETC Area 1B
C-ID: C-ID COMM 190

This introductory course will examine historical and contemporary approaches to persuasive messages throughout time. It will also focus on the presentation of persuasive appeals, and learning to construct, deliver, and critique persuasive messages. Students will construct and deliver ethical persuasive messages directed toward a specific audience in front of a live audience or other pedagogically appropriate medium. Students explore ethical considerations of persuasive communication, learn about types of reasoning, and identify fallacious arguments as well as unethical means of influence such as manipulation, coercion, and propaganda as they occur in persuasion. This course presents fundamental theoretical models of critical thinking and communication studies that apply to rhetoric, examining message production, analyzing messages, and exploring the fields of electronic, print and social media, advertising (product campaign), political campaign strategy, and ideological campaign techniques for mass communication. A series of writing assignments of advanced composition will focus on the skills of critical thinking, persuasion, and the sophistication of argumentative essay skills. Access to a computer with online capabilities may be required and computer access is available on campus. As the courses of COMM 482 and HONOR 341, Persuasion within Social Issues, have a similar basis as this course, this course is not open to a student that has received credit for either COMM 482 or HONOR 341.

COMM 321 Interpersonal Communication

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligibility for ENGL C1000 (formerly known as ENGWR 300).
Transferable: CSU; UC
General Education: Local GE L4; Local GE L7B
C-ID: C-ID COMM 130

This course will explore and apply models and theories of interpersonal communication in a variety of personal and professional contexts. Using simulations and structured exercises, students will develop a deeper understanding of communication concepts associated with developing and maintaining satisfying interpersonal relationships. Additionally, students will focus on communication competency through a heightened awareness of the complexity of interpersonal communication during verbal and nonverbal transactions and the development of skills as both senders and receivers of shared messages. Video equipment may be used as an aid to the student’s self-analysis and improvement. Access to a computer with online capabilities may be required and computer access is available on campus.

COMM 325 Intercultural Communication

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC (COMM 325, 331, 361 combined: maximum transfer credit is one course)
General Education: Local GE L4; Cal-GETC Area 4
C-ID: C-ID COMM 150

This course introduces students to the influence of culture on identity, perception, social organization, language and nonverbal messages in intercultural experiences in the United States. Variations and commonalities in communication patterns across cultures are examined as well as processes and outcomes among persons of different group-based experiential backgrounds. Practical application of factors which influence communication among individuals of different cultures is emphasized. Access to a computer with online capabilities may be required and computer access is available on campus.

COMM 331 Group Discussion

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC (COMM 325, 331, 361 combined: maximum transfer credit is one course)
General Education: Local GE L1B
C-ID: C-ID COMM 140

This course is designed to increase students' understanding of group communication and oral communication. Students learn and apply foundational rhetorical theories and techniques of public speaking in a multicultural democratic society. Students discover, develop, and critically analyze ideas in public discourse through research, reasoning, organization, composition, delivery to a live audience and evaluation of various types of speeches, including informative and persuasive speeches. Preparing and delivering presentations, this course prepares students to function more effectively in various types of groups, as college students, employees, as members in the community. The course is designed to assist students in developing an understanding of how group communication is uniquely different from other communication. The course will enhance students' effectiveness in the small group dynamics of roles, functions, leadership, and norms. Problem-solving and decision-making skills are emphasized through simulations and discussion. Group projects may require students to meet outside of class time for service learning or campus activities. Video-recording equipment may be used as an aid to the student's self-analysis and improvement. Access to a computer with online capabilities may be required and computer access is available on campus.

COMM 341 Organizational Communication

Units: 3
Hours: 54 hours LEC
Prerequisite: Eligibility for ENGL C1000 (formerly known as ENGWR 300).
Transferable: CSU
General Education: Local GE L1B; Local GE L4

This course examines both theoretical and pragmatic essentials of effective organizational messages from preparation and presentation to efficacious observation and analysis. Students will explore the dynamics of organizational communications in basic communication skills, working relationships, leadership, diversity in the workplace, conflict negotiation teams and problem solving and/or decision-making groups. The roles of internal and external messages on the communication process and organizational effectiveness will be examined and analyzed. Access to a computer with on-line capabilities may be required and computer access is available on campus.

COMM 361 The Communication Experience

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC (COMM 325, 331, 361 combined: maximum transfer credit is one course)
General Education: Local GE L1B

In this course, students learn and apply foundational rhetorical theories and techniques of public speaking in a multicultural democratic society. Students discover, develop, and critically analyze ideas in public discourse through research, reasoning, organization, composition, delivery to a live audience and evaluation of various types of speeches, including informative and persuasive speeches.
Presentations in this course include an introduction to students of the fundamental concepts necessary for effective communication in a variety of settings with a variety of audiences. Special emphasis is placed on practical experiences within groups, facilitation of interpersonal relationships, and methods of conflict management. As part of this course, students are required to actively participate in groups and deliver oral presentations, both individually and in groups. Video-recording equipment may be used as an aid to the student's self-analysis and improvement. Access to a computer with online capabilities may be required and computer access is available on campus.

COMM 363 Introduction to Communication Theory

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligibility for ENGL C1000 (formerly known as ENGWR 300).
Transferable: CSU; UC
General Education: Local GE L1B; Local GE L4
C-ID: C-ID COMM 180

This course will introduce the student to the symbolic process of human communication through the study of basic communication models, fundamental theory, and relevant research findings. Emphasis will be placed on achieving an understanding of the communication process, and the process through which researchers in the field add to their existing body of knowledge. Access to a computer with online capabilities may be required and computer access is available on campus.

COMM 480 Honors Seminar: Political Campaign Communication

Units: 3
Hours: 54 hours LEC
Prerequisite: ENGL C1000 or C1000H with a grade of "C" or better
Enrollment Limitation: Enrollment is limited to Honors Program students. Details about the Honors Program can be found in the Cosumnes River College Catalog.
Transferable: CSU; UC
General Education: Local GE L4; Cal-GETC Area 4

What do pundits, politicians and the public have in common? The ability to impact political campaign communication. This seminar-style course will introduce students to the effects of political campaign communication on public opinion and election results. Using timely data, students will evaluate news media, debate presidential debates, and analyze campaign messages using qualitative and quantitative approaches. This course is intended for the honors student interested in learning about political communication, rhetorical criticism, and techniques for writing for academic audiences. Video-streaming devices may be used as an aid to the student's self-analysis and improvement. Access to a computer with online capabilities may be required and computer access is available on campus. Enrollment is limited to Honors Program students. Details about the Honors Program can be

found in the front of the Catalog and on the CRC website. This course
is the same as HONOR 340, and only one may be taken for credit.

COMM 482 Honors Seminar: Persuasion within Social Issues

Units: 3
Hours: 54 hours LEC
Prerequisite: ENGL C1000 and C1000H with grades of "C" or better, or placement through the assessment process.
Enrollment Limitation: Enrollment is limited to Honors Program students.
Transferable: CSU; UC
General Education: Cal-GETC Area 1B
C-ID: C-ID COMM 190

This seminar-style course will introduce students to the fundamental theories and techniques of persuasion as they occur in various communication contexts, including commercial, interpersonal, public and mass media. A series of writing assignments will focus on the skills of critical thinking, persuasion, and the sophistication of argumentative essay skills. Essays of advanced composition shall be evaluated for their quality in both critical thinking and composition. The writing assignments will apply theoretical models of critical thinking and communication studies to rhetoric, examining message production, analyzing messages, and exploring the fields of electronic and print media, advertising (product campaign), political campaign strategy, and ideological campaign techniques for mass communication. Students explore ethical considerations of persuasive communication, learn about types of reasoning, and identify fallacious arguments as they occur in persuasion. Students will focus on the design and organization of persuasive messages within a speech format for an individual or group presentations for a live audience. This course offers honors students the opportunity to study, critique, discuss and present advanced topics to focus on the impact of persuasive attempts within ethical, social and political issues. Access to a computer with online capabilities may be required and computer access is available on campus. Enrollment is limited to Honors Program students. Details about the Honors Program can be found in the front of the Catalog and on the CRC website. As COMM 315, Persuasion, has a similar basis as this Honors course, this course is not open to a student that has received credit for COMM 315, Persuasion. This course is the same as HONOR 341, and only one may be taken for credit.

COMM 494 Topics in Communication

Units: 0.5 - 4
Hours: 9 - 72 hours LEC
Prerequisite: None.
Transferable: CSU

This course is designed to allow a student to focus on a set of contemporary communication concepts or theoretical frameworks in communication studies. Possible options for topics may include, but are not limited to: extemporaneous speaking, intercultural communication in the workplace or diverse settings, stages within interpersonal relationships, communication in the classroom, conflict, principles of visual communication, nonverbal communication, readers' theater, rhetorical criticism, parliamentary procedure and decision making techniques. Consult class schedule for specific topics offered.

COMM 495 Independent Studies in Communication

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

COMM 498 Work Experience in Communication and Media Studies

Units: 0.5 - 4
Hours: 27 - 216 hours LAB
Prerequisite: None.
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position or job related to career goals in Communication and Media Studies.
Transferable: CSU

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in transfer level degree occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and complete 27 hours of related work experience for 0.5 unit. An additional 27 hours of related work experience is required for each additional 0.5 units. 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.

COMM 499 Experimental Offering in Communication

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU

This is the experimental courses description.

Community Services Education

Our Community Services offerings enable you to improve the quality of your life through lifelong learning. These fee-based classes are designed to serve individuals with educational goals that do not require college credit.

Dean Ashu Mishra

Phone (916) 525-4319

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Community Services Education (CSERV) Courses

CSERV 2080 BAR A-6 Alternative - Electrical and Electronic Systems Training

Units: 0
Prerequisite: None.

This course is an intensive Bureau of Automotive Repair-approved review of automotive electrical/electronic systems. It partially satisfies the ASE certification requirement when applying for a Smog Check technician license.

CSERV 2081 BAR A-8 Alternative - Engine Performance Systems

Units: 0
Prerequisite: None.

This course is an intensive Bureau of Automotive Repair-approved review of automotive engine performance systems. It partially satisfies ASE certification requirement when applying for a Smog Check technician license.

CSERV 2082 BAR Approved L-1 Alternative

Units: 0
Prerequisite: None.

This course is preparation for the Bureau of Automotive Repair (BAR) – approved Advanced Engine Performance Exam. Topics covered include Power Train Diagnosis, Computer Control Diagnostics, Ignition System Diagnostics, Fuel and Air Induction Diagnostics, Emission Control Diagnostics, and I/M Failure Diagnosis. The BAR L-1 Alternative test is administered at the end of the class.

CSERV 2084 Bureau Of Automotive Repair 16 Hour Emission Update

Units: 0
Prerequisite: None.

This course is required for initial licensing and license renewal for smog technicians who need to meet California emissions control smog license standards. Students may repeat courses listed in the College Catalog as such to meet a legally mandated training requirement as a condition of continued paid or volunteer employment. These repetitions are not limited.

Computer Information Science

CRC computer information science programs include study in computer programming, information systems security, computer networking, management information systems, and computer applications. A wide range of degree and certificate programs are available to meet the needs of transfer students who plan to complete a four-year degree as well as career/technical students who plan to enter the workforce.

View the CRC CIS Course Sequence (crc/main/doc/3-academics/course-sequences/cis-sequence.pdf).

Degrees and Certificates Offered

A.S. in CIS - Computer Science
A.S. in Cybersecurity and Information Assurance
A.S. in Information Technology Associate
A.S. in Management Information Systems
A.S. in Web Developer
Business Information Professional I Certificate
Business Information Worker Certificate
CIS - Computer Programmer-SQL Certificate
CIS - Database Analyst-SQL Certificate
CIS - Database Design Certificate
CIS - Object Oriented Software Development Certificate
CIS - Programming in C/C++ Certificate
CIS - Relational Database Administration Certificate
CIS - Web Programming Certificate
CIS - Web Publishing Certificate
Computer Science Certificate
Cyber Defense Certificate
Cybersecurity Certificate
Information Technology Associate Certificate
Information Technology Technician Certificate

Dean Tyler Rollins
Department Chair Wendell Fishman
Phone (916) 691-7226
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Associate Degrees

A.S. in CIS - Computer Science

This program provides a foundation in algorithm development, programming techniques, data structures, and structured problem solving.

This A.S. Degree would be appropriate for a student planning to transfer to the California State University (CSU) or the University of California (UC) to major in either Computer Science or Computer Engineering.

It is critical that transfer students regularly meet with a CRC counselor and the CRC programming faculty to select specific CRC courses that match university degree requirements.

Degree Requirements

Course Code	Course Title	Units
1st Semester:		
CISP 300	Algorithm Design/Problem Solving	3[1]
2nd Semester:		
CISP 360	Introduction to Structured Programming	4
3rd Semester:		
CISP 400	Object Oriented Programming with C++	4
***Spring Semester only*:**		
CISP 310	Computer Architecture and Organization	4
4th Semester:		
CISP 430	Data Structures	4
***Fall Semester in odd-numbered years only*:**		
CISP 440	Discrete Structures for Computer Science	3
Total Units:		**22**

[1]The corequisite for this course can be applied to the CRC graduation requirements.

The CIS - Computer Science Associate in Science (A.S.) degree may be obtained by completion of the required program, plus the local CRC General Education Requirement, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

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

- Redefine a complex problem into a sequential set of parts that can be translated into the language of programming logic.
- Design, write, test, and debug computer programs in a structured language, a low-level language, and an object-oriented language.
- Incorporate foundational data management concepts such as data structures within computer programs.

A.S. in Cybersecurity and Information Assurance

This program prepares IT professionals to apply knowledge and experience in risk management and digital forensics to safeguard infrastructure and secure data through continuity planning and disaster recovery operations. Courses deliver proven methods for information security using software analysis techniques, cloud management, and networking strategies to prevent, detect, and mitigate cyber attacks. This program also provides preparation for several nationally recognized, high demand certifications in the field of Cybersecurity.

HIGHLIGHTS:
* Hands-on experience in a state-of-the-art Cybersecurity computer lab.

* Part-time Cybersecurity Instructional Assistant (IA) in BS-145A to assist both students and instructors.
* CAE designation (pending) (https://tinyurl.com/t6a764o).
* Opportunities to work on specialized projects relating to computer information science, business and computer programming.
* Study in a field that has great employment opportunities and encompasses many careers.

GUIDELINES TO STUDENTS:
* This degree covers up to five CompTIA and three CISCO certification exams (note: the exams must be taken separately).
* It is recommended that students use their best judgment and talk to a counselor or a CIS instructor to help guide them with their selection of the appropriate courses for their personal and/or professional needs.
* Students who want to complete this degree in two years will have to take five or more courses per semester and some courses over the summer. In most cases it will take students three to four years to complete if not done full-time.

NOTES TO TRANSFER STUDENTS:
* If you are interested in transferring to a four-year college or university to pursue a bachelor's degree in this or a related major, it is critical you meet with a CRC counselor to select the appropriate transfer courses for your particular major.
* Schools vary widely in terms of their graduation requirements.

Degree Requirements

Course Code	Course Title	Units
Foundational:		
CISC 310	Introduction to Computer Information Science	3[1]
CISC 360	Information & Communication Technology Essentials (A+)	4[2]
CISN 300	Network Systems Administration (3)	3[3]
CISN 304	Networking Technologies	3[4]
CISS 310	Network Security Fundamentals	3[5]
Core:		
CISS 315	Ethical Hacking	3
CISS 321	Scripting for Cyber Security	3
CISS 350	Disaster Recovery	3
CISS 353	Management of Information Security	3
CISS 360	Computer Forensics and Investigation	3
CISW 375	Security for Web Development	3
Total Units:		**34**

[1]or CompTIA's ITF+ certification

[2]or CompTIA's A+ certification

[3]or Microsoft AZ-800 certification

[4]or CompTIA Network+ certification

[5]or CompTIA Security+ certification

The Cybersecurity and Information Assurance Associate in Science (A.S.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Student Learning Outcomes

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

- Design and produce business information systems solutions incorporating current Information Technology, trends, security, and best practices (PSLO 1).
- Execute Linux system commands from either a keyboard or a shell script using correct command syntax (PSLO 2).
- Analyze and implement security concepts and security policies (PSLO 3).
- Analyze common threats to and vulnerabilities of computer systems and networks (PSLO 4).
- Implement and manage Cisco secure networks (PSLO 5).
- Implement network perimeter defense (PSLO 6).

Career Information

Some career opportunities associated with this degree include: security analyst, network systems security administrator, security policy analyst, information technology specialist (State of California) and more.

A.S. in Information Technology Associate

This degree allows students to acquire basic core Information Technology competencies that will prepare them for a career in Computer Networking, Cybersecurity, and related fields.

Degree Requirements

Course Code	Course Title	Units
Foundational:		
CISC 310	Introduction to Computer Information Science	3[1]
CISC 360	Information & Communication Technology Essentials (A+)	4[2]
Networking Core:		
CISN 300	Network Systems Administration	3
CISN 301	Network Client Systems Administration	3
CISN 303	Network Administration - Linux Server	3
CISN 304	Networking Technologies (3)	3
CISN 490	Networking Helpdesk Practicum	3
Security Core:		
CISS 310	Network Security Fundamentals	3
CISS 315	Ethical Hacking	3
CISS 321	Scripting for Cyber Security (3)	3
Total Units:		**31**

[1]or CompTIA ITF+ certification

[2]or CompTIA A+ certification

The Information Technology Associate Associate in Science (A.S.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Student Learning Outcomes

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

- PSLO #1: Apply fundamental knowledge of computing and the current use of technology techniques, skills, and tools necessary for the computing practice.
- PSLO #2: Evaluate and solve business problems with technology solutions using qualitative and quantitative information.
- PSLO #3: Assess user needs in the selection, creation, evaluation and administration of computer-based information systems.
- PSLO #4: Demonstrate appreciation of the Information Technology career field and the need to be lifelong learners.

Career Information

The Associate's degree in Information Technology prepares students to either enter the workforce as an entry-level computer or network support technician or pursue a bachelor's degree in managing information systems. Several CSUs currently offer baccalaureate IT or CT programs, as do several private universities.

A.S. in Management Information Systems

CRC's programs in CIS include study in computer programming, information systems security, computer networking, management information systems, and computer applications. A wide range of degree and certificate programs is available to meet the needs of transfer students who plan to complete a four-year degree as well as career/technical students who plan to enter the workforce. Several programs are designed to promote a career ladder from certificate to associate degree to university transfer. Other programs are designed to upgrade the skill set of working IT professionals. All program options are designed with advice from business and industry representatives and conform to industry standards. For more information, refer to specific information about each program on the following pages. Transfer students should see a counselor to develop an educational plan based on the specific requirements of the transfer institution.

This degree is designed to meet CSU Sacramento's lower-division coursework for a BS in Business Administration with a Management Information Systems concentration.

Note to Transfer Students:
If you are interested in transferring to a four-year college or university to pursue a bachelor's degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate's degree in this major may be different from the requirements needed for the Bachelor's degree.

Degree Requirements

Course Code	Course Title	Units
1st Semester:		
BUS 300	Introduction to Business	3
CISC 310	Introduction to Computer Information Science	3
MATH 341	Calculus for Business and Economics (4)	4 - 5[1]
or MATH 343	Modern Business Mathematics (4)	
or MATH 355	Calculus for Biology and Medicine I (4)	
or MATH 400	Calculus I (5)	
2nd Semester:		
ACCT 301	Financial Accounting	4
CISA 315	Introduction to Electronic Spreadsheets	2
STAT C1000E	Introduction to Statistics	4
3rd Semester:		
ACCT 311	Managerial Accounting	4
BUS 340	Business Law	3
ECON 302	Principles of Macroeconomics	3
4th Semester:		
CISP 370	Beginning Visual Basic	4
ECON 304	Principles of Microeconomics	3
Total Units:		**37 - 38**

[1]MATH 341 is recommended, but the other courses listed in this group will also meet the second MATH course requirement for Business Administration majors (all Concentrations, including Management Information Systems) transferring to CSU Sacramento.

The Management Information Systems Associate in Science (A.S.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Student Learning Outcomes

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

- Apply fundamental information and communication technology concepts in various types of organizational settings (PSLO #01).
- Organize data sets by using spreadsheet application software in various types of organizational settings (PSLO #02).
- Apply fundamental accounting concepts and principles to decision-making processes in various organizational settings (PSLO #03).
- Apply fundamental economics concepts and principles to decision-making processes in various organizational settings (PSLO #04).

- Apply fundamental legal concepts and principles to decision-making processes in various organizational settings (PSLO #05).
- Use statistical and mathematical methods to support decision-making processes in various organizational settings (PSLO #6).

Career Information

Applications Software Specialist; Business Operations Manager;

A.S. in Web Developer

Web Developers are proficient at creating Web site structure and interactivity. The Web Developer degree requires students to design, code, and modify websites from layout to function, in accordance to a client's specification. Students will work with a variety of tools, environments, and applications to learn and practice website programming, scripting languages, and interacting with databases.

Degree Requirements

Course Code	Course Title	Units
CISW 300	Web Publishing	3
CISW 304	Cascading Style Sheets	2
CISC 323	Linux Operating System	1
CISP 353	Application Development in a Client Server Environment	3
CISW 321	Web Site Development	3
CISW 350	Imaging for the Web	1
CISW 400	Client-side Web Scripting	4
CISW 410	Database-Driven Web Applications	4
CISW 440	XML: Introduction to Extensible Markup Language	2
A minimum of 5 units from the following:		5
CISC 324	Intermediate Linux Operating System (1)	
CISW 308	Mobile Web Development (2)	
CISW 310	Advanced Web Publishing (4)	
CISW 355	Web Imaging Projects (2)	
CISW 402	Intermediate JavaScript (2)	
CISP 350	Database Programming (3)	
Total Units:		**28**

The Web Developer Associate in Science (A.S.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Student Learning Outcomes

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

- Manage a multi-level Web site hosted on a Web server.
- Utilize multiple programs simultaneously in order to develop Web sites.
- Recommend Web scripting language, current markup language or Web authoring software, and cascading style sheets to develop complex Web sites that are uploaded via File Transfer Protocol (FTP) to a Web server.
- Research and implement current, valid World Wide Web Consortium (W3C) standards including technical recommendations for markup languages, and other recommendations as they are introduced.
- Plan a structured approach to Web site development that identifies the information dissemination needs of a client and organizes the content effectively and efficiently in order to communicate to an identified audience; then develop and implement an appropriate Web solution.
- Utilize client-side scripting in order to manipulate interactive objects like navigation bars, forms, rollovers, other event handling, and the control of windows, frames, and/or layers.
- Develop Web solutions that include form validation and processing, server-side programming, and database-driven Web development.
- Demonstrate proficiency in the process of Web project management on a real-world Web site including design specification, research, production, modification, time estimation, and presentation.
- Write code in a currently used Web scripting language.

Career Information

This Web Developer Degree prepares students to become Web Developer, Webmaster, Systems Analyst, Web Systems Analyst, IT Analyst, ICT Analyst, Web Database Administrator, Back-end Developer, and Web Programmer.

Certificates of Achievement

Business Information Professional I Certificate

The Business Information Professional I Certificate prepares students for entry-level office, computer, and administrative support positions in a variety of industries. This certification includes courses in: oral and written business communications; computer application skills, including beginning Excel, Word, and Outlook; the fundamentals of computer systems; and critical thinking and problem-solving. This is a collaborative certificate between ARC, CRC, and FLC. Certificate candidates must meet with counseling to ensure local unit requirements are met. Courses are available at multiple colleges. Students can reference the required course list to find more information regarding the courses available at each college. This certificate can be completed 100% online.

Certificate Requirements

Course Code	Course Title	Units
ENGL C1000	Academic Reading and Writing (3)	3
or BUS 100	English for the Professional (3)	

Course Code	Course Title	Units
or BUS 310	Business Communications (3)	
MATH 300	Introduction to Mathematical Ideas (3)	3
or BUS 105	Business Mathematics (3)	
CISA 126	Outlook: Basics	1[1]
BUSTEC 305	Introduction to Business Information Technology (3)	3
BUSTEC 307	Computer Keyboarding and Skill Building	3
CISC 302	Computer Familiarization (2)	2[2]
CISA 305	Beginning Word Processing	2[3]
CISA 315	Introduction to Electronic Spreadsheets (2)	2[4]
CISA 340	Presentation Graphics (2)	2[5]
BUS 498	Work Experience in Business (0.5 -4)	0.5 - 4[6]
or CISC 498	Work Experience in Computer Information Science - Core (0.5 -4)	
Total Units:		**21.5 - 25**

[1]Substitute course, BUSTEC 126 - Outlook: Basics is available at Folsom Lake College, or Course CISA 126 - Outlook: Basics is available at American River College.

[2]Substitute course(s), CISC 300 - Computer Familiarization, is available at American River College and Sacramento City College, BUSTEC 309 - Computer Familiarization is available at Folsom Lake College.

[3]Substitute course, BUSTEC 360 - Word Processing Beyond the Essentials, is available at Folsom Lake College.

[4]Substitute course, BUSTEC 362 - Comprehensive Electronic Spreadsheets, is available at Folsom Lake College.

[5]Substitute course, BUSTEC 366 - Electronic Presentations, is available at Folsom Lake College.

[6]Substitute course, BUSTEC 498 - Work Experience in Business Technology, is available at Folsom Lake College.

Student Learning Outcomes

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

- PSLO #1: DEMONSTRATE COMMON OFFICE APPLICATION SKILLS.
- Demonstrate proficiency in business technology applications.
- Construct projects efficiently generating solutions using various workplace computer programs and shortcuts.
- PSLO #2: DEMONSTRATE COMMON OFFICE ADMINISTRATION SKILLS.
- Demonstrate proficiency in business administration skills.
- Integrate the features of working with tasks and schedules to organize both professional and personal information.
- PSLO #3: DEMONSTRATE BASIC OFFICE COMMUNICATION SKILLS.
- Demonstrate proficiency in business communication skills.
- Identify techniques to send, receive and manage email messages.
- PSLO #4: EXAMINE CUSTOMER SERVICE NEEDS AND REQUIREMENTS
- Apply customer service skills in a business environment and provide a positive customer service experience.
- Analyze the extent to which customer service is facilitated by the effective use of technology.

Career Information

Students who successfully complete the Business Information Professional Certificate are prepared for entry-level positions in office, computer, and administrative support positions in a variety of industries.

Business Information Worker Certificate

The Business Information Worker Certificate is designed to prepare students for entry-level office and administrative support in a variety of organizations.

Certificate Requirements

Course Code	Course Title	Units
BUSTEC 302	Computer-Keyboarding	2
BUSTEC 110	Business Procedures for Professional Success	3
BUSTEC 120	Skills for Today's Office	1
CISC 308	Exploring Computer Environments and the Internet	1
CISA 305	Beginning Word Processing	2
CISA 315	Introduction to Electronic Spreadsheets	2
BUS 100	English for the Professional	3
CISC 310	Introduction to Computer Information Science	3
Total Units:		**17**

Enrollment Eligibility

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

- (None)

Enrollment Process

Eligible students are selected for the program according to the following steps:

- (None)

Student Learning Outcomes

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

- PSLO #1. DEMONSTRATE COMMON OFFICE APPLICATIONS SKILLS.
- Diagram and differentiate basic computer terminology and apply it to communication.
- Construct and modify solutions to simple personal, educational or business needs applying use of office workplace computer programs.
- Design, diagram, and construct simple file folder structure on local storage, and access files for upload/download to/from online tools.
- Formulate expressions and construct logic comparisons using proper symbols and syntax in workplace computer programs.
- Create and organize various types of files using various workplace computer programs.
- Construct projects efficiently generating solutions using various workplace computer programs and shortcuts.
- Demonstrate the mechanics and use of word processing software to organize and present data in a multicolumn, multipage newsletter format including banner, bordering, tables, text effects and embedded graphics.
- Demonstrate appropriate pagination and word processing features to apply a formal (MLA/APA/Chicago) style of documentation in the creation of a multi-section research paper or report with Table of Contents, Index, and Bibliography.
- Design and construct a form using multiple content controls.
- Apply advanced Excel tools such as pivot tables, pivot charts, and templates to workbooks.
- Create audience centric business documents to enhance readability.
- PSLO #2. DEMONSTRATE COMMON OFFICE ADMINISTRATION SKILLS.
- Integrate the features of working with tasks and schedules to organize both professional and personal information.
- Design and assess plans for backup and maintenance of Outlook files and information.
- Analyze trends in technologies and evaluate their effects on organizational data analysis.
- PSLO #3. DEMONSTRATE BASIC OFFICE COMMUNICATION SKILLS.
- Identify techniques to send, receive and manage email messages.
- Analyze business situations and determine appropriate methods to deliver negative and positive messages.
- PSLO #4. EXAMINE CUSTOMER SERVICE NEEDS AND REQUIREMENTS.
- Explain the elements of a service culture.
- Analyze strategies for promoting a positive service culture.
- Analyze the extent to which customer service is facilitated by the effective use of technology.

Career Information

Students who successfully complete the Business Information Worker Certificate are prepared for entry-level positions in general office environments in a variety of fields.

CIS - Computer Programmer-SQL Certificate

This certificate is designed for students who have completed the Database Analyst-SQL Certificate and aspire to be entry level programmers using the Structured Query Language (SQL). This is the second in a series of three certificate programs in Relational Database Management Systems. Courses taken towards the completion of the Database Analyst-SQL Certificate may be also be used towards this certificate.

Certificate Requirements

Course Code	Course Title	Units
CISC 310	Introduction to Computer Information Science	3
CISC 323	Linux Operating System	1
CISC 324	Intermediate Linux Operating System	1
CISP 300	Algorithm Design/Problem Solving	3
CISP 351	Introduction to Relational Database Design and SQL	3
CISP 352	Intermediate SQL	3
CISP 353	Application Development in a Client Server Environment	3
A minimum of 2 units from the following:		2
CISP 370	Beginning Visual Basic (4)	
or CISA 320	Introduction to Database Management (1)	
or CISA 321	Intermediate Database Management (1)	
Total Units:		**19**

Student Learning Outcomes

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

- List and describe the hardware components of a computer system and differentiate among system and application software.
- describe and assess the relationship of operating systems to database file management.
- devise computerized solutions in the development of databases by applying a solid foundation of algorithmic principles.
- compare and contrast hierarchical, network, and relational databases.
- design, create, and administer relational databases
- design and develop tables, forms, queries, and reports using SQL.

Career Information

Computer Operator; Programmer; Computer Systems Specialist

CIS - Database Analyst-SQL Certificate

This certificate is designed for beginning students as well as technical professionals who aspire to design, create, or administer relational databases and create client applications. Successful students will be prepared to apply for entry-level positions for industry such as business analyst. The Database Analyst Certificate is the first in a series of three certificate programs designed for the entry-level student and business user.

Certificate Requirements

Course Code	Course Title	Units
CISC 310	Introduction to Computer Information Science	3
CISC 323	Linux Operating System	1
CISC 324	Intermediate Linux Operating System	1
CISP 300	Algorithm Design/Problem Solving	3
CISP 351	Introduction to Relational Database Design and SQL	3
CISP 352	Intermediate SQL	3
Total Units:		**14**

Student Learning Outcomes

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

- list the hardware components of a computer system and differentiate among system and application software.
- describe the relationship of operating systems to database file management.
- devise computerized solutions in the development of databases by applying a solid foundation of algorithmic principles.
- compare and contrast hierarchical, network, and relational databases.
- design, create, and administer relational databases.
- create client applications using structured query language (SQL).

CIS - Database Design Certificate

This certificate aims at preparing the students to understand the entire design, programming methodology and life cycle of databases. This certificate is designed for the student who requires programming skills in Relational Database Management Systems (RDBMS) and Structured Query Language (SQL) techniques using ORACLE, SQLServer and or Microsoft Access.

Certificate Requirements

Course Code	Course Title	Units
CISA 320	Introduction to Database Management	1
CISA 321	Intermediate Database Management	1
CISP 350	Database Programming	3
CISP 356	Relational Database Design and Information Retrieval	3
A minimum of 4 units from the following:		4
CISP 360	Introduction to Structured Programming (4)	
or CISP 370	Beginning Visual Basic (4)	
or CISP 400	Object Oriented Programming with C++ (4)	
or CISP 300	Algorithm Design/Problem Solving (3)	
or CISC 498	Work Experience in Computer Information Science - Core (0.5 - 4)	
A minimum of 4 units from the following:		4
CISC 305	Introduction to the Internet (1)	
or CISC 306	Introduction to Web Page Creation (1)	
or CISW 300	Web Publishing (3)	
or CISW 400	Client-side Web Scripting (4)	
or CISW 410	Database-Driven Web Applications (4)	
Total Units:		**16**

Student Learning Outcomes

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

- SLO# 1: Describe relational database technologies for desktop, enterprise and Internet platforms.
- Analyze and employ relational database technologies to solve common business problems using standard database principles and practices.
- SLO# 2: Explain and discuss database theory and principles.
- SLO# 3: Select Entity-Relationship diagrams to solve problems related to database design.
- SLO# 4: Devise computerized solutions in the development of databases by applying a solid foundation of algorithmic principles and SQL.
- Apply techniques of Structured Query Language Programming to solve problems related to information retrieval from relational databases.
- SLO# 5: Evaluate proposed database design solutions and create relational databases to meet stated objections

Career Information

Computer Operator; Applications Software Specialist; Programmer; Data Entry Specialist; Database Designer; Database Developer.

CIS - Object Oriented Software Development Certificate

This certification will enhance students' proficiency in the development by using Object Oriented programming languages. After this certification, the student should be able to

use Java, C++, C#, and etc. to develop object oriented Programs.

Certificate Requirements

Course Code	Course Title	Units
CISP 401	Object Oriented Programming with Java	4
CISP 402	Java - Data Handling	4
A minimum of 8 units from the following:		8
CISP 370	Beginning Visual Basic (4)	
CISP 400	Object Oriented Programming with C++ (4)	
CISP 405	Object Oriented Programming using C# on Visual Studio .NET (4)	
Total Units:		**16**

Enrollment Eligibility

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

- Pass CISP360, Introduction to Structured Programming, or equivalent course with a C or better.

Student Learning Outcomes

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

- Formulate problems as steps so be able to solve systematically.
- Describe the principles of object oriented programming.
- Use structure programming skills proficiently in an object oriented program.
- Apply the concepts of object oriented programming skills such as reusability, portability, data encapsulation, inheritance, polymorphism and etc. to a program.
- Design and develop programs with Graphical User Interfaces.
- Use an object oriented language to develop solutions for real life projects in a team work environment.

Career Information

This certificate is designed to prepare students for advancing their study in game programming, computer science, computer engineering, software engineering, computer graphics, and other related fields for under graduate and graduated study. It could be used for students to improvement their job skills in high tech computer science, computer programming, game programming, research, teaching, etc.

CIS - Programming in C/C++ Certificate

This CIS - Programming in C/C++ certificate provides students an advanced level of C/C++ programming skill. It will prepare students in advancing their career or transferring to four-year Universities.

HIGHLIGHTS

*Hands-on experience in a state-of-the-art computer center
*Opportunities to work on specialized projects relating to computer information science, business and computer programming
*Study in a field that has great employment opportunities and encompasses many careers

Certificate Requirements

Course Code	Course Title	Units
CISP 300	Algorithm Design/Problem Solving	3
CISP 360	Introduction to Structured Programming	4
CISP 400	Object Oriented Programming with C++	4
CISP 430	Data Structures	4
A minimum of 4 units from the following:		4
CISP 370	Beginning Visual Basic (4)	
or CISP 401	Object Oriented Programming with Java (4)	
or CISP 405	Object Oriented Programming using C# on Visual Studio .NET (4)	
Total Units:		**19**

Student Learning Outcomes

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

- Apply Object and Structure programming in programs
- Use a C/C++ programming development tool to develop programs.
- Communicate and analyze programming problems, and determine what object-oriented programming approach would be most appropriate to resolve them.

Career Information

Computer Operator; Applications Software Specialist; Programmer; Data Entry Specialist; Systems Analyst, and Database Administrator.

CIS - Relational Database Administration Certificate

The Relational Database Administration Certificate is designed for a person who is responsible for interacting with SQL Programmers, Database Designers, Systems Administrators, and Network Engineers as well as the day-to-day operation of a Relational Database Management System. This course of study is appropriate for an entry level Database Administration position. Courses used towards the completion of the Computer Programmer - SQL certificate may also be used to satisfy the requirements of this certificate.

Certificate Requirements

Course Code	Course Title	Units
CISC 310	Introduction to Computer Information Science	3
CISA 320	Introduction to Database Management	1
CISA 321	Intermediate Database Management	1

Course Code	Course Title	Units
CISC 323	Linux Operating System	1
CISC 324	Intermediate Linux Operating System	1
CISP 300	Algorithm Design/Problem Solving	3
CISP 351	Introduction to Relational Database Design and SQL	3
CISP 352	Intermediate SQL	3
CISP 354	Introduction to Relational Database Administration	3
Total Units:		**19**

Student Learning Outcomes

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

- Analyze and list the hardware components of a computer system and differentiate among system and application software.
- Plan and design tables, forms, queries, and reports using office database application software.
- Assess and design multi-table forms, establish table relationships
- Describe the relationship of operating systems to database file management.
- Devise computerized solutions in the development of databases by applying a solid foundation of algorithmic principles.
- Compare and contrast hierarchical, network, and relational databases.
- Demonstrate ability to design, create, and administer relational databases.
- Create client applications using structured query language (SQL).

Career Information

Computer Operator; Applications Software Specialist; Systems Analyst; Programmer; Data Entry Specialist; Computer Systems Specialist; Computer Technician

CIS - Web Programming Certificate

This certificate prepares students for work as a front end, back end, or full stack Web developer, designing, building, and maintaining professional websites. Additionally, this certificate will prepare students to design and develop database management applications to support Web-based commercial objectives.

HIGHLIGHTS:
- Hands-on experience using a state of the art computer hardware and software.
- Opportunities to work on specialized projects relating to computer information science, business and computer programming.
- Study in a field that has great employment opportunities and encompasses many careers.

Certificate Requirements

Course Code	Course Title	Units
CISP 300	Algorithm Design/Problem Solving	3
CISA 320	Introduction to Database Management	1
CISC 308	Exploring Computer Environments and the Internet (1)	1
or CISC 323	Linux Operating System (1)	
CISC 324	Intermediate Linux Operating System	1[1]
CISW 300	Web Publishing	3
CISW 304	Cascading Style Sheets	2
CISW 400	Client-side Web Scripting	4
CISP 360	Introduction to Structured Programming	4[2]
CISP 350	Database Programming	3
CISW 410	Database-Driven Web Applications	4
A minimum of 5 units from the following:		5
CISW 440	XML: Introduction to Extensible Markup Language (2)	
CISW 402	Intermediate JavaScript (2)	
CISW 310	Advanced Web Publishing (4)	
CISA 321	Intermediate Database Management (1)	
CISS 310	Network Security Fundamentals (3)	
CISW 308	Mobile Web Development (2)	
Total Units:		**31**

[1]Linux Operating System

[2]C or C#

Student Learning Outcomes

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

- PSLO 1: Design, develop, support, and maintain professional Web pages.
- PSLO 2: Demonstrate knowledge of web-related technology and media applications.
- PSLO 3: Be competent evaluators and users of the World Wide Web.
- PSLO 4: Adapt to technological changes and select a current solution for a given problem.
- PSLO 5: Understand how to deal with interoperability between different products, systems, and platforms.
- PSLO 6: Find effective solutions to maintaining and supporting web sites and related resources.

Career Information

Full-Stack Web Developer; Front/Back-end Web Developer; Computer Operator; Applications Software Specialist; Programmer; Data Entry Specialist; Internet Technician

CIS - Web Publishing Certificate

This certificate is designed to give students the benefits of hands-on training in Web Page Design and Publication, Internet usage, and proficiency with web-related media applications.

HIGHLIGHTS

*Hands-on experience in a state-of-the-art computer center
*Opportunities to work on specialized projects relating to computer information science, business and computer programming
*Study in a field that has great employment opportunities and encompasses many careers

Certificate Requirements

Course Code	Course Title	Units
BUS 100	English for the Professional (3)	3
CISC 308	Exploring Computer Environments and the Internet (1)	1[1]
or CISC 323	Linux Operating System (1)	
CISW 350	Imaging for the Web	1
CISW 300	Web Publishing	3
A minimum of 3 units from the following:		3
ART 301	Digital Drawing and Composition (3)	
PHOTO 400	Digital Imaging (3)	
ARTNM 324	Digital Design (3)	
A minimum of 4 units from the following:		4[2]
CISC 306	Introduction to Web Page Creation (1)	
CISW 321	Web Site Development (3)	
CISW 310	Advanced Web Publishing (4)	
CISA 340	Presentation Graphics (2)	
CISW 400	Client-side Web Scripting (4)	
CISW 410	Database-Driven Web Applications (4)	
CISW 355	Web Imaging Projects (2)	
CISW 304	Cascading Style Sheets (2)	
CISW 326	Intermediate Web Site Development using Dreamweaver (3)	
CISW 308	Mobile Web Development (2)	
Total Units:		**15**

[1]Select either Windows (through CISC 308) or Linux (through CISC 323) operating system.

[2]CISW 310 is recommended to meet this 4-unit requirement.

Student Learning Outcomes

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

- Demonstrate knowledge of web-related technology and media applications.
- Be competent evaluators and users of the World Wide Web.
- Adapt to technological changes and select a current solution for a given problem.
- Understand how to deal with interoperability between different products, systems, and platforms.
- Find effective solutions to maintaining and supporting web sites and related resources.

Career Information

Applications Software Specialist; Data Entry Specialist; Computer Technician; Internet Technician

Computer Science Certificate

This certificate teaches students to design, create, and debug complicated apps. Structured programming, object-oriented programming, programming mathematics, and data structures are covered.

Computer Science students transferring to most California universities will complete the certificate courses.

Certificate Requirements

Course Code	Course Title	Units
CISP 300	Algorithm Design/Problem Solving	3
CISP 360	Introduction to Structured Programming	4
CISP 400	Object Oriented Programming with C++ (4)	4[1]
or CISP 401	Object Oriented Programming with Java (4)	
CISP 310	Computer Architecture and Organization	4
CISP 430	Data Structures	4
CISP 440	Discrete Structures for Computer Science	3
Total Units:		**22**

[1]The one that you take will depend on your transfer university. Speak with a CRC counselor for more information.

Student Learning Outcomes

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

- PSLO #1 Design an algorithm from data types, operations, and logic structures to solve complex problems.
- PSLO #2 Refactor a complex algorithm into single job components such as functions or modules.
- PSLO #3 Translate an algorithm into a low-level or high-level programming language.
- PSLO #4 Compare and contrast the data, operations, and logic structure of a high-level language such as C++ and a low-level language such as Assembly Language.
- PSLO #5 Organize data and functions into classes.
- PSLO #6 Organize data into structures such as trees, linked lists, and dictionaries.
- PSLO #7 Construct a recursive algorithm to solve a word problem.
- PSLO #8 Model simple computation using finite state automata and regular languages.

Career Information

The North/Far North Center of Excellence (April 2019) compiled a report that gave the job prospects for software development occupations in the Sacramento region. The report found that Computer Programmers, Software Developers (Applications and Systems Software), and Web Developers have been and will continue to be in demand. The demand for these occupations is expected to increase in the Greater Sacramento region. The report noted that these careers pay well above the Sacramento County Living Wage.

Cyber Defense Certificate

This fully online certificate provides graduates with the skill sets needed to defend a network. Students will be introduced to the basic tools and techniques that can be used to protect a network and communication assets from cyber threats.

Certificate Requirements

Course Code	Course Title	Units
CISN 300	Network Systems Administration	3[1]
CISN 304	Networking Technologies	3[2]
CISS 310	Network Security Fundamentals	3[3]
CISS 315	Ethical Hacking	3
CISS 321	Scripting for Cyber Security	3
CISS 353	Management of Information Security	3
CISS 360	Computer Forensics and Investigation	3
Total Units:		**21**

[1]or Microsoft AZ-800 certification

[2]or CompTIA Network+ certification

[3]or CompTIA Security+ certification

Student Learning Outcomes

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

- PSLO 1: Describe the key concepts in network defense (defense in depth, minimizing exposure, etc.).
- PSLO 2: Explain how network defense tools (firewalls, IDS, etc.) are used to defend against attacks and mitigate vulnerabilities.
- PSLO 3: Analyze how security policies are implemented on systems to protect a network.
- PSLO 4: Evaluate how network operational procedures relate to network security.

Career Information

Cyber Defense Analyst - Uses data collected from a variety of cyber defense tools (e.g., IDS alerts, firewalls, network traffic logs) to analyze events that occur within their environments for the purposes of mitigating threats. Cyber Defense Infrastructure Support Specialist - Tests, implements, deploys, maintains, and administers the infrastructure hardware and software. Cyber Defense Incident Responder - Investigates, analyzes, and responds to cyber incidents within the network environment or enclave. Vulnerability Assessment Analyst - Performs assessments of systems and networks within the network environment or enclave and identifies where those systems/networks deviate from acceptable configurations, enclave policy, or local policy. Measures effectiveness of defense-in-depth architecture against known vulnerabilities.

Cybersecurity Certificate

This certificate provides graduates with the skills needed to defend networks and information systems against cyber-attacks. Students receive extensive hands-on experience and develop the knowledge and abilities necessary to succeed in the protection of an organization’s data and operations. It is a rigorous one-year fully online program designed to help students master the fundamentals of cybersecurity by applying industry-accepted and emerging practices to solve real-world security problems. Upon completion of the program, students will be able to evaluate security trends, recognize best practices, and understand Information Technology security products and threats. Some career opportunities associated with this degree include: security analyst, network systems security administrator, security policy analyst, and more.

Certificate Requirements

Course Code	Course Title	Units
CISC 360	Information & Communication Technology Essentials (A+)	4[1]
CISC 310	Introduction to Computer Information Science	3[2]
CISN 303	Network Administration - Linux Server (3)	3[3]
CISN 304	Networking Technologies	3[4]
CISS 310	Network Security Fundamentals	3[5]
CISN 341	CISCO Networking Academy (CCNA)tm:Switching, Routing, and Wireless Essentials	3.5[6]
CISS 316	Cisco Networking Academy(R): CyberOps Associate	3[7]
CISN 342	CISCO Networking Academy (CCNA)tm: Enterprise Networking, Security, and Automation	3.5[8]
CISS 327	Cisco Networking Academy(R): Network Security	3.5[9]
Total Units:		**29.5**

[1]or CompTIA A+ certification

[2]or CompTIA ITF+ certification

[3]or CompTIA Linux+ certification

[4]or CompTIA Network+ certification

[5]or CompTIA Security+ certification

[6]or CISCO CCENT certification

[7]or CCNA CyberOPS certification

[8]or CCNA Automation and Programmability certification

[9]or CCNA Security certification

Student Learning Outcomes

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

- Design and produce business information systems solutions incorporating current Information Technology, trends, security, and best practices (PSLO 1).
- Execute Linux system commands from either a keyboard or a shell script using correct command syntax (PSLO 2).
- Analyze and implement security concepts and security policies (PSLO 3).
- Analyze common threats to and vulnerabilities of computer systems and networks (PSLO 4).
- Implement and manage Cisco secure networks (PSLO 5).
- Implement network perimeter defense (PSLO 6).

Career Information

Some career opportunities associated with this degree include: security analyst, network systems security administrator, security policy analyst, and more.

Information Technology Associate Certificate

This fully online certificate allows students to acquire basic core Information Technology competencies that will prepare them for a career in Computer Networking, Cybersecurity, and related fields.

Certificate Requirements

Course Code	Course Title	Units
CISC 360	Information & Communication Technology Essentials (A+)	4[1]
CISN 300	Network Systems Administration	3[2]
CISS 310	Network Security Fundamentals	3[3]
CISN 301	Network Client Systems Administration	3
CISN 303	Network Administration - Linux Server	3
CISN 304	Networking Technologies	3
CISN 490	Networking Helpdesk Practicum	3
CISS 315	Ethical Hacking	3
Total Units:		**25**

[1]or CompTIA A+ certification

[2]or Microsoft AZ-800 certification

[3]or CompTIA Security+ certification

Student Learning Outcomes

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

- PSLO #1: Apply fundamental knowledge of computing and the current use of technology techniques, skills, and tools necessary for the computing practice.
- PSLO #2: Evaluate and solve business problems with technology solutions using qualitative and quantitative information.
- PSLO #3: Assess user needs in the selection, creation, evaluation and administration of computer-based information systems.
- PSLO #4: Demonstrate appreciation of the Information Technology career field and the need to be lifelong learners.

Career Information

The Certificate in Information Technology prepares students to either enter the workforce as an entry-level computer or network support technician. Several CSUs currently offer baccalaureate IT or CT programs, as do several private universities.

Information Technology Technician Certificate

This fully online certificate provides students the information necessary to obtain an entry-level career in the field of networking. Upon completion of this certificate, students will understand helpdesk concepts and responsibilities, hardware and software troubleshooting, and technical communication skill-sets. The fundamentals of supporting end users and a Local Area Network (LAN) will also be emphasized.

Certificate Requirements

Course Code	Course Title	Units
CISC 310	Introduction to Computer Information Science (3)	3[1]
CISC 360	Information & Communication Technology Essentials (A+)	4[2]
CISN 300	Network Systems Administration	3
CISN 301	Network Client Systems Administration	3
CISN 303	Network Administration - Linux Server	3
CISN 304	Networking Technologies (3)	3
CISS 310	Network Security Fundamentals	3
CISN 490	Networking Helpdesk Practicum	3
Total Units:		**25**

[1]or CompTIA ITF+ certification

[2]or CompTIA A+ certification

Student Learning Outcomes

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

- Analyze the fundamentals of an operating system. Examine the relationship of the operating system to other applications programs (PSLO #1).
- Demonstrate knowledge of networking technology. Judge the strengths and weaknesses of the different network operating systems and technologies (PSLO #2).
- Analyze the effects of an application on a network operating system (PSLO #3).
- Analyze the effects of network intruders and viruses on an application and an operating system (PSLO #4).

Career Information

Computer Operator; Applications Software Specialist; Information Technology Technician

Computer Information Science - Applications (CISA) Courses

CISA 126 Outlook: Basics

Units: 1
Hours: 18 hours LEC
Prerequisite: None.
Advisory: BUSTEC 302 with a grade of "C" or better

This course introduces Microsoft Outlook, the industry-leading personal information management software. Topics include understanding and navigating the Outlook environment, creating and sending email, using email special features, managing Outlook contacts, using an electronic calendar, and creating tasks and to-do items.

CISA 299 Experimental Offering in Computer Information Science - Applications

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

CISA 305 Beginning Word Processing

Units: 2
Hours: 36 hours LEC
Prerequisite: None.
Advisory: BUSTEC 302, CISC 302, or CISC 310
Transferable: CSU

This course introduces students to fundamental and intermediate word processing skills. The course includes basic word processing operations: formatting business documents, editing, saving, retrieving, printing text, and creating and editing simple tables. The course also includes intermediate operations: inspecting documents for hidden properties, inserting and formatting graphic elements, managing reference markers, and merging multiple documents.

CISA 306 Intermediate Word Processing

Units: 2
Hours: 36 hours LEC
Prerequisite: CISA 305 with a grade of "C" or better
Transferable: CSU

This is a course designed to build upon previous training in the use of word processing. The course covers intermediate to advanced word processing features, such as styles, macros, outlines, document notations, forms, charts, and advanced mail merge techniques. Also covered are integrating word processing with other applications and creating documents for use on the Internet, i.e. web pages and e-mail attachments in word processing. Advanced business document formatting will also be included.

CISA 315 Introduction to Electronic Spreadsheets

Units: 2
Hours: 36 hours LEC
Prerequisite: None.
Advisory: CISC 302 or 310
Transferable: CSU

This course is designed to introduce the student to the use of spreadsheet programs. The course will include: designing a spreadsheet, developing formulas for automatic calculations, using special functions, developing what-if models, producing charts, performing spreadsheet data base functions, and producing reports. Students will be using mathematical concepts and skills.

CISA 316 Intermediate Electronic Spreadsheets

Units: 2
Hours: 36 hours LEC
Prerequisite: CISA 315 with a grade of "C" or better
Transferable: CSU
C-ID: C-ID BSOT 122X

This course introduces students to the intermediate features of spreadsheet programs. The course will cover macros, data tables and lookup functions, logical expressions as well as advanced file operations, functions, and convenience commands. Students will follow spreadsheet templates and design their own sheets.

CISA 320 Introduction to Database Management

Units: 1
Hours: 18 hours LEC
Prerequisite: None.
Advisory: CISC 302 or 310
Transferable: CSU

This course is designed to introduce the student to the use of database management programs on the computer. The course will include designing a database; accessing, searching and updating files; and designing and producing printed reports.

Students will be reading and interpreting written and oral instructions of a technical nature.

CISA 321 Intermediate Database Management

Units: 1
Hours: 18 hours LEC
Prerequisite: CISA 320 with a grade of "C" or better
Transferable: CSU

This course will extend the capabilities of students who have started to use a microcomputer database. Topics and laboratory will include complex relational databases, form design, intermediate report design, advanced queries, OLE objects, macros and an introduction to visual programming.

CISA 340 Presentation Graphics

Units: 2
Hours: 36 hours LEC
Prerequisite: None.
Advisory: CISC 302 or 310
Transferable: CSU

This course is an introduction to the use of the computer to generate graphics used in business. Topics covered include: hardware (screens, printers, input devices), software (paint, chart, CAD), types of graphics (pictures, graphs, charts, designs).

CISA 499 Experimental Offering in Computer Information Science - Applications

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU

This is the experimental courses description.

Computer Information Science - Core (CISC) Courses

CISC 295 Independent Studies in Computer Information Science - Core

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

CISC 299 Experimental Offering in Computer Information Science - Core

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

CISC 302 Computer Familiarization

Same As: JOUR 330
Units: 2
Hours: 36 hours LEC
Prerequisite: None.
Advisory: BUSTEC 302
Transferable: CSU

This is an introductory course to provide general knowledge on how computers work, computer terminology and the impact of computers on society and the work environment. Beginning level hands-on instruction using an operating system, word processing software, spreadsheet software, database software, email and the Internet will be emphasized. Students will be reading and interpreting written and oral instructions of a technical nature. This course is the same as JOUR 330, and only one may be taken for credit. See "Cross-Listed Courses" in the catalog.

CISC 305 Introduction to the Internet

Units: 1
Hours: 18 hours LEC
Prerequisite: None.
Advisory: CISC 302 or 310
Transferable: CSU

This course is an introduction to 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 HTML.

CISC 306 Introduction to Web Page Creation

Units: 1
Hours: 18 hours LEC
Prerequisite: CISC 305 with a grade of "C" or better; or equivalent skills for an intermediate level of Internet proficiency to be determined by the instructor of the course.
Transferable: CSU

The student will be able to produce a Web page, including design, layout, construction, and presentation. HTML will be used to format a Web page.

CISC 308 Exploring Computer Environments and the Internet

Units: 1
Hours: 18 hours LEC
Prerequisite: None.
Transferable: CSU

The course acquaints the student with the fundamentals of microcomputer hardware, software and computer networking, focusing on widely used hardware and operating systems, Intel-based PCs and the Windows operating system. The fundamentals of the Internet and Internet tools are introduced, as well as effective electronic communication.

CISC 310 Introduction to Computer Information Science

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Students should be familiar with basic functions of word processing, spreadsheet, and web browser software applications, or they should have successfully completed a Computer Technology course in middle or high school.
Transferable: CSU; UC
C-ID: C-ID BUS 140; C-ID ITIS 120

This course covers fundamental concepts related to information technology and its applications in organizations and society. The student will learn about digital devices, computer software, networks, cybersecurity, information systems, database management, and related applied ethical considerations. The student will apply concepts by using hands-on projects to develop computer-based solutions.

CISC 323 Linux Operating System

Units: 1
Hours: 18 hours LEC
Prerequisite: None.
Transferable: CSU

This course introduces the Linux operating system for desktop computers. Concepts include kernels, file structures, Daemons, shells, GUIs, procedures for installing software, creation of user accounts, shell commands, scripts, and file security.

CISC 324 Intermediate Linux Operating System

Units: 1
Hours: 18 hours LEC
Prerequisite: CISC 323 with a grade of "C" or better
Transferable: CSU

This course covers the Linux operating system for desktop computers. It covers advanced shell scripting, C Shell, K Shell, and BASH. Other topics covered in this course include decision-making logic, looping, and nesting. Consult the class schedule for specific operating system offered.

CISC 356 Introduction to Local Area Networks

Units: 1.5
Hours: 27 hours LEC
Prerequisite: None.
Transferable: CSU

From hubs to servers this course will introduce students to the exciting field of computer networking. Beginners will become comfortable with the concepts and vocabulary of computer networking and will gain hands-on experience in basic networking technology. Some topics include the Internet and its tools; the diversity of Network Operating Systems one can use in a Local Area Network; how to configure communication protocols, such as TCP/IP; the distinction between a Local Area Network and a Wide Area Network; and the fundamentals of network architecture and design.

CISC 360 Information & Communication Technology Essentials (A+)

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: CISC 302 and 310
Transferable: CSU
C-ID: C-ID ITIS 110

This course provides an introduction to the computer hardware and software skills needed to help meet the growing demand for entry-level ICT professionals. The fundamentals of computer hardware and software, as well as advanced concepts such as security, networking, and the responsibilities of an ICT professional, will be introduced. This course helps to prepare students for the CompTIA A+ certification exam.

CISC 495 Independent Studies in Computer Information Science - Core

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

CISC 498 Work Experience in Computer Information Science - Core

Units: 0.5 - 4
Hours: 27 - 216 hours LAB
Prerequisite: None.
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position or job related to career goals in Computer Information Science.
Transferable: CSU

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in transfer level degree occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and complete 27 hours of related work experience for 0.5 unit. An additional 27 hours of related work experience is required for each additional 0.5 units. 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.

CISC 499 Experimental Offering in Computer Information Science - Core

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU

This is a course designed to give students an opportunity to study topics in Computer Information Science which are not included in the current course offerings. This course may be repeated for credit providing there is no duplication of topics.

Computer Information Science - Data Science (CISD) Courses

CISD 299 Experimental Offering in Computer Information Science - Data Science

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

CISD 499 Experimental Offering in Computer Information Science - Data Science

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

Computer Information Science - Networking (CISN) Courses

CISN 300 Network Systems Administration

Units: 3
Hours: 45 hours LEC; 27 hours LAB
Prerequisite: None.
Advisory: CISC 310 with a grade of "C" or better
Transferable: CSU
C-ID: C-ID ITIS 155

This course will provide a student with the knowledge and skills required to build, maintain, troubleshoot and support server hardware and software technologies. The student will be able to identify environmental issues; understand and comply with disaster recovery and physical/software security procedures; become familiar with industry terminology and concepts; understand server roles/specializations and interaction within the overall computing environment. Consult the class schedule for specific operating system offered.

CISN 301 Network Client Systems Administration

Units: 3
Hours: 45 hours LEC; 27 hours LAB
Prerequisite: None.
Advisory: CISC 310
Transferable: CSU

This course covers the administration of a client in a client/server network. Topics include designing a basic network, installing and configuring a client network operating system, managing network security with user and group accounts, creating directory structures and network shares, setting up and managing network printers, backing up servers, monitoring and troubleshooting network resources, and establishing policies and procedures for network operations.

CISN 303 Network Administration - Linux Server

Units: 3
Hours: 45 hours LEC; 27 hours LAB
Prerequisite: None.
Advisory: CISC 323 with a grade of "C" or better
Transferable: CSU
C-ID: C-ID ITIS 155

This course provides introductory coverage of Linux Network Administration. The course maps to the CompTIA Linux+ certification exam, and to SAIR/GNU's Linux Networking course. Specific course topic coverage includes: introducing Linux; exploring the desktop; using the Shell; understanding users and file systems; understanding text processing; managing processes; using network clients; installing Linux; understanding system initialization; managing software packages and file systems; managing users; configuring networks; system and kernel management; writing Shell scripts; and advanced topics and troubleshooting. The course requires many hands-on projects, which allow students to practice what they learn.

CISN 304 Networking Technologies

Units: 3
Hours: 45 hours LEC; 27 hours LAB
Prerequisite: None.
Advisory: CISC 310 with a grade of "C" or better
Transferable: CSU
C-ID: C-ID ITIS 150

This course introduces the architecture, structure, functions, components, and models of the Internet and other computer networks. Students achieve a basic understanding of how networks operate and how to build simple local area networks (LAN), perform basic configurations for routers and switches, implement Internet Protocol (IP) and enterprise technologies, including cloud and virtualization. Students will apply the knowledge and skills required to troubleshoot, configure, and manage common network devices; establish basic network connectivity; and implement network security, standards, and protocols. This course prepares students for the CompTIA Network+ certification exam.

CISN 341 CISCO Networking Academy (CCNA)tm:Switching, Routing, and Wireless Essentials

Units: 3.5
Hours: 54 hours LEC; 27 hours LAB
Prerequisite: None.
Corequisite: CISN 304
Transferable: CSU
C-ID: C-ID ITIS 151

The second course in the CCNA curriculum focuses on switching technologies and router operations that support small to medium business networks and includes wireless local area networks (WLANs) and security concepts. Students learn key switching and routing concepts. Students will perform basic network configuration and troubleshooting, identify and mitigate LAN security threats, and configure and secure a basic WLAN.

CISN 342 CISCO Networking Academy (CCNA)tm: Enterprise Networking, Security, and Automation

Units: 3.5
Hours: 54 hours LEC; 27 hours LAB
Prerequisite: CISN 341 with a grade of "C" or better
Transferable: CSU

This course provides advanced routing and switching technologies. Topics include advanced router configurations, network management, network design, WANs concepts and network security. This is the third course in preparation for CISCO CCNA certification examination. CRC is a certified CISCO Networking Academy, and all courses are taught by CISCO Certified Academy Instructors (CCAI).

CISN 490 Networking Helpdesk Practicum

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: CISC 360, CISN 300, and CISN 304 with grades of "C" or better
Transferable: CSU

This course focuses on key information and skills for user support professionals, including troubleshooting and problem solving, successful communication with users, determining a client's specific needs, and training end users. For those considering entering the field, alternate career paths for user-support workers are covered. With balanced coverage of both people skills and technical skills, this course is an excellent resource for those in or preparing for the technical-support field.

CISN 499 Experimental Offering in Computer Information Science - Networking

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU

This is the experimental courses description.

Computer Information Science - Programming (CISP) Courses

CISP 300 Algorithm Design/Problem Solving

Units: 3
Hours: 54 hours LEC
Prerequisite: Intermediate Algebra (or equivalent in high school) or higher with a C or better or eligibility for transfer-level mathematics.
Transferable: CSU; UC
General Education: Local GE L2

This course covers the design and debugging of software applications. Students will learn the programming concepts that are part of every desktop, web, mobile, and database application and every programming language.

CISP 310 Computer Architecture and Organization

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: CISP 360 with a grade of "C" or better
Transferable: CSU; UC
C-ID: C-ID COMP 142

This course is an introduction to computer architecture using assembly language programs. Topics include: binary representation of data and instructions, memory addressing modes, subroutines and macros, operating system interrupts, processor architecture, and interfacing with high level languages.

CISP 350 Database Programming

Units: 3
Hours: 54 hours LEC
Prerequisite: CISA 320 with a grade of "C" or better; and three units in any programming language.
Transferable: CSU; UC
General Education: Local GE L2

This is an introductory course in programming databases. Topics include analysis and design, modular programming, screen displays and menus, and multiple databases.

CISP 351 Introduction to Relational Database Design and SQL

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU

This course is designed to introduce relational database technology, normalization, entity relationships, logical model design, and ISO-ANSI standard Structured Query Language (SQL). Topics covered include: database design, basic properties of a relational database such as relations, tables, primary keys, foreign keys and principles of normalization, simple SQL select statements, sorting and grouping data, joining tables, subqueries and views. The course covers core

concepts in identifying data and information management requirements for organizations, data modeling, and normalization techniques. The database design section focuses on logical model design and entity relationship (ER) modeling. The course exposes students to the use of Relational Database Management Systems using an industrial-strength database management system. Students will leave the course with a good working knowledge of database technology.

CISP 352 Intermediate SQL

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: CISP 351
Transferable: CSU

This course builds upon the Introduction to Relational Databases and SQL course with more in-depth SQL constructs common to most commercial database products and extensions to the SQL language. Topics include: complex joins including inner and outer joins, correlated subqueries, complex table definition, table and column constraints, Union, Intersection, Minus, triggers, procedures and packages.

CISP 353 Application Development in a Client Server Environment

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: CISP 352
Transferable: CSU

This course is designed for the intermediate level SQL programmer to design, create and deploy GUI applications that access relational database management systems. Topics include: GUI design fundamentals, data control and access methods (remote and local), creating datasets, implementing joins, transaction processing, multi-user data access, record locking, and deploying and installing applications on client workstations.

CISP 354 Introduction to Relational Database Administration

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: CISP 352
Transferable: CSU

This course is designed to introduce students to administering a relational database management system. Topics include: managing users, privileges, resources, and tablespaces; creating an operational database, managing database files; how to start up and shut down an instance or database, the data dictionary, transaction processing, and backup and recovery issues. Completion will provide students with sufficient knowledge for an entry level Database Administration position in industry.

CISP 356 Relational Database Design and Information Retrieval

Units: 3
Hours: 54 hours LEC
Prerequisite: CISP 350 with a grade of "C" or better
Transferable: CSU

This course is designed to serve as an advanced-level course within the Database Design certificate. The course covers advanced database concepts. Topics include: data analysis, principle data models with emphasis on the relational model, entity-relationship diagrams, logical design, data administration and normalization.

CISP 360 Introduction to Structured Programming

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: CISP 300 or MATH 400 with a grade of "C" or better, or placement through the assessment process.
Transferable: CSU; UC
General Education: Local GE L2
C-ID: C-ID COMP 112

This course is an introduction to structured programming. Sample topics include typed variables and constants, operators, control structures, standard libraries, arrays, pointers, I/O with keyboard/monitor and files, and an introduction to objects.

CISP 370 Beginning Visual Basic

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: CISC 310 or CISP 300
Transferable: CSU; UC

This course covers development of Windows-based desktop applications using VB.NET. Topics include best practices for GUI design, use of the Visual Studio .NET development software, organizing code into procedures and modules, calculation techniques, input data validation, file I/O, variable scope, arrays, multiple-window applications, and class development. This course is designed for students who want a strong foundation in building GUI applications and transfer MIS majors.

CISP 400 Object Oriented Programming with C++

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: CISP 360 with a grade of "C" or better
Transferable: CSU; UC
General Education: Local GE L2
C-ID: C-ID COMP 122

This course is an intermediate C++ course designed to further enhance the students' abilities to design and develop object-oriented programs. Included is an emphasis in higher level programming skills development. Detailed information into class design and implementation, function templates, dynamic data allocation, pointers, strings, arrays, control structures, operator overloading, inheritance, virtual functions, polymorphism, data stream input and output, exception handling and file processing. (C-ID COMP 122)

CISP 401 Object Oriented Programming with Java

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: CISP 360 with a grade of "C" or better
Transferable: CSU; UC
General Education: Local GE L2

This course is an introduction to object oriented programming using the Java language. The student will learn the Java programming language as well as the Java compiler. Topics will include: creating Java applications, writing Java applets, using the control statements, creating Java methods, declaring Java arrays, object-based programming, object-oriented programming: inheritance and polymorphism, handling strings and characters, controlling graphics by using graphics and Java 2D, generating graphics by using graphical user interface components, exception handling, multithreading, and managing files and streams handling.

CISP 402 Java - Data Handling

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: CISP 401 with a grade of "C" or better
Transferable: CSU

This course is an intermediate JAVA class. The student will enhance their knowledge in Java Application Program Interface (API) and programming skills. Topics will include Files and Streams, Networking, Multimedia (Images, Animation and Audio), Data Structures, Java Utilities Package and Bit Manipulation, Collections, Java Database Connectivity with JDBC™, Servlets and JavaServer Pages (JSP).

CISP 405 Object Oriented Programming using C# on Visual Studio .NET

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: CISP 400 or 401 with a grade of "C" or better, or placement through the assessment process.
Transferable: CSU; UC

This course is an introduction to C# object-oriented programming language in a Visual Studio environment. Topics will include Visual Studio IDE, Constructors, Methods, Arrays, Inheritance, Polymorphism, Exception Handling, GUI, and Multithreading. This course is designed for students to understand the web-based as well as system development capabilities of C#.

CISP 430 Data Structures

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: CISP 400 or CISP 401 with a grade of “C” or better or an equivalent level programming course in the programming language used in this course
Transferable: CSU; UC
C-ID: C-ID COMP 132

This course applies a case study approach which incorporates techniques for systematic problem analysis, program specification, design, coding, testing, debugging and documentation of large programs. Data structures include stacks, queues, trees, lists, etc. Advanced language features related to strings, non-text files, pointers, recursion, and object-oriented programming methodology are covered. Searching and sorting techniques are discussed. Consult the class schedule for specific topics.

CISP 440 Discrete Structures for Computer Science

Units: 3
Hours: 54 hours LEC
Prerequisite: MATH 370 with a grade of "C" or better
Corequisite: CISP 430
Transferable: CSU; UC
General Education: Local GE L2
C-ID: C-ID COMP 152

This course is an introduction to the discrete structures used in Computer Science with an emphasis on their applications. Topics covered include: counting methods, elementary formal logic and set theory, recursive programming and algorithm analysis, digital logic and combinational circuits, regular expressions, and finite state automata.

CISP 499 Experimental Offering in Computer Information Science - Programming

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU; UC (Credit for variable topics courses is given only after a review of the scope and content of the course by the enrolling UC campus.)

This is the experimental courses description.

Computer Information Science - Security (CISS) Courses

CISS 300 Introduction to Information Systems Security

Units: 1
Hours: 18 hours LEC
Prerequisite: None.
Advisory: Some experience and/or coursework in networking.
Transferable: CSU

This course is intended for beginner users who want to increase their understanding of information security issues and practices. It is intended for end users who use computers at home or in the office. The course covers all of the need-to-know information about staying secure, including up-to-date information on relevant topics such as protecting mobile devices and wireless local area networks. Students will learn how to maintain a secure environment and avoid security attacks through a series of real-life user experiences, hands-on projects, and case projects.

CISS 310 Network Security Fundamentals

Units: 3

Hours: 45 hours LEC; 27 hours LAB
Prerequisite: None.
Advisory: CISC 310 with a grade of "C" or better
Transferable: CSU
C-ID: C-ID ITIS 160

This course is an introduction to the fundamental principles and topics of Information Technology security and Risk Management at the organizational level. It also addresses hardware, software, processes, communications, applications, and policies and procedures with respect to cyber-security. In addition, this course prepares students for the CompTIA Security+ certification exam.

CISS 315 Ethical Hacking

Units: 3
Hours: 45 hours LEC; 27 hours LAB
Prerequisite: CISS 310 with a grade of "C" or better
Transferable: CSU
C-ID: C-ID ITIS 164

This course introduces the network security specialist to the various methodologies for attacking a network. Students will be introduced to the concepts, principles, and techniques, supplemented by hands-on exercises, for attacking and disabling a network within the context of properly securing a network. The course will emphasize network attack methodologies with the emphasis on student use of network attack techniques and tools and appropriate defenses and countermeasures. Students will receive course content information through a variety of methods: lecture and demonstration of hacking tools will be used in addition to a virtual environment. Students will experience a hands-on practical approach to penetration testing measures and ethical hacking.

CISS 316 Cisco Networking Academy(R): CyberOps Associate

Units: 3
Hours: 45 hours LEC; 27 hours LAB
Prerequisite: None.
Advisory: CISN 304, CISS 300, or CISS 310 with a grade of "C" or better
Transferable: CSU

This course covers knowledge and skills needed to successfully handle the tasks, duties, and responsibilities of an associate-level Security Analyst working in a Security Operations Center (SOC). It helps students to prepare for the Cisco Certified CyberOps Associate industry certification.

CISS 321 Scripting for Cyber Security

Units: 3
Hours: 45 hours LEC; 27 hours LAB
Prerequisite: None.
Advisory: CISS 315 with a grade of "C" or better
Transferable: CSU

This course is designed to cover tools that are commonly used by Information Security Professionals. Modern Operating Systems and scripting languages will be discussed as well as utilities and technologies that enable them. Topics including securing, hardening systems, incident response, automating tasks, auditing, and vulnerability assessment will be covered.

CISS 327 Cisco Networking Academy(R): Network Security

Units: 3.5
Hours: 54 hours LEC; 27 hours LAB
Prerequisite: CISN 304 and 341 with grades of "C" or better
Advisory: CISS 310 with a grade of "C" or better
Transferable: CSU

This course provides the theoretical understanding of network security and the hands-on skills to implement and support network security. Topics include Cisco switch and router security, Authentication, Authorization, and Accounting (AAA), Access Control Lists (ACLs), Firewalls, Intrusion Prevention System (IPS), and Virtual Private Networks (VPNs). Additionally, the Cisco Adaptive Security Appliance (ASA) and Adaptive Security Device Manager (ASDM) are covered.

CISS 350 Disaster Recovery

Units: 3
Hours: 48 hours LEC; 18 hours LAB
Prerequisite: CISS 310 with a grade of "C" or better
Transferable: CSU

This course teaches students how to identify network vulnerabilities and how to take the appropriate countermeasures to prevent and mitigate failure risks for an organization. Students will gain an understanding of the steps needed for good disaster recovery including, how to prepare a disaster recovery plan, the various risks associated with an enterprise network, the diverse job functions of employees in a Disaster Recovery Plan, and the methods needed to implement a plan once it is complete. In addition, each student will develop a Disaster Recovery Plan with a group for a real or fictitious organization.

CISS 353 Management of Information Security

Units: 3
Hours: 48 hours LEC; 18 hours LAB
Prerequisite: CISS 310 with a grade of "C" or better
Transferable: CSU

This course focuses on the managerial aspects of information security and assurance. Topics covered include project management, access control models, information security governance, and information security program assessment and metrics. Coverage on the foundational and technical components of information security is included to reinforce key concepts.

CISS 360 Computer Forensics and Investigation

Units: 3
Hours: 45 hours LEC; 27 hours LAB
Prerequisite: CISS 310 with a grade of "C" or better
Transferable: CSU
C-ID: C-ID ITIS 165

This course is an introduction to the methods used to properly conduct a computer forensics investigation beginning with a discussion of ethics, while mapping to the objectives of the International Association of Computer Investigative Specialists (IACIS) certification. Topics covered include an overview of

computer forensics as a profession; the computer investigation process; understanding operating systems boot processes and disk structures; data acquisition and analysis; technical writing; and a review of familiar computer forensics tools.

Computer Information Science - Web (CISW) Courses

CISW 300 Web Publishing

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: CISC 305
Transferable: CSU

This course is an introduction to publishing on the Internet's World Wide Web (www). Topics include creating www pages with the HyperText Markup Language (html), organizing a series of pages into a website, and uploading web pages to a server. The course makes extensive use of the computer tools necessary to insert html tags, create images, and view web documents. This course prepares apprentice web designers and publishers to identify the information dissemination needs of a client, design appropriate World Wide Web solutions, and implement it.

CISW 304 Cascading Style Sheets

Units: 2
Hours: 27 hours LEC; 27 hours LAB
Prerequisite: CISW 300 with a grade of "C" or better
Transferable: CSU

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 308 Mobile Web Development

Units: 2
Hours: 27 hours LEC; 27 hours LAB
Prerequisite: CISW 300 with a grade of "C" or better
Advisory: CISW 304
Transferable: CSU

In this course, students will learn to create websites that are responsive: sites that adapt their layout to the client device being used, whether it be a smartphone, tablet computer, or desktop computer/laptop.
Students will learn to use CSS media queries, mobile-friendly HTML5 features, JavaScript enhancements, and various frameworks to build websites that are fluid and flexible.

CISW 310 Advanced Web Publishing

Units: 4
Hours: 72 hours LEC
Prerequisite: CISW 300 with a grade of "C" or better
Transferable: CSU

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 programming with JavaScript, CGI scripting with Perl, and web-database interactivity.

CISW 321 Web Site Development

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: CISC 305
Transferable: CSU

This course covers the use of current web software applications, HTML/CSS, and Content Management Systems (CMS) to make websites. Topics include creating responsive web pages that contain text, images, links, tables, forms, and multimedia. Additional topics include developing effective web site design and layout, how to use templates, Search Engine Optimization (SEO) techniques, and metatags. Students will work individually and as a member of a team to plan, implement, test, and evaluate web sites.

CISW 326 Intermediate Web Site Development using Dreamweaver

Units: 3
Hours: 54 hours LEC
Prerequisite: CISW 321 with a grade of "C" or better
Transferable: CSU

This course will reinforce and deepen many Dreamweaver topics covered in the beginning course CISW 321 by providing a more in-depth approach. In addition the course will introduce the other Adobe components such as Flash, Flash Script, and content management using Contribute software. Other topics covered include the following: advanced page formatting using style sheets, web site behaviors, work flow enhancement, templates, libraries, dynamic data, search functions, shopping cart functions, site security, user authentication, and other web services.

CISW 350 Imaging for the Web

Units: 1
Hours: 18 hours LEC
Prerequisite: None.
Advisory: CISC 306 and CISW 300
Transferable: CSU

This course takes a look at designing graphics for the web. Using industry standard graphic software, students will manipulate images and create original graphics. Through lecture, demonstration and hands-on methods as well as class/instructor critiques, students will learn and practice designing graphics for use on the World Wide Web. Topics include developing graphic elements for a web site using a visual theme, creating buttons and intuitive navigational elements, making background textures and images, understanding web file formats, scanning, and creating animation.

CISW 355 Web Imaging Projects

Units: 2
Hours: 27 hours LEC; 27 hours LAB
Prerequisite: CISW 350 with a grade of "C" or better

Transferable: CSU

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 Web sites are discussed and practiced. Real and simulated projects will 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 375 Security for Web Development

Units: 3
Hours: 45 hours LEC; 27 hours LAB
Prerequisite: None.
Advisory: CISW 410 with a grade of "C" or better
Transferable: CSU

This course provides an overview of web security and vulnerabilities. It examines current tools, methods, and strategies used by web developers for combating cyber security threats.

CISW 400 Client-side Web Scripting

Units: 4
Hours: 72 hours LEC
Prerequisite: CISW 300 with a grade of "C" or better
Advisory: CISP 300
Transferable: CSU

This course emphasizes the creation of dynamic and interactive web sites using a client-side scripting language such as JavaScript. Topics include the Document Object Model of web pages, core features of the client-side scripting language, event handling, control of windows and frames, functions, and form validation.

CISW 402 Intermediate JavaScript

Units: 2
Hours: 27 hours LEC; 27 hours LAB
Prerequisite: CISW 400 with a grade of "C" or better
Advisory: CISW 410
Transferable: CSU

In this course, students will learn advanced JavaScript techniques and good standard coding conventions. Topics include advanced form validation, creating jump menus and cascading select menus, and learning to control CSS with JavaScript to manipulating the HTML DOM. Students will also learn about AJAX and practice using it to create interactive, asynchronous web pages. Finally, students will learn to use jQuery and other similar JavaScript frameworks.

CISW 410 Database-Driven Web Applications

Units: 4
Hours: 72 hours LEC
Prerequisite: CISW 300 with a grade of "C" or better
Advisory: CISP 300 or CISW 310
Transferable: CSU

This course emphasizes the creation of dynamic and interactive web sites using a middleware scripting language such as PHP or 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 440 XML: Introduction to Extensible Markup Language

Units: 2
Hours: 36 hours LEC
Prerequisite: CISW 300 with a grade of "C" or better
Advisory: CISA 320 or CISP 350
Transferable: CSU

XML is a universal method for representing information that is especially well suited for distribution over the Internet. This course will address the most fundamental XML questions - what XML is, why it is needed, and how it can be used. Students will learn the most current, practical XML technologies available at the present time.

CISW 499 Experimental Offering in Computer Information Science - Web

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU

This is the experimental courses description.

Construction

The Construction Technology programs at Cosumnes River College are preparing students for work in new construction, remodel, and energy auditing industries. Course offerings include everything from entry level trades courses, all the way to national certification. Students will train at the college, and at real jobsites. Traditional building practices are covered, but advanced framing techniques, energy efficiency, health and safety, and sustainability are emphasized.

Degrees and Certificates Offered

A.S. in Construction

Construction Certificate

Construction Pre-Apprenticeship Certificate

Green Buildings Certificate

Solar Installers Certificate

Dean Ashu Mishra
Department Chair Ryan Connally
Phone (916) 525-4319
Email mishraa@crc.losrios.edu

Associate Degree

A.S. in Construction

This program trains students for an industry that is one of the largest employers in the nation. CRC's construction program is designed to provide students with basic and applied technical skills and knowledge necessary for employment in the building and construction industry. Standard construction procedures are emphasized throughout the program.

HIGHLIGHTS
*Articulation agreements for transfer to specific four-year institutions
*Field trips to a variety of new and existing construction structures for study and appreciation

Degree Requirements

Course Code	Course Title	Units
CMT 112	Construction Estimating	3
CMT 120	Legal Aspects of Construction	3
CMT 136	Construction Safety	3
CMT 300	Introduction to Construction Plans and Specifications (3)	3
or BIT 102	Plan Reading and Non-Structural Plan Review (3)	
CMT 310	Materials of Construction	3
CMT 313	Computer Estimating for Construction	3
BIT 100	Introduction to the International Building Code	3
CONST 105	Rough Carpentry I - Tools, Materials, and Foundations	3
CONST 106	Rough Carpentry II - Floors, Walls, and Roof Framing	3
CONST 107	Rough Carpentry III - Exterior Finishes	3
CONST 108	Finish Carpentry I - Interior Finish	3
Total Units:		**33**

The Construction Associate in Science (A.S.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Student Learning Outcomes

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

- PSLO #1: Career Options and Goals- Summarize career options in the industry, and formulate initial career goals.
- PSLO #2: Tools- Identify common hand and power tools used in the trades and residential building science, and demonstrate competence in their safe and efficient use.
- PSLO #3: Analysis of building materials- Examine various building materials, and compare their strengths and weaknesses as they relate to structural integrity, sustainability, and environmental impact.
- PSLO #4: Safety- Explain the relevance of the Occupational Safety and Health Administration, and interpret those regulations specific to the construction industry
- PSLO #5: Building principles- Utilize fundamental building principles to layout and construct residential and light carpentry structures
- PSLO #6: Analysis of Sustainability- Understand the principles of Green Building and compare and contrast emerging techniques with traditional production building methods.
- PSLO #7: Building Performance Testing- Perform shell and duct diagnostics, and prescribe measures that can be tested and retested for marked improvement in the energy efficiency of the home.

Career Information

Building and Construction Tradesperson; General Contracting; Estimators; Construction Supervisors; Material Salespersons; Building Inspection; Construction Apprenticeship programs. Some career options may require more than two years of college study. Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.

Certificates of Achievement

Construction Certificate

This program prepares students for entry into the building and construction industry as a general tradesperson; and prepares

students currently working within the industry for advancement.

Certificate Requirements

Course Code	Course Title	Units
CMT 112	Construction Estimating	3
CMT 136	Construction Safety	3
CMT 300	Introduction to Construction Plans and Specifications (3)	3
or BIT 102	Plan Reading and Non-Structural Plan Review (3)	
CMT 310	Materials of Construction	3
CONST 105	Rough Carpentry I - Tools, Materials, and Foundations	3
CONST 106	Rough Carpentry II - Floors, Walls, and Roof Framing	3
CONST 107	Rough Carpentry III - Exterior Finishes	3
CONST 108	Finish Carpentry I - Interior Finish	3
Total Units:		**24**

Student Learning Outcomes

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

- PSLO #1: Career Options and Goals- Summarize career options in the industry, and formulate initial career goals.
- PSLO #2: Tools- Identify common hand and power tools used in the trades and residential building science, and demonstrate competence in their safe and efficient use.
- PSLO #3: Analysis of Building Materials- Examine various building materials, and compare their strengths and weaknesses as they relate to structural integrity, sustainability, and environmental impact.
- PSLO #4: Safety- Explain the relevance of the Occupational Safety and Health Administration, and interpret those regulations specific to the construction industry
- PSLO #5: Building Principles- Utilize fundamental building principles to layout and construct residential and light carpentry structures
- PSLO #6: Analysis of Sustainability- Understand the principles of Green Building and compare and contrast emerging techniques with traditional production building methods.
- PSLO #7: Building Performance Testing- Perform shell and duct diagnostics, and prescribe measures that can be tested and retested for marked improvement in the energy efficiency of the home.

Construction Pre-Apprenticeship Certificate

This program prepares students for entry into formal apprenticeship programs and other entry level jobs in the building and construction industry.

Certificate Requirements

Course Code	Course Title	Units
CONST 102	Introduction to Construction Practices	4
CONST 103	OSHA 10 Hour Safety Training	1
CONST 105	Rough Carpentry I - Tools, Materials, and Foundations	3
CONST 106	Rough Carpentry II - Floors, Walls, and Roof Framing	3
CONST 107	Rough Carpentry III - Exterior Finishes	3
CONST 108	Finish Carpentry I - Interior Finish	3
Total Units:		**17**

Enrollment Eligibility

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

- Students need to be able to lift 50 pounds and be willing to work outside in all weather conditions.
- Students need to be able and willing to travel to jobsites to build houses and various projects in conjunction with normal class hours.

Student Learning Outcomes

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

- PSLO #1. Understand the career opportunities in the construction field including entry level expectations in various sectors, opportunities for an upward mobility, and strategies for career advancement.
- PSLO #2. Identify and safely operate many of the industry's common hand and power tools
- PSLO #3. Interpret basic working drawings for residential construction projects, and layout and erect basic floor, wall, and roof assemblies

Career Information

Entry level trades jobs, such as carpenter, electrician, plumber, cement mason. Those jobs can lead to other jobs such as foreman, superintendent, project manager, General contractor, estimator, scheduler, building inspector, safety manager, and even energy auditor.

Green Buildings Certificate

The purpose of this certificate is to develop job skills and an understanding of green strategies for high performance buildings and livable communities. It is focused at students and professionals in the fields of architecture; construction; building management; construction management; building inspection; design technology; landscape; and planning, who want to acquire a comprehensive knowledge of an integrated, economic life-cycle approach to the design of the built environment. It includes study of green rating systems, material choices and environmental strategies for a livable, sustainable future.

Certificate Requirements

Course Code	Course Title	Units
ARCH 342	Introduction to Green Buildings	3
CMT 310	Materials of Construction	3
A minimum of 12 units from the following:		12
ARCH 332	Design Awareness (3)	
ARCH 334	Advanced Design in Three Dimensions (3)	
ADT 320	Architectural Design Technology - Building Information Modeling (BIM) I (3)	
ADT 322	Architectural Design Technology - Building Information Modeling (BIM) II (3)	
BIT 150	California Energy Code – Building Energy Efficiency Standards (3)	
CONST 143	Solar Photovoltaic Systems (3)	
ECON 306	Environmental Economics (3)	
GEOG 302	Environmental Studies & Sustainability (3)	
GEOG 305	Global Climate Change (3)	
GEOG 306	Weather and Climate (3)	
Total Units:		**18**

Student Learning Outcomes

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

- PSLO 1: Establish meaningful ethical, social and environmental objectives for buildings and communities based on the values of energy and resource conscious design.
- Compare and contrast societal and economic implications of utilizing renewable and non-renewable energy sources.
- Compare and contrast the effect of contextual issues and evaluate their impact on energy consumption, environment and the beneficial experience of interior and exterior spaces.
- PSLO 2: Identify and articulate issues related to the choice of various building, landscape and environmental systems; ideate responsive solutions; and compare the alternatives in making effective, sustainable decisions.
- Analyze and calculate energy use to make informed, environmentally-sound and economic choices to satisfy human needs for comfort and aesthetics.
- Explain the concepts of resource conservation and waste reduction and make sustainable design choices related to materials and construction.
- Develop a comprehensive understanding of green rating systems, livable communities strategies and the ability to apply these concepts in decision-making.
- PSLO 3: Demonstrate independent learning, teamwork and continuing education habits that will help to encourage a life long pursuit of knowledge.
- To use a team work process to identify issues, analyze criteria, research and apply learned principles to synthesize solutions to specific design projects.
- To demonstrate habits of visual note making and independent research by developing a sketch and notebook to record learning.

Career Information

This certificate helps to develop the knowledge base related to sustainable green buildings and environments for the careers of architecture, construction, construction management, building inspection, horticulture, landscape architecture and architectural design technology.

Solar Installers Certificate

The Solar Installers Certificate program is designed to quickly prepare students for jobs installing solar panels in the solar industry. Our focus is to blend the academic rigor of the classroom, with the hands on training that entry level solar installers need to be successful in the industry.
The certificate is a fast paced blend of our introductory course for the construction industry, OSHA 10 Hour Safety certification, and two courses in solar photovoltaics, that culminate with national certification exam preparation and job placement assistance.

Certificate Requirements

Course Code	Course Title	Units
CONST 102	Introduction to Construction Practices	4
CONST 103	OSHA 10 Hour Safety Training	1
CONST 143	Solar Photovoltaic Systems	3
CONST 145	Advanced Solar Photovoltaic Systems	3
Total Units:		**11**

Enrollment Eligibility

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

- Students should have the physical ability to lift 40 pounds, and the desire to work on both roof top and ground mount solar arrays.

Student Learning Outcomes

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

- PSLO #1 Define the role that safety plays in the construction industry, with an emphasis on hazard recognition and regulatory compliance for solar installers.
- Demonstrate safe working practices with the tools and duties associated with solar panel installations.
- PSLO #2 Summarize the common career paths in the solar industry, and articulate the standard entry level expectations for those careers.
- PSLO #3 Define and describe the purpose and function of the major components in a typical photovoltaic solar system.
- Analyze the difference between grid tied PV systems and those PV systems with on site storage.

- PSLO #4 Demonstrate proficiency in system design and system sizing.
- Show knowledge of site survey, load analysis, system losses, and utility interconnection requirements.
- PSLO #5 Summarize system commissioning and system maintenance.
- Identify regularly used electrical test equipment and the typical performance parameters that are commonly monitored for PV solar systems.

Career Information

Solar installer, Crew leader, Solar sales, System designer, Estimator, Project manager, Safety manager, Solar trainer.

Construction (CONST) Courses

CONST 102 Introduction to Construction Practices

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: None.

This course provides students with in-depth analysis of the organization and structure of the construction industry and the many career choices the industry offers. Many of the construction trades are represented, with formal apprenticeship opportunities highlighted. The emerging "Green Building" jobs will be examined, as well as other topics in sustainability. Guest speakers and field trips provide the students a wide view of the expectations of entry-level work, wages, benefits, and work place culture. The curriculum also emphasizes job site safety, practical working knowledge of tool and equipment use, an introduction to blueprints, and an overview of industry math.

CONST 103 OSHA 10 Hour Safety Training

Units: 1
Hours: 18 hours LEC
Prerequisite: None.

This OSHA Outreach Training Program is for training construction students and industry workers in basic safety and health hazard recognition and prevention. This course is taught by authorized industry outreach trainers, and successful students will receive the OSHA 10 Hour card. Topics include: Intro to OSHA, Fall Protection, Electrical, Ladders and Stairs, Scaffolds, PPE, Hand and Power Tools, Hazcom, Motor Vehicles, Confined Space Entry, Fire Protection, and Ergonomics.

CONST 105 Rough Carpentry I - Tools, Materials, and Foundations

Units: 3
Hours: 27 hours LEC; 81 hours LAB
Prerequisite: None.

This course is designed to teach the introductory skills required to be successful in the construction industry. Course topics include an Introduction to the Industry, Hand and Power Tools, Building Materials, Introduction to Plans and Building Codes, Site Layout and Foundations. A heavy emphasis is placed on "hands on" demonstration of proficiency with safe and efficient use of tools, plan reading, as well as the fundamental layout techniques for foundations.

CONST 106 Rough Carpentry II - Floors, Walls, and Roof Framing

Units: 3
Hours: 27 hours LEC; 81 hours LAB
Prerequisite: None.

This course is designed to teach the skills required to be successful in the construction industry. Course topics include Skill Development in Hand and Power Tool use, as well as techniques in Floor Framing, Wall Framing and Roof Framing. A heavy emphasis is placed on "hands-on" demonstration of proficiency with safe and efficient use of tools, plan reading, as well as the fundamental layout techniques for floor, wall, and roof framing.

CONST 107 Rough Carpentry III - Exterior Finishes

Units: 3
Hours: 27 hours LEC; 81 hours LAB
Prerequisite: None.

This course is designed to teach the skills required to be successful in the construction industry. Course topics include skill development for hand and power tools, review of framing principles, windows and doors, insulation and ventilation, exterior siding, and roofing. A heavy emphasis is placed on "hands-on" demonstration of proficiency with safe and efficient use of tools, window and door installations, as well as siding and roofing.

CONST 108 Finish Carpentry I - Interior Finish

Units: 3
Hours: 27 hours LEC; 81 hours LAB
Prerequisite: None.

This course is designed to teach the skills required to be successful in the construction industry. Course topics include Skill development with tools, Drywall, Interior doors and door frames, Interior trim, Stairs and cabinets. A heavy emphasis is placed on "hands-on" demonstration of proficiency with safe and efficient use of tools, drywall applications, as well as the accurate installation of interior trim.

CONST 132 Introduction to Residential Heating and Cooling Systems

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.

This course is designed to teach the introductory skills required to be successful in the heating and cooling trades. Course topics include career paths leading into the Heating, Ventilation, and Air Conditioning (HVAC) trades, skill development for hand and power tools, an introduction to heating and cooling principles, components of common HVAC

systems, heat pump technology, duct system design, and heat load calculations.

CONST 142 Energy, Performance, and Indoor Air Quality

Units: 3
Hours: 54 hours LEC
Prerequisite: None.

This course is intended to be the third in the series of Green Building courses, although the sequence is not mandatory. Each course in the series focuses on specific pieces of the larger Green Building sector. This course covers the following topics: The science of energy and its sources, as well as the common alternative and renewable sources of energy that are being researched and developed.
Green building guidelines and state energy efficiency standards for buildings and appliances will also be examined. The "Whole House approach" to Building Performance will be an under-current through out the course. Indoor Air Quality, and other health topics will be introduced. This course satisfies the elective units for the CRC Green Building Certificate.

CONST 143 Solar Photovoltaic Systems

Units: 3
Hours: 45 hours LEC; 27 hours LAB
Prerequisite: None.

This course will cover general solar industry topics with an emphasis photovoltaic principles and products. There will be a brief study of the political landscape in California in support of the California Solar Initiative, and market strategies and incentives will also be discussed. There will be some hands on projects to help students learn basic electrical theory and circuits, and an introduction to print reading. System Sizing and components will be covered as well.

CONST 145 Advanced Solar Photovoltaic Systems

Units: 3
Hours: 45 hours LEC; 27 hours LAB
Prerequisite: CONST 143 with a grade of "C" or better

This course reviews basic solar PV system basics, and will continue deeper into concepts in system sizing and wiring, utility interconnection requirements and policies, commissioning, maintenance and troubleshooting, economic analysis and business models, and will conclude with preparation for an external industry certification examination.

CONST 160 Introduction to Residential Building Performance

Units: 6
Hours: 81 hours LEC; 81 hours LAB
Prerequisite: None.

This class focuses on preparing students for jobs within the Residential Building Performance and Weatherization industries. This class will train students in residential building science, energy efficiency, and combustion appliance safety. Topics will include nationally recognized Building Performance Institute standards and California Weatherization Installation Standards, Duct and Shell Sealing Measures, and Combustion Appliance Zone testing. This is the first course in the Residential Building Performance and Energy Assessment certificate.

CONST 161 Intermediate Residential Building Performance and Energy Auditing

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: CONST 160 with a grade of "C" or better

This course focuses on preparing students for jobs in the Building Performance and Residential Energy Assessment industry. This class will train students about current auditing methods and standards including inspection, whole house performance diagnostics, building science, software applications for the energy professional, utility fee structure and bill disaggregation, and the industry's recognized rating systems. This course will also prepare the student for the Building Performance Institute "Building Analyst" exam.

CONST 163 Advanced Energy Auditing and Energy Modeling

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: CONST 161

This course prepares students for jobs in the building performance and energy auditing industry. This class will train students in advanced energy auditing techniques using energy modeling software, and thermography. Students will be trained to use energy modeling software recognized by the California Energy Commission for both new and existing structures. Students will also be trained to use infra red imaging for accurate, non-invasive inspection of homes, assisting the auditor in locating thermal bridging in the building envelope. Topics in Multifamily and "Envelope Professional" certification will also be discussed.

CONST 294 Topics in Green Building Technology

Units: 0.5 - 4
Hours: 9 - 54 hours LEC
Prerequisite: None.

This course covers special topics not included in current green building classes. Topics may be offered in workshops or seminar presentations on timely subjects or targeted for specific audiences.

CONST 298 Work Experience in Construction

Units: 0.5 - 4
Hours: 27 - 216 hours LAB
Prerequisite: None.
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position or job related to career goals in Construction.

This course provides students with opportunities to develop marketable skills in preparation for employment in their major

field of study or advancement within their career. It is designed for students interested in work experience and/or internships in associate degree level or certificate occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and complete 27 hours of related work experience for 0.5 unit. An additional 27 hours of related work experience is required for each additional 0.5 units. 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.

CONST 299 Experimental Offering in Construction

Units: 5
Hours: 72 hours LEC; 54 hours LAB
Prerequisite: None.

This class focuses on preparing students for jobs within the weatherization industry. This class will train students in Weatherization Installation Standards, Duct ands Shell Sealing Measures, and Combustion Appliance Safety. Students enrolled in Construction 299- Weatherization Standards, will sign up with the Sacramento Employment Training Agency, and receive funding for tools, books, and other support services, including job placement services, upon successful completion of the course, and an endorsement from the instructor.

Construction Management Technology

This CRC program offers training of management-level employees for the construction industry, as well as preparation for transfer to a four-year college or university construction program. Graduates may be employed by contractors, business and government agencies for work in project planning, estimating and project coordinating. A student planning to transfer to a four-year college or university should consult the lower division requirements of the anticipated college program.

Degrees and Certificates Offered

A.S. in Construction Management Technology

Construction Management Technology Certificate

Green Buildings Certificate

Dean Ashu Mishra

Department Chair Ryan Connally

Phone (916) 525-4319

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Associate Degree

A.S. in Construction Management Technology

This program offers training of management-level employees for the construction industry, as well as preparation for transfer to a four-year college or university construction program. Graduates may be employed by contractors, business and government agencies for work in project planning, estimating and project coordinating. A student planning to transfer to a four-year college or university should consult the lower division requirements of the anticipated college program.

HIGHLIGHTS
*Current curriculum emphasizes analytical problem solving and management skills
*Field trips to a variety of construction sites to study construction methods and procedures (instructor option)
*Transfer potential to four-year programs in Construction Technology

Degree Requirements

Course Code	Course Title	Units
ACCT 101	Fundamentals of College Accounting (3)	3 - 4
or ACCT 301	Financial Accounting (4)	
ADT 310	Architectural Computer-Aided Drawing I	3
CISC 302	Computer Familiarization	2
CMT 300	Introduction to Construction Plans and Specifications (3)	3
or BIT 102	Plan Reading and Non-Structural Plan Review (3)	
CMT 112	Construction Estimating	3
CMT 120	Legal Aspects of Construction	3
CMT 134	Construction Scheduling and Critical Path Method	3
CMT 136	Construction Safety	3
CMT 310	Materials of Construction	3
CMT 313	Computer Estimating for Construction	3
PHYS 310	Conceptual Physics	3
Total Units:		**32 - 33**

The Construction Management Technology Associate in Science (A.S.) degree may be obtained by completion of the required program, plus the local CRC General Education Requirement, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Career Information

Plan Checker; Estimator; Superintendent; Project Manager; Contractor; Retail/Wholesale; Office Manager; Developer; Foreman; Laborer. Some career options may require more than two years of college study. Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.

Certificates of Achievement

Construction Management Technology Certificate

This CRC program offers training of management-level employees for the construction industry, as well as preparation for transfer to a four-year college or university construction program. Graduates may be employed by contractors, business and government agencies for work in project planning, estimating and project coordinating. A student planning to transfer to a four-year college or university should consult the lower division requirements of the anticipated college program.

HIGHLIGHTS:

*Current curriculum emphasizes analytical problem solving and management skills

*Field trips to a variety of construction sites to study construction methods and procedures (Instructor option)
*Transfer potential to 4-year programs in Construction Technology

NOTE TO TRANSFER STUDENTS: If you are interested in transferring to a four-year college or university to pursue a bachelor’s degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate’s degree in this major may be different from the requirements needed for the Bachelor’s degree.

Certificate Requirements

Course Code	Course Title	Units
ADT 310	Architectural Computer-Aided Drawing I	3
CISC 302	Computer Familiarization	2
CMT 112	Construction Estimating	3
CMT 120	Legal Aspects of Construction	3
CMT 134	Construction Scheduling and Critical Path Method	3
CMT 300	Introduction to Construction Plans and Specifications (3)	3
or BIT 102	Plan Reading and Non-Structural Plan Review (3)	
CMT 310	Materials of Construction	3
CMT 313	Computer Estimating for Construction	3
Total Units:		**23**

Career Information

Plan Checker; Estimator; Superintendent; Project Manager; Contractor; Retail/Wholesale; Office Manager; Developer; Foreman; Laborer Some career options may require more than two years of college study. Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.

Green Buildings Certificate

The purpose of this certificate is to develop job skills and an understanding of green strategies for high performance buildings and livable communities. It is focused at students and professionals in the fields of architecture; construction; building management; construction management; building inspection; design technology; landscape; and planning, who want to acquire a comprehensive knowledge of an integrated, economic life-cycle approach to the design of the built environment. It includes study of green rating systems, material choices and environmental strategies for a livable, sustainable future.

Certificate Requirements

Course Code	Course Title	Units
ARCH 342	Introduction to Green Buildings	3
CMT 310	Materials of Construction	3
A minimum of 12 units from the following:		12
ARCH 332	Design Awareness (3)	
ARCH 334	Advanced Design in Three Dimensions (3)	
ADT 320	Architectural Design Technology - Building Information Modeling (BIM) I (3)	
ADT 322	Architectural Design Technology - Building Information Modeling (BIM) II (3)	
BIT 150	California Energy Code – Building Energy Efficiency Standards (3)	
CONST 143	Solar Photovoltaic Systems (3)	
ECON 306	Environmental Economics (3)	
GEOG 302	Environmental Studies & Sustainability (3)	
GEOG 305	Global Climate Change (3)	
GEOG 306	Weather and Climate (3)	
Total Units:		**18**

Student Learning Outcomes

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

- PSLO 1: Establish meaningful ethical, social and environmental objectives for buildings and communities based on the values of energy and resource conscious design.
- Compare and contrast societal and economic implications of utilizing renewable and non-renewable energy sources.
- Compare and contrast the effect of contextual issues and evaluate their impact on energy consumption, environment and the beneficial experience of interior and exterior spaces.
- PSLO 2: Identify and articulate issues related to the choice of various building, landscape and environmental systems; ideate responsive solutions; and compare the alternatives in making effective, sustainable decisions.
- Analyze and calculate energy use to make informed, environmentally-sound and economic choices to satisfy human needs for comfort and aesthetics.
- Explain the concepts of resource conservation and waste reduction and make sustainable design choices related to materials and construction.
- Develop a comprehensive understanding of green rating systems, livable communities strategies and the ability to apply these concepts in decision-making.
- PSLO 3: Demonstrate independent learning, teamwork and continuing education habits that will help to encourage a life long pursuit of knowledge.
- To use a team work process to identify issues, analyze criteria, research and apply learned principles to synthesize solutions to specific design projects.
- To demonstrate habits of visual note making and independent research by developing a sketch and notebook to record learning.

Career Information

This certificate helps to develop the knowledge base related to sustainable green buildings and environments for the careers of architecture, construction, construction management, building inspection, horticulture, landscape architecture and architectural design technology.

Construction Management Technology (CMT) Courses

CMT 112 Construction Estimating

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: CMT 310

This course covers construction quantity survey and estimating practices for residential, light commercial and green building projects.

CMT 120 Legal Aspects of Construction

Units: 3
Hours: 54 hours LEC
Prerequisite: None.

This course is a summary of the legal implications of licensing, contracts, specifications and their interpretations. Emphasis on the laws of liability, workers compensation, social security, Cal-OSHA, lien laws, and federal laws affecting construction and compliance problems.

CMT 134 Construction Scheduling and Critical Path Method

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: CMT 112

This course introduces computer and manual techniques used in planning, scheduling and controlling construction projects. Network analysis and applications using critical path method and current computer programs will be utilized.

CMT 136 Construction Safety

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: CMT 300

This course addresses the application of safety principles in construction with emphasis on the Occupation Safety and Health Act of 1970 and California OSHA.

CMT 295 Independent Studies in Construction Management Technology

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

CMT 299 Experimental Offering in Construction Management Technology

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

CMT 300 Introduction to Construction Plans and Specifications

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Concurrent enrollment in CMT 310
Transferable: CSU

This is an introductory course in how to read building plans and specifications. Intended for both the homeowner and the builder, the course gives emphasis to building plan symbols, interpretation of shop and field drawings, and requirements for obtaining building permits.

CMT 310 Materials of Construction

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: CMT 300, or placement through the assessment process.
Transferable: CSU

This is a general survey of materials and methods of building construction. An overall view of residential, commercial, and heavy construction practices will be studied.

CMT 313 Computer Estimating for Construction

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: CMT 112
Transferable: CSU

This course is designed to meet current demands for computerized estimating in the construction industry. This course will integrate computer technology with current construction estimating practices. This technology will provide the student with experience in determining construction quantities and costs quickly, economically and effectively.

CMT 334 Project Management I

Units: 3
Hours: 54 hours LEC
Prerequisite: CMT 300, 310, and 313 with grades of "C" or better

This course provides development of fundamental construction project management skills ranging from soft skill development, document control, negotiation & communication skills, meeting management, computer management software familiarization and project setup.

CMT 335 Project Management II

Units: 3
Hours: 54 hours LEC
Prerequisite: CMT 334 with a grade of "C" or better
Transferable: CSU

This course covers the diverse roles and responsibilities of a project manager. Students will learn how to communicate and coordinate with the construction team using contextual learning applications in combination with scenario-based exercises. Critical thinking skills, contingency planning, schedule and budget management, and team coordination management skills are all developed while managing a mock project.

CMT 495 Independent Studies in Construction Management Technology

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

CMT 498 Work Experience in Construction Management Technology

Units: 0.5 - 4
Hours: 27 - 216 hours LAB
Prerequisite: None.
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position or job related to career goals in Construction Management Technology.
Transferable: CSU

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in transfer level degree occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and complete 27 hours of related work experience for 0.5 unit. An additional 27 hours of related work experience is required for each additional 0.5 units. 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.

CMT 499 Experimental Offering in Construction Management Technology

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU

This is the experimental courses description.

Culinary Arts Management

This program provides training for management-track employment in commercial culinary service operations and/or for those wishing to start a food service business. Courses begin at entry-level training; advanced courses build upon skills acquired in pre-requisite courses.

The degrees and certificates include coursework in culinary arts, food and equipment use and identification, culinary sanitation, nutrition, management techniques, marketing, legal control, financial analysis, and entrepreneurship. Students will apply those skills with training in lab courses and work experience.

Sanitation training is offered as an integral part of each certificate and degree and is certified by the National Restaurant Association.

Students who complete the AA in Culinary Arts Management are also eligible to receive the Culinary Services Certificate and the Cooking and Supervision Certificate, which are embedded within the degree path. Students who complete the AA in Restaurant and Food Service Entrepreneurship are also eligible to receive the Culinary Services Certificate, the Cooking and Supervision Certificate, and the Small Business Management/ Entrepreneurship Certificate, which are embedded within the degree path. Students who complete all program requirements for their chosen AA Degree will be eligible to graduate with all eligible certificates along with the degree.

To participate in production labs, students must be able to lift and carry objects that weigh up to 50 lbs. Students must have the ability to use knives and other hand tools.

Degrees and Certificates Offered

A.A. in Culinary Arts Management

A.A. in Restaurant and Food Service Entrepreneurship

Basic Culinary Services Certificate

Cooking and Supervision Certificate

Dean Kris Hubbard

Department Chair Dave Andrews

Phone (916) 691-7020

Email hubbark@crc.losrios.edu

Associate Degrees

A.A. in Culinary Arts Management

This program provides training for management track employment in commercial culinary service operations. Courses begin at entry-level training; advanced courses build upon skills acquired in pre-requisite courses.

The program includes coursework in culinary arts, food and equipment use and identification, culinary sanitation, nutrition, management techniques, marketing, legal control, financial analysis and entrepreneurship. Students will apply those skills with training in lab courses and work experience.

Sanitation training is offered as an integral part of each certificate and degree, and is certified by the National Restaurant Association as well as Sacramento County Environmental Health Division.

Both the Basic Culinary Services Certificate and the Cooking and Supervision Certificate are embedded within this program. Students who complete all program requirements for the Culinary Arts Management A.A. Degree will be eligible to graduate with both certificates and their degree.

To participate in production labs, students must be able to lift and carry objects up to 50 Lbs. Students must have the ability to use knives and other hand tools.

Degree Requirements

Course Code	Course Title	Units
First Semester:		
CAM 300	Survey of Food Service Careers and Career Skills	3
First Semester:		
CAM 306	Culinary Sanitation & Safety	2
Second Semester:		
CAM 301	Food Theory and Preparation	4[1]
Second Semester:		
CAM 321	Culinary Computations	3
Fall (Semester 3 or 4):		
CAM 310	Quantity Food Production	4
Spring (Semester 3 or 4):		
CAM 316	Micro-Entrepreneurship in Food Service	4
Fall (Semester 3 or 4):		
CAM 332	Culinary Financial Management	3
Fall, Spring, or Summer (Semester 3 or 4):		
A minimum of 4 units from the following:		4
CAM 498	Work Experience in Culinary Arts Management (0.5 - 4)	
Any Semester:		
BUS 300	Introduction to Business	3
First Semester, Area II(a) Requirement:		
BUS 310	Business Communications (3)	3
or ENGWR 341	Introduction to Technical and Professional Writing (3)	
Any Semester:		
BUS 340	Business Law	3
Any Semester:		
BUS 350	Small Business Management/Entrepreneurship (3)	3
or MGMT 362	Techniques of Management (3)	
Any Semester:		
MKT 330	Internet Marketing	3
Any Semester, Area IV Requirement :		
HORT 313	Sustainable Agriculture (3)	3

Course Code	Course Title	Units
or HORT 300	Introduction to Horticulture (3)	
or ENGR 304	How Things Work (3)	
Any Semester, Area III(b) Requirement:		
NUTRI 300	Nutrition	3
Any Semester, Area V(b)and Area VI Requirements:		
NUTRI 310	Cultural Foods of the World (3)	3
or BUS 330	Managing Diversity in the Workplace (3)	
Total Units:		**51**

[1]CAM 300, 306, and 301 serve as prerequisite courses for many higher level courses.

The Culinary Arts Management Associate in Arts (A.A.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Student Learning Outcomes

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

- Demonstrate the ability to use professional written and oral communication skills necessary to communicate to a variety of audiences.
- Demonstrate awareness, understanding, and skills necessary to live and work in a diverse world.
- Demonstrate necessary mathematical principles for foodservice production and management tasks.
- Understand and practice proper sanitation and safety procedures critical to the foodservice industry.
- Demonstrate the ability to develop, examine, question, and explore perspectives or alternatives to problems within the foodservice industry.
- Demonstrate proficiency in a variety of managerial skills necessary for foodservice managers and entrepreneurs.
- Exhibit a basic understanding of nutrition and the relationship between nutrition and food preparation.
- Demonstrate basic knowledge of cooking techniques and procedures.
- Practice professional ethics, provide leadership, demonstrate personal and global responsibility and work effectively as a team member.

Career Information

Culinary Manager; Culinary Supervisor; Cook; Kitchen Manager; Restaurant Manager; Caterer; Food Service Worker.

A.A. in Restaurant and Food Service Entrepreneurship

This program provides training and education for those wishing to own a restaurant or other food service venture. The various elements involved in starting and operating a small business are covered as well as training in food theory and production, safety and sanitation, and business practices.

The Basic Culinary Services Certificate; and the Cooking and Supervision Certificate; and the Small Business Management/ Entrepreneurship Certificate are embedded within this program. Students who complete all program requirements for the Restaurant and Food Service Entrepreneurship A.A. Degree will be eligible to graduate with all three certificates and their degree.

To participate in production labs, students must be able to lift and carry objects up to 50 Lbs. Students must have the ability to use knives and other hand tools.

Degree Requirements

Course Code	Course Title	Units
First Semester:		
CAM 300	Survey of Food Service Careers and Career Skills	3
First Semester:		
CAM 306	Culinary Sanitation & Safety	2
Second Semester:		
CAM 301	Food Theory and Preparation	4
Second Semester:		
CAM 321	Culinary Computations	3
Fall (Semester 3 or 4):		
CAM 310	Quantity Food Production	4
Spring (Semester 3 or 4):		
CAM 316	Micro-Entrepreneurship in Food Service	4
Fall (Semester 3 or 4):		
CAM 332	Culinary Financial Management	3
Offered Only Fall Semester in Odd Years:		
BUS 215	Entrepreneurial Opportunity and Business Planning	3
Offered Fall and Spring Semesters :		
BUS 300	Introduction to Business	3
Offered Fall and Spring Semesters :		
BUS 340	Business Law	3
Offered Fall, Spring, and Summer Semesters:		
BUS 350	Small Business Management/ Entrepreneurship	3
Offered Fall, Spring, and Summer Semesters :		
MKT 300	Principles of Marketing	3
Offered Fall and Spring Semesters :		
ACCT 301	Financial Accounting (4)	3 - 4
or BUS 320	Concepts in Personal Finance (3)	
Any Semester, Area III(b) Requirement:		
NUTRI 300	Nutrition	3
Any Semester, Area V(b)and Area VI Requirements:		
NUTRI 310	Cultural Foods of the World (3)	3
or BUS 330	Managing Diversity in the Workplace (3)	
Offered Fall, Spring, and Summer :		
BUS 310	Business Communications (3)	3
or ENGWR 341	Introduction to Technical and Professional Writing (3)	

Course Code	Course Title	Units
Any Semester, Area IV Requirement:		
HORT 313	Sustainable Agriculture (3)	3
or HORT 300	Introduction to Horticulture (3)	
or ENGR 304	How Things Work (3)	
Total Units:		**53 - 54**

The Restaurant and Food Service Entrepreneurship Associate in Arts (A.A.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Student Learning Outcomes

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

- Understand and practice proper sanitation and safety procedures critical to the food service industry.
- Demonstrate critical thinking skills needed to assess and correct problems within food preparation, production, presentation and service.
- Develop effective oral and written communication skills that can be applied in various business settings.
- Demonstrate basic knowledge of cooking techniques and procedures.
- Exhibit a basic understanding of nutrition
- Demonstrate skill and comprehension in entrepreneurship as indicated by course outcomes.
- Transform an entrepreneurial idea into a viable business concept.
- Employ appropriate management, finance, accounting, and marketing techniques required in operating a business.
- Demonstrate the ability to think critically and analyze problems.
- Evaluate the feasibility of success when starting a new business venture.
- Research and compose a business plan that includes all facets of starting and managing a business.
- Express ideas and facts clearly and completely.

Career Information

Small Business Owner- Restaurant and Food Service field. Restaurant manager.

Certificates of Achievement

Basic Culinary Services Certificate

This program provides training in the entry-level skills necessary for a career in food service. Courses begin at basic training, culminating in an advanced course focusing on the quantity production of food.

The program includes coursework in culinary arts, culinary sanitation, and customer service. Students will apply skills with hands-on training in production centered labs.

Sanitation training is offered as an integral part of each certificate and degree in the department and is certified by the National Restaurant Association as well as Sacramento County Environmental Health Division.

This certificate is the first in a program series. After completion, students can continue CAM coursework towards a certificate in cooking and supervision and then towards an A.A. Degree, with all coursework counting as part of the requirements for the degree.

To participate in production labs, students must be able to lift and carry objects up to 50 Lbs. Students must have the ability to use knives and other hand tools.

Certificate Requirements

Course Code	Course Title	Units
CAM 300	Survey of Food Service Careers and Career Skills	3
CAM 306	Culinary Sanitation & Safety	2
CAM 301	Food Theory and Preparation	4[1]
CAM 321	Culinary Computations	3
CAM 310	Quantity Food Production	4
Total Units:		**16**

[1]CAM 300, 306, and 301 serve as prerequisite courses for many higher level department courses

Student Learning Outcomes

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

- demonstrate the ability to use professional written and oral communication skills necessary to communicate to a variety of audiences.
- demonstrate basic mathematical principles for foodservice record keeping, baking procedures, and recipe conversions.
- understand and practice proper sanitation and safety procedures critical to the foodservice industry.
- demonstrate basic knowledge of cooking techniques and procedures.
- demonstrate critical thinking skills needed to assess and correct problems within food preparation and production.

Career Information

This program is designed to prepare graduates with the skills necessary to enter into entry level employment in a food service operation.

Cooking and Supervision Certificate

This program provides training in the basic skills necessary for a career in food service management. Coursework begins with basic training, culminating in an advanced course focusing on the quantity production of food and intermediate skills in management relevant to the foodservice industry.

The program includes coursework in culinary arts, culinary sanitation, customer service, and management principles. Students will apply skills with training in labs at at work experience sites.

Sanitation training is offered as an integral part of each certificate and degree in the department and is certified by the National Restaurant Association as well as Sacramento County Environmental Health Division.

This certificate is the second in a program series. After completion, students can continue their CAM coursework towards an A.A. Degree, with all coursework counting as part of the requirements for the degree.

To participate in production labs, students must be able to lift and carry objects up to 50 Lbs. Students must have the ability to use knives and other hand tools.

Certificate Requirements

Course Code	Course Title	Units
CAM 300	Survey of Food Service Careers and Career Skills	3
CAM 306	Culinary Sanitation & Safety	2
CAM 301	Food Theory and Preparation	4[1]
CAM 321	Culinary Computations	3
CAM 310	Quantity Food Production	4
CAM 316	Micro-Entrepreneurship in Food Service (4)	4
CAM 332	Culinary Financial Management	3
A minimum of 2 units from the following:		2
CAM 498	Work Experience in Culinary Arts Management (0.5 - 4)	
A minimum of 3 units from the following:		3
NUTRI 300	Nutrition (3)	
or HORT 300	Introduction to Horticulture (3)	
or HORT 313	Sustainable Agriculture (3)	
or NUTRI 310	Cultural Foods of the World (3)	
A minimum of 3 units from the following:		3
BUS 300	Introduction to Business (3)	
or BUS 310	Business Communications (3)	
or BUS 340	Business Law (3)	
or BUS 330	Managing Diversity in the Workplace (3)	
or BUS 350	Small Business Management/Entrepreneurship (3)	
or MGMT 362	Techniques of Management (3)	
or MKT 330	Internet Marketing (3)	
Total Units:		**31**

[1]CAM 300, 306, and 301 serve as pre-requisite courses for many higher level department courses

Student Learning Outcomes

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

- Demonstrate the ability to use professional written and oral communication skills necessary to communicate to a variety of audiences.
- Demonstrate necessary mathematical principles for foodservice production and management tasks.
- Understand and practice proper sanitation and safety procedures critical to the foodservice industry.
- Exhibit a basic understanding of nutrition and the relationship between nutrition and food preparation.
- Demonstrate basic knowledge of cooking techniques and procedures.
- Work effectively as a team member.

Career Information

This program is designed to prepare graduates with the skills necessary for advancement from entry-level employment in a food service operation.

Culinary Arts Management (CAM) Courses

CAM 294 Topics in Culinary Arts Management

Units: 0.5 - 4
Hours: 5 - 36 hours LEC; 13 - 108 hours LAB
Prerequisite: None.

Coursework designed to cover special topics not included in current culinary offerings. Topics may be offered in a workshop or seminar presentation on timely subjects or targeted for specific audiences.

CAM 300 Survey of Food Service Careers and Career Skills

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU

This course provides an overview of the various careers and the necessary career skills required in the foodservice management field. It concentrates on the career paths within the food service sector, including a review of the industry's past and present state. Additionally, the course will provide guidance on essential career skills such as interview techniques and job strategies.

CAM 301 Food Theory and Preparation

Units: 4
Hours: 36 hours LEC; 108 hours LAB
Prerequisite: None.
Corequisite: CAM 306 and 321
Transferable: CSU

This course provides a comprehensive study of the basic principles and techniques involved in professional food preparation. The principles covered within this course will serve as the foundation for all other lab courses. Topics will include: work simplification, measurements/conversions, knife skills, soups, sauces, salads, heat transfer methods, equipment recognition, cleaning, use of hand tools/measuring devices, as well as identifying, cleaning, and cutting raw materials. This course will examine the reasons for procedures and phenomena and the prevention and/or correction of cooking failures. The laboratory emphasizes theory application through the preparation of soups, sauces, salads, vegetables, meats, poultry, seafood, breakfast dishes, grains, pastas and potatoes. This course may require out of class time attendance at events (all required events will be listed in the course syllabus).

CAM 306 Culinary Sanitation & Safety

Units: 2
Hours: 36 hours LEC
Prerequisite: None.
Transferable: CSU

This course covers the principles of food microbiology, important foodborne diseases, standards that are enforced by regulatory agencies, and applied measures for the prevention of foodborne diseases and other microbiological problems. All phases of sanitation for professional culinary operations are covered in the context of schools, hospitals and commercial restaurants and cafeterias. Subjects covered include types and causes of food borne illnesses, correct procedures for handling food in quantity, and the principles of cleaning and sanitizing. The course focuses on practical applications for culinary workers, supervisors, and trainers. Completion of the course includes optional certification by the Educational Foundation of the National Restaurant Association.

CAM 310 Quantity Food Production

Units: 4
Hours: 36 hours LEC; 108 hours LAB
Prerequisite: CAM 300, 301, and 306 with grades of "C" or better
Transferable: CSU

This course is a survey of the principles of quantity food production and service. The production and service of industry quality and quantity food will be covered. Components may include knife skills, equipment recognition, use of hand tools and measuring devices, and cleaning / cutting raw materials. This course may also cover quantity preparation of sandwiches, soups, salads, garde manger items, vegetables, meats, poultry, seafood, breakfast dishes, rice and other grains, pastas and potatoes, sauces and simple dessert items.
This course may require out of class time attendance at events (all required events outside of class time will be listed in the course syllabus). This course has mandatory prerequisites that must be completed before enrolling.

CAM 316 Micro-Entrepreneurship in Food Service

Units: 4
Hours: 36 hours LEC; 108 hours LAB
Prerequisite: CAM 300, 301, and 306 with grades of "C" or better
Advisory: CAM 310
Transferable: CSU

This course is designed to teach students the process for developing a micro-entrepreneurial business from conception to production. A variety of topics relevant to the food service micro-entrepreneur will be covered and practiced.
In person sections of this course may require attendance at events outside of the normally scheduled class time (all required events outside of class time will be listed in the course syllabus).

CAM 321 Culinary Computations

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU

This course will cover a variety of basic culinary computations necessary for the food service manager. The primary focus will be on measurements and recipe conversions. Other applicable topics may be covered including basic menu and labor costing and the use of spreadsheets for computational purposes. This course will serve as a pre-requisite for many higher level CAM courses.

CAM 332 Culinary Financial Management

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Corequisite: CAM 300
Transferable: CSU

This course focuses on food and beverage pricing, culinary accounting and finance for culinary operations. The course includes the use of accounting techniques in such areas as analyzing business performance, budgeting, as well as cost and profit planning.

CAM 495 Independent Studies in Culinary Arts Management

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

CAM 498 Work Experience in Culinary Arts Management

Units: 0.5 - 4
Hours: 27 - 216 hours LAB
Prerequisite: CAM 300, 301, and 306 with grades of "C" or better
Corequisite: CAM 310
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position or job related to career goals in Culinary Arts Management.
Transferable: CSU

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed

for students interested in work experience and/or internships in transfer level degree occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and complete 27 hours of related work experience for 0.5 unit. An additional 27 hours of related work experience is required for each additional 0.5 units. 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.

CAM 499 Experimental Offering in Culinary Arts Management

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU

This is the experimental courses description.

Deaf Culture and American Sign Language Studies

CRC offers courses in Deaf Studies designed to introduce students to Deaf Culture and American Sign Language Studies. Students learn basic skills to enable them to communicate with members of the deaf community. Moreover, students learn about deaf culture such as cultural behaviors and values.

Degrees Offered

A.A. in Deaf Studies

Dean Emmanuel Sigauke
Department Chair Kim E. Harrell
Phone (916) 691-7359
Email sigauke@crc.losrios.edu

Associate Degree

A.A. in Deaf Studies

This degree provides an introductory overview of the Deaf community and American Sign Language in cultural context. Students completing the Deaf Studies A.A. degree will develops an understanding and respect for the Deaf culture which will enable them to collaborate effectively with Deaf people for the empowerment of the Deaf community. The Deaf Studies A.A. provides students with the psychosocial dynamics necessary to work in educational or social service setting or to pursue an advanced degree at a 4-year institution.

Degree Requirements

Course Code	Course Title	Units
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 351	Introduction to American Deaf Culture	3
DEAF 352	Introduction to American Deaf Education	3
DEAF 360	Deaf Art	3
A minimum of 3 units from the following:		3
DEAF 311	Fingerspelling, Classifiers and Numbers (3)	
DEAF 354	Creative Signs (3)	
DEAF 380	American Sign Language Literature (3)	
Total Units:		**28**

The Deaf Studies Associate in Arts (A.A.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Student Learning Outcomes

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

- Compare and contrast characteristics that impact a Deaf person's life in the following areas: the world of work, education, family, language and social development.
- Demonstrate the ability to carry on an American Sign Language conversation consistent with the ability of a 4th semester second language students with a Deaf individual or groups of Deaf people.
- Demonstrate characteristics related to personal growth and adjustment in various populations within and outside of the Deaf community.
- Apply skills in working with various Deaf participants within and outside of the Deaf community.
- Demonstrate skills in working with school-age Deaf children in an educational setting.
- Compare and differentiate the Deaf individual to individuals of diverse populations when comparing human development.
- Demonstrate appropriate cultural interactions within the Deaf community.
- Demonstrate ability to communicate respectfully in a Deaf-culture setting.

Career Information

This degree prepares students for entry-level positions such as paraprofessional services in an individual or group setting, in an educational or social services agency which serves Deaf consumers.

Deaf Culture and American Sign Language Studies (DEAF) Courses

DEAF 300 Introduction to Deaf Culture and ASL Studies Orientation

Units: 0.5
Hours: 9 hours LEC
Prerequisite: None.
Transferable: CSU

This course provides an overview of Deaf Culture and American Sign Language (ASL) Studies at Cosumnes 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

Units: 4
Hours: 72 hours LEC
Prerequisite: None.
Transferable: CSU; UC (Corresponds to two years of high school study)
General Education: Local GE L3

This is the first course in a series of four 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 was formerly known as SILA 305.

DEAF 311 Fingerspelling, Classifiers and Numbers

Units: 3
Hours: 54 hours LEC
Prerequisite: DEAF 310 with a grade of "C" or better
Transferable: CSU; UC

This course covers the manual alphabet, numbers and classifiers and is designed to augment expressive and receptive fingerspelling, number and classifiers skills introduced in American Sign Language (ASL) courses. The focus is on skills and perceptual strategies used by students. Emphasis is on recognition of fingerspelling in context. Basic knowledge of American Sign Language is required. It enables the ASL students to develop, expand, and reinforce hands-on experiences with ASL using basic or complex fingerspelling, numbers, and classifiers skills.

DEAF 312 American Sign Language II

Units: 4
Hours: 72 hours LEC
Prerequisite: DEAF 310 with a grade of "C" or better
Transferable: CSU; UC
General Education: Local GE L3

This is the second in a series of four courses in American Sign Language (ASL). The emphasis is on nonverbal communication. Course topics will be presented in a culturally rich context, providing students with the opportunity to develop an understanding and appreciation for Deaf culture. 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 was formerly known as SILA 306.

DEAF 314 American Sign Language III

Units: 4
Hours: 72 hours LEC
Prerequisite: DEAF 312 or SILA 306 with a grade of "C" or better
Transferable: CSU; UC
General Education: Local GE L3

This course is the third in a series of four courses in American Sign Language. It emphasizes expressive and receptive nonverbal communication skills between signers who have preliminary American Sign Language syntactical and lexical skills. It provides an understanding of deaf cultural processes by identifying behaviors and norms from activities assigned in the class. It also includes dialogs that involve asking, empathizing, negotiating and agreeing or disagreeing. The emphasis is on non-speech communication. This course was formerly known as SILA 315.

DEAF 316 American Sign Language IV

Units: 4
Hours: 72 hours LEC
Prerequisite: DEAF 314 or SILA 315 with a grade of "C" or better
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3B

This course is the fourth in a series of four 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 was formerly known as SILA 316.

DEAF 351 Introduction to American Deaf Culture

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L4; Cal-GETC Area 4

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

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L4

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 was formerly known as SILA 332.

DEAF 353 Baby Sign Language

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU

This course focuses on Baby Sign Language vocabulary, alphabet, handshape, movement, palm orientation, structure,and grammar. Students will learn core vocabulary, comprehension, and grammar in ASL to understand its structure. Students will also be introduced to the history of the Deaf community and its culture, as well as be exposed to community resources for the Deaf and Hard of Hearing populations. This course was formerly known as SILA 338.

DEAF 354 Creative Signs

Units: 3
Hours: 54 hours LEC
Prerequisite: DEAF 314 or communicating at a level of preliminary American Sign Language syntactical and lexical skills that are equivalent to the completion of DEAF 314.
Transferable: CSU

Introduction to the techniques of facial expression, characterization, body movement, and specialization as it relates to American Sign Language. Development of expressive sign language skills through the use of poetry, songs, skits, storytelling, jokes and slang signs.

DEAF 360 Deaf Art

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC

This course introduces Deaf Arts such as drawings, sculptures, artifacts, painting, printmaking and films. We will examine the materials, methods, and design principles of creating Deaf Arts . Local field trips may be required. This course addresses the need and demand of this instruction for global recognition and its social and cultural affects toward Deaf Arts. It promotes global and cultural understanding to the relationship of Deaf Art and the expression of national, regional, socio-economic class, and gender identity.

DEAF 380 American Sign Language Literature

Units: 3
Hours: 54 hours LEC
Prerequisite: DEAF 314 with a grade of "C" or better
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3B

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 400 Deaf Culture and ASL Studies Capstone

Units: 1
Hours: 18 hours LEC
Prerequisite: DEAF 316 or SILA 316 with grades of "C" or better
Transferable: CSU

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 Study

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

DEAF 499 Experimental Offering in Deaf Culture & ASL Studies

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU

This is the experimental courses description.

Sign Language Studies (SILA) Courses

SILA 499 Experimental Offering in Sign Language Studies

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU

This is the experimental courses description.

Diagnostic Medical Sonography

The Diagnostic Medical Sonography (DMS) program includes didactic, laboratory, and practicum components that are structured to facilitate the achievement of educational and career goals. According to the American Registry for Diagnostic Medical Sonographers (ARDMS), sonographers are "highly-skilled professionals who use specialized equipment to create images of structures inside the human body that are used by physicians to make medical diagnoses."

Organizations such as the ARDMS certify the competency of sonographers through registration.

As a notification requirement of accreditation status, the Cosumnes River College Diagnostic Medical Sonography Program is accredited by the Commission on Accreditation of Allied Health Education Programs (http://www.caahep.org) upon the recommendation of the Joint Review Committee on Education in Diagnostic Medical Sonography (JRC-DMS). The program has been placed on Probationary Accreditation as of January 18, 2024.

We will update you in the future as to any changes that are made to our probationary status.

CAAHEP
9355 – 113th St. N, #7709
Seminole, FL 33775
(772) 210-2350

DMS Program Goals:

- To prepare competent entry-level sonographers in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains for the abdominal sonography-extended concentration.
- To prepare competent entry-level sonographers in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains for the obstetrics and gynecology concentration.

DMS Medical Advisor: Bijan Bijan, MD

For questions, email hubbark@crc.losrios.edu.

Degrees and Certificates Offered

A.S. in Diagnostic Medical Sonography

Diagnostic Medical Sonography Certificate

Dean Kris Hubbard

Department Chair Cori Burns

Phone (916) 691-7345

Email hubbark@crc.losrios.edu

Associate Degree

A.S. in Diagnostic Medical Sonography

The CRC Diagnostic Medical Sonography (DMS) Program includes didactic, laboratory, and practicum components that are structured to facilitate the achievement of educational and career goals. According to the American Registry for Diagnostic Medical Sonographers (ARDMS), sonographers are “highly-skilled professionals who use specialized equipment to create images of structures inside the human body that are used by physicians to make medical diagnoses". Sonographers have extensive, direct patient contact that may include performing some invasive procedures. They must be able to interact compassionately and effectively with people who range from healthy to critically ill.

Organizations such as the American Registry of Diagnostic Medical Sonographers (ARDMS) certify the competency of sonographers through registration.

Degree Requirements

Course Code	Course Title	Units
1st Summer Semester:		
SONOG 200	Introduction to Sonography	3
SONOG 202	Sectional Anatomy for Medical Imaging	3
1st Fall Semester:		
SONOG 205	Ultrasound Physics & Instrumentation	3
SONOG 210	Abdominal Scanning and Pathology	4
SONOG 240	Superficial & Small Parts Scanning	3
1st Spring Semester:		
SONOG 215	Clinical Experience I	7
SONOG 220	OB/GYN Scanning & Pathology	4
2nd Summer Semester:		
SONOG 225	Clinical Experience II	7
SONOG 228	Advanced OB/GYN Pathology	2
2nd Fall Semester:		
SONOG 230	Vascular Scanning	4
SONOG 235	Clinical Experience III	9
2nd Spring Semester:		
SONOG 250	Sonography Interpretation & ARDMS/ARRT Exam Review	2
SONOG 255	Clinical Experience IV	9
Total Units:		**60**

The Diagnostic Medical Sonography Associate in Science (A.S.) degree may be obtained by completion of the required program, plus the local CRC General Education Requirement, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Enrollment Eligibility

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

- Associate in Science degree, or higher, from a U.S. accredited college;
- 400 hours work/voluntary experience hours with a minimum of 200 hours of paid or volunteer patient care experience and a minimum of 200 hours in positions where evidence of empathy, service, ethics, responsibility, appropriate interaction with clients/patients are demonstrated.
- Complete the application process for enrollment in the DMS program;
- Fulfill all requirements set forth by the CRC Allied Health Practicum Guidelines including but not limited to: background clearance, physical examination, CPR Certification, immunization clearance and drug screening;
- Successfully complete with a B or better all prerequisite courses as outlined below.
- College-level Intermediate Algebra (or higher math course)
- Interpersonal Communications (or equivalent communications/speech course such as: COMM 321 Interpersonal Communications, COMM C1000 Intro to Public Speaking [formerly COMM 301], COMM 325 Intercultural Communication, COMM 331 Group Discussion, COMM 361 The Communication Experience)
- Anatomy & Physiology (one year with lab)
- Medical Language
- Human Disease or Pathophysiology
- Conceptual Physics
- The program prerequisites do not apply to physicians who have an approved foreign transcript evaluation.

Student Learning Outcomes

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

- Perform entry-level skills of a diagnostic sonographer in a clinical setting (PSLO #1)
- Demonstrate attainment of knowledge needed for successful completion of the American Registry of Diagnostic Medical Sonographers (ARDMS) certification examination (PSLO #2)
- Acknowledge and adhere to the scope of practice of a Diagnostic Medical Sonographer (PSLO #3)

Career Information

Career Opportunities: According to the ARDMS, Sonography is a dynamic profession that has grown significantly over the past 25 years. With rapidly developing new technologies and increased use of diagnostic ultrasound procedures, growth is projected to continue in the future with employment opportunities for qualified sonographers in both urban and rural areas nationwide. Sonographers and vascular technologists can choose to work in clinics, hospitals, private-practice physician offices, public-health facilities, laboratories, and other medical settings performing examinations in their areas of specialization. According to the Bureau of Labor Statistics' Occupational Outlook Website, almost two-thirds of all sonographers are employed by hospitals. The rest work in physicians' offices, medical and diagnostic laboratories/imaging centers and outpatient care centers. Employment of diagnostic medical sonographers is expected to increase by 29.4 percent, or 1,500 jobs between 2014 and 2024. As ultrasound technology evolves, it will become a more common method used to assist in diagnosing medical conditions, favored over more invasive procedures.

Certificate of Achievement

Diagnostic Medical Sonography Certificate

The CRC Diagnostic Medical Sonography (DMS) Program includes didactic, laboratory, and practicum components that are structured to facilitate the achievement of educational and career goals. According to the American Registry for Diagnostic Medical Sonographers (ARDMS), sonographers are "highly-skilled professionals who use specialized equipment to create images of structures inside the human body that are used by physicians to make medical diagnoses." Sonographers have extensive, direct patient contact that may include performing some invasive procedures. They must be able to interact compassionately and effectively with people who range from healthy to critically ill.

Students must achieve a "C" or better in all SONOG didactic courses and a "Pass" in all practicum courses to remain in, and progress through, the DMS program. Students who do not achieve these minimum expectations will be dismissed from the program.

Organizations such as the American Registry of Diagnostic Medical Sonographers (ARDMS) certify the competency of sonographers through registration.

Certificate Requirements

Course Code	Course Title	Units
SONOG 200	Introduction to Sonography	3
SONOG 202	Sectional Anatomy for Medical Imaging	3
SONOG 205	Ultrasound Physics & Instrumentation	3
SONOG 210	Abdominal Scanning and Pathology	4
SONOG 240	Superficial & Small Parts Scanning	3
SONOG 215	Clinical Experience I	7
SONOG 220	OB/GYN Scanning & Pathology	4
SONOG 225	Clinical Experience II	7
SONOG 228	Advanced OB/GYN Pathology	2
SONOG 230	Vascular Scanning	4
SONOG 235	Clinical Experience III	9
SONOG 250	Sonography Interpretation & ARDMS/ARRT Exam Review	2
SONOG 255	Clinical Experience IV	9
Total Units:		**60**

Enrollment Eligibility

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

- Associate in Science degree, or higher, from a U.S. accredited college;
- a minimum of 800 hours of paid or volunteer patient care experience; hours must be documented within an official volunteer program where they report to a licensed/credentialed health care provider; home health care for a single patient is not acceptable. Applicants will need to document their 800 hours either volunteer, student extern/intern hours, or work hours in direct patient care;
- Complete the application process for enrollment in the DMS program;
- Fulfill all requirements set forth by the CRC Allied Health Practicum Guidelines including but not limited to: background clearance, physical examination, CPR Certification, immunization clearance and drug screening;
- Successfully complete with a B or better all pre-requisite courses as outlined below within the last five (5) years:
- College-level Intermediate Algebra (or higher math course)
- Interpersonal Communications (or equivalent communications/speech course)
- Anatomy & Physiology (one year with lab)
- Medical Language
- Human Disease or Pathophysiology
- Conceptual Physics
- The program prerequisites do not apply to physicians who have an approved foreign transcript evaluation.

Student Learning Outcomes

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

- Perform entry-level skills of a diagnostic sonographer in a clinical setting (PSLO #1);
- Successfully complete the American Registry of Diagnostic Medical Sonographers (ARDMS) certification examination (PSLO #2);
- Acknowledge and adhere to the scope of practice of a diagnostic medical sonographer (PSLO #3).

Career Information

Career Opportunities: According to the ARDMS, Sonography is a dynamic profession that has grown significantly over the past 25 years. With rapidly developing new technologies and increased use of diagnostic ultrasound procedures, growth is projected to continue in the future with employment opportunities for qualified sonographers in both urban and rural areas nationwide. Sonographers and vascular technologists can choose to work in clinics, hospitals, private-practice physician offices, public-health facilities, laboratories, and other medical settings performing examinations in their areas of specialization. According to the Bureau of Labor Statistics' Occupational Outlook Website, almost two-thirds of all sonographers are employed by hospitals. The rest work in physicians' offices, medical and diagnostic laboratories/ imaging centers and outpatient care centers. Employment of diagnostic medical sonographers is expected to increase by 29.4 percent, or 1,500 jobs between 2014 and 2024. As ultrasound technology evolves, it will become a more common method used to assist in diagnosing medical conditions, favored over more invasive procedures.

Diagnostic Medical Sonography (SONOG) Courses

SONOG 200 Introduction to Sonography

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Corequisite: SONOG 202
Enrollment Limitation: This course is only available to students who have been accepted into the most recent cohort and who remain in good standing within the DMS program. Students must take this course for a letter grade, and must earn a grade of "C" or better in this course to remain in the DMS program.

This course is designed for students in the Diagnostic Medical Sonography (DMS) program. The course will introduce fundamental sonography theory including terminology and equipment. Students will be instructed in sonographer and patient safety, including ergonomics, legal, ethical and regulatory issues. Scope of practice, patient care techniques, assessment and treatment will be introduced. Emphasis will be placed on interaction with diverse patient populations. This course must be taken for a letter grade, and students must achieve a "C" or better to remain in the DMS program.

SONOG 202 Sectional Anatomy for Medical Imaging

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Corequisite: SONOG 200 and 300
Enrollment Limitation: This course is only available to students who have been accepted into the most recent cohort and who remain in good standing within the DMS program. Students must take this course for a letter grade, and must earn a grade of "C" or better in this course to remain in the DMS program.

This is an introductory course in cross-sectional anatomy. Basic principles of human anatomy are presented in cross section and multi-planes and applied to Sonographic images, along with comparison modalities in the diagnostic imaging fields. This course builds upon basic understanding of human anatomy and physiology as it relates specifically to diagnostic imaging in an integrated fashion. This course provides critical cross-sectional analysis of human anatomy in preparation for abdominal, pelvic, vascular and small parts scanning, including sonographic terminology and directional anatomy in the cross-sectional planes. This course is only available to students who have been accepted in to the CRC Diagnostic Medical Sonography program. This course must be taken for a letter grade, and students must achieve a "C" or better to remain in the DMS program.

SONOG 205 Ultrasound Physics & Instrumentation

Units: 3
Hours: 54 hours LEC
Prerequisite: SONOG 202 with a grade of "C" or better
Corequisite: SONOG 210 and 240
Enrollment Limitation: This course is only available to students who have been accepted into the most recent cohort and who remain in good standing within the DMS program. Students must take this course for a letter grade, and must earn a grade of “C” or better in this course to remain in the DMS program.

This course covers the basic principles of diagnostic ultrasound physics and instrumentation. Topics include acoustical physics, Doppler effect, color flow imaging and the effects of ultrasound waves on human tissue. The course will cover transducer designs, quality assurance, bio-effects and imaging artifacts. The fundamentals of instrumentation, equipment design and application will be included. Hands-on instruction may be provided to introduce the student to necessary elementary scanning skills. This course is available to students who have been accepted in to the DMS program. This course must be taken for a letter grade, and students must achieve a "C" or better to remain in the DMS program.

SONOG 210 Abdominal Scanning and Pathology

Units: 4
Hours: 36 hours LEC; 108 hours LAB
Prerequisite: SONOG 202 with a grade of "C" or better
Corequisite: SONOG 205 and 240
Enrollment Limitation: This course is only available to students who have been accepted into the most recent cohort and who remain in good standing within the DMS program. Students must take this course for a letter grade, and must earn a grade of “C” or better in this course to remain in the DMS program.

This course will provide a study of the clinical applications of abdominal sonography, including positioning and scanning protocol. Anatomical structures will include: abdominal vasculature; liver; gallbladder and biliary system; pancreas; spleen; and kidneys. Specific pathology and clinical symptomotology will be covered as they relate to the sonographic appearance of these structures. Interpretation and critique of normal and abnormal anatomy with correlation of clinical, didactic and image information will be presented. This course is available to students who have been accepted in to the DMS program. This course must be taken for a letter grade, and students must achieve a "C" or better to remain in the DMS program.

SONOG 215 Clinical Experience I

Units: 7
Hours: 384 hours LAB
Prerequisite: SONOG 210 with a grade of "C" or better
Corequisite: SONOG 220
Enrollment Limitation: This course is only available to students who have been accepted into the most recent cohort and who remain in good standing within the DMS program. This course is graded “P/NP”, and students must earn a grade of “P” in this course to remain in the DMS program. Enrollment in all clinical experience courses requires all of the following: 1) successful completion of the ARDMS Sonography Principles & Instrumentation (SPI) exam; 2) must have obtained an approved clinical placement assigned by the CRC DMS program coordinator; and 3) must be enrolled in all co-requisite courses.

This course will provide basic instruction and scanning experience in sonography in a hospital or other healthcare setting. The student will be learn to demonstrate the ability to perform basic sonographic examinations according to the protocols established by the program and healthcare facility utilizing sonographic equipment. The directed practice experience will also serve to familiarize the student with the hospital setting, sonography department and other related clinical training aspects including Health Insurance Portability and Accountability Act (HIPAA) law. This course is only available to students who currently enrolled in the DMS program and have met the pre-requisites, co-requisites and have met all enrollment limitations. This course is graded as "Pass/No Pass", and students must achieve a "Pass" to remain in the DMS program.

SONOG 220 OB/GYN Scanning & Pathology

Units: 4
Hours: 36 hours LEC; 108 hours LAB
Prerequisite: SONOG 240 with a grade of "C" or better
Corequisite: SONOG 215 and 215
Enrollment Limitation: This course is only available to students who have been accepted into the most recent cohort and who remain in good standing within the DMS program. Students must take this course for a letter grade, and must earn a grade of “C” or better in this course to remain in the DMS program.

This course will cover the anatomy and pathology related to the sonography of the female reproductive system, pregnant and non-pregnant. It will include an assessment of fetal gestational age, fetal anatomy and pathology, as well as associated maternal conditions throughout all trimesters. Topics of discussion include related clinical symptoms, sonographic appearances, scanning techniques and protocols. This course is available to students who have been accepted in to the most recent DMS cohort. This course must be taken for a letter grade, and students must achieve a "C" or better to remain in the DMS program.

SONOG 225 Clinical Experience II

Units: 7
Hours: 384 hours LAB
Prerequisite: SONOG 220 with a grade of "C" or better
Corequisite: SONOG 228
Enrollment Limitation: This course is only available to students who have been accepted into the most recent cohort and who remain in good standing within the DMS program. This course is graded “P/NP”, and students must earn a grade of “P” in this course to remain in the DMS program. Enrollment in all clinical experience courses requires all of the following: 1) successful completion of the ARDMS Sonography Principles & Instrumentation (SPI) exam; 2) must have obtained an approved clinical placement assigned by the CRC DMS program coordinator; and 3) must be enrolled in all co-requisite courses.

This course will provide intermediate-level instruction and scanning experience in a hospital or other healthcare setting. The student will be able to demonstrate the ability to perform abdominal, OB/GYN and small parts sonographic examinations of patients according to the protocols established by the program and healthcare facility utilizing sonographic

equipment. This course is available to students who have been accepted in to the most recent DMS cohort. This course is graded “Pass/No Pass”, and students must achieve a "Pass" to remain in the DMS program.

SONOG 228 Advanced OB/GYN Pathology

Units: 2
Hours: 36 hours LEC
Prerequisite: SONOG 220 with a grade of "C" or better
Enrollment Limitation: This course is only available to students who have been accepted into the most recent cohort and who remain in good standing within the DMS program. Students must take this course for a letter grade, and must earn a grade of “C” or better in this course to remain in the DMS program.

This course builds upon lessons from SONOG 220 covering OB/GYN pathology and maternal-fetal complications. This course covers: High Risk Obstetrics in Sonography, Fetal Structural Abnormalities, Genetic Abnormalities and Syndromes. This course will also cover clinical assessments including interventional procedures and post-partum complications as well as pathology involving infertility. Topics of discussion include related clinical symptoms, sonographic appearances, scanning techniques and protocols. This course is available to students who have been accepted in to the most recent DMS cohort. This course must be taken for a letter grade, and students must achieve a "C" or better to remain in the DMS program.

SONOG 230 Vascular Scanning

Units: 4
Hours: 36 hours LEC; 108 hours LAB
Prerequisite: SONOG 225 and 225 with grades of "C" or better
Corequisite: SONOG 235 and 235
Enrollment Limitation: This course is only available to students who have been accepted into the most recent cohort and who remain in good standing within the DMS program. Students must take this course for a letter grade, and must earn a grade of “C” or better in this course to remain in the DMS program.

This course covers the basic positioning and scanning protocol of the vascular system. Terminology specific to the hemodynamics of the arterial, venous and cerebrovascular applications will be presented. Normal, abnormal and pathologic states of the vascular system, including the carotid and lower extremities, will be included. This course is available to students who have been accepted in to the most recent DMS cohort. This course must be taken for a letter grade, and students must achieve a "C" or better to remain in the DMS program.

SONOG 235 Clinical Experience III

Units: 9
Hours: 512 hours LAB
Prerequisite: SONOG 228 with a grade of "C" or better
Corequisite: SONOG 230
Enrollment Limitation: This course is only available to students who have been accepted into the most recent cohort and who remain in good standing within the DMS program. This course is graded “P/NP”, and students must earn a grade of “P” in this course to remain in the DMS program. Enrollment in all clinical experience courses requires all of the following: 1) successful completion of the ARDMS Sonography Principles & Instrumentation (SPI) exam; 2) must have obtained an approved clinical placement assigned by the CRC DMS program coordinator; and 3) must be enrolled in all co-requisite courses.

This course will provide intermediate/advanced-level instruction, supervision and scanning experience in a hospital or other healthcare setting. The student will be able to demonstrate the ability to perform abdominal, OB/GYN, small parts and/or vascular sonographic examinations of patients according to the protocols established by the program and healthcare facility utilizing sonographic equipment. This course is available to students who have been accepted in to the most recent DMS cohort. This course is graded “Pass/No Pass”, and students must achieve a "Pass" to remain in the DMS program.

SONOG 240 Superficial & Small Parts Scanning

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: SONOG 202 with a grade of "C" or better
Corequisite: SONOG 210
Enrollment Limitation: This course is only available to students who have been accepted into the most recent cohort and who remain in good standing within the DMS program. Students must take this course for a letter grade, and must earn a grade of “C” or better in this course to remain in the DMS program.

This course covers the basic positioning and scanning of pediatric, small part and superficial structures; related anatomy and pathology; clinical symptomatology and how they relate to the sonographic appearance. Interpretation of normal and abnormal anatomy with correlation of clinical information will also be presented. This course is available to students who have been accepted in to the most recent DMS cohort. This course must be taken for a letter grade, and students must achieve a "C" or better to remain in the DMS program.

SONOG 250 Sonography Interpretation & ARDMS/ARRT Exam Review

Units: 2
Hours: 18 hours LEC; 54 hours LAB
Prerequisite: SONOG 235 and 235 with grades of "C" or better
Enrollment Limitation: This course is only available to students who have been accepted into the most recent cohort and who remain in good standing within the DMS program. Students must take this course for a letter grade, and must earn a grade of “C” or better in this course to remain in the DMS program.

This course will cover advanced interpretation and critique of abdominal, OB/GYN, vascular, superficial and small parts sonographs. This course serves as a continuation of previous, basic knowledge within the Diagnostic Medical Sonography program. This course will also provide students with guidance to assist them in their independent study and preparation for the ARDMS and AART examinations. This course is available to students who have been accepted in to the most recent DMS cohort. This course must be taken for a letter grade, and students must achieve a "C" or better to remain in the DMS program.

SONOG 255 Clinical Experience IV

Units: 9

Hours: 512 hours LAB
Prerequisite: SONOG 235 and 235 with grades of "C" or better
Corequisite: SONOG 250 and 250
Enrollment Limitation: This course is only available to students who have been accepted into the most recent cohort and who remain in good standing within the DMS program. This course is graded “P/NP”, and students must earn a grade of “P” in this course to remain in the DMS program. Enrollment in all clinical experience courses requires all of the following: 1) successful completion of the ARDMS Sonography Principles & Instrumentation (SPI) exam; 2) must have obtained an approved clinical placement assigned by the CRC DMS program coordinator; and 3) must be enrolled in all co-requisite courses.

This course is the final directed practice study course in the Diagnostic Medical Sonography program. The course incorporates all areas of study including the abdomen, OB/GYN, vascular, superficial and small parts scanning. The student will be able to perform advanced sonographic examinations in a healthcare facility according to the protocols and criteria established by the CRC DMS program. Students will complete all final program competency evaluations and demonstrate the ability to perform all required examinations, including the ability to scan independently, under the direction of the assigned primary clinical site preceptor(s). This course is graded “Pass/No Pass”, and students must achieve a "Pass" to remain in the DMS program.

Digital Media

This two-year instructional program is designed to provide skills for industry and for degree or transfer. This option can lead to entry-level jobs in television, Cable TV, business or industrial video and graphics, animation, or digital media for broadcast, CD/DVD production and the Internet.

Degrees and Certificates Offered

A.A. in Digital Media

Digital Media Certificate

Dean Brian Rickel
Department Chair Mun Kang
Phone (916) 691-7171
Email kangm@crc.losrios.edu

Associate Degree

A.A. in Digital Media

This two-year instructional program is designed to provide skills for industry and for degree or transfer. This option can lead to entry-level jobs in television, Cable TV, business or industrial video and graphics, animation, or digital media for broadcast, CD/DVD production and the Internet.

Highlights include:
* Practical experience working with contemporary computer software
* State of the art computer lab for graphics and nonlinear editing, including Final Cut Pro Studio, Photoshop, Illustrator, and After Effects
* Internship opportunities working with local television stations, independent film companies and post-production editing facilities

Note to Transfer Students:
If you are interested in transferring to a four-year college or university to pursue a bachelor's degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate's degree in this major may be different from the requirements needed for the Bachelor's degree.

Degree Requirements

Course Code	Course Title	Units
RTVF 300	Mass Media and Society	3
RTVF 302	Introduction to Digital Design & Storytelling	3
RTVF 304	Introduction to Multimedia	3
RTVF 319	Beginning Audio Production	3
RTVF 330	Beginning Single Camera Production	3
RTVF 360	Introduction to Motion Graphics: Adobe After Effects	3
RTVF 362	Digital Non-Linear Video Editing	3
RTVF 368	Scriptwriting for Film, Video & Multimedia	3
PHOTO 302	Beginning Digital Photography	3
A minimum of 3 units from the following:		3
RTVF 354	Audio Editing for Film & Video Post Production (3)	
RTVF 361	Intermediate Motion Graphics: Adobe After Effects (3)	
RTVF 365	Intermediate Film & Video Editing (3)	
RTVF 370	Broadcast Writing & Announcing (3)	
RTVF 371	Hollywood TV and Film Studios: A Behind the Scenes Experience (1)	
RTVF 498	Work Experience in Radio, Television and Film (0.5 - 4)	
Total Units:		**30**

The Digital Media Associate in Arts (A.A.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Student Learning Outcomes

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

- Write in clear, concise English. (PSLO-1)
- Create traditional media, print and digital media projects that demonstrate effective use of established design principles for typography, color, images, animation, sound and video (PSLO-2)
- Demonstrate a conceptual foundation in new media technology. (PSLO-3)
- Articulate and apply the basic principles and processes used in traditional and digital graphic and multimedia design. (PSLO-4)
- Demonstrate a conceptual foundation in the ethics of new media technology. (PSLO-5)
- Examine and critique media products utilizing general information and concepts in new media. (PSLO-6)

Career Information

Career Options Nonlinear Video Editor, DVD Author, Computer Graphic Artist, Animation Artist, Producer/Director for Broadcast, Personal or Corporate Video and the Internet. Some career options may require more than two years of college study. Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.

Certificate of Achievement

Digital Media Certificate

This instructional program is designed to provide skills for industry. This option can lead to entry-level jobs in television, Cable TV, business or industrial video and graphics, animation,

or digital media for broadcast, CD/DVD production and the Internet.

Highlights include:
* Practical experience working with contemporary computer software
* State of the art computer lab for graphics and nonlinear editing, including Photoshop, Illustrator, After Effects, Final Cut Pro, Lightwave 3D
* Internship opportunities working with local television stations, independent film companies and post-production editing facilities

Certificate Requirements

Course Code	Course Title	Units
RTVF 302	Introduction to Digital Design & Storytelling	3
RTVF 319	Beginning Audio Production	3
RTVF 330	Beginning Single Camera Production	3
RTVF 360	Introduction to Motion Graphics: Adobe After Effects	3
RTVF 362	Digital Non-Linear Video Editing	3
A minimum of 3 units from the following:		3
RTVF 304	Introduction to Multimedia (3)	
RTVF 306	Introduction to Media Aesthetics and Cinematic Arts (3)	
RTVF 312	Beginning Radio and Podcasting (3)	
RTVF 354	Audio Editing for Film & Video Post Production (3)	
RTVF 361	Intermediate Motion Graphics: Adobe After Effects (3)	
RTVF 365	Intermediate Film & Video Editing (3)	
RTVF 368	Scriptwriting for Film, Video & Multimedia (3)	
Total Units:		**18**

Student Learning Outcomes

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

- Create digital media projects that incorporate art theory, digital design and development, digital audio and non-linear digital video. (PSLO-1)
- Examine and critique media products utilizing general information and (PSLO-2)
- Demonstrate a conceptual foundation in the ethics of new media techr (PSLO-3)
- Demonstrate skills required for a vast array of digital media careers including web design and development, multimedia production, digital video production and corporate communications. (PSLO-4)

Career Information

Career Options Nonlinear Video Editor, Computer Graphic Artist, Animation Artist, Personal or Corporate Video Producer/ Director. Some career options may require more than two years of college study. Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.

Early Childhood Education

The Early Childhood Education A.A. degrees and certificates offer an interactive approach to acquiring the knowledge, skills, and dispositions necessary to work with young children, birth to 12 years old. Students are guided by experienced and qualified faculty in an in-depth study of the theories, principles and practices of early childhood, and child development.

The Early Childhood Education department strives to bring innovative research-based, current information and knowledge to students. Reflective practices and opportunities to practice critical thinking skills are woven into all coursework. Emphasis is placed on developing professional and ethical dispositions that foster positive relationships among children, families, and colleagues. Additionally, students are immersed in practices inclusive of all children; including children who are culturally and linguistically diverse and children with special needs.

The Early Childhood Education department believes in the importance of promoting an engaging, intellectually challenging, and creative learning environment. The Early Childhood Education's philosophy is sustained through the Early Childhood Education Peer-to-Peer Mentoring and Support program. This program promotes a student centered, strength-based approach to foster the professional disposition to be a successful student and lifelong learner.

The Early Childhood Education Program is aligned to the Child Development and Early Childhood Education majors offered by several California State Universities and the Curriculum Alignment Project (CAP) which align early childhood programs across California Community Colleges. Coursework fulfills the California Commission on Teacher Credentialing (CCTC) fulfill requirements leading to Child Development Permits and early childhood units needed to work as a Transitional Kindergarten Teacher.

Degrees and Certificates Offered

A.S.-T. in Early Childhood Education for Transfer

A.A. in Early Childhood Education

A.A. in Early Childhood Education, Site Supervisor

Early Childhood Education - Master Teacher Certificate

Early Childhood Education - Teacher Certificate

Early Childhood Education, Associate Teacher Certificate

Early Childhood Education, Infant and Toddler Specialist Certificate

Early Childhood Education, School Age Child Care and Education Certificate

Dean Emilie Mitchell

Department Chair Jeannette Mulhern

Phone (916) 691-7656

Email mitchee@crc.losrios.edu

Associate Degrees for Transfer

A.S.-T. in Early Childhood Education for Transfer

The Associate in Arts in Early Childhood Education (ECE) for Transfer Degree (AS-T) provides a clearly articulated curricular pathway for students who wish to pursue a degree option in the California State University (CSU) system. The degree is designed to serve 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 Associate in Science in ECE for Transfer Degree provides students with a major that fulfills the general requirements of the California State University for transfer. Upon successful completion of the degree requirements, students will be guaranteed admission to the CSU system with junior status and will not have to repeat lower division coursework. Students are encouraged to meet with a counselor to develop their educational plans as degree options and general education requirements vary for each university.

The Associate in Science in Early Childhood Education (ECE) for Transfer Degree (AS-T) may be obtained by the completion of 60 transferable, semester units with a minimum of a 2.0 GPA, including the California General Education Transfer Curriculum (Cal-GETC) pattern. Students must earn a grade of C or better (or "P" if taken Pass/No Pass) in all the courses for the major as described in the Required Program. The ECE courses required in this program are part of the CA Curriculum Alignment Project.

Degree Requirements

Course Code	Course Title	Units
ECE 312	Child Development	3
ECE 314	The Child, the Family and the Community	3
ECE 300	Introduction to Principles and Practices in Early Childhood Education	3
ECE 320	Curriculum and Interactions in Early Childhood Education	4
ECE 321	Advanced Practicum in Early Childhood Education	4
ECE 326	Making Learning Visible Through Observation and Documentation	3
ECE 415	Children's Health, Safety and Nutrition	3
ECE 430	Culture and Diversity in Early Childhood Education	3
Total Units:		**26**

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) the California General Education Transfer Curriculum (Cal-GETC) Requirement.

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. (PSLO 1)
- Design inclusive, culturally and linguistically appropriate learning environments, based on child development, child observations, family information and knowledge of culturally diverse child rearing practices. (PSLO 2)
- Incorporate strategies for building respectful, reciprocal family and community relationships in order to support families with their children's development and learning. (PSLO 3)
- Assess children's learning through observation, documentation, and interpretation, using results to guide curriculum and teaching strategies. (PSLO 4)
- 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. (PSLO 5)
- Demonstrate practices that maintain standards of health, nutrition, and safety in-group care early childhood settings. (PSLO 6)
- Apply ethical standards of behavior accepted by the profession of early childhood education. (PSLO 7)
- Appraise knowledge of public policy and legislative issues concerning children and their families. (PSLO 8)

Career Information

The Associate in Science in Early Childhood Education transfer degree was designed to facilitate students' successful transfer to certain California State University (CSU) campuses that prepare them for advanced study in a variety of baccalaureate degree programs including teaching, child development specialist, program director, and child life specialist. With a baccalaureate degree 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. Students who are planning to obtain an associate degree and not continue to a baccalaureate program are advised to complete the Early Childhood Education AA degree rather than this AS-T. The AA degree provides a comprehensive foundation for in-depth early childhood teacher preparation necessary for those seeking employment after completion of the degree. NOTE TO TRANSFER STUDENTS: The Associate in Science in Early Childhood Education for Transfer program is designed for students who plan to transfer to a campus of the California State University (CSU). Other than the required core, the courses you choose to complete this degree will depend to some extent on the selected CSU for transfer. In addition, some Cal-GETC requirements can also be completed using courses required for this associate degree for transfer major (known as "double-counting"). Meeting with a counselor to determine the most appropriate course choices will facilitate efficient completion of your transfer requirements. For students wishing to transfer to other universities (UC System, private, or out-of-state), the Associate Degree for Transfer may not provide adequate preparation for upper-division transfer admissions; it is critical that you meet with a CRC counselor to select and plan the courses for the major, as programs vary widely in terms of the required preparation.

Associate Degrees

A.A. in Early Childhood Education

This program provides a comprehensive foundation for in-depth early childhood teacher preparation both through strong general education and principles and practices 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.

Note to Transfer Students:
If you are interested in transferring to a four-year college or university to pursue a Bachelor's degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate's degree in this major may be different from the requirements needed for the Bachelor's degree.

Degree Requirements

Course Code	Course Title	Units
ECE 300	Introduction to Principles and Practices in Early Childhood Education	3
ECE 312	Child Development (3)	3
ECE 314	The Child, the Family and the Community (3)	3
ECE 415	Children's Health, Safety and Nutrition (3)	3
ECE 326	Making Learning Visible Through Observation and Documentation	3
ECE 320	Curriculum and Interactions in Early Childhood Education	4
ECE 430	Culture and Diversity in Early Childhood Education	3
ECE 321	Advanced Practicum in Early Childhood Education	4
ECE 404	Children with Special Needs	3
ECE 424	Adult Supervision: Mentoring in a Collaborative Learning Setting	2
A minimum of 9 units from the following:		9
ECE 322	Promoting Children's Social Competence (3)	
ECE 342	Constructive Math and Science in Early Childhood Education (3)	
ECE 343	Language and Literacy Development in Early Childhood (3)	
ECE 365	Creative Projects and Experiences for Young Children (3)	
ECE 307	Introduction to Bilingual Education (3)	
ECE 361	Introducing Young Children to Visual Arts (3)	
A minimum of 3 units from the following:		3
ECE 330	Infant and Toddler Development (3)	
ECE 331	Care and Education of Infants and Toddlers (3)	

Course Code	Course Title	Units
ECE 356	Programs for the School-Age Child (3)	
ECE 402	Infants with Atypical Development (3)	
Total Units:		**43**

The Early Childhood Education Associate in Arts (A.A.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Student Learning Outcomes

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

- PSLO 1: (Development and Learning) Analyze and synthesize research and theories to support development and learning. Evaluate and implement developmentally appropriate and culturally relevant approaches to teaching and learning which support the whole child including foundational skills and concepts in language and literacy, math, science, art, health and wellness, and social relationships.
- PSLO 2: (Equity and Cultural Sustainability) Construct knowledge based on the principles of anti-bias education in order to design environments that promote justice, equity and inclusion for all children, families, and communities.
- PSLO 3: (Professionalism) Develop competencies, professional skills, and plans for professional growth. Integrate reflective practices to support professional growth as an Early Childhood professional. Understand and integrate the NAEYC Code of Ethics to support children, families, and other educators.
- PSLO 4: (Observation, Documentation and Assessment) Utilize authentic assessment strategies based on observation, reflection, documentation, and interpretation of children’s development to inform teaching practices.
- PSLO 5: (Family Engagement) Incorporate strategies for building respectful and reciprocal relationships with families, children and the community in order to support children's development and learning. Develop knowledge and skills to provide a responsive curriculum and learning environment that reflects the children and the families in the program.
- PSLO 6: (Leadership) Understanding and commitment to leadership development that empowers, encourages, cultivates, and supports self and others to become agents of change and advocate for high-quality early care and education experiences for all children, support for families, and professional stature of educators.

Career Information

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.

A.A. in Early Childhood Education, Site Supervisor

Administration of early care and education programs is the main focus of this degree. 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.

Degree Requirements

Course Code	Course Title	Units
ECE 300	Introduction to Principles and Practices in Early Childhood Education	3
ECE 312	Child Development (3)	3
ECE 314	The Child, the Family and the Community (3)	3
ECE 415	Children's Health, Safety and Nutrition	3
ECE 326	Making Learning Visible Through Observation and Documentation	3
ECE 320	Curriculum and Interactions in Early Childhood Education	4
ECE 430	Culture and Diversity in Early Childhood Education	3
ECE 404	Children with Special Needs	3
ECE 321	Advanced Practicum in Early Childhood Education	4
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
A minimum of 3 units from the following:		3
ECE 322	Promoting Children's Social Competence (3)	
ECE 342	Constructive Math and Science in Early Childhood Education (3)	
ECE 343	Language and Literacy Development in Early Childhood (3)	
ECE 365	Creative Projects and Experiences for Young Children (3)	
ECE 307	Introduction to Bilingual Education (3)	
ECE 361	Introducing Young Children to Visual Arts (3)	
A minimum of 3 units from the following:		3
ECE 330	Infant and Toddler Development (3)	
ECE 331	Care and Education of Infants and Toddlers (3)	
ECE 402	Infants with Atypical Development (3)	
Total Units:		**43**

The Early Childhood Education, Site Supervisor Associate in Arts (A.A.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Student Learning Outcomes

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

- PSLO 1: (Development and Learning) Analyze and synthesize research and theories to support development and learning. Evaluate and implement developmentally appropriate and culturally relevant approaches to teaching and learning which support the whole child including foundational skills and concepts in language and literacy, math, science, art, health and wellness, and social relationships.
- PSLO 2: (Equity and Cultural Sustainability) Construct knowledge based on the principles of anti-bias education in order to design environments that promote justice, equity and inclusion for all children, families, and communities.
- PSLO 3: (Professionalism) Develop competencies, professional skills, and plans for professional growth. Integrate reflective practices to support professional growth as an Early Childhood professional. Understand and integrate the NAEYC Code of Ethics to support children, families, and other educators.
- PSLO 4: (Observation, Documentation and Assessment) Utilize authentic assessment strategies based on observation, reflection, documentation, and interpretation of children's development to inform teaching practices.
- PSLO 5: (Family Engagement) Incorporate strategies for building respectful and reciprocal relationships with families, children and the community in order to support children's development and learning. Develop knowledge and skills to provide a responsive curriculum and learning environment that reflects the children and the families in the program.
- PSLO 6: (Leadership) Understanding and commitment to leadership development that empowers, encourages, cultivates, and supports self and others to become agents of change and advocate for high-quality early care and education experiences for all children, support for families, and professional stature of educators.

Career Information

Upon completion of this certificate, the student exceeds the minimum requirements to work as a director/site supervisor in a privately funded early care and education program. With documented experience supervising staff, the student also meets the requirements to work as a director/site supervisor in a publicly funded early care and education program.

Certificates of Achievement

Early Childhood Education - 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.

Certificate Requirements

Course Code	Course Title	Units
ECE 300	Introduction to Principles and Practices in Early Childhood Education	3
ECE 312	Child Development (3)	3
ECE 314	The Child, the Family and the Community (3)	3
ECE 326	Making Learning Visible Through Observation and Documentation	3
ECE 404	Children with Special Needs (3)	3
ECE 320	Curriculum and Interactions in Early Childhood Education	4
ECE 430	Culture and Diversity in Early Childhood Education	3
ECE 321	Advanced Practicum in Early Childhood Education	4
ECE 415	Children's Health, Safety and Nutrition	3
ECE 424	Adult Supervision: Mentoring in a Collaborative Learning Setting	2
A minimum of 16 units from the following:		16
ENGL C1000	Academic Reading and Writing (3)	
MATH 310	Mathematical Discovery (3)	
or MATH 300	Introduction to Mathematical Ideas (3)	
FCS 324	Human Development: A Life Span (3)	
or PSYC 371	Life Span Developmental Psychology (3)	
HUM 300	Classical Humanities (3)	
or PHIL 310	Introduction to Ethics (3)	
or PHOTO 420	History of Photography (3)	
SPAN 401	Elementary Spanish I (4)	
or VIET 401	Elementary Vietnamese (4)	
or DEAF 310	American Sign Language I (4)	
To be eligible for the Child Development Permit (Master Teacher Level) through California Commission on Teacher Credentialing students must complete, "sixteen diversified semester units in general education (i.e., at least one course in each of the following areas: English Communication, Mathematical Concepts/Natural Sciences, Social and Behavioral Sciences, Arts and Humanities."[5 CCR § 80113, 5 CA ADC § 80113] General education units must be transferable.		
Students will select a Master Teacher "Specialization" consisting of six (6) units of focused content (see below). Contact ECE Instructional Faculty for information on experience and supervised experience requirements all Child Development Permits.		
Subtotal Units:		**47**

Curriculum, Specialization Option

Course Code	Course Title	Units
A minimum of 6 units from the following:		6
ECE 342	Constructive Math and Science in Early Childhood Education (3)	
ECE 343	Language and Literacy Development in Early Childhood (3)	
ECE 365	Creative Projects and Experiences for Young Children (3)	
ECE 322	Promoting Children's Social Competence (3)	
ECE 307	Introduction to Bilingual Education (3)	
ECE 361	Introducing Young Children to Visual Arts (3)	
Curriculum, Specialization Option Units:		6
Total Units:		**53**

Infant and Toddler Care, Specialization Option

Course Code	Course Title	Units
A minimum of 6 units from the following:		6
ECE 331	Care and Education of Infants and Toddlers (3)	
ECE 330	Infant and Toddler Development (3)	
ECE 402	Infants with Atypical Development (3)	
Infant and Toddler Care, Specialization Option Units:		6
Total Units:		**53**

School-Age Care, Specialization Option

Course Code	Course Title	Units
ECE 356	Programs for the School-Age Child	3
ECE 350	Introduction to Elementary Teaching with Field Experience	3
School-Age Care, Specialization Option Units:		6
Total Units:		**53**

Student Learning Outcomes

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

- PSLO 1: (Development and Learning) Analyze and synthesize research and theories to support development and learning. Evaluate and implement developmentally appropriate and culturally relevant approaches to teaching and learning which support the whole child including foundational skills and concepts in language and literacy, math, science, art, health and wellness, and social relationships.
- PSLO 2: (Equity and Cultural Sustainability) Construct knowledge based on the principles of anti-bias education in order to design environments that promote justice, equity and inclusion for all children, families, and communities.
- PSLO 3: (Professionalism) Develop competencies, professional skills, and plans for professional growth. Integrate reflective practices to support professional growth as an Early Childhood professional. Understand and integrate the NAEYC Code of Ethics to support children, families, and other educators.
- PSLO 4: (Observation, Documentation and Assessment) Utilize authentic assessment strategies based on observation, reflection, documentation, and interpretation of children’s development to inform teaching practices.
- PSLO 5: (Family Engagement) Incorporate strategies for building respectful and reciprocal relationships with families, children and the community in order to support children's development and learning. Develop knowledge and skills to provide a responsive curriculum and learning environment that reflects the children and the families in the program.
- PSLO 6: (Leadership) Understanding and commitment to leadership development that empowers, encourages, cultivates, and supports self and others to become agents of change and advocate for high-quality early care and education experiences for all children, support for families, and professional stature of educators.

Career Information

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. Some career options may require more than two years of college study. Meet with a counselor and an ECE faculty to determine these options.

Early Childhood Education - 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.

Certificate Requirements

Course Code	Course Title	Units
ECE 300	Introduction to Principles and Practices in Early Childhood Education	3
ECE 312	Child Development (3)	3
ECE 314	The Child, the Family and the Community (3)	3

Course Code	Course Title	Units
ECE 326	Making Learning Visible Through Observation and Documentation	3
ECE 320	Curriculum and Interactions in Early Childhood Education	4
ECE 430	Culture and Diversity in Early Childhood Education	3
ECE 321	Advanced Practicum in Early Childhood Education	4
ECE 415	Children's Health, Safety and Nutrition	3
ECE 330	Infant and Toddler Development (3)	3
or ECE 331	Care and Education of Infants and Toddlers (3)	
or ECE 356	Programs for the School-Age Child (3)	
or ECE 402	Infants with Atypical Development (3)	
A minimum of 16 units from the following:		16
ENGL C1000	Academic Reading and Writing (3)	
MATH 300	Introduction to Mathematical Ideas (3)	
FCS 324	Human Development: A Life Span (3)	
or PSYC 371	Life Span Developmental Psychology (3)	
HUM 300	Classical Humanities (3)	
or PHIL 310	Introduction to Ethics (3)	
or PHOTO 420	History of Photography (3)	
SPAN 401	Elementary Spanish I (4)	
or VIET 401	Elementary Vietnamese (4)	
or DEAF 310	American Sign Language I (4)	
Students must complete 16 units in general education categories to be eligible for the Child Development Permit (Teacher Level) through California Commission on Teacher Credentialing. At least one course in each of the following GE areas must be completed: English Communication, Mathematical Concepts/Natural Sciences, Social and Behavioral Sciences, Arts and Humanities		
See ECE Department for information on experience requirement for the Child Development Permits.		
Total Units:		**45**

Student Learning Outcomes

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

- PSLO 1: (Development and Learning) Analyze and synthesize research and theories to support development and learning. Evaluate and implement developmentally appropriate and culturally relevant approaches to teaching and learning which support the whole child including foundational skills and concepts in language and literacy, math, science, art, health and wellness, and social relationships
- PSLO 2: (Equity and Cultural Sustainability) Construct knowledge based on the principles of anti-bias education in order to design environments that promote justice, equity and inclusion for all children, families, and communities.
- PSLO 3: (Professionalism) Develop competencies, professional skills, and plans for professional growth. Integrate reflective practices to support professional growth as an Early Childhood professional. Understand and integrate the NAEYC Code of Ethics to support children, families, and other educators.
- PSLO 4: (Observation, Documentation and Assessment) Utilize authentic assessment strategies based on observation, reflection, documentation, and interpretation of children’s development to inform teaching practices.
- PSLO 5: (Family Engagement) Incorporate strategies for building respectful and reciprocal relationships with families, children and the community in order to support children's development and learning. Develop knowledge and skills to provide a responsive curriculum and learning environment that reflects the children and the families in the program.

Career Information

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.

Early Childhood Education, Associate Teacher Certificate

Upon completion of one of the following certificates, and with appropriate documented experience, the student meets the minimum requirements for employment in a privately funded child care program or family day care program. Certificates are designed to meet varying employment levels and focused training with infants and school-age children. These requirements are outlined in Title 22 (Department of Social Services) regulations for child care licensing.

To be eligible for the Child Development Permit (Associate Teacher) students must also complete experience requirements for the particular permit for which they are applying. See ECE Department for further information.

Certificate Requirements

Course Code	Course Title	Units
ECE 300	Introduction to Principles and Practices in Early Childhood Education	3
ECE 312	Child Development (3)	3
ECE 314	The Child, the Family and the Community (3)	3
ECE 326	Making Learning Visible Through Observation and Documentation	3
ECE 320	Curriculum and Interactions in Early Childhood Education	4
Total Units:		**16**

Student Learning Outcomes

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

- PSLO 1: (Development and Learning) Analyze and synthesize research and theories to support development and learning. Evaluate and implement developmentally appropriate and culturally relevant approaches to teaching and learning which support the whole child including foundational skills and concepts in language and literacy, math, science, art, health and wellness, and social relationships.
- PSLO 3: (Professionalism) Develop competencies, professional skills, and plans for professional growth. Integrate reflective practices to support professional growth as an Early Childhood professional. Understanding of and integration of the NAEYC Code of Ethics to support children, families, and other educators.
- PSLO 4: (Observation, Documentation and Assessment) Utilize authentic assessment strategies based on observation, reflection, documentation, and interpretation of children's development to inform teaching practices.
- PSLO 5: (Family Engagement) Incorporate strategies for building respectful and reciprocal relationships with families, children and the community in order to support children's development and learning. Develop knowledge and skills to provide a responsive curriculum and learning environment that reflects the children and the families in the program.

Career Information

This certificate allows the student to work as a teacher in a private early care and education (Title 22) program, serving infants/toddlers, preschool-age children, and school-age children in before-and-after school programs. With the Associate Teacher Child Development Permit, an individual can work as an assistant or associate teacher in a publicly funded (Title 5) early care and education program.

Early Childhood Education, Infant and Toddler Specialist Certificate

This certificate provides the foundational coursework that serves as the core curriculum for the early childhood education workforce with a specialized focus on infant and toddler care. Topics include an introduction to the profession, observation techniques, and developmentally responsive care and education. The program emphasizes infant and toddler development, culturally and linguistically inclusive practices, and high-quality caregiving in group settings. The Infant and Toddler Specialist Certificate prepares students to work with children from birth to age 3 in diverse early care and education environments. Completion of this certificate fulfills the child development coursework requirement—when combined with documented experience—for the California Child Development Permit at the Teacher level. Graduates will meet the minimum qualifications for employment in licensed infant/toddler programs.

Certificate Requirements

Course Code	Course Title	Units
ECE 300	Introduction to Principles and Practices in Early Childhood Education	3
ECE 312	Child Development (3)	3
ECE 314	The Child, the Family and the Community (3)	3
ECE 330	Infant and Toddler Development	3
ECE 326	Making Learning Visible Through Observation and Documentation	3
ECE 331	Care and Education of Infants and Toddlers (3)	3
or ECE 402	Infants with Atypical Development (3)	
ECE 320	Curriculum and Interactions in Early Childhood Education	4
Total Units:		**22**

Student Learning Outcomes

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

- PSLO 1: (Development and Learning) Analyze and synthesize research and developmental theories to support infant and toddler learning. Implement developmentally, culturally, and linguistically responsive teaching practices that support the whole child, fostering foundational skills in language and literacy, math, science, health and wellness, and social emotional relationships.
- PSLO 2: (Professionalism) Demonstrate core professional competencies, including ethical decision-making, reflective practice, and advocacy for equitable early learning environments. Develop a plan for ongoing professional growth while integrating the NAEYC Code of Ethical Conduct to support children, families, and fellow educators.
- PSLO 3: (Observation, Documentation and Assessment) Utilize authentic, strengths-based assessment strategies through observation, reflection, documentation, and interpretation of children's development to inform responsive teaching practices.
- PSLO 4: (Family Engagement) Describe how to build respectful, reciprocal relationships with families and communities to support children's development and learning. Develop skills necessary to create inclusive, responsive learning environments and curriculum that reflect and honor the diverse cultural and linguistic backgrounds of the children and families in the program.

Career Information

Upon completion of this certificate and with appropriate documented experience, students meet the minimum qualifications for employment in an infant/toddler care program. Additionally, students who complete this certificate, along with appropriate documented experience, qualify for employment in privately funded child care programs and family child care settings.

Early Childhood Education, School Age Child Care and Education Certificate

Upon completion of one of the following certificates, and with appropriate documented experience, the student meets the minimum requirements for employment in a privately funded child care program or family day care program. Certificates are designed to meet varying employment levels and focused training with infants and school-age children. These requirements are outlined in Title 22 (Department of Social Services) regulations for child care licensing.

Certificate Requirements

Course Code	Course Title	Units
ECE 300	Introduction to Principles and Practices in Early Childhood Education	3
ECE 312	Child Development (3)	3
ECE 314	The Child, the Family and the Community (3)	3
ECE 326	Making Learning Visible Through Observation and Documentation	3
ECE 307	Introduction to Bilingual Education (3)	3
ECE 404	Children with Special Needs	3
ECE 320	Curriculum and Interactions in Early Childhood Education	4
ECE 321	Advanced Practicum in Early Childhood Education	4
Total Units:		**26**

Student Learning Outcomes

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

- PSLO 1: (Development and Learning) Analyze and synthesize research and theories to support development and learning. Evaluate and implement developmentally appropriate and culturally relevant approaches to teaching and learning which support the whole child including foundational skills and concepts in language and literacy, math, science, art, health and wellness, and social relationships.
- PSLO 2: (Professionalism) Develop competencies, professional skills, and plans for professional growth. Integrate reflective practices to support professional growth as an Early Childhood professional. Understand and integrate the NAEYC Code of Ethics to support children, families, and other educators.
- PSLO 3: (Observation, Documentation and Assessment) Utilize authentic assessment strategies based on observation, reflection, documentation, and interpretation of children’s development to inform teaching practices.
- PSLO 4: (Family Engagement) Incorporate strategies for building respectful and reciprocal relationships with families, children and the community in order to support children's development and learning. Develop knowledge and skills to provide a responsive curriculum and learning environment that reflects the children and the families in the program.

Career Information

Upon completion of this certificate and with appropriate documented experience, the student exceeds the minimum requirements for employment as a teacher in privately funded before-and-after school child care programs. These requirements are outlined in Title 22 (Department of Social Services) regulations for child care licensing.

Early Childhood Education (ECE) Courses

ECE 295 Independent Studies in Early Childhood Education

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

ECE 299 Experimental Offering in Early Childhood Education

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

ECE 300 Introduction to Principles and Practices in Early Childhood Education

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU
C-ID: C-ID ECE 120

This course is an introduction to early care and education of young children (0 - 8 years old), including the evolution of professional practices and educational principles that support child development and learning. Historical contexts and theoretical perspectives along with typical roles and expectations of early childhood educators are explored. Professional ethics, career pathways, and professional standards are introduced. Students will integrate teaching practices including observation, documentation, and interpretation of children’s behavior. Developmentally appropriate practices, early learning environments, curriculum, and effective pedagogy for young children are examined and applied, including how play contributes to children's learning, growth, and development.

ECE 307 Introduction to Bilingual Education

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU

This course is an introduction to the study of the education of English Learners in California and the United States. It includes the history, relevant legislation, first and second language acquisition theories, practices and strategies for the development of English proficiency. The course involves observations and tutoring of an emergent English Language Learner using materials and strategies responsive to the students' primary language and assessed levels of English proficiency.

ECE 312 Child Development

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligibility for ENGL C1000: Academic Reading and Writing (formerly known as ENGWR 300: College Composition).
Transferable: CSU; UC
General Education: Local GE L4; Local GE L7B; Cal-GETC Area 4
C-ID: C-ID CDEV 100

This course examines the progression of development in the physical, cognitive, social, and emotional domains and identifies developmental milestones for children from conception through adolescence. Interactions between biological processes and environmental factors are emphasized. Students will observe children, evaluate individual differences, and analyze characteristics of development at various stages according to developmental theories. (C-ID CDEV 100)

ECE 314 The Child, the Family and the Community

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligibility for ENGL C1000 (formerly known as ENGWR 300).
Transferable: CSU; UC
General Education: Local GE L4; Local GE L7B; Cal-GETC Area 4
C-ID: C-ID CDEV 110

This course is a historical and current examination of the developing child in a societal context focusing on the interrelationship of family, school, and community. The process of socialization and identity development will be highlighted, showing the importance of respectful, reciprocal relationships that support and empower families. This course explores the role of collaboration between family, community, and schools in supporting children’s development, birth through adolescence (C-ID CDEV 110).

ECE 320 Curriculum and Interactions in Early Childhood Education

Units: 4
Hours: 36 hours LEC; 108 hours LAB
Prerequisite: ECE 300 and 312 with grades of "C" or better
Corequisite: ECE 326
Enrollment Limitation: Under California law (Title 22) any persons working directly with children must provide proof of current Tuberculosis clearance and provide any required proof of immunizations (currently: measles, pertussis, and influenza/ influenza waiver).
Transferable: CSU
C-ID: C-ID ECE 130

This course provides supervised experience working with children in an early childhood setting. Topics include principles of developmentally appropriate curriculum development, environments, classroom design, and child guidance, with the opportunity to apply key teaching principles. Students will use knowledge of children’s development, theories of learning and development including models of developmentally appropriate practice to plan environments and curriculum in all content areas to support children's development and learning integrated throughout indoor and outdoor settings.

This is an approved program/curriculum course required by the California Code of Regulations Title 22 and Title 5.
Under the supervision of a qualified Mentor Teacher, students will complete 3.5 in-person scheduled lab hours twice a week at the CRC Child Development Center or an instructor-approved early learning and care setting.

Up to 50 days of experience can be applied to California Commission on Teacher Credentialing (CCTC) Child Development Permits for students completing ECE 320 & 321.

Up to 100 hours of supervised clinical practice equivalency (in-person lab hours) may be applied to a PK-3 Early Childhood Education (ECE) Specialist Instruction Credential Program (CCTC).

The college requires all lab students to complete a lab waiver within the learning management system. Students must show current proof of tuberculosis clearance, pertussis immunization, and measles immunization. Additionally, students enrolled in the fall semester must be immunized against influenza, or submit an influenza waiver. (C-ID ECE 130)

ECE 321 Advanced Practicum in Early Childhood Education

Units: 4
Hours: 36 hours LEC; 108 hours LAB
Prerequisite: ECE 300, 312, 320, and 326 with grades of "C" or better
Enrollment Limitation: Under California law (Title 22) any persons working directly with children must provide proof of current Tuberculosis clearance and provide any required proof of immunizations (currently: measles, pertussis, and influenza/ influenza waiver).
Transferable: CSU
C-ID: C-ID ECE 210

This course provides supervised experience working with children in an early childhood setting under the supervision of an early childhood education faculty and other qualified early education professionals. Building on the foundational knowledge students obtained in the Introduction to Curriculum (ECE 320) course students will build competence in guidance and classroom leadership. Using child observations and assessments, students will plan and implement developmentally appropriate early childhood programming, curriculum, and collaborate on the design of early learning environments. Students will utilize practical classroom experiences to make connections between theory and practice, develop professional and ethical dispositions, and build a comprehensive understanding of the children and families in the program. Reflective practice will be emphasized as student teachers design, implement, and evaluate approaches, strategies, and techniques that promote development and learning. This course will include an exploration of career

pathways, professional development, and teacher responsibilities.

This is an approved program/curriculum course required by the California Code of Regulations Title 22 and Title 5.
Under the supervision of a qualified Mentor Teacher, students will complete 3.5 in-person scheduled lab hours twice a week at the CRC Child Development Center or an instructor-approved early learning and care setting.

Up to 50 days of experience can be applied to California Commission on Teacher Credentialing (CCTC) Child Development Permits for students completing ECE 320 & 321.

Up to 100 hours of supervised clinical practice equivalency (in-person lab hours) may be applied to a PK-3 Early Childhood Education (ECE) Specialist Instruction Credential Program (CCTC).

The college requires all lab students to complete a lab waiver within the learning management system. Students must show current proof of tuberculosis clearance, pertussis immunization, and measles immunization. Additionally, students enrolled in the fall semester must be immunized against influenza, or submit an influenza waiver. (C-ID ECE 210)

ECE 322 Promoting Children's Social Competence

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU
General Education: Local GE L7B

This course focuses on early childhood guidance and discipline through examination of theories, research and practical application for parents, early childhood education teachers and caregivers of young children. The course includes strategies for understanding and responding to children's behavior in ways that are congruent with the core values of early childhood education. Concepts of guidance relating to typical and atypical development, culture, and environment will be presented. Developmental stages of children's behavior, positive guidance strategies and teaching social-emotional skills are included.

ECE 326 Making Learning Visible Through Observation and Documentation

Units: 3
Hours: 54 hours LEC
Prerequisite: ECE 312 with a grade of "C" or better
Advisory: ENGL C1000 with a grade of "C" or better; Eligibility for ENGWR 300
Transferable: CSU
C-ID: C-ID ECE 200

This course applies critical and reflective thinking to observation and assessment of young children’s development. It also prepares teachers of young children to appropriately use observation, documentation, and interpretation tools and strategies to inform and plan learning environments and experiences. Multiple forms of child and early childhood program assessments are explored, along with strategies for collaboration with families and professionals. (C-ID ECE 200).

ECE 330 Infant and Toddler Development

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU
General Education: Local GE L4; Local GE L7B

This course explores infant development from pre-conception through three years of age, focusing on physical, cognitive, language, social, and emotional growth. Students will apply current research and theoretical frameworks to understand behavior, as well as the interactions between heredity and environment. The course emphasizes the role of family, relationships, and caregiving strategies at each developmental stage, providing practical insights for parents or professionals working with infants in health, education, or social services.

ECE 331 Care and Education of Infants and Toddlers

Units: 3
Hours: 54 hours LEC
Prerequisite: ECE 312 or 330 with a grade of "C" or better
Transferable: CSU

This course integrates current research on infant development into the teaching and care of infants in group settings. It emphasizes early childhood education principles and practices for caring for and educating infants from birth to three years. Students will explore strategies for designing, implementing, and evaluating group care programs for infants and toddlers.

ECE 342 Constructive Math and Science in Early Childhood Education

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ECE 312 with a grade of "C" or better
Transferable: CSU

The course is an introduction to the constructivist approach to teaching pre-math and science in early childhood education. The content and teaching techniques support the perspective that children construct knowledge through a dynamic, interactive process that facilitates their development of working theories relating to math and science.

ECE 343 Language and Literacy Development in Early Childhood

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ECE 312 with a grade of "C" or better
Transferable: CSU

This course will prepare current or future early childhood educators and caregivers to understand and enhance the emergent literacy experiences of young children. The knowledge of developmentally appropriate literacy practices will improve the early childhood educators' abilities to prepare children from birth to age 5 for reading and writing in the primary grades.

ECE 350 Introduction to Elementary Teaching with Field Experience

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Enrollment Limitation: In order to participate in the fieldwork portion of the course, students will need to complete any clearance processes required by the cooperating school's policies. These may include but are not limited to: fingerprinting, background checks, mandated reporter training and vaccinations.
Advisory: ECE 312; ECE 307
Transferable: CSU
General Education: Local GE L7B
C-ID: C-ID EDUC 200

This course introduces students to teaching diverse learners in today's contemporary schools, Kindergarten through grade 12 (K-12). Students will complete three hours weekly (minimum of 45 hours per semester) at a field placement in a college-approved local public elementary classroom under the supervision of a credentialed teacher. Course content covers teaching as a profession and career, historical and philosophical foundations of the United States education system, contemporary educational issues, California's content standards and frameworks, and teacher performance standards, as well as observation skills, communication skills, diversity and social issues. Students' fieldwork experiences will integrate and apply the course content. In order to participate in the fieldwork portion of the course, students will need to complete any clearance processes required by the cooperating school's policies. These may include but are not limited to: fingerprinting, mandated reporter training, background checks, and vaccinations.

ECE 356 Programs for the School-Age Child

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ECE 312 with a grade of "C" or better
Transferable: CSU

This program will present the fundamentals of planning, implementing and evaluating programs for before- and after-school care of school-age children (K-6). Course emphasis is on developmental levels, age-appropriate activities and day-to-day program operation. A field trip may be utilized to enhance classroom instruction.

ECE 361 Introducing Young Children to Visual Arts

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU
General Education: Local GE L3

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 365 Creative Projects and Experiences for Young Children

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU

This course prepares teachers in early childhood education with strategies for promoting children's creativity through experiential projects and experiences. The focus will be on observing children's natural ways of exploring their environment and on the learning strategies needed to facilitate and document children's learning and emerging skills. Students will evaluate and design creative early childhood environments which promote a project approach and a Reggio Emilia perspective.

ECE 402 Infants with Atypical Development

Units: 3
Hours: 54 hours LEC
Prerequisite: ECE 312 with a grade of "C" or better
Transferable: CSU

This course will examine the developmental characteristics, assessment techniques, methods of intervention, natural environments, community and family resources, and current issues of the atypical infant from birth through age three. Students will understand and practice the early intervention techniques that very young children with special needs and disabilities require in the developmental areas of sensory stimulation and integration, gross and fine motor control, cognitive, language, social and self-help skills. The course will explore the community services and agencies that offer family support as well as the laws related to the atypical infant/toddler. Career and vocational opportunities in the fields related to special needs infants/toddlers and the various roles of the multi-disciplinary teams that develop the Individualized Family Service Plan (IFSP) will be examined.

ECE 404 Children with Special Needs

Units: 3
Hours: 54 hours LEC
Prerequisite: ECE 312 with a grade of "C" or better
Transferable: CSU

This course provides an overview of special education in the U.S., covering key laws (e.g., ADA, IDEA, Section 504) and foundational concepts such as disability categories, the least restrictive environment (LRE), and individualized support plans (IEP, IFSP, 504 Plans). Students will explore typical and atypical development from birth through adolescence, learn to identify common disorders (e.g., genetic, sensory, emotional, and behavioral), and understand the referral process. Emphasis is placed on collaborating effectively with IEP/IFSP teams and families to develop tailored support plans. The course highlights instructional strategies (e.g., UDL, MTSS) and incorporates culturally responsive, anti-bias practices to create inclusive learning environments for children with diverse needs. It also examines the challenges faced by youth with disabilities and their families, discusses available community

resources, and outlines key advocacy actions to support children and families.

ECE 415 Children's Health, Safety and Nutrition

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU
General Education: Local GE L7B
C-ID: C-ID ECE 220

The key components that ensure the health, safety, and nutrition of both children and staff will be identified along with the importance of collaboration with families and health professionals. Students will be introduced to early childhood curriculum, laws, regulations, standards, policies and procedures related to child health, safety and nutrition for children birth through middle childhood. Course emphasis is placed on integrating and maintaining the optimal health, safety, and nutritional concepts in everyday planning and program development for all children, including injury prevention, accident reporting, infectious diseases control, sanitation, overall risk management, and emergency procedures and evacuation.

ECE 420 Administration I: Programs in Early Childhood Education

Units: 3
Hours: 54 hours LEC
Prerequisite: ECE 300 and 312 with grades of "C" or better
Advisory: ECE 320 with a grade of "C" or better
Transferable: CSU

This is an introductory course in the elements of program planning, budgeting, supervision and personnel administration for public and private centers and schools serving young children.

ECE 422 Administration II: Personnel and Leadership in Early Childhood Education

Units: 3
Hours: 54 hours LEC
Prerequisite: ECE 300 and 312 with grades of "C" or better
Advisory: ECE 320 with a grade of "C" or better
Transferable: CSU

This is an advanced course in administration and coordination of multi-faceted Child Development Programs. The emphasis will be on publicly funded programs and personnel management. This course meets the requirements of the Education Code under Title 5 and the Commission on Teacher Credentialing.

ECE 424 Adult Supervision: Mentoring in a Collaborative Learning Setting

Units: 2
Hours: 36 hours LEC
Prerequisite: ECE 320 with a grade of "C" or better
Transferable: CSU

This course is a study of the methods and principles of collaborative learning, with emphasis on supervising adults working in early care and education centers. Special attention is placed on the role of a mentor as a reflective practitioner who is open to professional development and who has a keen understanding of classroom practice that is effective and supports individual strengths for children, families and colleagues. This course satisfies the adult supervision requirement for receiving a supervising teacher permit from the California Commission on Teacher Credentialing.

ECE 430 Culture and Diversity in Early Childhood Education

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L4
C-ID: C-ID ECE 230

This course examines the historical and current perspectives on diversity and inclusion and the impact of systemic societal influences on children's development, learning, and school experiences. Strategies for developmentally, culturally, and linguistically appropriate anti-bias curriculum will be explored as well as approaches to promote inclusive and anti-racist classroom communities. This includes self-reflection on the influence of teacher's own culture and life experiences on teaching and interactions with children and families.

ECE 494 Topics in Early Childhood Education

Units: 0.5 - 4
Hours: 9 hours LEC
Prerequisite: None.
Enrollment Limitation: Students must verify paid registration to the conference.
Transferable: CSU

Designed to give students an opportunity to study topics in Early Childhood Education which are not included in current course offerings. Topics may include, but are not limited to: Management of Family Day Care Homes; Guidance of the Special Child in Everyday Living; Behavior and Discipline; Children in Crisis; The Single Parent Family; and Cross-Cultural Experiences with Children and Families.

ECE 495 Independent Studies in Early Childhood Education

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

ECE 499 Experimental Offering in Early Childhood Education

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

Economics

Economics is a field of study that focuses on how people, businesses, governments and societies allocate scarce resources between competing uses. The allocation of resources is an integral part of our daily lives here in the US and around the globe. Economics provides a tool kit for analyzing and evaluating these decisions. Comparisons over time focus on the past, present and future to see how resource allocations have changed over time for households (food, children, time and money), businesses (labor, machinery and profits), government (military, Social Security, education and healthcare), and environment (pollution, green technology, biodiversity and sustainability). Economics provides a solid foundation for many career opportunities.

Degrees Offered

A.A.-T. in Economics

Dean Tyler Rollins
Department Chair Edwin Fagin
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Associate Degree for Transfer

A.A.-T. in Economics

The Associate in Arts in Economics for Transfer degree program 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. 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.

This program has the following completion requirements:

(1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
(A) Cal-GETC the California General Education Transfer Curriculum (Cal-GETC) Requirement.
(B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
(2) Obtainment of a minimum grade point average of 2.0.

ADTs require that students must earn a "C" or better in all courses required for the major or area of emphasis. A "P" (Pass) grade is also an acceptable grade for courses in the major if the course is taken on a Pass/No Pass basis.

Degree Requirements

Course Code	Course Title	Units
Core:		
ECON 302	Principles of Macroeconomics	3
ECON 304	Principles of Microeconomics	3
ECON 310	Statistics for Business and Economics (3)	3 - 4
or PSYC 330	Introductory Statistics for the Behavioral Sciences (3)	
or STAT C1000E	Introduction to Statistics (4)	
or STAT C1000H	Introduction to Statistics - Honors (4)	
MATH 341	Calculus for Business and Economics (4)	4 - 5
or MATH 400	Calculus I (5)	
List A Select one course from the following (3-5 units):		
ACCT 301	Financial Accounting (4)	3 - 5
or ACCT 311	Managerial Accounting (4)	
or MATH 401	Calculus II (5)	
or CISC 310	Introduction to Computer Information Science (3)	
or CISP 360	Introduction to Structured Programming (4)	
or MATH 410	Introduction to Linear Algebra (3)	
List B Select one course from the following (3 units):		
ECON 306	Environmental Economics (3)	3[1]
or AGB 321	Agriculture Economics (3)	
Total Units:		**19 - 23**

[1]or any course not used in List A

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) the California General Education Transfer Curriculum (Cal-GETC) Requirement.

Student Learning Outcomes

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

- Describe and apply basic economic principles and concepts to economic issues. This includes the ability to: • Analyze graphical and numerical representations of resource allocation in the presence of scarcity. • Analyze graphical and numerical representations of a microeconomic and macroeconomic equilibrium using the tools of supply and demand and aggregate supply and aggregate demand analysis.
- Demonstrate the use of numerical methods to quantify common terms used in economics. This includes an ability to: • Calculate GDP and economic growth rates. • Calculate unemployment rates. • Calculate inflation rates using a price index. • Calculate profits, total cost, variable cost, and fixed cost.

- Demonstrate the ability to think critically and analyze solutions to major economic questions. This includes an ability to: • Analyze the strengths and weaknesses of major macroeconomic policy tools including fiscal and monetary policy. Evaluation of Monetary and Fiscal Policy will focus on the impact on unemployment, GDP, and inflation. • Comparing perfectly competitive markets and imperfectly competitive markets and their effect on profits, prices and quantities produced. •
- Discuss the global nature of economic issues. This includes an ability to: • Describe the common features of international trade as it is related to GDP. • Analyze different international trade theories and their implications for specialization.

Career Information

Career Opportunities: There are a wide array of job opportunities in business, finance, government, and other sectors for an individual with an undergraduate degree in economics. Business firms of all sizes provide employment and career opportunities including jobs in banking, budget and market analysis, and in sales. Federal, state, and local government agencies require and employ individuals with training in economics to carry out benefit-cost analysis and as research assistants and analysts. Job opportunities also exist in education and journalism. Economies and individual markets are dynamic, and economists help firms understand and adapt to changes occurring in the economy and in specific markets. Individuals with economics degrees work in a broad range of fields with jobs with federal, state, and local government agencies. Job opportunities are expanding for employment for those seeking jobs with global or international focus.

Economics (ECON) Courses

ECON 100 Introduction to Economics

Units: 3
Hours: 54 hours LEC
Prerequisite: None.

This course introduces the purpose, terminology, and basic concepts of economic theory. It examines the fundamental economic problem of scarcity and describes how our society is organized to deal with scarcity. It considers some of the problems (unemployment, inflation, national debt, poverty, crime, pollution, etc.) that economic theory may help explain.

ECON 299 Experimental Offering in Economics

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

ECON 300 Survey of Economics

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L4; Cal-GETC Area 4

This course introduces the purpose, terminology, and basic concepts of economic theory. It examines the fundamental economic problem of scarcity and describes how our society is organized to deal with scarcity. It considers some of the problems our economy faces (unemployment, pollution, taxes, inflation, national debt, poverty, crime, international trade, etc.) and how economic theory can be used to investigate these pressing issues.

ECON 302 Principles of Macroeconomics

Units: 3
Hours: 54 hours LEC
Prerequisite: Elementary Algebra or equivalent with a grade of “C” or better or eligibility for higher level math or through the placement process
Transferable: CSU; UC
General Education: Local GE L4; Cal-GETC Area 4
C-ID: C-ID ECON 202

This course was formerly known as ECON 302 Principles of Macroeconomics.

This course is a graphical and functional analysis of the economy as a whole. It focuses on the economy's well-being, problems, and possible solutions. Major topics include: basic economic analysis, demand, supply, and equilibrium in a market; macroeconomic sectors, goals, and problems (unemployment, inflation, business cycle, and government budget deficit); the economy's output, income, and price level; aggregate demand, aggregate supply, and equilibrium; and macroeconomic policies (fiscal and monetary). Time permitting, related topics such as international trade, international finance, and economic growth may also be discussed. Course work includes doing arithmetic problems, solving algebraic equations, and graphing straight and curvilinear lines.

ECON 304 Principles of Microeconomics

Units: 3
Hours: 54 hours LEC
Prerequisite: Elementary Algebra or equivalent with a grade of “C” or better or eligibility for higher level math or through the placement process
Transferable: CSU; UC
General Education: Local GE L4; Cal-GETC Area 4
C-ID: C-ID ECON 201

This course was formerly known as ECON 304 Principles of Microeconomics.

This course is a graphical and functional analysis of the units (sectors) making up the economy. The focus is on the sectors’ choices and interactions, microeconomic goals (efficiency and equity), problems, and solutions. Major topics include basic principles of economics; basic economic analyses; demand, supply, and equilibrium in a market; markets and applications; costs and production; product and resources markets; and microeconomic problems (externalities, public goods, and income inequality). Time permitting, related topics such as international trade and health economics may also be discussed. Course work includes doing arithmetic problems, solving algebraic equations, and graphing straight and curvilinear lines.

ECON 306 Environmental Economics

Units: 3
Hours: 54 hours LEC

Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L4; Cal-GETC Area 4

This course focuses on the application of economic principles to help understand and manage the relationship between humans and the environment. The central theme is that there are competing demands for our limited natural resources, including the waste assimilation capacity of the environment, necessitating that difficult choices be made regarding how those resources are used. The course illustrates how resources are allocated in a market economy, potential problems from a social perspective with that allocation, and alternative solutions for reallocating resources to achieve more socially desirable outcomes. Issues such as efficiency and externality, benefit-cost analysis, and alternative policy instruments for pollution control are examined. Topics related to global climate change, California water resources, and other current environmental policy issues will be discussed as time permits.

ECON 310 Statistics for Business and Economics

Units: 3
Hours: 54 hours LEC
Prerequisite: Intermediate Algebra or higher (or high school equivalent) with a C or better or eligibility for transfer-level mathematics.
Transferable: CSU; UC (UC transfer credit limitation: STAT 300, STAT 480, STAT C1000E, STAT C1000H, ECON 310 and POLS 382, PSYC 330 combined: maximum credit, 1 course)
General Education: Local GE L2; Cal-GETC Area 2
C-ID: C-ID MATH 110

This course focuses on statistical concepts commonly used in economics, business and other behavioral sciences. It covers the collection, organization, presentation, analysis, and interpretation of numerical data. Major topics include organizing and describing data using graphs, tables, and charts; calculating and interpreting descriptive statistics including measures of central tendency and measures of dispersion; probability and sampling distributions; statistical inference; correlation and linear regression; analysis of variance, chi-square and t-tests. Computer software and/or hand calculations will be used in this course to calculate, organize and display statistical information. Results generated either by hand calculation, the use of computer software, articles or textbook examples will be used to analyze and interpret statistical findings.

ECON 320 Concepts in Personal Finance

Same As: BUS 320
Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: BUS 105
Transferable: CSU
General Education: Local GE L4; Local GE L7B

This course is designed to assist individuals in analyzing their financial affairs. Elements and conceptual basis of financial planning, analysis, and decision making in areas of budgeting, taxes, borrowing, money management, insurance, investments, and retirement will be examined with an emphasis on principles to develop students' economic decision making. Students will be using mathematical concepts as well as reading and interpreting written and oral instructions. The course provides a solid base for a career in financial planning services. This course is the same as BUS 320, and only one may be taken for credit.

ECON 495 Independent Studies in Economics

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

ECON 499 Experimental Offering in Economics

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU

This is the experimental courses description.

Education/Teaching

This major provides students with principles, practices, and competencies related to teaching California's K-12 youth. Students are immersed in practices inclusive of all children; including children who are culturally and linguistically diverse and children with special needs. Students will gain practical fieldwork experience working with and/or observing children at their site placements within Elk Grove Unified School District.

This major is especially designed for students who plan to transfer into California State University, Sacramento's Teacher Preparation Program, providing the lower division coursework necessary to gain admission to the university and the Elementary Teacher Credential Program. Students planning to transfer in this major should consult with a counselor as requirements vary among transfer universities.

Degrees and Certificates Offered

A.A.-T. in Elementary Teacher Education

A.A. in Early Childhood Education

A.A. in Early Childhood Education, Site Supervisor

A.A. in Liberal Studies for Elementary Education

Early Childhood Education - Master Teacher Certificate

Early Childhood Education, School Age Child Care and Education Certificate

Dean Emilie Mitchell

Department Chair Jeannette Mulhern

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Associate Degrees for Transfer

A.A.-T. in Elementary Teacher Education

The Associate in Arts in Elementary Teacher Education for Transfer Degree (AA-T) is designed to provide a seamless transfer pathway for students interested in pursuing at least one Elementary Teacher Education degree option in the California State University (CSU) system. The degree is comprised of lower division coursework typically required by CSU institutions. Students must complete the core curriculum (minimum grade in each course of "C" or "P" if taken pass/no-pass) and electives to meet a total of 60 transferable units, which includes the California General Education Transfer Curriculum (CalGETC) pattern, with a minimum overall GPA of 2.0. Upon successful completion of the degree requirements, students will be guaranteed admission to the CSU system with junior status and will not have to repeat lower division coursework. Students are encouraged to meet with a counselor to develop their educational plans as degree options and general education requirements vary for each university.

Degree Requirements

Course Code	Course Title	Units
ECE 312	Child Development	3
ECE 350	Introduction to Elementary Teaching with Field Experience	3
ARTH 300	Art Appreciation (3)	3
or MUFHL 300	Introduction to Music (3)	
or TA 300	Introduction to the Theatre (3)	
BIOL 308	Contemporary Biology (3)	3
BIOL 309	Contemporary Biology Laboratory	1
COMM C1000	Introduction to Public Speaking	3
COMM 311	Argumentation and Debate (3)	3
or COMM 315	Persuasion (3)	
or ENGL C1001	Critical Thinking and Writing (3)	
ENGL C1000	Academic Reading and Writing (3)	3
or ENGL C1000H	Academic Reading and Writing - Honors (3)	
ENGWR 301	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
MATH 310	Mathematical Discovery	3
PHYS 310	Conceptual Physics (3)	3
POLS C1000	American Government and Politics (3)	3
or POLS C1000H	American Government and Politics - Honors (3)	
Total Units:		**44**

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) the California General Education Transfer Curriculum (Cal-GETC) Requirement.

Student Learning Outcomes

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

- Apply knowledge and skills gained in various disciplines to ensure transfer to a CSU campus in preparation for successful completion of upper division coursework after transfer (PSLO #1)
- Use the scientific methods of inquiry, data collection, quantitative reasoning, and basic mathematical concepts to analyze information in appropriate disciplines
- Apply analytical reading and writing, research, and critical thinking essential for completing assigned tasks
- Describe the nature of American government and compare and contrast local, state and national political institutions

- Write and speak effectively, demonstrating the ability to evaluate audience and appeal to it persuasively
- Apply knowledge of world history and cultures to identify the values of a culture and work with others of a diverse culture
- Compare and contrast various forms and styles of music, artworks, and theatrical performances
- Evaluate attitudes, actions, and behaviors indicative of a professional educator (PSLO #2)
- Apply knowledge of developmental theories to assess teaching practices and learning conditions in children and classroom situations. (PSLO #3)

Career Information

The AA-T in Elementary Teacher Education provides students with the foundational knowledge necessary for transfer to a Bachelor of Arts (BA) degree program, especially at a campus of the California State University (CSU) system. Career opportunities for students who have earned BA degrees in Elementary Teacher Education include but are not limited to: Teacher, primary grades; Teacher, intermediate grades; Teacher, private school; Instructional Assistant. Many careers require additional training beyond the Bachelor Degree. NOTE TO TRANSFER STUDENTS: The Associate Degree for Transfer program is designed for students who plan to transfer to a campus of the California State University (CSU). Other than the required core, the courses you choose to complete this degree will depend to some extent on the selected CSU for transfer. In addition, some CSU-GE Breadth or Cal-GETC requirements can also be completed using courses required for this associate degree for transfer major (known as “double-counting”). Meeting with a counselor to determine the most appropriate course choices will facilitate efficient completion of your transfer requirements. For students wishing to transfer to other universities (UC System, private, or out-of-state), the Associate Degree for Transfer may not provide adequate preparation for upper-division transfer admissions; it is critical that you meet with a CRC counselor to select and plan the courses for the major, as programs vary widely in terms of the required preparation.

Associate Degrees

A.A. in Early Childhood Education

This program provides a comprehensive foundation for in-depth early childhood teacher preparation both through strong general education and principles and practices 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.

Note to Transfer Students:
If you are interested in transferring to a four-year college or university to pursue a Bachelor’s degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate’s degree in this major may be different from the requirements needed for the Bachelor’s degree.

Degree Requirements

Course Code	Course Title	Units
ECE 300	Introduction to Principles and Practices in Early Childhood Education	3
ECE 312	Child Development (3)	3
ECE 314	The Child, the Family and the Community (3)	3
ECE 415	Children's Health, Safety and Nutrition (3)	3
ECE 326	Making Learning Visible Through Observation and Documentation	3
ECE 320	Curriculum and Interactions in Early Childhood Education	4
ECE 430	Culture and Diversity in Early Childhood Education	3
ECE 321	Advanced Practicum in Early Childhood Education	4
ECE 404	Children with Special Needs	3
ECE 424	Adult Supervision: Mentoring in a Collaborative Learning Setting	2
A minimum of 9 units from the following:		9
ECE 322	Promoting Children's Social Competence (3)	
ECE 342	Constructive Math and Science in Early Childhood Education (3)	
ECE 343	Language and Literacy Development in Early Childhood (3)	
ECE 365	Creative Projects and Experiences for Young Children (3)	
ECE 307	Introduction to Bilingual Education (3)	
ECE 361	Introducing Young Children to Visual Arts (3)	
A minimum of 3 units from the following:		3
ECE 330	Infant and Toddler Development (3)	
ECE 331	Care and Education of Infants and Toddlers (3)	
ECE 356	Programs for the School-Age Child (3)	
ECE 402	Infants with Atypical Development (3)	
Total Units:		**43**

The Early Childhood Education Associate in Arts (A.A.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Student Learning Outcomes

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

- PSLO 1: (Development and Learning) Analyze and synthesize research and theories to support development and learning. Evaluate and implement developmentally appropriate and culturally relevant approaches to teaching and learning which support the whole child including foundational skills and concepts in language and literacy, math, science, art, health and wellness, and social relationships.
- PSLO 2: (Equity and Cultural Sustainability) Construct knowledge based on the principles of anti-bias education in order to design environments that promote justice, equity and inclusion for all children, families, and communities.

- PSLO 3: (Professionalism) Develop competencies, professional skills, and plans for professional growth. Integrate reflective practices to support professional growth as an Early Childhood professional. Understand and integrate the NAEYC Code of Ethics to support children, families, and other educators.
- PSLO 4: (Observation, Documentation and Assessment) Utilize authentic assessment strategies based on observation, reflection, documentation, and interpretation of children's development to inform teaching practices.
- PSLO 5: (Family Engagement) Incorporate strategies for building respectful and reciprocal relationships with families, children and the community in order to support children's development and learning. Develop knowledge and skills to provide a responsive curriculum and learning environment that reflects the children and the families in the program.
- PSLO 6: (Leadership) Understanding and commitment to leadership development that empowers, encourages, cultivates, and supports self and others to become agents of change and advocate for high-quality early care and education experiences for all children, support for families, and professional stature of educators.

Career Information

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.

A.A. in Early Childhood Education, Site Supervisor

Administration of early care and education programs is the main focus of this degree. 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.

Degree Requirements

Course Code	Course Title	Units
ECE 300	Introduction to Principles and Practices in Early Childhood Education	3
ECE 312	Child Development (3)	3
ECE 314	The Child, the Family and the Community (3)	3
ECE 415	Children's Health, Safety and Nutrition	3
ECE 326	Making Learning Visible Through Observation and Documentation	3
ECE 320	Curriculum and Interactions in Early Childhood Education	4
ECE 430	Culture and Diversity in Early Childhood Education	3
ECE 404	Children with Special Needs	3
ECE 321	Advanced Practicum in Early Childhood Education	4
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
A minimum of 3 units from the following:		3
ECE 322	Promoting Children's Social Competence (3)	
ECE 342	Constructive Math and Science in Early Childhood Education (3)	
ECE 343	Language and Literacy Development in Early Childhood (3)	
ECE 365	Creative Projects and Experiences for Young Children (3)	
ECE 307	Introduction to Bilingual Education (3)	
ECE 361	Introducing Young Children to Visual Arts (3)	
A minimum of 3 units from the following:		3
ECE 330	Infant and Toddler Development (3)	
ECE 331	Care and Education of Infants and Toddlers (3)	
ECE 402	Infants with Atypical Development (3)	
Total Units:		**43**

The Early Childhood Education, Site Supervisor Associate in Arts (A.A.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Student Learning Outcomes

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

- PSLO 1: (Development and Learning) Analyze and synthesize research and theories to support development and learning. Evaluate and implement developmentally appropriate and culturally relevant approaches to teaching and learning which support the whole child including foundational skills and concepts in language and literacy, math, science, art, health and wellness, and social relationships.
- PSLO 2: (Equity and Cultural Sustainability) Construct knowledge based on the principles of anti-bias education in order to design environments that promote justice, equity and inclusion for all children, families, and communities.
- PSLO 3: (Professionalism) Develop competencies, professional skills, and plans for professional growth. Integrate reflective practices to support professional growth as an Early Childhood professional. Understand and integrate the NAEYC Code of Ethics to support children, families, and other educators.

- PSLO 4: (Observation, Documentation and Assessment) Utilize authentic assessment strategies based on observation, reflection, documentation, and interpretation of children's development to inform teaching practices.
- PSLO 5: (Family Engagement) Incorporate strategies for building respectful and reciprocal relationships with families, children and the community in order to support children's development and learning. Develop knowledge and skills to provide a responsive curriculum and learning environment that reflects the children and the families in the program.
- PSLO 6: (Leadership) Understanding and commitment to leadership development that empowers, encourages, cultivates, and supports self and others to become agents of change and advocate for high-quality early care and education experiences for all children, support for families, and professional stature of educators.

Career Information

Upon completion of this certificate, the student exceeds the minimum requirements to work as a director/site supervisor in a privately funded early care and education program. With documented experience supervising staff, the student also meets the requirements to work as a director/site supervisor in a publicly funded early care and education program.

A.A. in Liberal Studies for Elementary Education

This major is designed for students who wish to be teachers in public and private elementary schools. Further education at the university level will be required to fulfill all requirements for a teaching credential authorizing service in California public schools.

Note to Transfer Students:
If you are interested in transferring to a four-year college or university to pursue a bachelor's degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate's degree in this major may be different from the requirements needed for the Bachelor's degree.

Degree Requirements

Course Code	Course Title	Units
ENGL C1000	Academic Reading and Writing	3[1]
COMM 361	The Communication Experience	3
ENGED 305	Structure of English	3
ENGL C1001	Critical Thinking and Writing	3
MATH 310	Mathematical Discovery	3
BIOL 307	Biology of Organisms (4)	4
or BIOL 310	General Biology (4)	
GEOL 305	Earth Science	3
GEOL 306	Earth Science Laboratory	1
ECON 302	Principles of Macroeconomics	3
POLS C1000	American Government and Politics	3
HIST 307	History of World Civilizations to 1500	3
HIST 308	History of World Civilizations, 1500 to Present	3
ENGED 320	Service Learning: Tutoring Elementary Students in Reading	3
ECE 350	Introduction to Elementary Teaching with Field Experience	3
ART 430	Art and Children	3
ECE 312	Child Development (3)	3
SOC 321	Race, Ethnicity and Inequality in the United States (3)	3
or COMM 325	Intercultural Communication (3)	
or ENGLT 336	Race and Ethnicity in Contemporary American Literature (3)	
Total Units:		**50**

[1]The program requirements listed here for CSUS apply to students completing this course sequence by Fall 2007. Students should contact a counselor about the new program requirements which were effective with the Fall 2004-05 catalog.

The Liberal Studies for Elementary Education Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus the local CRC General Education Requirement, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

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

- Apply knowledge, skills and abilities towards successful completion of coursework at transfer institutions.
- Apply knowledge of child development theories to assess the characteristics of teaching practices and learning conditions.

Career Information

Teacher, primary grades; Teacher, intermediate grades; Instructional Assistant Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.

Certificates of Achievement

Early Childhood Education - 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.

Certificate Requirements

Course Code	Course Title	Units
ECE 300	Introduction to Principles and Practices in Early Childhood Education	3
ECE 312	Child Development (3)	3
ECE 314	The Child, the Family and the Community (3)	3
ECE 326	Making Learning Visible Through Observation and Documentation	3
ECE 404	Children with Special Needs (3)	3
ECE 320	Curriculum and Interactions in Early Childhood Education	4
ECE 430	Culture and Diversity in Early Childhood Education	3
ECE 321	Advanced Practicum in Early Childhood Education	4
ECE 415	Children's Health, Safety and Nutrition	3
ECE 424	Adult Supervision: Mentoring in a Collaborative Learning Setting	2
A minimum of 16 units from the following:		16
ENGL C1000	Academic Reading and Writing (3)	
MATH 310	Mathematical Discovery (3)	
or MATH 300	Introduction to Mathematical Ideas (3)	
FCS 324	Human Development: A Life Span (3)	
or PSYC 371	Life Span Developmental Psychology (3)	
HUM 300	Classical Humanities (3)	
or PHIL 310	Introduction to Ethics (3)	
or PHOTO 420	History of Photography (3)	
SPAN 401	Elementary Spanish I (4)	
or VIET 401	Elementary Vietnamese (4)	
or DEAF 310	American Sign Language I (4)	
To be eligible for the Child Development Permit (Master Teacher Level) through California Commission on Teacher Credentialing students must complete, "sixteen diversified semester units in general education (i.e., at least one course in each of the following areas: English Communication, Mathematical Concepts/Natural Sciences, Social and Behavioral Sciences, Arts and Humanities."[5 CCR § 80113, 5 CA ADC § 80113] General education units must be transferable.		
Students will select a Master Teacher "Specialization" consisting of six (6) units of focused content (see below). Contact ECE Instructional Faculty for information on experience and supervised experience requirements all Child Development Permits.		
Subtotal Units:		**47**

Curriculum, Specialization Option

Course Code	Course Title	Units
A minimum of 6 units from the following:		6
ECE 342	Constructive Math and Science in Early Childhood Education (3)	
ECE 343	Language and Literacy Development in Early Childhood (3)	
ECE 365	Creative Projects and Experiences for Young Children (3)	
ECE 322	Promoting Children's Social Competence (3)	
ECE 307	Introduction to Bilingual Education (3)	
ECE 361	Introducing Young Children to Visual Arts (3)	
Curriculum, Specialization Option Units:		6
Total Units:		**53**

Infant and Toddler Care, Specialization Option

Course Code	Course Title	Units
A minimum of 6 units from the following:		6
ECE 331	Care and Education of Infants and Toddlers (3)	
ECE 330	Infant and Toddler Development (3)	
ECE 402	Infants with Atypical Development (3)	
Infant and Toddler Care, Specialization Option Units:		6
Total Units:		**53**

School-Age Care, Specialization Option

Course Code	Course Title	Units
ECE 356	Programs for the School-Age Child	3
ECE 350	Introduction to Elementary Teaching with Field Experience	3
School-Age Care, Specialization Option Units:		6
Total Units:		**53**

Student Learning Outcomes

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

- PSLO 1: (Development and Learning) Analyze and synthesize research and theories to support development and learning. Evaluate and implement developmentally appropriate and culturally relevant approaches to teaching and learning which support the whole child including foundational skills and concepts in language and literacy, math, science, art, health and wellness, and social relationships.
- PSLO 2: (Equity and Cultural Sustainability) Construct knowledge based on the principles of anti-bias education in order to design environments that promote justice, equity and inclusion for all children, families, and communities.
- PSLO 3: (Professionalism) Develop competencies, professional skills, and plans for professional growth. Integrate reflective practices to support professional

growth as an Early Childhood professional. Understand and integrate the NAEYC Code of Ethics to support children, families, and other educators.

- PSLO 4: (Observation, Documentation and Assessment) Utilize authentic assessment strategies based on observation, reflection, documentation, and interpretation of children's development to inform teaching practices.
- PSLO 5: (Family Engagement) Incorporate strategies for building respectful and reciprocal relationships with families, children and the community in order to support children's development and learning. Develop knowledge and skills to provide a responsive curriculum and learning environment that reflects the children and the families in the program.
- PSLO 6: (Leadership) Understanding and commitment to leadership development that empowers, encourages, cultivates, and supports self and others to become agents of change and advocate for high-quality early care and education experiences for all children, support for families, and professional stature of educators.

Career Information

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. Some career options may require more than two years of college study. Meet with a counselor and an ECE faculty to determine these options.

Early Childhood Education, School Age Child Care and Education Certificate

Upon completion of one of the following certificates, and with appropriate documented experience, the student meets the minimum requirements for employment in a privately funded child care program or family day care program. Certificates are designed to meet varying employment levels and focused training with infants and school-age children. These requirements are outlined in Title 22 (Department of Social Services) regulations for child care licensing.

Certificate Requirements

Course Code	Course Title	Units
ECE 300	Introduction to Principles and Practices in Early Childhood Education	3
ECE 312	Child Development (3)	3
ECE 314	The Child, the Family and the Community (3)	3
ECE 326	Making Learning Visible Through Observation and Documentation	3
ECE 307	Introduction to Bilingual Education (3)	3
ECE 404	Children with Special Needs	3
ECE 320	Curriculum and Interactions in Early Childhood Education	4
ECE 321	Advanced Practicum in Early Childhood Education	4
Total Units:		**26**

Student Learning Outcomes

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

- PSLO 1: (Development and Learning) Analyze and synthesize research and theories to support development and learning. Evaluate and implement developmentally appropriate and culturally relevant approaches to teaching and learning which support the whole child including foundational skills and concepts in language and literacy, math, science, art, health and wellness, and social relationships.
- PSLO 2: (Professionalism) Develop competencies, professional skills, and plans for professional growth. Integrate reflective practices to support professional growth as an Early Childhood professional. Understand and integrate the NAEYC Code of Ethics to support children, families, and other educators.
- PSLO 3: (Observation, Documentation and Assessment) Utilize authentic assessment strategies based on observation, reflection, documentation, and interpretation of children's development to inform teaching practices.
- PSLO 4: (Family Engagement) Incorporate strategies for building respectful and reciprocal relationships with families, children and the community in order to support children's development and learning. Develop knowledge and skills to provide a responsive curriculum and learning environment that reflects the children and the families in the program.

Career Information

Upon completion of this certificate and with appropriate documented experience, the student exceeds the minimum requirements for employment as a teacher in privately funded before-and-after school child care programs. These requirements are outlined in Title 22 (Department of Social Services) regulations for child care licensing.

Emergency Medical Technology

Cosumnes River College’s Emergency Medical Technology courses are designed to provide the student with the skills and knowledge to apply for certification as an Emergency Medical Technician (EMT) in the State of California. EMT certification is the first step to starting a career working on an ambulance. EMT certification is also a pre-employment requirement for most professional fire departments.

Admission to a health services professional program is open to all students regardless of immigration status. For more information, please contact our Dream Center (https://crc.losrios.edu/student-resources/dream-center).

Certificates Offered

Emergency Medical Technician Certificate

Dean Kris Hubbard
Department Chair Kris Hubbard
Phone (916) 691-7390
Email hubbark@crc.losrios.edu

Certificate of Achievement

Emergency Medical Technician Certificate

EMTs (previously called EMT-I or Basic) are the backbone of the Emergency Medical Services (EMS) system throughout the nation, helping to reduce injury severity and death at the scene of an accident or sudden illness and during transportation to a medical facility.

Students seeking to become a state-certified EMT should take the EMT 115, EMT 115 and EMT 116 courses. The EMT 115, 116 and EMT 117 courses fulfill the requirements for State EMT certification (NREMT) testing. These courses must be taken in the same semester to fulfill the state of Califonia objectives.

Cosumnes River College's Emergency Medical Technology courses are designed to provide the student with the skills and knowledge to apply for certification as an Emergency Medical Technician and are approved by the Sacramento County Health Department, Division of Emergency Medical Services, and the certifying agency for Sacramento County. EMT 100 course completion is mandatory for all personnel who wish to pursue State certification as an EMT. EMT certification from Sacramento County Health Department, Division of Emergency Medical Services is the first step to starting a career working on an ambulance. EMT certification is also a pre-employment requirement for most professional fire departments. Together with varying levels of actual on-the-job experience, it is often required for admission to Paramedic training programs throughout the state and country.

EMT State certification has also become an important first step in the career path of students pursuing professions as physicians, registered nurses, physician assistants, and other allied health professions, by offering a distinct advantage in patient assessment and critical interventions skills, as well as the ability to obtain valuable work experience. Cosumnes River College's EMT 100 students will gain actual experience by spending hours off-campus in operating ambulance units and in hospital emergency departments.

Highlights include:
* Hands-on experience administering proper emergency medical care
* Preparation for the EMT state certification test
* Recertification for EMT state certification
* First step in pursuing a paramedic license
* Hospital emergency room observation time and opportunities to “ride-along” in ambulances

Certificate Requirements

Course Code	Course Title	Units
EMT 115	Emergency Medical Technician (EMT) Didactic Introduction	1.5
EMT 116	Emergency Medical Technician (EMT) Didactic Conclusion	5
EMT 117	Emergency Medical Technician (EMT) Practicum	1.5
Total Units:		**8**

Student Learning Outcomes

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

- SLO #1: Demonstrate and confirm knowledge of current information to work in the field of emergency medicine as an EMT.
- The students will be able to analyze fluid complex medical problems with patients and then apply appropriate patient care based on a standardized decision making process.
- Perform the skills and tasks of patient care and demonstrate proficiency on the basic equipment that EMTs use in the field.
- Demonstrate critical thinking techniques and how to apply them to sick and injured patients in the pre-hospital arena.
- SLO #2: Demonstrate and incorporate professional values and standards for medical personnel that the industry requires in pre-hospital emergency medicine.
- Implement and maintain professional appearance and conduct in all aspects of program activities.
- Perform patient assessment and care utilizing a team approach.
- SLO#3: Achieve the basic educational requirements for most paramedic programs in the state. Most paramedic programs will require at least 1 year work experience as an EMT on an ambulance as an application requirement for Paramedic school.
- Students will work in field clinical settings alongside experienced medical professionals and will apply skills and knowledge learned in the program.
- Students will complete and pass the State’s EMT Certification Written Exam to achieve EMT certification.

- Students will utilize recently learned skills and knowledge and comprehend the need for EMTs to stay current on the most up to date emergency medical information and training.

Career Information

EMT; Emergency Room Technician; Fire Service With additional training: Firefighter; Rescue Worker; Paramedic; Emergency Medical Dispatcher

Emergency Medical Technology (EMT) Courses

EMT 100 Emergency Medical Technician

Units: 7.5
Hours: 81 hours LEC; 162 hours LAB
Prerequisite: All EMT 100 students must have an American Heart Association BLS for the Health Care Provider CPR card (required under NHTSA and California Regulations) prior to the first day of class. We will ONLY ACCEPT American Heart Association CPR cards (or eCards) – BLS for the Healthcare Provider from the American Heart Association. Online CPR courses without hands on skills component are NOT accepted. The college will NOT accept Life Guard Training Certificates or EMR (First Responder) Certificates as CPR cards. The student must have a BLS for the Healthcare Provider Cards from the American Heart Association and we no longer accept Red Cross Cards.
Enrollment Limitation: Not open to students with a current California EMT - certification (license). California licensed Physicians, RNs, Paramedics, or military trained medics may be allowed to challenge the course under State law. Please check with the Program Director for more information.
Advisory: AH 311 and BIOL 102; Students should take an Anatomy and Physiology course or an EMT Prep course prior to taking EMT 100. Two subject areas many students struggle with in an Emergency Medical Technician (EMT) program are Medical Terminology and the Human Body topics, especially Cardiology and Neurology. UCLA EMS Education Program offers an Online EMT Prep course: https://www.cpc.mednet.ucla.edu/course/emt-preparation

This course provides instruction to the level of Emergency Medical Technician (Previously called EMT Basic or EMT-I). This course has additional financial costs that are required for clinical components. Topics include: skills necessary to provide emergency medical care at a basic life-support level with a fire, ambulance, or other specialized
service. Cosumnes River College's Emergency Medical Technology 100 course is the primary step to provide the student with the skills and knowledge to apply for certification as an Emergency Medical Technician and is approved by the Sacramento County Health Department, Division of Emergency Medical Services, which is the
certifying agency for Sacramento County by the State of California. This certification is mandatory for all personnel who wish to pursue a career working on an ambulance. EMT certification is also a pre-employment
requirement for most paid fire departments. Together with varying levels of actual on-the-job experience, it is required for admission to paramedic training programs throughout the state and country. EMT students will gain actual clinical experience by spending time off-campus in operating ambulance units and in emergency departments of hospitals. Students will be required to complete background checks and drug screens, purchase uniforms and liability insurance, verify immunizations and have Tb clearance. Other requirements may be necessary for the clinical component of this course. The course requires students to work on an ambulance in the clinical component. Students may not have a beard or any facial hair below the lip to be compliant with OSHA
regulations. This course is conducted in compliance with the California Code of Regulations. A final grade "B" or better is required for a course completion certification in this course. This is an intensive medical class that students should possess a strong background in anatomy
and physiology as well as medical terminology. Students that do not possess both generally do not succeed in the course. It is STRONGLY recommended that students take a basic anatomy and physiology class as well as a medical terminology class prior to attempting this class. See Advisory. The EMT class has additional non-mandatory
hours for quiz reviews and skills practice that students are strongly encouraged to attend.
To become Certified (Licensed) as an EMT in California all applicants must be legal citizens, posses a high school diploma (GED), be at least 18 years old, pass background check, and have valid social security number. For more information please go to State EMS office website - www.emsa.ca.gov

EMT 102 Emergency Medical Care Refresher

Units: 1.5
Hours: 18 hours LEC; 27 hours LAB
Prerequisite: Current certification as an Emergency Medical Technician (1) or Basic.

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 is designed for currently California State certified EMT - Basic(I) and meets all state requirements for EMT (I) recertification by Sacramento Emergency Medical Services Agency. BLS (CPR) cards are not issued in the completion of this course. Students that have expired EMT certification should contact the instructor prior to signing up for EMT 102. This course does not provide preparation for the National Registry of Emergency Medical Technicians (NREMT) entry or recertification exam.

EMT 109 Emergency Medical Responder

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.

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.

EMT 115 Emergency Medical Technician (EMT) Didactic Introduction

Units: 1.5
Hours: 81 hours LAB

Prerequisite: All EMT 115 students must have an American Heart Association BLS for the Health Care Provider CPR card or BLS Provider Card or eCard (required under NHTSA and California Regulations) prior to the first day of class. We will ONLY ACCEPT American Heart Association CPR cards (or eCards) – BLS for the Healthcare Provider BLS Provider from the American Heart Association. Online CPR courses without hands on skills component are NOT accepted. The college will NOT accept Life Guard Training Certificates or EMR (First Responder) Certificates as CPR cards. The student must have a BLS for the Healthcare Provider Cards from the American Heart Association. Red Cross Cards are no longer accepted to meet this requirement.
Advisory: AH 311 and BIOL 102; These advisories are not required but are only a suggestion for students that do not possess a strong background in Anatomy and Physiology or Medical terminology. Students are advised to take an Anatomy and Physiology course or an EMT Prep course prior to taking EMT 115. Two subject areas many students struggle with in an Emergency Medical Technician (EMT) program are Medical Terminology and the Human Body topics, especially Cardiology and Neurology. Other Justification: EMT is an intense Medical class with low student success for students that are not proficient in Human Anatomy and Medical terminology.

This 8-week course provides the first step of instruction to the level of Emergency Medical Technician (Previously called EMT Basic or EMT-I). This course has additional financial costs that are required for clinical components. Topics include skills necessary to provide emergency medical care at a basic life-support level with a fire, ambulance, or other specialized services. Cosumnes River College's Emergency Medical Technology EMT 115 course is the first step to provide the student with the skills and knowledge to apply for certification as an Emergency Medical Technician. Students must successfully complete EMT 115, EMT 116 and EMT 117 (taken in the same semester) to take the National testing to become a Certified (Licensed) EMT in the State of California. This course is approved by the Sacramento County Health Department, Division of Emergency Medical Services, which is the certifying agency for Sacramento County by the State of California's EMS Agency. This EMT state certification is mandatory for all personnel who wish to pursue a career working on an ambulance. EMT certification is also a pre-employment requirement for most paid fire departments. Together with varying levels of actual on-the-job experience, it is required for admission to paramedic training programs throughout the state and country. EMT 115 prepares the EMT students to gain the required medical and operational EMS knowledge to work in the field. EMT 116 and EMT 117 (second 8-week courses - taken concurrently in same semester) cover the EMS skills and Experience by spending time off-campus in operating ambulance units and in emergency departments of hospitals. For classes, EMT 116 and EMT 117 students will be required to complete background checks and drug screenings, purchase uniforms, and liability insurance verify immunizations and have Tb clearance. Other requirements may be necessary for the clinical component of this course. These courses require students to work on an ambulance in the clinical component. Students may not have a beard or any facial hair below the lip to be compliant with OSHA regulations. This course is conducted in compliance with the California Code of Regulations. Students must Maintain 80% on all testing or better for a course completion certification in this course. This is an intensive medical class so students should possess a strong background in anatomy and physiology as well as medical terminology. Students that do not possess both generally do not succeed in the course. It is STRONGLY recommended that students take a basic anatomy and physiology class as well as a medical terminology class prior to attempting this class. See Advisory. The EMT class has additional non-mandatory hours for quiz reviews and skills practice that students are strongly encouraged to attend. For more information please go to State EMS office website - www.emsa.ca.gov. This course follows the U.S. Department of Transportation (DOT) National EMS Education Standards (DOT HS 811 077A, January 2009). All requirements will be discussed on the first class day. Students need the required American Heart Association BLS Provider CPR course and should read as much of the EMT textbook as possible before the first class day. For questions please contact the EMS program coordinator: Matthew McHugh.

EMT 116 Emergency Medical Technician (EMT) Didactic Conclusion

Units: 5
Hours: 81 hours LEC; 36 hours LAB
Prerequisite: EMT 115 with a grade of "C" or better; All EMT 116 students must have met all the Class requirements listed in the EMT 115 syllabus to move on to EMT 116. The students must take EMT 115 and EMT 116 and EMT 117 in the same semester to meet the course and clinical requirements of the program to receive a State Approved Course Completion for EMT State of California Certification/License. Students must have and Maintain an American Heart Association BLS for the Healthcare Provider CPR card or BLS Provider Card or eCard (required under NHTSA and California Regulations) prior to the first day of class. We will ONLY ACCEPT American Heart Association CPR cards (or eCards) – BLS for the Healthcare Provider BLS Provider from the American Heart Association. Online CPR courses without hands on skills component are NOT accepted. The college will NOT accept Lifeguard Training Certificates or EMR (First Responder) Certificates as CPR cards. The student must have a BLS for the Healthcare Provider Cards from the American Heart Association and we no longer accept Red Cross Cards.

This 8 week course provides instruction to the level of Emergency Medical Technician (Previously called EMT Basic or EMT-I). This course must be taken in sequence with EMT 115 (first 8 week course) in the same semester. This course has additional financial costs that are required for clinical components. Topics include skills necessary to provide emergency medical care at a basic life-support level with a fire, ambulance, or other specialized services. Cosumnes River College's Emergency Medical Technology EMT 116 (along with EMT 115) courses are the primary step to provide the student with the skills and knowledge to apply for certification as an Emergency Medical Technician and is approved by the Sacramento County Health Department, Division of Emergency Medical Services, which is the certifying agency for Sacramento County by the State of California. This certification is mandatory for all personnel who wish to pursue a career working on an ambulance. EMT certification is also a pre-employment requirement for most paid fire departments. Together with varying levels of actual on-the-job experience, it is required for admission to paramedic training programs throughout the state and country. EMT students will gain actual clinical experience by spending time off-campus in operating ambulance units and in emergency departments of hospitals. Students will be required to complete background checks and drug screenings, purchase uniforms and liability insurance, verify immunizations and have Tb clearance. Other requirements may be necessary for the clinical component of this course. The course requires students to work on an ambulance in the clinical component. Students may not have a beard or any facial hair below the lip to be compliant with OSHA regulations. This course is conducted in compliance with

the California Code of Regulations. A final grade 80% or better is required for a course completion certification in this course. This is an intensive medical class that students should possess a strong background in anatomy and physiology as well as medical terminology. It is STRONGLY recommended that students take a basic anatomy and physiology class as well as a medical terminology class prior to attempting this class. See Advisory. The EMT class has additional non-mandatory hours for quiz reviews and skills practice that students are strongly encouraged to attend. For more information please go to State EMS office website - www.emsa.ca.gov. This course follows the U.S. Department of Transportation (DOT) National EMS Education Standards (DOT HS 811 077A, January 2009).

EMT 117 Emergency Medical Technician (EMT) Practicum

Units: 1.5
Hours: 81 hours LAB
Prerequisite: EMT 115 with a grade of "C" or better; Students must meet all syllabus requirements in EMT 115 to advance to EMT 116 and EMT 117. The following requirements must be complete prior to the start of Clinical hours for EMT 116 and EMT 117: 1. The student must acquire the Student Access Card or an Official College Photo ID Card with ID holder stating EMT student. This ID must be worn as part of the uniform for clinical hours; 2. An approved Clinical uniform: all students going to clinical will be required to purchase an EMT 100 T-shirt and have dark blue work pants; 3. Criminal background checks with drug screen; 4. Blood borne pathogens training; 5. Immunization verification; 6. TB clearance: All students must have a verification of 2 step TB clearance no more than 2 months prior to the beginning of clinical; 7. A current American Health Association BLS Provider Card or eCard (required under the National Health Traffic Safety Association and California Regulations). Only the AHA BLS Provider Card or eCard is acceptable, as online CPR courses without hands-on skills component, or Lifeguard Training Certificates or EMR (First Responder) are NOT acceptable. Any other clinical requirement by the hospitals or EMS agencies; 8. A student must bring a watch with a seconds display each day to class; 9. A student must have the PPE, and other EMT equipment to participate in clinical hours. All of these requirements are a prerequisite for health and safety as mandated in Title 22, Division 9, Chapter 2 of the California Code of Regulations. Students must take EMT 115 in the same semester as EMT 116 and EMT 117 to meet clinical requirements to be successful in the program.
Corequisite: EMT 116

This 8-week course provides instruction to the level of Emergency Medical Technician (Previously called EMT Basic or EMT-I). This course must be taken in sequence with EMT 115 (first 8-week course) and concurrent with EMT 116 (second 8-week course) in the same semester. This course requires students to complete ride along in ambulances and clinical hands on skills at Emergency Rooms of Hospitals. This course has additional financial costs that are required for clinical components. Topics include skills necessary to provide emergency medical care at a basic life-support level with a fire, ambulance, or other specialized services. Cosumnes River College’s Emergency Medical Technology EMT 116 and EMT 117 (along with EMT 115) courses are the primary step to provide the student with the skills and knowledge to apply for certification as an Emergency Medical Technician and is approved by the Sacramento County Health Department, Division of Emergency Medical Services, which is the certifying agency for Sacramento County by the State of California. This certification is mandatory for all personnel who wish to pursue a career working on an ambulance. EMT certification is also a pre-employment requirement for most paid fire departments. EMT students will gain actual clinical experience by spending time off-campus in operating ambulance units and in emergency departments of hospitals. Students will be required to complete background checks and drug screenings, purchase uniforms and liability insurance, verify immunizations and have Tb clearance. Other requirements may be necessary for the clinical component of this course. The course requires students to work on an ambulance in the clinical component. Students may not have a beard or any facial hair below the lip to be compliant with OSHA regulations. This course is conducted in compliance with the California Code of Regulations. A final grade 80% or better is required for a course completion certification in this course.

EMT 298 Work Experience in Emergency Medical Technology

Units: 0.5 - 4
Hours: 27 - 216 hours LAB
Prerequisite: None.
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position or job related to career goals in Emergency Medical Technology.

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in associate degree level or certificate occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and complete 27 hours of related work experience for 0.5 unit. An additional 27 hours of related work experience is required for each additional 0.5 units. 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.

EMT 299 Experimental Offering in Emergency Medical Technology

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

Engineering

Engineering involves the application of scientific and mathematical principles used in design and in the solution of practical technical problems. CRC’s program provides the foundation in mathematics, physics, and engineering necessary to transfer to a university and complete a Bachelor of Science degree in Engineering. However, because the lower division requirements of universities vary, the student should check the transfer university’s catalog to be sure he/she meets its specific requirements. See a CRC counselor for assistance.

Degrees Offered

A.S. in Engineering - Civil/Mechanical Option

A.S. in Engineering - Electrical/Computer Option

A.S. in General Science

Dean Banafsheh Amini

Department Chair Eric Anderson

Phone (916) 691-7204

Email anderse@crc.losrios.edu

Associate Degrees

A.S. in Engineering - Civil/Mechanical Option

Pre-Professional Transfer Opportunities
CRC's program provides the foundation in mathematics, physics, and engineering necessary to transfer to a university and complete a bachelor's degree in engineering. Engineering involves the application of scientific and mathematical principles needed to solve practical technical problems. Although the first two years of engineering courses for all engineering degrees are similar, students should consult the lower division requirements of the institution to which they wish to transfer.

Highlights include:
* Challenging and rewarding classes that transfer to four-year universities
* A Mathematics, Engineering and Science Achievement (MESA) program

Note to Transfer Students:
If you are interested in transferring to a four-year college or university to pursue a bachelor’s degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate’s degree in this major may be different from the requirements needed for the Bachelor’s degree.

When choosing whether to take the suggested electives, check university requirements; these courses may be required at some universities..

Degree Requirements

Course Code	Course Title	Units
CHEM 400	General Chemistry I	5
CISP 360	Introduction to Structured Programming (4)	4[1]
ENGR 400	Introduction to Electrical Circuits and Devices	3
ENGR 312	Engineering Graphics	3
ENGR 420	Statics	3
ENGR 412	Properties of Materials	4
MATH 400	Calculus I	5
MATH 401	Calculus II	5
MATH 402	Calculus III	5
MATH 420	Differential Equations	4
PHYS 411	Mechanics of Solids and Fluids	4
PHYS 421	Electricity and Magnetism	4
Total Units:		**49**

[1]Check specific university requirements before choosing a course

The Engineering - Civil/Mechanical Option Associate in Science (A.S.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Career Information

Aerospace Engineer; Architectural Engineer; Chemical Engineer; Civil Engineer; Computer Engineer; Electrical Engineer; Mechanical Engineer, and other types of engineers
Most career options require a B.S. degree.

A.S. in Engineering - Electrical/Computer Option

Pre-Professional Transfer Opportunities
CRC's program provides the foundation in mathematics, physics, and engineering necessary to transfer to a university and complete a bachelor's degree in engineering. Engineering involves the application of scientific and mathematical principles needed to solve practical technical problems. Although the first two years of engineering courses for all engineering degrees are similar, students should consult the lower division requirements of the institution to which they wish to transfer.

Highlights include:
* Challenging and rewarding classes that transfer to four-year universities
* A Mathematics, Engineering and Science Achievement (MESA) program

Note to Transfer Students:
If you are interested in transferring to a four-year college or university to pursue a bachelor’s degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate’s degree in this major may be different from the

requirements needed for the Bachelor's degree.

When choosing whether to take the suggested electives, check university requirements; these courses may be required at some universities..

Degree Requirements

Course Code	Course Title	Units
CHEM 400	General Chemistry I	5
CISP 360	Introduction to Structured Programming (4)	4
ENGR 400	Introduction to Electrical Circuits and Devices	3
MATH 400	Calculus I	5
MATH 401	Calculus II	5
MATH 402	Calculus III	5
MATH 420	Differential Equations	4
PHYS 411	Mechanics of Solids and Fluids	4
PHYS 421	Electricity and Magnetism	4
Total Units:		**39**

The Engineering - Electrical/Computer Option Associate in Science (A.S.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Career Information

Aerospace Engineer; Architectural Engineer; Chemical Engineer; Civil Engineer; Computer Engineer; Electrical Engineer; Mechanical Engineer, and other types of engineers Most career options require a B.S. degree.

A.S. in General Science

Areas of Study include:

- Biological Anthropology
- Astronomy
- Biology
- Chemistry
- Engineering
- Physical Geography
- Geology
- Physics

Eighteen (18) units of transfer-level course work in science are required. Two laboratory courses must be included: one in the physical sciences and one in the biological sciences. Courses may be selected from astronomy, biology, chemistry, geology, physical geography, biological anthropology, and physics. The student, in consultation with a counselor, should choose science courses to meet their program, transfer, or general education requirements.

Students interested in transferring to a four-year university with a science major are encouraged to complete a science AS or AS-T degree such as Anthropology, Biology, Chemistry, Engineering, Geography, Geology, or Physics. This General Science degree may not include the majors-level transfer courses needed for many science majors. Students are strongly recommended to see a counselor for guidance.

Degree Requirements

Course Code	Course Title	Units
Life Science with Lab :		
A minimum of 4 units from the following:		4
ANTH 300	Biological Anthropology (3)	
and ANTH 301	Biological Anthropology Laboratory (1)	
ANTH 480	Honors Biological Anthropology (3)	
and ANTH 482	Honors Biological Anthropology Laboratory (1)	
BIOL 308	Contemporary Biology (3)	
and BIOL 309	Contemporary Biology Laboratory (1)	
BIOL 400	Principles of Biology (5)	
BIOL 410	Principles of Botany (5)	
BIOL 420	Principles of Zoology (5)	
BIOL 430	Anatomy and Physiology (5)	
BIOL 431	Anatomy and Physiology (5)	
BIOL 440	General Microbiology (4)	
Physical Science with Lab:		
A minimum of 3 units from the following:		3
ASTR 300	Introduction to Astronomy (3)	
and ASTR 400	Astronomy Laboratory (1)	
CHEM 300	Beginning Chemistry (4)	
CHEM 305	Introduction to Chemistry (5)	
CHEM 306	Introduction to Organic and Biological Chemistry (5)	
CHEM 309	Integrated General, Organic, and Biological Chemistry (5)	
CHEM 400	General Chemistry I (5)	
CHEM 401	General Chemistry II (5)	
CHEM 420	Organic Chemistry I (5)	
CHEM 421	Organic Chemistry II (5)	
GEOG 300	Physical Geography: Exploring Earth's Environmental Systems (3)	
and GEOG 301	Physical Geography Laboratory (1)	
GEOL 300	Physical Geology (3)	
and GEOL 301	Physical Geology Laboratory (1)	
GEOL 305	Earth Science (3)	
and GEOL 306	Earth Science Laboratory (1)	
GEOL 310	Historical Geology (3)	
and GEOL 311	Historical Geology Laboratory (1)	
ENGR 304	How Things Work (3)	
PHYS 350	General Physics (4)	
PHYS 360	General Physics (4)	
PHYS 370	Introductory Physics - Mechanics and Thermodynamics (5)	

Course Code	Course Title	Units
PHYS 380	Introductory Physics - Electricity and Magnetism, Light and Modern Physics (5)	
PHYS 411	Mechanics of Solids and Fluids (4)	
PHYS 421	Electricity and Magnetism (4)	
PHYS 431	Heat, Waves, Light and Modern Physics (4)	
Additional Science Courses :		
A minimum of 11 units from the following:		11[1]
ANTH 300	Biological Anthropology (3)	
ANTH 301	Biological Anthropology Laboratory (1)	
ANTH 480	Honors Biological Anthropology (3)	
ANTH 482	Honors Biological Anthropology Laboratory (1)	
ASTR 300	Introduction to Astronomy (3)	
ASTR 400	Astronomy Laboratory (1)	
BIOL 308	Contemporary Biology (3)	
BIOL 309	Contemporary Biology Laboratory (1)	
BIOL 342	The New Plagues: New and Ancient Infectious Diseases Threatening World Health (3)	
BIOL 350	Environmental Biology (3)	
BIOL 352	Conservation Biology (3)	
BIOL 400	Principles of Biology (5)	
BIOL 410	Principles of Botany (5)	
BIOL 420	Principles of Zoology (5)	
BIOL 430	Anatomy and Physiology (5)	
BIOL 431	Anatomy and Physiology (5)	
BIOL 440	General Microbiology (4)	
CHEM 300	Beginning Chemistry (4)	
CHEM 305	Introduction to Chemistry (5)	
CHEM 306	Introduction to Organic and Biological Chemistry (5)	
CHEM 309	Integrated General, Organic, and Biological Chemistry (5)	
CHEM 400	General Chemistry I (5)	
CHEM 401	General Chemistry II (5)	
CHEM 420	Organic Chemistry I (5)	
CHEM 421	Organic Chemistry II (5)	
ENGR 304	How Things Work (3)	
GEOG 300	Physical Geography: Exploring Earth's Environmental Systems (3)	
GEOG 301	Physical Geography Laboratory (1)	
GEOG 305	Global Climate Change (3)	
GEOG 306	Weather and Climate (3)	
GEOL 300	Physical Geology (3)	
GEOL 301	Physical Geology Laboratory (1)	
GEOL 305	Earth Science (3)	
GEOL 306	Earth Science Laboratory (1)	
GEOL 310	Historical Geology (3)	
GEOL 311	Historical Geology Laboratory (1)	
GEOL 330	Introduction to Oceanography (3)	
GEOL 390	Field Studies in Geology (1 - 4)	
PHYS 310	Conceptual Physics (3)	
PHYS 350	General Physics (4)	
PHYS 360	General Physics (4)	
PHYS 370	Introductory Physics - Mechanics and Thermodynamics (5)	
PHYS 380	Introductory Physics - Electricity and Magnetism, Light and Modern Physics (5)	
PHYS 411	Mechanics of Solids and Fluids (4)	
PHYS 421	Electricity and Magnetism (4)	
PHYS 431	Heat, Waves, Light and Modern Physics (4)	
Total Units:		**18**

[1]Courses used in A or B above will not count towards C, except units exceeding the 4 or 3 unit minimum in A and B. For example, a student completing the 5 unit CHEM 309 under B could apply 2 of those units towards C. A total of 18 science units is required.

The General Science Associate in Science (A.S.) degree may be obtained by completion of the required program, plus the local CRC General Education Requirement, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

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

- explain the core perspectives of the scientific method and apply it to at least one scientific discipline. (PSLO 1)
- solve introductory problems of a conceptual and/or numerical nature of at least one scientific discipline. (PSLO 2)
- accurately apply the basic vocabulary and concepts of at least one scientific discipline verbally and in writing. (PSLO 3)
- recognize the use and misuse of scientific concepts in society including politics and the media. (PSLO 4)

Engineering (ENGR) Courses

ENGR 300 Introduction to Engineering

Units: 1
Hours: 18 hours LEC
Prerequisite: None.
Transferable: CSU; UC

This course will provide students with information to evaluate the engineering profession as a personal career choice. Students will explore the branches of engineering and the different types of work that engineers do. Participants will investigate personal characteristics which contribute to being happy and successful engineers, and will examine their own traits. They will learn what preparation is needed and strategies for successful completion. Course participants will appreciate the role of engineers in society and understand the responsibilities of engineers in their service to society.

ENGR 304 How Things Work

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: MATH 100
Transferable: CSU; UC
General Education: Local GE L5

This course covers how everyday things and technologies operate and is designed primarily for non-science students or anyone interested in learning about technology. The basic scientific principles behind the technology will be explored. Systems studied will include mechanical, electrical, thermal, optical and others. Students will gain hands-on experience with basic machines and technologies during lab.

ENGR 312 Engineering Graphics

Units: 3
Hours: 36 hours LEC; 72 hours LAB
Prerequisite: None.
Advisory: Completion of high school geometry with a grade of C or better
Transferable: CSU; UC

In this class, students will learn the graphical tools needed to develop and communicate engineering ideas. They will learn to use parametric solid modeling software as a design and analysis tool. Freehand sketches for spatial visualization skill development and design conceptualization will be used throughout the semester. Students will learn to make part and assembly models, orthographic projections, and engineering drawings. Students will complete both group and individual work. Students will demonstrate the skills they learn through a series of design projects. This course is primarily for Mechanical and Civil Engineering majors.

ENGR 400 Introduction to Electrical Circuits and Devices

Units: 3
Hours: 54 hours LEC; 18 hours LAB
Prerequisite: PHYS 421 with a grade of "C" or better
Transferable: CSU; UC

This course will provide engineering students with circuit analysis concepts and applications that will be of value in any engineering field as well as a solid foundation for electrical engineering and related majors. The course includes the analysis of circuits with resistors, inductors, capacitors, and independent and dependent voltage and current sources. Many analysis techniques will be applied to DC and AC circuits. Differential equations will be used to find the transient response of circuits. Power calculations will be performed on both DC and AC circuits, including an introduction to three-phase AC power. This course is required for most engineering Bachelors of Science degrees.

ENGR 412 Properties of Materials

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: CHEM 400 and PHYS 411 with grades of "C" or better
Transferable: CSU; UC

This is an introductory course on the relationship of the internal structure of materials to their properties. Topics include crystalline structure, imperfections, phases and phase diagrams, steels and non-ferrous alloys, polymers, ceramics, semiconductors, and corrosion. Students will apply the concepts in laboratory activities and will use typical materials testing equipment and analysis techniques. This course is required for CRC's A.S.-Engineering, Civil/Mechanical Engineering option degree, and many university engineering B.S. degrees.

ENGR 420 Statics

Units: 3
Hours: 54 hours LEC
Prerequisite: MATH 401 and PHYS 411 with grades of "C" or better
Transferable: CSU; UC
C-ID: C-ID ENGR 130

This course covers analysis of two and three dimensional force systems for bodies in static equilibrium. Vector and scalar analysis methods address forces acting on rigid bodies, trusses, frames, and machines. Students will calculate internal forces in members and will create shear and bending moment diagrams for beams. Friction problems will include slipping vs tipping. Students will learn methods to calculate centroids and moments of inertia for bodies that are combinations of simple geometric shapes. This course is required for most engineering majors.

ENGR 495 Independent Studies in Engineering

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

ENGR 498 Work Experience in Engineering

Units: 0.5 - 4
Hours: 27 - 216 hours LAB
Prerequisite: None.
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position or job related to career goals in Engineering.
Transferable: CSU

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in transfer level degree occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and complete 27 hours of

related work experience for 0.5 unit. An additional 27 hours of related work experience is required for each additional 0.5 units. 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.

ENGR 499 Experimental Offering in Engineering

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU; UC (Credit for variable topics courses is given only after a review of the scope and content of the course by the enrolling UC campus.)

This is the experimental courses description.

English

“Anyone who has read a great deal can imagine the new world that opened. Let me tell you something: from then until I left that prison, in every free moment I had, if I was not reading in the library, I was reading on my bunk. You couldn't have gotten me out of books with a wedge...Up to then, I never had been so truly free in my life.” — Malcolm X

The CRC English Department teaches universal skills applicable in multiple fields and disciplines. Today's business leaders want to hire colleagues who understand the human experience from a variety of perspectives and who have the skills to read detailed instructions and "Careers no longer follow the linear paths that they have for previous generations...The skills you [develop] as an English major...prepare you for a range of possible careers." No matter where you plan to transfer, this degree will give you the skills and flexibility to follow your heart toward any number of dynamic careers.

View our English Course Sequence (https://crc.losrios.edu/2025-2026-official-catalog/programs-of-study/list-of-programs/english-course-sequence) and English Placement (https://crc.losrios.edu/admissions/placement/english-placement) pages for more information.

Degrees Offered

A.A.-T. in English

A.A. in English

Dean Emmanuel Sigauke

Department Chair Norman Hom

Phone (916) 691-7359

Email sigauke@crc.losrios.edu

Associate Degrees for Transfer

A.A.-T. in English

The Associate in Arts in English for Transfer Degree (AA-T) is designed to provide a seamless transfer pathway for students interested in pursuing at least one English degree option in the California State University (CSU) system.

Students must complete the following Associate Degree for Transfer (ADT) requirements (Pursuant to SB1440, §66746):
• 60 semester or 90 quarter CSU-transferable units
• the California General Education Transfer Curriculum (Cal-GETC) pattern
• a minimum of 18 semester or 27 quarter units in the major or area of emphasis as determined by the community college district
• obtain a minimum grade point average (GPA) of 2.0
• earn a grade of C or better (or "P" if taken Pass/No Pass) in all the courses for the major as described in the Required Program.

Upon successful completion of the degree requirements, students will be guaranteed admission to the CSU system with junior status and will not have to repeat lower division coursework. Students are encouraged to meet with a counselor to develop their educational plans as degree options and general education requirements vary for each university.

Degree Requirements

Course Code	Course Title	Units
Core:		
ENGWR 301	College Composition and Literature (3)	3
ENGL C1001	Critical Thinking and Writing	3
List A:		
A minimum of 6 units from the following:		6
ENGLT 310	English Literature I (3)	
ENGLT 311	English Literature II (3)	
ENGLT 320	American Literature I (3)	
ENGLT 321	American Literature II (3)	
ENGLT 340	World Literature I (3)	
ENGLT 341	World Literature II (3)	
List B:		
A minimum of 3 units from the following:		3
Any course from List A not used above.		
ENGCW 400	Creative Writing (3)	
ENGLT 335	Latino, Mexican-American, and Chicano Literature (3)	
List C:		
A minimum of 3 units from the following:		3
Any course from Lists A or B not used above.		
ENGCW 400	Creative Writing (3)	
ENGCW 410	Fiction Writing Workshop (3)	
ENGCW 420	Poetry Writing Workshop (3)	
ENGCW 430	Creative Non-Fiction Writing Workshop (3)	
ENGCW 452	College Literary Magazine (4)	
ENGED 305	Structure of English (3)	
ENGLT 303	Introduction to the Short Story (3)	
ENGLT 330	African American Literature (3)	
ENGLT 336	Race and Ethnicity in Contemporary American Literature (3)	
ENGLT 343	Contemporary Regional World Literature (3)	
ENGLT 345	Mythologies of the World (3)	
ENGLT 360	Women in Literature (3)	
ENGLT 370	Children and Literature (3)	
ENGLT 402	Introduction to Shakespeare and Film (3)	
JOUR 300	Newswriting and Reporting (3)	
SPAN 426	Introduction to Mexican American Literature (3)	
SPAN 427	Introduction to Spanish American Literature (3)	
TA 300	Introduction to the Theatre (3)	

Course Code	Course Title	Units
ENGLT 365	Introduction to Gay, Lesbian, Bisexual and Transgender Literature (3)	
ENGLT 335	Latino, Mexican-American, and Chicano Literature (3)	
Total Units:		**18**

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) the California General Education Transfer Curriculum (Cal-GETC) Requirement.

Student Learning Outcomes

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

- function successfully and completely at the university, in the workplace, and in diverse cultural settings with the academic literacy skills they have obtained. (P-SLO #1: Diversity)
- recognize the ethical implications of various modes of communication and the need to use this knowledge responsibly. (P-SLO #2: Ethics)
- become self-reliant, evaluative readers and writers, able to use critical thinking skills to read and write effectively and in academic and workplace settings. (P-SLO #3: Critical thinking)
- develop academic literacy skills, to utilize reading and writing processes, to find and comprehend information, and to apply that knowledge in myriad rhetorical situations. (P-SLO #4: Analytical thinking)
- obtain the necessary reading and writing skills for university-level courses. (P-SLO #5: Communication)

Career Information

The AA-T in English can provide students with the foundational knowledge necessary for transfer to a 4-year Bachelor of Arts (BA) degree program. Career opportunities for students who have earned BS or BA degrees in English include but are not limited to: Advertising; Business; Civil Servant; Columnist/ Journalist; Contract Specialist; Editor/Evaluator; Information Specialist; Insurance; Interpreter; Lawyer; Lexicographer; Legislative Assistant; Librarian; Manager; Methods Analyst; Program Developer; Public Relations; Publisher; Researcher; Teacher; Technical Writer; Writing Consultant Some careers may require additional training. NOTE TO TRANSFER STUDENTS: The Associate Degree for Transfer program is designed for students who plan to transfer to a campus of the California State University (CSU). Other than the required core, the courses you choose to complete this degree will depend to some extent on the selected CSU for transfer. For students wishing to transfer to other universities (UC System, private, or out-of-state), the Associate Degree for Transfer may not provide adequate preparation for upper-division transfer admissions; it is critical that you meet with a CRC counselor to select and plan the courses for the major, as programs vary widely in terms of the required preparation.

Associate Degrees

A.A. in English

Anyone who has read a great deal can imagine the new world that opened. Let me tell you something: from then until I left that prison, in every free moment I had, if I was not reading in the library, I was reading on my bunk. You couldn't have gotten me out of books with a wedge . . . Up to then, I never had been so truly free in my life" ~ Malcolm X.

The CRC English department teaches skills that are universal to every other discipline. Taking courses in English increases the student's chances of success in every other area the student chooses to pursue. The ability to read effectively and to write expressively will prove invaluable for any CRC student.

The English major offers courses in literature, composition, and creative writing designed to enhance communication skills, deepen cultural awareness, provide a breadth of knowledge appropriate for many degree and vocational programs, and prepare students for transfer to four-year institutions, and for a baccalaureate major in English or related majors.

HIGHLIGHTS

*Numerous composition and literature courses
*Composition designed for all levels of ability
*Creative writing and writing for publication
*Exemplary faculty: creative, dedicated and innovative

NOTE TO TRANSFER STUDENTS: If you are interested in transferring to a four-year college or university to pursue a bachelor's degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate's degree in this major may be different from the requirements needed for the Bachelor's degree.

Degree Requirements

Course Code	Course Title	Units
Core requirements (18 units):		
ENGL C1000	Academic Reading and Writing	3
ENGWR 301	College Composition and Literature (3)	3
or ENGL C1001	Critical Thinking and Writing (3)	
ENGLT 320	American Literature I	3
ENGLT 321	American Literature II	3
ENGLT 310	English Literature I	3
ENGLT 311	English Literature II	3
Electives:		
A minimum of 6 units from the following:		6
ENGED 305	Structure of English (3)	
ENGED 320	Service Learning: Tutoring Elementary Students in Reading (3)	
ENGWR 330	Writing for Publication (3)	
or JOUR 340	Writing for Publication (3)	
ENGWR 331	Writing for Publication (3)	

Course Code	Course Title	Units
ENGCW 400	Creative Writing (3)	
ENGCW 410	Fiction Writing Workshop (3)	
ENGCW 420	Poetry Writing Workshop (3)	
ENGCW 430	Creative Non-Fiction Writing Workshop (3)	
ENGCW 452	College Literary Magazine (4)	
ENGLT 336	Race and Ethnicity in Contemporary American Literature (3)	
ENGLT 345	Mythologies of the World (3)	
ENGLT 360	Women in Literature (3)	
ENGLT 343	Contemporary Regional World Literature (3)	
ENGLT 340	World Literature I (3)	
ENGLT 341	World Literature II (3)	
ENGLT 370	Children and Literature (3)	
ENGLT 330	African American Literature (3)	
ENGLT 303	Introduction to the Short Story (3)	
ENGLT 402	Introduction to Shakespeare and Film (3)	
Total Units:		**24**

The English Associate in Arts (A.A.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Student Learning Outcomes

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

- function successfully and completely at the university, in the workplace, and in diverse cultural settings with the academic literacy skills they have obtained. (P-SLO #1: Diversity)
- recognize the ethical implications of various modes of communication and the need to use this knowledge responsibly. (P-SLO #2: Ethics)
- become self-reliant, evaluative readers and writers, able to use critical thinking skills to read and write effectively and in academic and workplace settings. (P-SLO #3: Critical thinking)
- develop academic literacy skills, to utilize reading and writing processes, to find and comprehend information, and to apply that knowledge in myriad rhetorical situations. (P-SLO #4: Analytical thinking)
- obtain the necessary reading and writing skills for university-level courses. (P-SLO #5: Communication)

Career Information

Advertising; Business; Civil Servant; Columnist/Journalist; Contract Specialist; Editor/Evaluator; Information Specialist; Insurance; Interpreter; Lawyer; Lexicographer; Legislative Assistant; Librarian; Manager; Methods Analyst; Program Developer; Public Relations; Publisher; Researcher; Teacher; Technical Writer; Writing Consultant Some career options may require more than two years of college study.

English (ENGL) Courses

English - Creative Writing (ENGCW) Courses

ENGCW 400 Creative Writing

Units: 3
Hours: 54 hours LEC
Prerequisite: Eligibility for ENGL C1000 (formerly known as ENGWR 300).
Transferable: CSU; UC (1) ENGCW 400, 410, 420, or 430 combined: maximum transfer credit is two courses; 2) ENGCW 400 and 480 combined: maximum credit one course)
General Education: Local GE L3
C-ID: C-ID ENGL 200

This course is designed to stimulate creative thinking, hone analysis skills, and build confidence in communication abilities through writing experience in three genres: short story, poetry, and creative non-fiction. Engage in exploration of literary models and techniques, receive thoughtful feedback in a workshop setting, explore audience through publishing, and learn to put the right words in the best order.

ENGCW 410 Fiction Writing Workshop

Units: 3
Hours: 54 hours LEC
Prerequisite: Eligibility for ENGWR300
Transferable: CSU; UC (* ENGCW 400, 410, 420, or 430 combined: maximum credit, two courses)
General Education: Local GE L3

This is a creative writing course designed for students who wish to concentrate on fiction writing. Through lecture, discussion, assigned reading, writing exercises, short story (or novel chapter) writing, and critiques of student writing in a workshop mode, the student will examine critically the elements of literary creation. The students will keep a journal and prepare a portfolio of their work.

ENGCW 420 Poetry Writing Workshop

Units: 3
Hours: 54 hours LEC
Prerequisite: Prerequisite updated to reflect new Common Course Numbering: Eligibility for ENGL C1000 (formerly known as ENGWR 300).
Transferable: CSU; UC (ENGCW 400, 410, 420, or 430 combined: maximum transfer credit is two courses)
General Education: Local GE L3

Engage in analysis of poetics, receive constructive feedback in a workshop setting, acquire invention and revision techniques, explore audience through publishing, and build capacity to express feelings and ideas with style and rhythm. Break down creative blocks and develop confident communication skills through reading and writing experience in poetry.

ENGCW 430 Creative Non-Fiction Writing Workshop

Units: 3
Hours: 54 hours LEC

Prerequisite: None.
Transferable: CSU; UC (ENGCW 400, 410, 420, or 430 combined: maximum transfer credit is two courses)
General Education: Local GE L3

This is a creative writing course concentrating on the literary essay. The class focuses on constructive in-class analysis of personal essays written by students. Students will write and critically examine essays such as the memoir, autobiography, reflective, and philosophical that have a literary, stylistic component. The class will also emphasize multi-cultural, multi-generational, mythological, and ecological topics. Students will prepare a portfolio of completed work.

ENGCW 452 College Literary Magazine

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: None.
Transferable: CSU

Obtain hands-on experience as an editor for a nationally distributed and award-winning literary journal. Write, select, and edit manuscripts in the genres of poetry, short fiction, and creative non-fiction. Correspond with established authors and artists to create the campus's annual literary journal. Learn to use a submission manager and obtain tips on publishing your writing from the editor's point of view.

ENGCW 495 Independent Studies in English - Creative Writing

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

ENGCW 499 Experimental Offering in English - Creative Writing

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU

This is the experimental courses description.

English - Education (ENGED) Courses

ENGED 305 Structure of English

Units: 3
Hours: 54 hours LEC
Prerequisite: ENGL C1000 with a grade of "C" or better
Transferable: CSU

Designed for prospective teachers or those entering professions requiring strong written language skills, this course affords students the opportunity to study the history of English, traditional and transformational grammars, linguistics, standard usage, phonology, and orthography. Students will examine the development and structure of the English language, language acquisition, and the cultural and linguistic diversity represented by the students in the California public school system. They will also apply grammatical concepts as they meet the 2,000 word writing requirement.

ENGED 320 Service Learning: Tutoring Elementary Students in Reading

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: Eligibility for ENGRD 310 or ENGWR 300
Transferable: CSU
General Education: Local GE L7B

This class offers students an opportunity to learn and practice basic methods of tutoring elementary children in reading. Students will meet on campus for the first part of the semester to be trained, and then will be assigned to a nearby elementary school where they will have in-depth practice at tutoring elementary children. This course, which provides an early field experience for students interested in elementary education, may be taken once for credit. Prior to beginning work in the schools, students may be required to be fingerprinted and pass a TB test.

ENGED 495 Independent Studies in English - Education

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

ENGED 499 Experimental Offering in English - Education

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU

This is the experimental courses description.

English - Laboratory (ENGLB) Courses

ENGLB 70 Writing Center I

Units: 0.5 - 1
Hours: 27 - 54 hours LAB
Prerequisite: None.

This laboratory course provides assistance in writing skills to students in all subject areas. Students may enter the course at any time during the first 9 weeks of the semester and earn either .5 or 1 unit. This course is graded on a credit/no credit

basis. ENGLB 70 is recommended for students who are encountering difficulties in writing, spelling, sentence structure, paragraph or essay structure, and who would benefit from individual tutor/instructor assistance.

ENGLB 72 Writing Center II

Units: 0.5 - 1
Hours: 27 - 54 hours LAB
Prerequisite: None.

Writing Center II is an independent study course designed to provide one-on-one assistant for students who experience significant difficulty in writing. The course is particularly recommended for students who test into ENGWR 42/ENGRD 19, but may be taken by any student in any discipline needing significant assistance in writing. Students may earn .5 to 1 unit of credit and the course may be added until the end of the 9th week of the regular semester.

ENGLB 73 Writing Center III

Units: 0.5 - 1
Hours: 27 - 54 hours LAB
Prerequisite: None.
Advisory: ENGWR 58, or placement through the assessment process.

Writing Center III is designed for students seeking to improve their writing skills with the express purpose of learning to write for success in college level courses. The course is particularly recommended for students who test into ENGWR 58/ENGRD 59but may be taken by any student in any discipline seeking to improve in writing for an academic purpose. Students may earn .5 to 1 unit of credit and the course may be added until the end of the 9th week of the regular semester.

ENGLB 74 Writing Center IV

Units: 0.5 - 1
Hours: 27 - 54 hours LAB
Prerequisite: None.
Advisory: ENGL C1000, or placement through the assessment process.

Writing Center IV is an independent study course which provides assistance in developing writing skills for students who may be enrolled in college level courses where writing demands are significant, but the student is not yet fully confident or consistent in his/her ability to write as demanded by specific discipline courses. This course is particularly recommended for students who are enrolled in or who test into ENGWR 101 or ENGL C1000 (formerly known as ENGWR 300). The course is open to any student in any course seeking to improve in writing for an academic purpose. Students may earn .5 to 1 unit of credit and the course may be added until the end of the 9th week of the regular semester.

ENGLB 75 Reading Center I

Units: 0.5 - 1
Hours: 27 - 54 hours LAB
Prerequisite: None.

Reading is a fundamental skill required by all college students. Reading Center I is designed to meet that need by providing independent study in foundational reading skills following diagnostic assessment of the student's reading abilities. The course is open to all students in all disciplines where reading demands are significant. Students may elect to take the course for .5 to 1.0 unit and the course may be added through the 9th week of the semester.

ENGLB 76 Reading Center II

Units: 0.5 - 1
Hours: 27 - 54 hours LAB
Prerequisite: None.

Reading Center II is an independent study course open to any student experiencing significant difficulty in reading as required for college. The course may especially be recommended for students enrolled in ENGRD 19/ENGWR 42 or ESLR 40, but may be taken by any student in any discipline where reading demands are significant and where the student may not be prepared. Students may elect to take the course for .5 to 1.0 unit and the course may be added through the 9th week of the semester.

ENGLB 77 Reading Center III

Units: 0.5 - 1
Hours: 27 - 54 hours LAB
Prerequisite: None.
Advisory: ENGWR 58, or placement through the assessment process.

Reading Center independent practice at reading skills necessary for college success. Students meet with an instructor for determination of reading needs, and an agreed upon prescription is then developed. Student may elect to take the course for.5 unit or 1.0 unit. This lab class may be recommended by instructors of ENGRD 59/ENGWR 58 but is open to any student in any discipline wishing to improve her/his reading skills. The course be added until the end of the 9th week of the semester.

ENGLB 78 Reading Center IV

Units: 0.5 - 1
Hours: 27 - 54 hours LAB
Prerequisite: None.
Advisory: ENGRD 310 or 312, or placement through the assessment process.

Critical reading is a skill needed for success in college and particularly in 300 level courses. Many students enter those courses who are not confident in their reading abilities or their abilities to read critically. Reading Center 4 provides practice in this area. This course is open to any student in any discipline where reading and research may be required. It may be recommended for students enrolled in ENGRD 310, ENGRD 312, or ENGRD 110. Students may enroll through the 9th week of the semester and may elect to take the course for .5 unit or 1.0 unit.

ENGLB 299 Experimental Offering in English - Laboratory

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

English - Literature (ENGLT) Courses

ENGLT 303 Introduction to the Short Story

Units: 3
Hours: 54 hours LEC
Prerequisite: Eligibility for ENGL C1000 (formerly known as ENGWR 300).
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3B

Students will read, analyze, and discuss short stories by a wide variety of writers. Reading will emphasize American and British writers but will include authors from other countries as well. Thematic emphasis will focus on the connections between literature and the human condition.

ENGLT 310 English Literature I

Units: 3
Hours: 54 hours LEC
Prerequisite: Eligibility for ENGL C1000 (formerly known as ENGWR 300).
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3B
C-ID: C-ID ENGL 160

This course includes the study of early English literature, featuring significant works of major English authors from Beowulf through Samuel Johnson, with consideration of the most important aspects of the English literary periods.

ENGLT 311 English Literature II

Units: 3
Hours: 54 hours LEC
Prerequisite: Eligibility for ENGL C1000 (formerly known as ENGWR 300).
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3B
C-ID: C-ID ENGL 165

Survey of significant works of major English authors from the beginning of Romanticism in the Eighteenth Century to the work of major authors in the Twentieth Century, with consideration of the important aspects of English literary history.

ENGLT 320 American Literature I

Units: 3
Hours: 54 hours LEC
Prerequisite: Eligibility for ENGL C1000 (formerly known as ENGWR 300).
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3B
C-ID: C-ID ENGL 130

This course is a survey of the more representative works in American literature from early America through the Civil War.

ENGLT 321 American Literature II

Units: 3
Hours: 54 hours LEC
Prerequisite: ENGL C1000 or C1000H with a grade of "C" or better
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3B
C-ID: C-ID ENGL 135

Students will survey the representative works in American Literature after the Civil War.

ENGLT 330 African American Literature

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3B

This course surveys the most representative African American writers from the slave narrative to the present. Our comprehensive literary study will frame today's issues in the context of significant historical and cultural influences.

ENGLT 334 Asian-American Literature

Units: 3
Hours: 54 hours LEC
Prerequisite: Eligibility for ENGL C1000 (formerly known as ENGWR 300).
General Education: Local GE L3

This course surveys fiction, drama, poetry, and memoirs written by Asian Americans. The course focuses on works written by Americans of Chinese, Filipino, Japanese, Hmong, Korean, and Vietnamese descent but also includes the work of other Pan-Asian American writers. Students explore the diaspora and ways in which the experience of being Asian in America has shaped the literature and examine the differences and similarities of these experiences across cultures, generations, and genders. Optional field trips may be included.

ENGLT 335 Latino, Mexican-American, and Chicano Literature

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligibility for ENGL C1000 (formerly known as ENGWR 300).
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3B

This course explores literature (poetry, short stories, novels, creative nonfiction, and performance) authored by Latinx writers. It typically examines the following themes: resistance, survival, identity, homeland, immigration, the border, socio-political activism, gender, and sexuality. All or most of each text is in English. Knowledge of the Spanish language is helpful but not required.

ENGLT 336 Race and Ethnicity in Contemporary American Literature

Units: 3
Hours: 54 hours LEC
Prerequisite: Eligibility for ENGL C1000, previously known as ENGWR 300.
Transferable: CSU; UC

General Education: Local GE L3; Cal-GETC Area 3B

This class will examine literature written in the United States during the last 50 years in which the issues of race and racism, ethnicity and ethnocentrism, and culture and assimilation predominate the thematic concerns. All genres will be examined, as well as writers from many of the ethnic groups in America, including African Americans, Mexican Americans, Native Americans, and Asian Americans.

ENGLT 340 World Literature I

Units: 3
Hours: 54 hours LEC
Prerequisite: Eligibility for ENGL C1000 (formerly known as ENGWR 300).
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3B
C-ID: C-ID ENGL 140

The course will acquaint students with a diverse range of world literatures from antiquity through the seventeenth century. Students will identify the commonalities and differences among and within ancient cultures and historical movements through close study of myths, epic poetry, philosophy, sacred texts, lyric poetry, prose, and drama of early Middle Eastern, Asian, African, South American, European and North American literatures. Students will be introduced to various methods of literary analysis and research.

ENGLT 341 World Literature II

Units: 3
Hours: 54 hours LEC
Prerequisite: ENGL C1000 with a grade of "C" or better, or placement through the assessment process.
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3B
C-ID: C-ID ENGL 145

This course offers a survey of world literature in translation from the mid-seventeenth to late-twentieth century. Significant works from Middle Eastern, Western, Asian, African, and North and South American traditions are studied. Students analyze these literatures in representative historical contexts and compare ideas across time, place, and culture to make connections between diverse literary texts, genres, and periods.

ENGLT 343 Contemporary Regional World Literature

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3B

This course is an introduction to literature of writers from, but not limited to, Africa, Central and South America, Asia and the Middle East. Approached through the reading and discussion of all genres, basic elements of literary interpretation will be stressed to enhance understanding of the world view and culture of writers often not covered in other literature classes.

ENGLT 345 Mythologies of the World

Units: 3
Hours: 54 hours LEC
Prerequisite: Eligibility for ENGL C1000 (formerly known as ENGWR 300).
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3B

This course explores and examines several universal themes of human experience as found through a broad survey of actual myths gathered from around the world. Special emphasis is also placed on the relationships and the similarities of various mythologies. The course includes fairly intensive instruction on primary interpretative theories of mythological research and analysis. This course emphasizes some of the myths underlying the western world view and recognizes diversity and commonality in myths from Middle Eastern, Native North American, African, Asian, and South American cultures. Students analyze, contrast, and compare myths on topics including the goddess culture, creation, the hero's journey, Judeo-Christian themes, the dying god, and psychological applications. From this process, they will gain an understanding of ethnocentrism, ethnicity and racism and the impact of these on the American experience. The format of instruction will involve lecture, group discussion, and other activities.

ENGLT 360 Women in Literature

Units: 3
Hours: 54 hours LEC
Prerequisite: Eligibility for ENGL C1000 (formerly known as ENGWR 300).
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3B

This course is designed for any person who is interested in examining the roles women have occupied in literature, both as writers and as protagonists and characters. Emphasis will be placed on literature that develops protagonists and explores literary themes that focus on women's experiences in childhood, adolescence, marriage, childbirth and child rearing, death, love, dependence, independence, and their own creativity. Female authors and protagonists, and possibly male authors featuring female protagonists, will be representative of a wide range of cultural and ethnic groups from around the world. Over the course of the semester, students will examine issues of ethnicity, ethnocentrism, racism, ageism, classism, gender inequity, and religious differences that are raised in the literature under discussion. The literature will include a variety of genres, such as short stories, novels, plays, and poetry.

ENGLT 365 Introduction to Gay, Lesbian, Bisexual and Transgender Literature

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligibility for ENGL C1000 (formerly known as ENGWR 300).
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3B

This course surveys representative literature concerning lesbian, gay, bisexual, transgender, and queer or questioning (LGBTQ+) themes and issues as written by or about LGBTQ+ people from throughout its literary history to the present day. This comprehensive literary study includes attention to diverse LGBTQ+ concerns as they intersect with issues concerning race, gender, ability, and class. Moreover, students will be expected to analyze the significant historical and cultural influences of the LGBTQ+ community through literature.

ENGLT 370 Children and Literature

Units: 3
Hours: 54 hours LEC
Prerequisite: Eligibility for ENGL C1000 (formerly known as ENGWR 300).
Transferable: CSU
General Education: Local GE L3
C-ID: C-ID ENGL 180

Through reading classical and contemporary pieces of children's literature, students will explore the historical and cultural context of this literature, the criteria for selecting literature for children, and the best practices for presenting literature to children, such as storytelling and oral reading. In addition, this class will offer opportunities for students to reflect on their relationships with literature as children. This course is primarily for parents, prospective elementary and preschool teachers, and/or those interested in literature written for children.

ENGLT 402 Introduction to Shakespeare and Film

Units: 3
Hours: 54 hours LEC
Prerequisite: Eligibility for ENGL C1000 (formerly known as ENGWR 300).
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3B

In this course, students will draw connections between traditional and contemporary literary genres as they read William Shakespeare's plays and critically analyze film versions of these plays. Students will read and analyze a selection of Shakespeare's histories, comedies, tragedies, and romances in the context of Elizabethan drama. Then they will view a variety of cinematic interpretations of these plays and compare and contrast such elements as plot, character, theme, staging, and critical and directorial interpretation.

ENGLT 488 Honors - Literature Adapted into Film

Units: 3
Hours: 54 hours LEC
Prerequisite: Eligibility for ENGL C1000 (formerly known as ENGWR 300).
Enrollment Limitation: Enrollment is limited to Honors Program students. Details about the Honors Program can be found in the Cosumnes River College Catalog.
Transferable: CSU; UC (Reaffirmed 08/01/2023.)
General Education: Local GE L3; Cal-GETC Area 3A; Cal-GETC Area 3B

This course analyzes the process, challenges, failures, and successes of adapting literary and stage material into film. It compares 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 examines intention, creative distinctions, as well as limits and strengths of each medium. This course requires at least one research essay proposing and justifying details for an adaptation and including appropriate MLA documentation. The honors course is a full hands-on course with advanced teaching methods focusing on analytical reading, film analysis, and writing skills; it provides opportunity to engage with contemporary social and ethical issues through small group discussion, collaborative projects requiring higher-level thinking tasks as well as independent and collaborative research. Students are tasked to not only analyze and critique but also create an adaptation. Distinguishing features include: deep focus on research, analysis, application, strong communication and critical thinking. Enrollment in this course is limited to Honors Program students. This course is the same as HONOR 378. This course, under either name, may be taken one time for credit.

ENGLT 495 Independent Studies in Literature

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

ENGLT 499 Experimental Offering in Literature

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU

This is the experimental courses description.

English - Reading (ENGRD) Courses

ENGRD 113 Reading and Writing Skills for College

Same As: ENGWR 109
Units: 4.5
Hours: 72 hours LEC; 27 hours LAB
Prerequisite: ENGWR 58 with a grade of "C" or better, or placement through the assessment process.

This integrated reading and writing course is designed to accelerate the preparation for college reading and writing competency requirement for students who are assessed into one level below transfer English courses. This course prepares students for ENGRD 310/312 and ENGL C1000 (formerly known as ENGWR 300) with integrated teaching and learning in both reading and writing to accelerate a pathway for English Reading and Writing requirements. Students will learn to develop reading skills in vocabulary expansion, unlocking meanings with context clues and word parts, increasing comprehension, SQ3R, and critical thinking. Students will also learn to develop skills in writing correct, clear, and concise sentences with proper English grammar that transfer to well developed and organized paragraphs and essays. Other skills include paraphrasing, summarizing, pre-reading and pre-writing techniques, revising and editing essays, analyzing and comparing ideas, identifying author’s tone, bias, and purpose. This course is most ideal for students who are assessed into both ENGRD 110 and ENGWR 101. Upon successful completion of this course, students will have met the prerequisite for

ENGRD 310/312 and ENGL C1000 (formerly known as ENGWR 300). This course may include a departmental final. This course is the same as ENGWR 109, and only one may be taken for credit.

ENGRD 119 College Textbook Reading Skills

Units: 0.5
Hours: 27 hours LAB
Prerequisite: None.

This course offers instruction in academic reading skills to students who are concurrently enrolled in a college course. The instruction includes informal lecture, self-paced individual work, workshop, guided practice, and assisted learning. Pass or No Pass only.

ENGRD 299 Experimental Offering in English - Reading

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

ENGRD 310 Critical Reading as Critical Thinking

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGLB 70 or ENGL C1000
Transferable: CSU
General Education: Local GE L1B

This course covers the theory and practice of essential reading skills for proficient academic performance with an emphasis on (1) reading strategy applications in textbook, fiction, and nonfiction, (2) critical analysis and evaluation of college level academic texts in multicultural writings, fiction and non-fiction reading, (3) critical and analytical evaluation of college level expository, narrative, descriptive, and argumentative essays and research, (4) development and expansion of critical thinking skills required in today’s diverse work environment, (5) vocabulary development, and (6) development of flexibility in reading rate. This course meets the Reading Competency requirement for the AA and AS degrees, and is CSU transferable. Additional work in the Reading and Writing Center (ENGLB 70 or 75) may be advised.

ENGRD 311 Intensive Critical Thinking for College Success

Units: 4
Hours: 72 hours LEC
Prerequisite: ENGWR 58 with a grade of "C" or better, or placement through the assessment process.
Transferable: CSU
General Education: Local GE L1B

This course emphasizes the theory and application of critical thinking through reading expository, argumentative, fictional and nonfictional literature and works to develop the following: critical and analytical reading skills for college-level text, critical and analytical evaluation in research, synthesizing information to form logical conclusions, comparing and evaluating multiple sources, application in critical reading strategies across the discipline, vocabulary development and expansion for college-level reading. This accelerated course is for students who are ready for the challenge of an intensive learning experience at college level. This course meets the Reading Competency requirement for AA and AS degrees and is CSU transferable.

ENGRD 312 Academic Texts and the Self

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGLB 70, ENGLB 75, ENGWR 101, or ESLW 320
Transferable: CSU

This course refines students' skills and ability to read, understand, and respond to college-level textbooks across the curriculum. Emphasis is placed on discipline-based vocabulary, critical reading and thinking strategies, interpretation of visual aids and data, and employing appropriate reading rate to fulfill the purpose of reading. This course meets the Reading Competency requirement for the A.A. and A.S. degrees, and is CSU transferable. Students are encouraged to also enroll in ENGLB 70 or 75 for access to individualized help in the Reading and Writing Center.

ENGRD 495 Independent Studies in English - Reading

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

ENGRD 499 Experimental Offering in English - Reading

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU

This is the experimental courses description.

English - Writing (ENGWR) Courses

ENGWR 44 Basics of Sentence Structure

Units: 1.5
Hours: 27 hours LEC
Prerequisite: None.

This course offers training in grammar, sentence building, correct usage, and punctuation. This course is recommended for students who wish to review basic principles of standard English as preparation for college-level compositions like ENGL C1000 (formerly known as ENGWR 300), ENGWR 301, and

ENGL C1001 (formerly known as ENGWR 302). Graded on a pass/no pass basis.

ENGWR 55 Fluency and Style in English Writing

Units: 1.5
Hours: 27 hours LEC
Prerequisite: None.

This course offers further training in grammar, sentence building, correct usage, and punctuation. Students focus on developing fluency and style through sentence combining. Recommended for students who wish to continue to develop their understanding of standard English as preparation or reinforcement for ENGL C1000/80 or ENGL C1000 (ENGL C1000 was previously known as ENGWR 300). This course is graded on a pass/no pass basis.

ENGWR 58 Writing Development with Reading

Units: 4
Hours: 72 hours LEC
Prerequisite: None.

The focus of this course will be on writing and reading instruction as integrally related skills. Students will study and practice reading comprehension in the context of the writing process with the goal of accelerating the pathway to the English Reading and English Writing requirements. Students will develop critical thinking skills and the ability to write clear and correct sentences as they write a variety of focused, developed, organized paragraphs and essays. Students will write both full-process and in-class essays. This course may include a departmental final or portfolio assessment. Successful completion of this course will serve as a prerequisite for ENGWR 101 and ENGRD 110 only at Cosumnes River College. As enrollment into course will be based upon prerequisite, there will be no self-placement. This course is the same as ENGRD 59, and only one may be taken for credit.

ENGWR 80 Accelerated College Writing

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Corequisite: ENGL C1000

This course provides support for students taking ENGL C1000 (formerly known as ENGWR 300). The assignments are often connected to the assignments in ENGL C1000 and reflect the diversity of Cosumnes River College. The course focuses on the writing process, as well as conferencing, peer review, self-reflection, and self-assessment to help students gain the skills, habits, and confidence to succeed in college level writing.

ENGWR 99 English Summer Bridge Program

Units: 1.5
Hours: 20 hours LEC; 21 hours LAB
Prerequisite: None.

This is a writing and grammar course that is part lecture and part lab. Students will focus on reading and writing as integrally related skills, hone their reading and writing processes, and practice grammar and sentence formation--all to become more college ready. This course is recommended for students who wish to review basic principles of standard English and practice college-level writing for ENGWR 51, ENGWR 101 or ENGL C1000 (formerly known as ENGWR 300). The course is graded on a pass/no pass basis.

ENGWR 109 Reading and Writing Skills for College

Same As: ENGRD 113
Units: 4.5
Hours: 72 hours LEC; 27 hours LAB
Prerequisite: ENGWR 58 with a grade of "C" or better, or placement through the assessment process.

This integrated reading and writing course is designed to accelerate the preparation for college reading and writing competency requirement for students who are assessed into one level below transfer English courses. This course prepares students for ENGRD 310/312 and ENGL C1000 (formerly known as ENGWR 300) with integrated teaching and learning in both reading and writing to accelerate a pathway for English Reading and Writing requirements. Students will learn to develop reading skills in vocabulary expansion, unlocking meanings with context clues and word parts, increasing comprehension, SQ3R, and critical thinking. Students will also learn to develop skills in writing correct, clear, and concise sentences with proper English grammar that transfer to well developed and organized paragraphs and essays. Other skills include paraphrasing, summarizing, pre-reading and pre-writing techniques, revising and editing essays, analyzing and comparing ideas, identifying author’s tone, bias, and purpose. This course is most ideal for students who are assessed into both ENGRD 110 and ENGWR 101. Upon successful completion of this course, students will have met the prerequisite for ENGRD 310/312 and ENGL C1000. This course may include a departmental final. This course is the same as ENGRD 113, and only one may be taken for credit.

ENGWR 110 College Reading and Writing Skills

Units: 4
Hours: 72 hours LEC
Prerequisite: None.

This pre-transfer-level course is designed to prepare students for success in ENGL C1000 (formerly known as ENGWR 300) and other courses that require writing. Students will read primarily transfer-level non-fiction texts of varying length, and write essays responding to and incorporating these readings. The course will focus on reading and writing fundamentals, such as active reading strategies, writing process, thesis development, paragraph structure, logical support, and sentence awareness.

ENGWR 299 Experimental Offering in English - Writing

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

ENGL C1000 Academic Reading and Writing

Units: 3
Hours: 54 hours LEC
Prerequisite: Placement as determined by the college's multiple measures assessment process
Advisory: LIBR 318 with a grade of "C" or better; Concurrent enrollment in ENGLB 55.
Transferable: CSU; UC
General Education: Local GE L1A; Cal-GETC Area 1A
C-ID: C-ID ENGL 100

This course was formerly known as ENGWR 300 College Composition.

In this course, students receive instruction in academic reading and writing, including writing
processes, effective use of language, analytical thinking, and the foundations of academic research. This course offers instruction in critical thinking, reading and writing, and is designed to help the student demonstrate, in both argumentative and expository prose, sound logic and/or argumentation, clear organization, precise diction, and appropriate style. Throughout the course, fluency and correctness are emphasized. Students may satisfy the prerequisite for the course through the Los Rios placement process OR guided self-placement OR successful completion of ESL 130 OR with a passing AP score. This course was formerly known as ENGWR 300 and is not open to students who have successfully completed ENGWR 300, or who have successfully passed the honors version of the course, ENGL C1000H, formerly known as ENGWR 480/HONOR 375.

Students may satisfy the prerequisite for the course through the Los Rios placement process OR guided self-placement OR successful completion of ESL 130 OR with a passing AP score. This course was formerly known as ENGWR 300 and is not open to students who have successfully completed ENGWR 300, or who have successfully passed the honors version of the course, ENGL C1000H, formerly known as ENGWR 480.

ENGWR 301 College Composition and Literature

Units: 3
Hours: 54 hours LEC
Prerequisite: ENGL C1000 and C1000H with grades of "C" or better
Transferable: CSU; UC
General Education: Local GE L1B; Local GE L3; Cal-GETC Area 1B; Cal-GETC Area 3B
C-ID: C-ID ENGL 105; C-ID ENGL 120

ENGWR 301 offers the study of literature, with an emphasis on analytical reading and writing. It covers principles of argument and analysis, such as reasoning inductively and deductively. Assigned readings may include novels, short stories, poems, plays, 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.

ENGL C1001 Critical Thinking and Writing

Units: 3
Hours: 54 hours LEC
Prerequisite: College-level composition (ENGL C1000/ENGL C1000H/ENGL C1000E/C-ID ENGL 100) or equivalent
Transferable: CSU; UC
General Education: Local GE L1B; Cal-GETC Area 1B
C-ID: C-ID ENGL 105

This course was formerly known as ENGWR 302 Advanced Composition and Critical Thinking.

In this course, students receive instruction in critical thinking for purposes of constructing,
evaluating, and composing arguments in a variety of rhetorical forms, using primarily non-fiction
texts, refining writing skills and research strategies developed in ENGL C1000 Academic Reading and
Writing (C-ID ENGL 100) or similar first-year college writing course. Students focus on critically assessing, developing, supporting, and effectively expressing persuasive opinions and arguments on issues in culturally diverse environments. Through reading, writing, and discussion, students examine methods by which an audience of readers is persuaded to think, believe, and act. Students identify, explore, and examine logical fallacies of arguments, analyze diverse arguments for soundness and validity, analyze various modes of discourse within diverse economic, political, environmental, social, and cultural contexts, and craft effective traditional and/or multimodal arguments designed with specific purposes for varying audiences. This course includes writing a minimum of 5,000 words (which includes full-process essays) and draws from various texts to present carefully reasoned arguments. At least one essay includes citations from primary and secondary sources, documented according to current MLA format.

This course was formerly known as ENGWR 302 and is not open to students who have successfully completed ENGWR 302.

ENGWR 309 Documenting Research for College Composition

Units: 1
Hours: 18 hours LEC
Prerequisite: None.
Advisory: LIBR 318
Transferable: CSU; UC

Learn to add credibility and to avoid plagiarism in your writing as you explore the principles and mechanics of documenting research while developing critical thinking skills. The final product of the course is a well-researched argumentative essay that shows mastery of the documentation style guidelines of the Modern Language Association of America (MLA).

ENGWR 330 Writing for Publication

Same As: JOUR 340
Units: 3
Hours: 54 hours LEC
Prerequisite: ENGL C1000, ENGL C1000H, and JOUR 300 with grades of "C" or better
Transferable: CSU

This is an introductory course in writing nonfiction for publication. Emphasis will be on developing magazine articles

that sell; finding ideas; analyzing magazines; writing query letters; researching and interviewing; organizing, writing and illustrating articles. Individual and class criticism of student work will be featured. This course is the same as JOUR 340, and only one may be taken for credit.

ENGWR 331 Writing for Publication

Units: 3
Hours: 54 hours LEC
Prerequisite: ENGL C1000 with a grade of "C" or better
Advisory: ENGWR 330
Transferable: CSU

This course offers a marketing approach to selling nonfiction writing. The course surveys consumer, general interest and specialty magazines, including trade journals, company publications, regional magazines and local markets. Activities will include the following: reporting on magazine categories; analysis of a variety of magazine article styles and types; writing and sending articles to the marketplace; individual and class criticism of student manuscripts. Emphasis will be placed on increasing freelance writing publication. The course may be taken twice for credit, with the understanding that many universities and four-year colleges place a nine-unit limit on transfer credit from advanced composition courses (ENGL C1000, ENGWR 331 and ENGCW 400).

ENGWR 341 Introduction to Technical and Professional Writing

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU
General Education: Local GE L1A

This course emphasizes principles of reader-centered writing for the workplace, focusing specifically on aspects of technical and professional writing. The course teaches the writing of documents used in industry and business. These documents may include memos, letters, brochures, reports, process analyses, technical descriptions, procedures, proposals, grants, scientific reports, web sites, software documentation, and case studies. The course may include team projects that require collaboration outside the classroom. The course complements communication skills needed for the Career and Technical Education disciplines. The course is intended to be applicable to AS and AA CTE degrees.

ENGL C1000H Academic Reading and Writing - Honors

Units: 3
Hours: 54 hours LEC
Prerequisite: Placement as determined by the college's multiple measures assessment process
Enrollment Limitation: Eligibility for the Honors Program.
Transferable: CSU; UC
General Education: Local GE L1A; Cal-GETC Area 1A
C-ID: C-ID ENGL 100

This course was formerly known as ENGWR 480 Honors College Composition.

In this course, students receive instruction in academic reading and writing, including writing processes, effective use of language, analytical thinking, and the foundations of academic research.
This is an honors course. This honors composition course for students intending to transfer to a four-year college or university focuses on reading, writing, and critical thinking skills that extend past those developed in a traditional composition course. This rigorous course requires the reading and analysis of complex short works along with at least one full-length academic text. Students will identify and implement explicit writing and reading strategies useful for navigating audience, purpose, context, genre, language conventions, and varied sources-as-evidence. They will produce carefully reasoned, stylistically sophisticated academic writing, which includes appropriate academic documentation and relies on academic research. Students will refine their practice of rhetorical process, strategy, research, and citation methods in a minimum of 6,500 written words in academic writing assignments across multiple genres, including at least 5,000 words in major writing assignments revised in response to formative peer and instructor feedback.

Honors students will engage in additional presentations of independent and collaborative research.

This course (formerly known as ENGWR 480) is not open to students who have successfully completed ENGL C1000 (formerly known as ENGWR 300). This course is the same as HONOR 375. This course, under either name, may be taken only one time for credit.

Students may satisfy the prerequisite for the course through the Los Rios placement process OR guided self-placement OR successful completion of ESL 325.

ENGWR 495 Independent Studies in English - Writing

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

ENGWR 499 Experimental Offering in English - Writing

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU

This is the experimental courses description.

English Course Sequence

English Composition Courses

First Semester

Enroll in *one* of the following:

- **ENGL C1000: Academic Reading and Writing**[1] (3 units)
- **ENGL C1000: Academic Reading and Writing**[1] (3 units) and **ENGWR 80: Accelerated College Writing** (3 units) – *must be taken concurrently*
- **ENGWR 341: Introduction to Technical and Professional Writing**[2] (3 units)
- **ENGWR C1000H: Academic Reading and Writing – Honors**[1 / 3] (3 units)

[1] Fulfills Cal-GETC 1A and AA/AS GE L1A. Transfers to four-year colleges and universities.

[2] Fulfills AA/AS GE L1A. Transfers to CSU.

[3] Requires admission to the Honors program (https://crc.losrios.edu/academics/programs-majors/honors).

Second Semester

Enroll in *one* of the following:

- **ENGWR 301: College Composition and Literature**[4] (3 units)
- **ENGL C1001: Critical Thinking and Writing**[5] (3 units)

[4] Fulfills Cal-GETC 1B and 3, and AA/AS GE L1B and L3. Transfers to four-year colleges and universities.

[5] Fulfills Cal-GETC 1B and AA/AS GE L1B. Transfers to four-year colleges and universities.

Support Courses

The following classes can be taken alongside English composition classes to provide additional support.

- **ENGRD 310: Critical Reading and Critical Thinking**
- **ENGLB 70 through 78: Writing Center** – open access laboratory assists students in writing, sentence structure, essay development, and reading in any subject area.

Creative Writing and Literature Courses

Studying English prepares students for a wide range of professions. Consider adding depth to your academic resume with one or more of the following classes. See a complete list of English courses (https://crc.losrios.edu/academics/programs-majors/english?tab=3). These courses enhance critical thinking and cross-cultural understanding. They also meet Cal-GETC requirements (https://crc.losrios.edu/2025-2026-official-catalog/graduation-and-transfer/preparing-to-transfer/california-general-education-transfer-curriculum-requirements).

Creative Writing Courses

- ENGCW 400
- ENGCW 410
- ENGCW 420
- ENGCW 430
- ENGCW 452

Literature Courses

- ENGLT 303
- ENGLT 310
- ENGLT 311
- ENGLT 320
- ENGLT 321
- ENGLT 330
- ENGLT 335
- ENGLT 336
- ENGLT 340
- ENGLT 341
- ENGLT 343
- ENGLT 345
- ENGLT 356
- ENGLT 360
- ENGLT 402
- ENGLT 488
- HONOR 378 (same as ENGLT 488)

Transferability Summary Table

Course Type	Transfers to CSU and UC	Transfers to CSU Only	Satisfies Cal-GETC
Composition	**ENGL** C1000, C1000H, C1001; **ENGWR** 301, 309	**ENGWR:** 330, 331, 341, 495, 499	**Area 1A** – **ENGL:** C1000, C1000H **Area 1B** – **ENGL:** C1001; **ENGWR:** 301 **Area 3** – **ENGWR:** 301
Creative Writing	**ENGCW:** 400, 410, 420, 430	**ENGCW:** 452, 495, 499	N/A
Literature	**ENGLT:** 303, 310, 311, 320, 321, 330, 336, 340, 341, 343, 345, 360, 365, 402, 488; **HONOR:** 378	**ENGLT:** 370, 495, 499	**Area 3B** – **ENGLT:** 303, 310, 311, 320, 321, 330, 336, 340, 341, 343, 345, 360, 365, 402, 488; **HONOR:** 378
Education	N/A	**ENGED:** 305, 320, 495, 499	N/A
Reading	N/A	**ENGRD:** 312, 495, 499	N/A

English as a Second Language

CRC offers a comprehensive ESL program with courses in grammar, listening/speaking, pronunciation, reading, and writing designed to provide the English language learner with the command of the English language necessary to pursue both transfer and vocational courses and enter the workforce. Students can enter with virtually no knowledge of English and progress to an extremely proficient level.

View the CRC ESL Course Sequence (https://crc.losrios.edu/2025-2026-official-catalog/programs-of-study/list-of-programs/english-as-a-second-language-course-sequence) and the ESL Placement (https://crc.losrios.edu/admissions/placement/esl-placement) webpage.

Certificates Offered

ESL Listening and Speaking for Academic and Workforce Preparation Certificate

ESL Listening and Speaking for College Success Certificate

ESL Reading for Academic and Workforce Preparation Certificate

ESL Reading for College Success Certificate

ESL Writing for Academic and Workforce Preparation Certificate

ESL Writing for College Success Certificate

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Certificates

ESL Listening and Speaking for Academic and Workforce Preparation Certificate

This certificate of proficiency recognizes English language learners who have successfully completed coursework in ESL Listening and Speaking from the novice to low intermediate level.

Certificate Requirements

Course Code	Course Title	Units
ESLL 31	Listening and Speaking for College Readiness	3
ESLL 41	Listening, Speaking and Presentation Skills for College	3
ESLP 41	The Basics of English Pronunciation	3
Total Units:		**9**

Student Learning Outcomes

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

- PSLO #1: USE INTERACTIVE SPEAKING STRATEGIES EFFECTIVELY
- PSLO #2: PREPARE AND DELIVER SHORT YET ENGAGING PRESENTATIONS ON ACADEMIC TOPICS
- PSLO #3: USE NOTE-TAKING TECHNIQUES TO TAKE ORGANIZED, ACCURATE NOTES BASED ON SHORT LECTURES FROM A VARIETY OF DISCIPLINES
- PSLO #4: DEMONSTRATE AN EMERGING ABILITY TO PRONOUNCE ALL THE SOUNDS OF ENGLISH IN CONTROLLED SPEECH.
- PSLO #5: USE BASIC WORD STRESS RULES TO IDENTIFY AND PRONOUNCE STRESSED SYLLABLES.
- PSLO #6: USE BASIC RULES OF SUPRASEGMENTAL STRESS TO IDENTIFY AND PRONOUNCE SENTENCE STRESS AND INTONATION.

ESL Listening and Speaking for College Success Certificate

This certificate of proficiency recognizes English language learners who have successfully completed coursework in ESL Listening and Speaking from the intermediate-mid to advanced-low level.

Certificate Requirements

Course Code	Course Title	Units
ESLP 51	Building English Fluency and Comprehensibility	3
ESLL 111	Academic Listening, Speaking, and Presentation Skills	3
ESLL 121	Academic Listening, Note-taking, and Discussion	3
Total Units:		**9**

Student Learning Outcomes

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

- PSLO 1: USE PRE-LISTENING STRATEGIES TO PREPARE FOR LECTURES
- PSLO 2: DEMONSTRATE COMPETENCE TAKING ACCURATE NOTES BASED ON LECTURES
- PSLO 3: ACTIVELY PARTICIPATE IN A VARIETY OF CLASS DISCUSSION ACTIVITIES
- PSLO 4: DEMONSTRATE THE ABILITY TO PRONOUNCE ALL THE SOUNDS OF ENGLISH IN CONTROLLED SPEECH WITH OCCASIONAL ERRORS.
- PSLO 5: USE OF A VARIETY OF WORD STRESS RULES TO IDENTIFY AND PRONOUNCE STRESSED SYLLABLES.
- PSLO 6: USE RULES OF SUPRASEGMENTAL STRESS TO IDENTIFY AND PRONOUNCE RHYTHM, SENTENCE STRESS, AND INTONATION

ESL Reading for Academic and Workforce Preparation Certificate

This certificate of proficiency recognizes English language learners who have successfully completed coursework in ESL Reading from the novice to low intermediate level.

Certificate Requirements

Course Code	Course Title	Units
ESL 37	Novice-High Integrated Reading and Writing	6
ESL 47	Intermediate-Low Integrated Reading and Writing	6
Total Units:		**12**

Student Learning Outcomes

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

- PSLO 1: EMPLOY "TOP-DOWN" COMPREHENSION STRATEGIES
- PSLO 2: EMPLOY LEVEL-APPROPRIATE VOCABULARY BUILDING STRATEGIES
- PSLO 3: DEMONSTRATE COMPREHENSION OF MULTI-PARAGRAPH ACADEMIC TEXTS
- PSLO 4: DEMONSTRATE AN EMERGING ABILITY TO SYNTHESIZE INFORMATION FROM TEXT AND USE THAT INFORMATION TO GENERATE IDEAS FOR WRITING.

ESL Reading for College Success Certificate

This certificate of proficiency recognizes English language learners who have successfully completed coursework in ESL Reading from the intermediate to advanced-low level.

Certificate Requirements

Course Code	Course Title	Units
ESL 110	ESL College English Preparation: Intermediate	6
ESL 130	ESL College English Preparation: Advanced-Low	6
Total Units:		**12**

Student Learning Outcomes

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

- PSLO 1: DEMONSTRATE ACADEMIC READING SKILLS BOTH IN CLASS UNDER THE PRESSURE OF TIME AND OUT OF CLASS.
- PSLO 2: RESPOND TO READINGS IN CLEAR WRITTEN AND ORAL RESPONSES THAT SHOW CRITICAL ANALYSIS.
- PSLO 3: DEMONSTRATE THE ABILITY TO INFER, SUMMARIZE, PARAPHRASE, AND MAKE GRAPHIC ORGANIZERS OR OUTLINES.

ESL Writing for Academic and Workforce Preparation Certificate

This certificate of proficiency recognizes English language learners who have successfully completed coursework in ESL Writing from the novice to low intermediate level.

Certificate Requirements

Course Code	Course Title	Units
ESL 37	Novice-High Integrated Reading and Writing	6
ESL 47	Intermediate-Low Integrated Reading and Writing	6
Total Units:		**12**

Student Learning Outcomes

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

- PSLO 1: EMPLOY THE WRITING PROCESS TO COMPLETE WRITING ASSIGNMENTS WHICH INCLUDE A CLEAR TOPIC, CONTROLLING IDEA, AND SUPPORTING DETAILS AT VARIOUS LEVELS OF SPECIFICITY.
- PSLO 2: DEMONSTRATE AN EMERGING ABILITY TO APPLY NEW INFORMATION TO WRITING
- PSLO 3: USE COMMON ENGLISH SENTENCE PATTERNS CORRECTLY.

ESL Writing for College Success Certificate

This certificate of proficiency recognizes English language learners who have successfully completed coursework in ESL Writing from the intermediate-mid to advanced-low level.

Certificate Requirements

Course Code	Course Title	Units
ESL 110	ESL College English Preparation: Intermediate	6
ESL 130	ESL College English Preparation: Advanced-Low	6
Total Units:		**12**

Student Learning Outcomes

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

- PSLO 1: EMPLOY THE WRITING PROCESS TO COMPLETE SEVERAL MULTI-DRAFT ESSAYS THAT INCLUDE OUTSIDE SOURCES.
- PSLO 2: CONSISTENTLY DEMONSTRATE COLLEGE-APPROPRIATE SKILLS BOTH IN AND OUT OF THE CLASSROOM
- PSLO 3: COMPLETE COLLEGE-LEVEL ASSIGNMENTS INCLUDING FOLLOWING MULTI-PART INSTRUCTIONS, USING INDEPENDENT THINKING OR BASIC RESEARCH, COMPLETING WORK ON TIME EVEN WHEN MULTIPLE STEPS ARE REQUIRED, AND UTILIZING CORRECT FORMATTING FOR ALL WRITTEN ASSIGNMENTS.

- PSLO 4: RESPECT ACADEMIC INTEGRITY BY USING ONE'S OWN IDEAS AND WORDS IN WRITING AND CITING SOURCES WHEN NECESSARY.

English as a Second Language (ESL) Courses

ESL 24 Novice-Mid ESL Skills Lab

Units: 0.5 - 1.5
Hours: 27 - 81 hours LAB
Prerequisite: None.
Enrollment Limitation: Students may only enroll in one ESL Skills Lab per semester.
Advisory: ESLL 20; Concurrent enrollment in ESLL 20, ESLR 20, and/or ESLW 20 is recommended as ESL 24 is designed to supplement the instruction students receive in those courses.

This course develops, expands, and reinforces multiple English language skills at the novice-mid level in an independent and/or small group environment. Coursework includes integrated study topics relative to vocabulary and study skills, reading, 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 is not a substitute for other ESL courses. Students will earn .5 units for each 27 hours of lab completed for a maximum of 1.50 units. This course is a Pass/No Pass course.

ESL 27 Beginning-Low Integrated Reading and Writing

Units: 6
Hours: 108 hours LEC
Prerequisite: None.

This course focuses on the fundamental reading and writing skills which are necessary for success in an academic English program. Students will develop an understanding of vocabulary building, reading comprehension, and the basic grammar and sentence structure necessary for paragraph writing. Students will use content from course readings to develop ideas for their own writing. This course is part of the reading and writing sequence which prepares ESL students to take college courses leading to a certificate, degree, and/or transfer.

ESL 34 Novice-High Skills Lab

Units: 0.5 - 1.5
Hours: 27 - 81 hours LAB
Prerequisite: None.
Advisory: Concurrent enrollment in ESLL 30, ESLR 30, and/or ESLW 30 is recommended as ESL 34 is designed to supplement the instruction students receive these courses.

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 is not a substitute for other ESL courses. Students will earn .5 units for each 27 hours of lab completed for a maximum of 1.50 units. This course is a Pass/No Pass course.

ESL 37 Novice-High Integrated Reading and Writing

Units: 6
Hours: 108 hours LEC
Prerequisite: None.

This course focuses on learning academic reading and writing skills at the novice-high level, with an emphasis on vocabulary development, reading comprehension, and the writing process. Students will develop paragraphs with a clear beginning, middle, and end in the context of a multiple paragraph writing assignment. This course is part of the reading and writing sequence which prepares ESL students to take college courses leading to a certificate, degree, and/or transfer.

ESL 39 College Ready Skills for English Language Learners

Units: 2
Hours: 36 hours LEC
Prerequisite: ESLL 20 with a grade of "C" or better, or placement through the assessment process.

This is a course to prepare English language learners for success in the American academic experience. This course provides college success strategies, language skills, and support resources in the language appropriate for entry level ESL students.

ESL 44 Intermediate-Low Skills Lab

Units: 0.5 - 1.5
Hours: 27 - 81 hours LAB
Prerequisite: None.
Advisory: concurrent enrollment in ESLL 40, ESLR 40, and/or ESLW 40 is recommended as ESL 44 is designed to supplement the instruction students receive these courses.

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, pronunciation and listening skills, composition and writing, and/or workplace skills. This is an open-entry open-exit course. Students may register until the end of the ninth week of the semester if space allows. This course is not a substitute for other ESL courses. Students will earn .5 units for each 27 hours of lab completed for a maximum of 1.50 units. This course is graded Pass/No Pass.

ESL 47 Intermediate-Low Integrated Reading and Writing

Units: 6
Hours: 108 hours LEC
Prerequisite: ESL 37 with a grade of "C" or better, or placement through the assessment process.

ESL 47 is an integrated reading and writing course for English language learners at the intermediate level. In preparation for

academic writing, students build skills in pre-writing, learn to write strong paragraphs, and practice the basics of essay structure. Students also build academic reading skills and vocabulary. With the information gathered through readings, students begin to use academic content to supplement their ideas in writing. This course is part of the reading and writing sequence, which prepares ESL students to take college courses leading to a certificate, degree, and/or transfer.

ESL 54 Intermediate-Mid Skills Lab

Units: 0.5 - 1.5
Hours: 27 - 81 hours LAB
Prerequisite: None.
Advisory: concurrent enrollment in ESLL 50, ESLR 50, and/or ESLW 50 is recommended as ESL 54 is designed to supplement the instruction students receive these courses.

This course develops, expands, and reinforces multiple English language skills at the intermediate-mid 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, pronunciation and listening skills, composition and writing, and/or workplace skills. This is an open-entry open-exit course. Students may register until the end of the ninth week of the semester if space allows. This course is not a substitute for other ESL courses. Students will earn .5 units for each 27 hours of lab completed for a maximum of 1.50 units. This course is a Pass/No Pass course.

ESL 110 ESL College English Preparation: Intermediate

Units: 6
Hours: 108 hours LEC
Prerequisite: ESL 47 with a grade of "C" or better, or placement through the assessment process.

ESL 110 is an accelerated course that integrates reading and writing. This course addresses the reading and writing skills English language learners need to succeed in college-level courses. Students focus on refining college-level academic skills in reading and writing with an emphasis on speed, vocabulary development, fluency, use of standard English, and analytical skills. Students will do extensive reading and writing with ever-increasing critical analysis. Students will follow the writing process in essay writing and will move from personal experiences to incorporating academic information. The class is the first semester of a two-semester sequence that moves students to ENGL C1000 (formerly known as ENGWR 300) and ENGRD 310/312.

ESL 130 ESL College English Preparation: Advanced-Low

Units: 6
Hours: 108 hours LEC
Prerequisite: ESL 110 with a grade of "C" or better, or placement through the assessment process.

ESL 130 is an accelerated course that integrates reading and writing at the high-intermediate and advanced-low level and prepares English language learners to be successful in college-level courses. Students refine academic reading skills with an emphasis on comprehension of academic texts, reading fluency, annotation, and vocabulary development. Students develop research and synthesizing skills and write a variety of essays based on critical analysis of readings. The course also emphasizes competent sentence variety and mastering the mechanics of English in the context of the essay. This class is the second semester of a two-semester sequence that moves students to ENGL C1000 (formerly known as ENGWR 300) and ENGRD 310/312.

ESL 299 Experimental Offering in English as a Second Language

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

English as a Second Language - Grammar (ESLG) Courses

ESLG 31 Basic English Grammar

Units: 3
Hours: 54 hours LEC
Prerequisite: None.

This course provides English language learners with an introduction to the basics of English grammar including parts of speech, word form, word order, and the fundamental verb tenses necessary for writing. Students will learn to recognize how words function in English sentences, and be able to identify and correct basic errors.

ESLG 41 Elements of English Sentences

Units: 3
Hours: 54 hours LEC
Prerequisite: ESLG 31 with a grade of "C" or better, or placement through the assessment process.

This course provides English Language Learners with a review of the basic elements of English sentences including parts of speech, word order, proper use of word form, and the simple and progressive verb tenses. Students will learn to recognize a variety of English sentence patterns in listening, and reading and be able to produce those patterns in their own speaking and writing.

ESLG 51 Grammar for Intermediate ESL Writers

Units: 3
Hours: 54 hours LEC
Prerequisite: ESLG 41 with a grade of "C" or better, or equivalent skills demonstrated through the assessment process.

This course reviews the form and use of the simple and continuous tenses in the present, past and future as well as the present perfect and present perfect continuous. It also provides instruction in other intermediate-level grammar topics such as gerunds and infinitives, articles, and nouns. It is intended for students who need additional grammar instruction to support their development writers in English.

ESLG 110 Grammar for Intermediate-High ESL Students

Units: 3
Hours: 54 hours LEC
Prerequisite: ESLG 41 with a grade of "C" or better, or placement through the assessment process.

This course is intended for English language learners who need to develop an understanding of English grammar to study at the college level. It continues to build competency in the English verb tense system and provides instruction in more advanced clause structures, such as noun clauses, adverb clauses, and conditionals. Students will apply these concepts in writing assignments.

ESLG 120 Advanced ESL Grammar

Units: 3
Hours: 54 hours LEC
Prerequisite: ESLG 110 with a grade of "C" or better, or placement through the assessment process.

This course focuses on developing control of the form and meaning of important grammar structures, especially those used in writing. Students also learn advanced-level grammar topics and develop independent editing skills. Students write extensively and apply strategies to correct both local and global grammatical errors. The course is intended for students who need to develop strong control of grammar to support their educational and career goals.

ESLG 299 Experimental Offering in English as a Second Language - Grammar

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

English as a Second Language - Listening (ESLL) Courses

ESLL 20 Novice Listening and Speaking

Units: 4
Hours: 72 hours LEC
Prerequisite: None.

This course will provide an introduction to academic listening and speaking for novice level English language learners. Instruction focuses on basic listening and speaking strategies for a variety of situations, including listening for main ideas and utilizing learned phrases for class discussion. English sounds and intonation patterns are introduced.

ESLL 31 Listening and Speaking for College Readiness

Units: 3
Hours: 54 hours LEC
Prerequisite: ESLL 20 with a grade of "C" or better, or placement through the assessment process.

English language learners at the novice-high level develop the listening and speaking strategies necessary for college and workforce readiness. Basic listening strategies include listening for main ideas and supporting details in a variety of situations. Basic speaking strategies include the utilization of appropriate learned vocabulary and continued development of the production of English sounds, stress patterns, and intonation patterns. Students will also develop effective small group and class discussion strategies. This course is part of the ESL listening sequence, which is designed to prepare English language learners to take college courses leading to a certificate, degree, and/or transfer.

ESLL 41 Listening, Speaking and Presentation Skills for College

Units: 3
Hours: 54 hours LEC
Prerequisite: ESLL 31 with a grade of "C" or better, or placement through the assessment process.

ESLL 41 is a course in college listening and speaking for English language learners at the intermediate-low level. Students improve their listening by learning to take notes while watching short lectures, and they develop their speaking skills through class discussions and short presentations. This course is part of the ESL listening sequence, which is designed to prepare English language learners to take college courses leading to a certificate, degree, and/or transfer.

ESLL 111 Academic Listening, Speaking, and Presentation Skills

Units: 3
Hours: 54 hours LEC
Prerequisite: ESLL 41 with a grade of "C" or better, or placement through the assessment process.

This course is intended for English language learners who intend to study at the college level. It builds students' ability to listen and speak in the college classroom. Students improve their listening skills through academic lectures and develop strong classroom speaking skills through various types of presentations.

ESLL 121 Academic Listening, Note-taking, and Discussion

Units: 3
Hours: 54 hours LEC
Prerequisite: ESLL 111 with a grade of "C" or better, or placement through the assessment process.

This course prepares English language learners for the level of listening, note-taking, and discussion necessary to be successful in college classes. Students develop academic note-taking skills by listening to real academic lectures and build speaking skills by responding to lectures in class discussions. This course helps prepare ESL students for the rigor of general education courses in the sciences, social sciences, humanities, and other disciplines.

ESLL 299 Experimental Offering in English as a Second Language - Listening

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

English as a Second Language - Pronunciation (ESLP) Courses

ESLP 41 The Basics of English Pronunciation

Units: 3
Hours: 54 hours LEC
Prerequisite: ESLL 31 with a grade of "C" or better, or placement through the assessment process.

This course introduces the phonetic alphabet and focuses on the identification and production of the sounds of English. Students use basic pronunciation rules to begin to control pronunciation of words and sentences and add expression to their speech.

ESLP 51 Building English Fluency and Comprehensibility

Units: 3
Hours: 54 hours LEC
Prerequisite: ESLP 41 with a grade of "C" or better

This course builds on the skills learned in ESLP 41 while adding increased focus on sentence stress, rhythm, and intonation. Students use pronunciation rules to increase their ability to control pronunciation in a variety of situations and to make their speech more comprehensible and engaging.

English as a Second Language - Reading (ESLR) Courses

ESLR 51 Building Vocabulary Skills

Units: 2
Hours: 36 hours LEC
Prerequisite: None.

This course introduces English language learners to vocabulary building skills. The course teaches parts of speech, vocabulary study strategies, word attack skills, dictionary skills, and level-appropriate academic vocabulary.

ESLR 111 Academic Vocabulary

Units: 2
Hours: 36 hours LEC
Prerequisite: ESLR 51 with a grade of "C" or better, or placement through the assessment process.

This course is intended to prepare English language learners for the sophisticated vocabulary needed for higher-level study or work. Students will engage with the Academic Word List while continuing to develop vocabulary building skills. The course teaches more complex vocabulary study strategies, word attack skills, and academic vocabulary from the Academic Word List.

ESLR 499 Experimental Offering in English as a Second Language - Reading

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU

This is the experimental courses description.

English as a Second Language - Writing (ESLW) Courses

ESLW 499 Experimental Offering in English as a Second Language - Writing

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU

This is the experimental courses description.

English as a Second Language (ESL) Course Sequence

Proficiency Level	Listening and Speaking Courses	Integrated Reading and Writing Courses	Grammar Courses	Pronunciation Courses
Degree Transfer	COMM C1000 or COMM 325	ENGRD 310 or 312 and ENGL C1000	N/A	N/A
Advanced-Low	ESLL 121 (3 units)	ESL 130 (6 units)	ESLG 120 (3 units)	N/A
Intermediate-High	ESLL 111 (3 units)	ESL 110 (6 units)	ESLG 110 (3 units)	N/A
Intermediate-Low	ESLL 41 (3 units)	ESL 47 (6 units)	ESLG 41 (3 units)	ESLP 41 (3 units)
Novice (Beginning) High	ESLL 31 (3 units)	ESL 37 (6 units)	ESLG 31 (3 units)	N/A
Novice (Beginning) Mid	ESLL 20 (4 units)	ESL 27 (6 units)	N/A	N/A

While each course has a specific skill focus, listening/speaking, reading/writing, and grammar are critical language skills for English language learners to be successful at school, at work, and in life. Students are expected to use level appropriate listening, speaking, grammar, reading and writing to complete activities, assignments, and exams in every ESL class. The ESL Department recommends that students complete all of the skills courses at one level before they advance to the next level.

Students taking college level courses are expected to have college level English verbal communication, reading, and writing. Students who place below the ESL Advanced-Low level are strongly encouraged to complete the ESL Intermediate-High level before they enroll in content area courses.

Ethnic Studies

Ethnic Studies is an interdisciplinary and diverse field that gives voice to historically marginalized peoples and their perspectives by challenging systems of injustice and valuing diversity. This program seeks to educate students on progressive social change, reflect on the dynamics of power and knowledge, and promote multiple approaches to social justice issues while encouraging students to be informed and active citizens. Ethnic Studies allows students a particular focus on marginalized and disadvantaged populations while also de-centering the dominant cultural, political, and social ideals that have shaped western societies.

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Ethnic Studies (ETHNS) Courses

ETHNS 300 Introduction to Ethnic Studies

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligibility for ENGL C1000 (formerly known as ENGWR 300).
Transferable: CSU; UC
General Education: Local GE L4; Local GE L6; Cal-GETC Area 4; Cal-GETC Area 6

This course introduces students to Ethnic Studies and the diverse institutional, cultural, and historical issues relating to the past and present life circumstances and intersectional identities of the four core Ethnic populations of Asian Americans, Chicana/o and Latina/o Americans, African Americans, and Native/Indigenous Americans within the United States.

ETHNS 320 Introduction to African American Studies

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligibility for ENGL C1000 (formerly known as ENGWR 300).
Transferable: CSU; UC
General Education: Local GE L4; Local GE L6; Cal-GETC Area 4; Cal-GETC Area 6

This course introduces students to Ethnic Studies and the diverse institutional, cultural, and historical issues relating to the past and present life circumstances of African Americans within the United States. This course is interdisciplinary in nature and presents an overview of the cultural, economic, historic, social, and political issues in the life of African Americans in the United States. It will expose students of all ethnic backgrounds to the issues germane to the experience of African Americans in the United States. This course was formerly known as ETHNS 320 The African American Experience.

ETHNS 330 Introduction to Asian American Studies

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligibility for ENGL C1000 (formerly known as ENGWR 300).
Transferable: CSU; UC
General Education: Local GE L4; Local GE L6; Cal-GETC Area 4; Cal-GETC Area 6

This course introduces students to Asian American Studies and the diverse institutional, cultural, and historical issues relating to the past and present life circumstances and intersectional identities of Asian Americans and Pacific Islanders. This course was formerly known as ETHNS 330 The Asian American Experience in America.

ETHNS 344 The Latino Experience in America

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Completion of ENGWR 101 or ESLW340 with a grade of "C" or better
Transferable: CSU; UC
General Education: Local GE L4; Cal-GETC Area 4

This interdisciplinary course examines the social, political, economic, and cultural experience of racial and ethnic minority groups in the United States using concepts, theories, and terminology from distinct disciplines within the social sciences. As an ethnic studies course, it has a culturally relativistic approach. Specifically, this course redefines the lives of Latino American subgroups through their own experiences: from the inside looking out at the world.

ETHNS 350 Introduction to Native American Studies

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGL C1000 (formerly known as ENGWR 300) with a grade of "C" or better.
Transferable: CSU; UC
General Education: Local GE L4; Local GE L6; Cal-GETC Area 4; Cal-GETC Area 6

This course introduces students to Ethnic Studies and the diverse institutional, cultural, and historical issues relating to the past and present life circumstances and intersectional identities of Native Americans/American Indians within the United States. This course is a survey of traditional cultures of Native Americans/American Indians focusing on the social, religious, economic, and artistic practices. The antiquity, distribution, and linguistic histories of Native American/ American Indian cultures are integrated with the contemporary status of Native peoples regarding social change and adaptation.

ETHNS 360 Introduction to Chicana/o/x Studies

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligibility for ENGL C1000 (formerly known as ENGWR 300).
Transferable: CSU; UC
General Education: Local GE L4; Local GE L6; Cal-GETC Area 4; Cal-GETC Area 6

This course introduces students to the diverse institutional, cultural, and historical issues relating to the past and present life circumstances and intersectional identities of Chicana/o/x Americans within the United States. Specifically, this course examines and redefines the lives of Chicana/o/x Americans through their own experiences from the inside looking out at the world. This course was formerly known as ETHNS 340 Chicanos/Mexican Americans in the U.S.

Family and Consumer Science

CRC's course offerings in Family and Consumer Science are designed primarily to provide knowledge and skills in the areas of human development.

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Family and Consumer Science (FCS) Courses

FCS 324 Human Development: A Life Span

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC (FCS 312, 324 and PSYC 371 combined: maximum transfer credit is two courses)
General Education: Local GE L7B

Students will study the physical, cognitive, social, and emotional development of humans from conception through the life span. Emphasis will be placed on the theoretical and practical application of developmental principles including atypical aspects of development. Major developmental theories concerning life span development will be studied. Topics from conception to death will be presented including: conception, prenatal development, including prenatal developmental complications, physical, cognitive, social, emotional developmental, and developmental issues. Included in these broad developmental areas are learning, brain development, personality, morality, and societal influences on development. Atypical development and challenges to optimal development will be included. The course also examines end of life issues and bereavement. This is a foundational course for careers in the educational, social, psychological, and medical fields. Students may receive credit for FCS 324 or PSYC 371, but not both. (C-ID PSY 180)

FCS 495 Independent Studies in Family and Consumer Science

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

FCS 499 Experimental Offering in Family and Consumer Science

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU

This is the experimental courses description.

Film and Media Studies

Film and Media Studies is designed to develop critical thinking and screenwriting skills while fostering a humanistic and social scientific understanding of the media. Students combine hands-on courses in scriptwriting, with critical studies of the visual media as an art form and social force. This major is particularly encouraged for students who intend to transfer to university film and media programs or pursue careers that demand a high level of visual literacy, analytic and writing skills. The production of digital film and broadcast television are taught through the Radio, Television and Film Production program.

Degrees Offered

A.A. in Film & Media Studies

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Associate Degree

A.A. in Film & Media Studies

The Film & Media Studies program is designed to foster critical thinking and media literacy skills, interrogate the multiple histories of film and media, and contemplate the role of film and media texts as artifacts that shape and reflect popular culture. Students engage in practical and theoretical discussions about film and media in a variety of courses on aesthetics, screenwriting, genre, narrative, and representations of race, sex, class and gender. This major is encouraged for students who intend to transfer to university film and media programs, or pursue careers that demand a high level of media literacy or analytical writing skills. The production of digital film and broadcast television are taught through the Radio, Television and Film production program.

** Students planning to transfer to a four-year institution should complete the lower division major requirements and general education pattern for the appropriate transfer institution and major. If you are interested in transferring to a four-year college or university to pursue a bachelor's degree in this major, it is critical that you meet with your CRC counselor and/or FMS professors to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate's degree in this major may be different from the requirements needed for the Bachelor's degree. Exact major requirements for UC and CSU institutions can be found on www.assist.org.

Career Opportunities: Filmmaker, Entertainment Writer or Editor, Producer, Screenwriter, Professor, Script Supervisor, Story Editor, Digital Content Producer, Film Festival Programmer, Film Publicist.

** Some career options may require more than two years of college study. Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.

Degree Requirements

Course Code	Course Title	Units
FMS 300	Introduction to Film Studies	3
FMS 305	Film History I (1895-1949) (3)	3
or RTVF 305	Film History I (1895-1949) (3)	
FMS 307	Film History II (1950-present) (3)	3
or RTVF 307	Film History II (1950-present) (3)	
FMS 320	Film Genre	3
JOUR 320	Race and Gender in the Media	3
A minimum of 6 units from the following:		6
FMS 310	Introduction to Screenwriting (3)	
FMS 321	Film Genre: Horror (3)	
RTVF 368	Scriptwriting for Film, Video & Multimedia (3)	
FMS 488	Honors Seminar: Introduction to Critical Theory (3)	
FMS 489	Honors Seminar: The Films of Alfred Hitchcock (3)	
Total Units:		**21**

The Film & Media Studies Associate in Arts (A.A.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Student Learning Outcomes

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

- Analyze, interpret and exercise critical judgment in the evaluation of film and media forms and cultures. (PSLO-1)
- Recognize, articulate and judge the visual, verbal and audio conventions through which images, words and sounds make meaning in film and media texts. (PSLO-2)
- Write clear, concise and well-developed analyses of film and media texts. (PSLO-3)
- Demonstrate an understanding of the professional, technical and formal choices that realize, develop, or challenge existing practices and traditions in film. (PSLO-4)
- Determine what type of information is needed for a research question, problem, or issue, and identify, evaluate and effectively apply this information in scholarly or visual projects. (PSLO-5)
- Articulate the history, development, genre and movements of the film medium, and recognize the contributions of national, minority, diasporic and subaltern filmmakers. (PSLO-6)
- Explain the processes, current structure and ethical norms of American media. (PSLO-7)
- Evaluate research on and popular claims of the media's social, political and individual effects. (PSLO-8)

Career Information

Filmmaker, Entertainment Writer or Editor, Producer, Screenwriter, Professor, Script Supervisor, Story Editor, Digital Content Producer, Film Festival Programmer, Film Publicist. ** Some career options may require more than two years of college study. Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.

Film and Media Studies (FMS) Courses

FMS 300 Introduction to Film Studies

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3A

This course is an introduction to the system of film, and its various forms, styles, and genres. Students will study a wide variety of films to further an understanding of the conventions by which motion pictures address social, and aesthetic experience. Through the class lectures, readings, and screenings, students will be introduced to the multiple functions of film, conventional and alternative ways of reading a film text, and will develop the critical tools necessary for thinking and writing about film as both an art form, and as a medium that reflects popular culture.

FMS 305 Film History I (1895-1949)

Same As: RTVF 305
Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3A

This course is an introduction to the early history of motion pictures (1890s to 1949), with an emphasis on examining how film functions as a telling historical document. We will explore the evolution of cinema around the world, investigating the emergence of various styles and movements, the contributions of seminal directors and performers, the effects of developing technologies, and the evolution of cinematic storytelling techniques. **Please Note: FMS/RTVF 305 is not a prerequisite of FMS/RTVF 307 and the courses can be taken in any order, or concurrently**. This course is the same as RTVF 305 and only one may be taken for credit.

FMS 307 Film History II (1950-present)

Same As: RTVF 307
Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3A

This course is an introduction to the modern history of motion pictures (1950s to the present), with an emphasis on examining how film functions as a telling historical document. We will explore the evolution of cinema around the world, investigating the emergence of various styles and movements, the contributions of seminal directors and performers, the effects of developing technologies, and the evolution of cinematic storytelling techniques. **Please Note: FMS/RTVF 305 is not a prerequisite of FMS/RTVF 307 and the courses can be taken in any order, or concurrently**. This course is the same as RTVF 307 and only one may be taken for credit.

FMS 310 Introduction to Screenwriting

Units: 3
Hours: 54 hours LEC
Prerequisite: ENGL C1000 with a grade of "C" or better, or placement through the assessment process.
Transferable: CSU; UC

This course is an introduction to the craft of screenwriting, and to the various approaches used for developing an original screenplay or teleplay. We will be primarily concerned with narrative structure and character development as key components in storytelling. Students will analyze canonical film and television scripts as examples, participate in writing exercises and workshops, and complete a final treatment for a film, or show bible for a television series.

FMS 320 Film Genre

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3A

This course is an introduction to the basic concepts and theories of film genre. Students will examine the structures, styles, and major themes of film genres such as comedy, horror, science fiction, teenpics, action-adventure, social problem films, disaster movies, and the western. Special attention will be paid to the tension between Hollywood filmmaking and auteur cinema.

FMS 321 Film Genre: Horror

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3A

This course performs a close examination of popular horror films in order to understand how they function as representations of cultural fear and anxiety. Throughout the semester we will analyze the multiple functions of the genre, including its social significance, the different reasons why horror appeals to mass audiences, seminal theories of horror, and its overall development and impact on film history. The course will be divided into three sections: the first will cover the early period of physical monsters; the second will examine psychological monsters, slashers and body films; and the third will look at post-9/11 horror to investigate contemporary themes of identity.

FMS 488 Honors Seminar: Introduction to Critical Theory

Units: 3
Hours: 54 hours LEC
Prerequisite: None.

Enrollment Limitation: Enrollment is limited to Honors Program students. Details about the Honors Program can be found in the Cosumnes River College Catalog and on the College's website.
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3B

This course investigates questions of interpretation and representation in film, literature, media, and culture. Students examine historical and contemporary critical and cultural theories, then apply these theories in analyzing various works, including films, literary texts, commercials, music videos, and more. Theories introduced include, but are not limited to, semiotics, psychoanalysis, Marxism, critical race theory, gender theory, and postmodernism. Students intending to transfer into arts, film, literature, humanities, and cultural studies programs will find this course particularly useful in understanding the critical language of the university. As an honors course, this is a seminar with advanced teaching methods focusing on complex theories, major writing, reading, and research assignments, in-depth film analysis, student class lectures, group discussions and interactions. Distinguishing features include a deep focus on research, analysis, application, strong communication, and critical thinking. Enrollment is limited to Honors Program students. Details about the Honors Program can be found at the front of the Catalog and on the CRC website. This course is the same as HONOR 350, and only one may be taken for credit.

FMS 489 Honors: Director's Cinema

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Enrollment Limitation: Enrollment is limited to Honors Program students. Details about the Honors Program can be found in the front of the Catalog and on the CRC website.
Transferable: CSU; UC
General Education: Local GE L3

This course is a critical examination of the historical and artistic career of a range of seminal directors in film history, with a particular focus on their impact on popular American culture. Students will investigate the filmography of selected directors, read articles and criticisms of their work, and discuss the cultivation of their filmmaking aesthetics. The course examines the visual style of filmmakers from different backgrounds, analyzing their thematic concerns and cinematographic techniques, while also introducing major theoretical approaches to director studies.
This honors course offers rigorous preparation in critical thinking, and analytic reading and writing skills for students intending to transfer to a four-year college or university. It provides an opportunity to engage contemporary political, economic, and social issues through small group discussion, a structured sequence of papers requiring higher-level thinking tasks, and collaborative projects. Research projects require extensive analysis of topics such as film theory, film history, director style, auteur studies and the tensions between mainstream and art cinema. Paper requirements are designed to challenge and motivate.
Details about the Honors Program can be found in the front of the Catalog and on the CRC website. This course is the same as HONOR 352 and only one may be taken for credit. Enrollment is limited to Honors Program students.

FMS 495 Independent Studies in Film and Media Studies

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

FMS 499 Experimental Offering in Film and Media Studies

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU

This is the experimental courses description.

Film/Digital Cinema Production

This Associate of Arts degree program is designed to provide skills in film production, digital cinema, and television through the preparation of projects for viewing on campus, cable TV, the Internet and new technologies. Given the expansion of new media distribution opportunities and the production convergence of High-Definition video and film, students will gain a broad exposure to visual storytelling in a professional environment, including dramatic narrative, documentary and experimental styles.

Degrees Offered

A.A. in Film / Digital Cinema Production

Dean Brian Rickel
Department Chair Mun Kang
Phone (916) 691-7171
Email kangm@crc.losrios.edu

Associate Degree

A.A. in Film / Digital Cinema Production

This Associate of Arts degree program is designed to provide skills in film production, digital cinema, and television through the preparation of projects for viewing on campus, cable TV, the Internet and new technologies. Given the expansion of new media distribution opportunities and the production convergence of High-Definition video and film, students will gain a broad exposure to visual storytelling in a professional environment, including dramatic narrative, documentary and experimental styles. This option can lead to entry-level jobs in the film industry, post-production, television, new media, business and industry. Some of the courses in this major also transfer to a four year university program. Please see a counselor for more information.

Highlights include:
* Practical experience working with school equipment on productions for viewing on campus, on cable TV and the Internet.
* Working in teams to build projects using a professional approach.
* State-of-the-art digital computer lab for graphics and non-linear editing, including Apple's Final Cut Pro, DVD production, Adobe Photoshop, Adobe Illustrator, and Adobe After Effects.
* Internship opportunities working in local independent film-makers, post-production facilities and at local television stations.
* Industry guest speakers provide real world examples of how to be successful in the film industry.

Note to Transfer Students:
If you are interested in transferring to a four-year college or university to pursue a bachelor's degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate's degree in this major may be different from the requirements needed for the Bachelor's degree.

Degree Requirements

Course Code	Course Title	Units
RTVF 305	Film History I (1895-1949) (3)	3[1]
or FMS 305	Film History I (1895-1949) (3)	
or RTVF 307	Film History II (1950-present) (3)	
or FMS 307	Film History II (1950-present) (3)	
RTVF 306	Introduction to Media Aesthetics and Cinematic Arts	3
RTVF 319	Beginning Audio Production	3
RTVF 330	Beginning Single Camera Production	3
RTVF 330 must be completed with a "C" or better before enrolling in RTVF 350:		
RTVF 350	Intermediate Film / Digital Cinema Production	3
RTVF 360	Introduction to Motion Graphics: Adobe After Effects	3
RTVF 362	Digital Non-Linear Video Editing	3
PHOTO 301	Beginning Photography (3)	3
or PHOTO 302	Beginning Digital Photography (3)	
A minimum of 6 units from the following:		6
RTVF 304	Introduction to Multimedia (3)	
RTVF 354	Audio Editing for Film & Video Post Production (3)	
RTVF 365	Intermediate Film & Video Editing (3)	
RTVF 368	Scriptwriting for Film, Video & Multimedia (3)	
RTVF 371	Hollywood TV and Film Studios: A Behind the Scenes Experience (1)	
RTVF 378	Acting for the Camera (3)	
RTVF 498	Work Experience in Radio, Television and Film (0.5 - 4)	
FMS 300	Introduction to Film Studies (3)	
FMS 310	Introduction to Screenwriting (3)	
FMS 320	Film Genre (3)	
RTVF 305	Film History I (1895-1949) (3)	3[2]
or FMS 305	Film History I (1895-1949) (3)	
or RTVF 307	Film History II (1950-present) (3)	
or FMS 307	Film History II (1950-present) (3)	
Total Units:		**33**

[1]Students must take one of the Film History options RTVF/FMS 305 or RTVF/FMS 307.

[2]If not used above.

The Film / Digital Cinema Production Associate in Arts (A.A.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Student Learning Outcomes

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

- Write in clear, concise English. (PSLO-1)
- Research critically, filter the results and present them in a cogent manner. (PSLO-2)
- Resolve and execute standard pre-production skills including planning, script, script breakdown, budgeting, storyboard creation, and crew and equipment selection. (PSLO-3)
- Utilize basic field production equipment correctly, safely and creatively, including cameras, lights and audio. (PSLO-4)
- Operate essential post-production equipment for audio and film/video editing and distribution in a variety of contemporary and emerging methods. (PSLO-5)
- Analyze, interpret, and exercise critical judgment in the evaluation of media productions. (PSLO-6)
- Demonstrate through projects that with the power of a communicator, comes moral and ethical responsibility. (PSLO-7)
- Demonstrate a hands-on ability to perform the professional level critical thinking needed for successful teamwork in media employment. (PSLO-8)

Career Information

Camera Operator; Cinematographer; Director of Photography; Lighting Director; Computer Graphic Artist; Non-Linear Video Editor; Audio Engineer; Broadcast Technician; Gaffer; Production Coordinator; Production Assistant; TV, Film, DVD, or Internet Producer/Director; Personal or Corporate Video. Some career options may require more than two years of college study. Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.

Fire Technology

The fire service is one of the most dynamic employers in the country. This CRC program is designed to provide the student with updated skills and knowledge necessary to complete and successfully apply for fire service positions. The curriculum serves as an inservice program as well as a pre-employment program for students seeking employment or advancement in the profession of urban fire fighting and fire suppression.

The Fire

CA State Fire logos

Technology program is accredited by the California State Fire Marshal – State Fire Training.

State Fire Marshal's Office
2251 Harvard St. #400
Sacramento, CA 95815

Degrees and Certificates Offered

A.S. in Fire Prevention

A.S. in Fire Technology

Wildland Fire Technology Certificate

Firefighter Suppression Specialist Certificate

Dean Kris Hubbard

Department Chair Kris Hubbard

Phone (916) 691-7390

Email hubbark@crc.losrios.edu

Associate Degrees

A.S. in Fire Prevention

The fire service is one of the most dynamic employers in the country. This CRC program is designed to provide the student with updated skills and knowledge necessary to complete and successfully apply for fire service positions. The curriculum serves as an in-service program as well as a pre-employment program for students seeking employment or advancement in the profession of fire prevention.

Degree Requirements

Course Code	Course Title	Units
FT 300	Fire Protection Organization	3
FT 301	Fire Prevention Technology	3
FT 302	Fire Protection Equipment and Systems	3
FT 303	Building Construction for Fire Protection	3
FT 304	Fire Behavior and Combustion	3
FT 498	Work Experience in Fire Technology	0.5 -4
A minimum of 9 units from the following:		9[1]
BIT 100	Introduction to the International Building Code (3)	
BIT 102	Plan Reading and Non-Structural Plan Review (3)	
BIT 104	International Building Code - Fire & Life Safety (3)	
BIT 130	Introduction to Inspection of Wood Frame Construction (3)	
Total Units:		**24.5 - 28**

[1]The student must have 1-4 units of work experience in Fire Prevention to receive a degree.

The Fire Prevention Associate in Science (A.S.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Student Learning Outcomes

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

- PSLO #1: Comprehend the qualifications for entry level skills, the discipline and evaluation process, fire service structure, history, and culture for the field of fire prevention.
- PSLO #2: Identify and comprehend laws, regulations, codes, standards and the regulatory and advisory organizations that influence fire prevention operations.
- PSLO #3: Analyze and determine the causes of fire, extinguishing agents, stages of fire, fire development, and methods of heat transfer.
- PSLO #4: Identify and describe the common types of building construction and conditions associated with structural collapse.
- PSLO #5: Differentiate between fire detection and fire suppression systems.

Career Information

Fire Inspector, Fire Investigator, Plans Examiner, Building Inspector, Fire Prevention Specialist/Officer, Public Education Specialist/Officer, Manager, Firefighter Some Career Opportunities may require more than two years of college study. Classes beyond the associate degree may be required to fulfill some career opportunities for preparation for transfer to a university program.

A.S. in Fire Technology

The fire service is one of the most dynamic employers in the country. This CRC program is designed to provide the student with updated skills and knowledge necessary to complete and successfully apply for fire service positions. The curriculum serves as an inservice program as well as a pre-employment program for students seeking employment or advancement in the profession of urban fire fighting and fire suppression.

HIGHLIGHTS

*Up-to-date technical information
*Field trips to a variety of fire service locations
*Networking with other fire service members
*Fire Technology work experience internships
(Fire Technology 498 for on-the-job experience)

NOTE TO TRANSFER STUDENTS: If you are interested in transferring to a four-year college or university to pursue a bachelor's degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate's degree in this major may be different from the requirements needed for the Bachelor's degree.

Degree Requirements

Course Code	Course Title	Units
FT 300	Fire Protection Organization	3
FT 301	Fire Prevention Technology	3
FT 302	Fire Protection Equipment and Systems	3
FT 303	Building Construction for Fire Protection	3
FT 304	Fire Behavior and Combustion	3
FT 305	Firefighter Safety and Survival	3
FT 320	Hazardous Materials	3
EMT 115	Emergency Medical Technician (EMT) Didactic Introduction	1.5[1]
EMT 116	Emergency Medical Technician (EMT) Didactic Conclusion	5
EMT 117	Emergency Medical Technician (EMT) Practicum	1.5
FT 498	Work Experience in Fire Technology (0.5 -4)	0.5 - 4[2]
A minimum of 9 units from the following:		9
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 210	Firefighter 1 Academy (State Fire Marshal Accredited Academy) and Fire Internship (11)	
and FT 211	Firefighter 2 (State Accredited Academy & Internship Preparation) (3)	
Total Units:		**38.5 - 42**

[1]A current California EMT certificate or Paramedic license will be accepted as satisfactory completion of the EMT course requirement.

[2]The student must have 1-4 units of work experience in Firefighting or Emergency Medical Services to receive a degree.

The Fire Technology Associate in Science (A.S.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Student Learning Outcomes

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

- PSLO #1: Comprehend the qualifications for entry level skills, the discipline and evaluation process, fire service structure, history, and culture for the field of fire technology.
- Analyze, appraise, and evaluate fire incidents and components of emergency management and firefighter safety.
- PSLO #2: Comprehend laws, regulations, codes, standards and the regulatory and advisory organizations that influence fire department operations.
- PSLO #3: Analyze and determine the causes of fire, extinguishing agents, stages of fire, fire development, and methods of heat transfer.
- Synthesize and determine the appropriate use and flow requirement of hydraulic fire apparatus.
- Describe the appropriate uses and maintenance for apparatus and equipment used in the fire service.
- PSLO #4: Evaluate the common types of building construction and conditions associated with structural collapse and firefighter safety.
- Evaluate fire detection and fire suppression systems.

Career Information

Firefighter; Inspector; Investigator; Supervisor; Manager Some career options may require more than two years of college study. Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.

Certificate of Achievement

Wildland Fire Technology Certificate

The fire service is one of the most dynamic employers in the country. This CRC program is designed for students who want to gain certification as a wildland firefighter through the National Wildland Coordinating Group (NWCG). This course will provide training in hand crew formation, fireline construction, and the use of wildland fire equipment. The end goal is to certify students and assist them in entry into the workforce of wildland firefighting. This course includes arduous physical conditioning including hiking with up to 45 pounds of weight and other strenuous outdoor activities.

The curriculum serves as an in-service program as well as a pre-employment program for students seeking employment or advancement in the profession of wildland fire fighting.

HIGHLIGHTS

*Up-to-date technical information
*Field trips to a variety of wildland settings
*Networking with other fire service members

Certificate Requirements

Course Code	Course Title	Units
FT 212	Basic Wildland Fire Academy	4
A minimum of 6 units from the following:		6[1]
FIRE 1809	Wildland Fire Chain Saws (S-212) (1)	
FIRE 1872	Basic Air Operations (S-270) (0.75)	
FIRE 1885	Firing Operations (S-219) (1)	
FIRE 1760	Low-Angle Rope Rescue Operational (LARRO) (0.5)	
FFS 1541	Intermediate Wildland Fire Behavior (S-290) (1.75)	
EMT 109	Emergency Medical Responder (3)	
Total Units:		**10**

[1]Current EMT or Paramedic Certification may be used in place of EMT 109

Enrollment Eligibility

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

- The ability to carry a 45 pound pack three miles within a 45 minute time period.

Student Learning Outcomes

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

- PSLO 1: Compare environmental factors of fuels, weather, and topography that affect the start and spread of wildland fires
- PSLO 2: Describe the importance of crew cohesiveness
- PSLO 3: Describe how to operate safely and effectively in a wildland urban interface incident using situational awareness, performing structure triage and citing appropriate structure protection actions
- PSLO 4: Demonstrate how to properly wear protective clothing
- PSLO 5: Describe the importance of physical fitness as a wildland firefighter

Career Information

Wildland Firefighter, Wildland Fuels Manager, Wildland Fire Ecologist, Fire and Aviation Manager, Fire Prevention Specialist/ Officer, Fire Behavior Specialist

Certificate

Firefighter Suppression Specialist Certificate

The fire service is one of the most dynamic employers in the country. This CRC program is designed to provide students with updated skills and knowledge necessary to complete and successfully apply for fire service positions. The purpose of the Fire Suppression Specialist Certificate is to recognize, through certification, qualified individuals who are dedicated to curtailing fire loss, both physical and financial, and who have acquired a level of professionalism through applied work experiences and related education opportunities, and through successful completion of a certification examination.

The curriculum serves as an in-service program as well as a pre-employment program for students seeking employment or advancement in the profession of urban fire fighting, fire prevention, and public and private fire suppression.

HIGHLIGHTS

*Up-to-date technical information
*Field trips to a variety of fire service locations
*Networking with other fire service members
*Fire Technology work experience internships
(Fire Technology 498 for on-the-job experience)

Certificate Requirements

Course Code	Course Title	Units
FT 300	Fire Protection Organization	3
EMT 115	Emergency Medical Technician (EMT) Didactic Introduction	1.5[1]
EMT 116	Emergency Medical Technician (EMT) Didactic Conclusion	5
EMT 117	Emergency Medical Technician (EMT) Practicum	1.5
FT 210	Firefighter 1 Academy (State Fire Marshal Accredited Academy) and Fire Internship (11)	14
and FT 211	Firefighter 2 (State Accredited Academy & Internship Preparation) (3)	
FT 320	Hazardous Materials	3
A minimum of 16 units from the following:		16[2]
FT 498	Work Experience in Fire Technology (0.5 - 4)	
Total Units:		**44**

[1]A current California EMT certificate or Paramedic license will be accepted as satisfactory completion of the EMT course requirement.

[2]Students should take 4 units of Fire Technology Work Experience (FT 498) each semester for 4 semesters, earning a total of 16 units of work experience through FT 498.

Student Learning Outcomes

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

- PSLO 1: Comprehend the qualifications for entry level skills, the discipline and evaluation process, fire service

structure, history, and culture for the field of fire technology.

- PSLO 2: Analyze, appraise, and evaluate fire incidents and components of emergency management and firefighter safety.
- Comprehend laws, regulations, codes, standards, and the regulatory and advisory organizations that influence fire department operations.
- PSLO 3: Develop policies, procedures, and training programs to inform and educate population in fire prevention principles and fire and life safety practices; understand proper design, installation, and maintenance of electrical systems and appliances while identifying the components that, alone or in combination, form emergency and standby power systems; analyze the dynamics of heating systems;identify basic components of and the hazards associated with ‘hot work’ and the manufacturing processes necessary for effective fire prevention.
- PSLO 4: Analyze facility fire hazard management to include capturing knowledge of property fire insurance, building construction and/or field experience; performing fire/property surveys involving detailed analyses; observation, examination, inspection, and gathering of data to describe all aspects of a property/ building and business; conducting complex inspection surveys of commercial and residential properties to evaluate physical characteristics of a property and business.
- PSLO 5: Recognize system approaches to property classes; assessing life safety as it relates to fire protection in special occupancies and understanding fire protection in warehouse and storage operations.
- Evaluate fire detection and fire suppression systems.
- PSLO 6: Define organizations for fire and rescue services; perform pre-incident planning for industrial and commercial facilities, interpret operations of fire loss prevention and emergency organizations, understand operations of emergency medical services, describe municipal fire prevention and code enforcement operations; train fire and emergency services; understand the use and function of fire and emergency services protective clothing and protective equipment; and evaluate fire department resources and the placement thereof.

Career Information

Firefighter; Fire Inspector; Investigator; Supervisor; Manager, Plans Examiner; Building Inspector; Fire Prevention Specialist/ Officer; Public Education Specialist/ Officer

Fire and Forestry Services (FFS) Courses

FFS 299 Experimental Offering in Fire and Forestry Services

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

FFS 499 Experimental Offering in Fire and Forestry Services

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

FFS 1540 Introduction to Wildland Fire Behavior (S-190)

Units: 0.25
Hours: 7 hours LEC
Prerequisite: None.
Enrollment Limitation: To enroll in this course (FFS 1540) the student must be an employee of a federal wildland fire fighting agency, which includes: United States Department of Agriculture, Forest Service, the United States Department of Interior's Bureau of Land Management, National Park Service, United States Fish and Wildlife Service, the Bureau of Indian Affairs, or a member of a local or state fire agency.

This is the first course in a series that collectively serves to develop fire behavior prediction knowledge and skills. Topics include the fire triangle, topography, fuels, weather, and fire behavior. Pass/No Pass only.

FFS 1541 Intermediate Wildland Fire Behavior (S-290)

Units: 1.75
Hours: 32 hours LEC
Prerequisite: None.
Enrollment Limitation: To enroll in this course (FFS 1541) the student must 1) be an employee of a federal wildland fire fighting agency, which includes: United States Department of Agriculture, Forest Service, the United States Department of Interior’s Bureau of Land Management, National Park Service, United States Fish and Wildlife Service, the Bureau of Indian Affairs, or a member of a local or state fire agency.

This course is designed to prepare the prospective fireline supervisor to undertake safe and effective fire management operations. It is the second course in a series that collectively serves to develop fire behavior prediction knowledge and skills. Pass/No Pass only.

Fire Technology (FT) Courses

FT 110 Fire Apparatus

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: FT 130 or FT 300, or employment as a firefighter

This course covers various aspects of fire apparatus. Topics include design, typing, specifications, construction, performance capabilities, and maintenance. This course includes principles and techniques for maintaining and operating fire service pumping and other mobile apparatus. The course includes fire service equipment and apparatus troubleshooting; principles and techniques of preventive maintenance; construction and operation of fire service pumps and pump accessories; basic highway operating techniques for fire apparatus; fire apparatus specifications and testing

procedures. Also included are warning devices and the utilization of apparatus in fire service emergencies. Effective utilization of equipment on the fireground will be the focus with emphasis on practical applications. Students will also become familiar with use of pumping charts and associated industry related materials for task proficiency.

FT 130 Fire Company Organization and Management

Units: 3
Hours: 54 hours LEC
Prerequisite: Company Officer is the preferred prerequisite, however, the minimum qualifications of Firefighter II in accordance with the State of California Office of the Fire Marshal may be accepted at the discretion of the instructor as this course meets Company Officer 2A instruction.
Advisory: FT 300 or employment as a firefighter.

An in-depth review of the operation, organization and planning concepts of today's fire departments. Emphasizes the functions of management including budgeting, time management, delegation, motivation, and discipline. Explores concepts of continuous improvement, team-building, and principles of quality management, relative to fire service operations.

FT 170 Fire Investigation

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: FT 300 or employment as a firefighter

This course focuses on determining causes of fires (accidental, suspicious and incendiary), the types of fires, related laws, an introduction to arson and incendiarism, recognizing and preserving evidence, the interviewing of witnesses and suspects, arrest and detention procedures, court procedures and giving court testimony.

FT 180 Rescue Practices

Units: 3
Hours: 38 hours LEC; 48 hours LAB
Prerequisite: None.
Advisory: FT 300 or employment as a firefighter

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. A strong emphasis will be placed on practicum of rescuer efficiency to include pass/or fail evaluations of delivered material and each candidate is subject to meeting the criteria for successful certification set forth by the OFM.

FT 190 Fire Tactics and Strategy

Units: 3
Hours: 54 hours LEC
Prerequisite: FT 300 with a grade of "C" or better
Advisory: FT 301, 302, 303, and 304; or employment as a firefighter.

This course provides the study of fundamental principles of fire tactics and strategy under fireground conditions and procedures for effective development and application of pre-fire plans. Fire emergency problems are critically analyzed and definitive coping strategies are examined as it relates to staffing resources, equipment and extinguishing agents available during the emergency incident. This course meets the National Fire Academy, Fire and Emergency Services Higher Education (FESHE) curriculum model for the Strategy and Tactics Course. This course is also aligned with the State of California Fire Marshal "All Risk Command for Company Officers" (2D) certification track series.

FT 210 Firefighter 1 Academy (State Fire Marshal Accredited Academy) and Fire Internship

Units: 11
Hours: 125.5 hours LEC; 223.25 hours LAB
Prerequisite: FT 300 with a grade of "C" or better; Current EMT Certification in the State of California. BLS Provider or BLS for the Healthcare Provider from American Heart Association; or current American Red Cross CPR for Professional Rescuer. CPR certification and EMT Certification must remain current for the entire internship. The student must meet other Academy requirements including but not limited to; drug screening, background check, purchasing firefighting personal protective equipment, college GPA of 2.5, physical, physical ability test, respirator fit testing, valid California driver's license, be able to pass the Cosumnes River College Physical Ability Test prior to the end of the academy. Students applying for FT 210 must pass a fire interview oral board to be accepted into the course.
Corequisite: FT 498; Students must complete the FEMA independent study courses: IS-100, IS-200, IS-700, IS-800 prior to being accepted into the course. These courses may be found online through FEMA's ICS Resource Center. These courses are free of charge and are self-paced online courses. (www.training.fema.gov/emiweb/is/icsresource/trainingmaterials/)
Enrollment Limitation: All students must be enrolled in FT 498 to sign up for FT 210.

FT 210 Firefighter Academy is a one semester class to provide the techniques and skills to work effectively and safely within the fire environment as well as in the fire department. This Firefighter Academy is a partnership with Cosumnes CSD Fire Department. It is a State Certified Regional Fire Academy. Students that successfully complete this course along with FT 211 (spring semester) and the CRC/CSD Firefighter work experience program (FT 498) are allowed to apply for the State of California Firefighter II certification.
Topics include indoctrination into the fire service, general maintenance, apparatus and equipment operations, fire control, salvage, rapid intervention crew tactics, physical fitness/wellness, emergency care, and forcible entry. Students may be charged a lab fee for personal protective equipment (PPE) in the use of and maintenance of structural firefighter turnouts and equipment in this course. Students will also be responsible for purchasing other equipment, liability insurance and uniforms. Pass/no pass only.

FT 211 Firefighter 2 (State Accredited Academy & Internship Preparation)

Units: 3
Hours: 30 hours LEC; 75.5 hours LAB
Prerequisite: FT 210; Current EMT Certification in the State of California. BLS Provider or BLS for the Healthcare Provider from

American Heart Association; or current American Red Cross CPR for Professional Rescuer. CPR certification must remain current for the entire internship. The student must meet other Academy requirements including but not limited to; drug screening, background check, purchasing firefighting personal protective equipment, college GPA of 2.5, physical, physical ability test, respirator fit testing, valid California driver's license, be able to acquire a Candidate Physical Ability Test (CPAT) card prior to the end of the academy.
Corequisite: FT 498

FT 211 is the second of two classes (FT 210 is the first) of the Firefighter Academy to provide the techniques and skills to work effectively and safely within the fire environment and in the fire department. This Firefighter Academy is a partnership with CSD Fire Department and Cosumnes River College which meets the requirements for the State Certified Regional Fire Academy.

Students who successfully complete this course along with FT 210 and the work experience program (FT 498) are allowed to apply for the State of California Firefighter II certification. Topics include: fire prevention and public education, fire and arson investigation, flammable liquids and gas firefighting, rapid intervention crew tactics, physical fitness/wellness, emergency care of injured firefighters and vehicle extrication. Students may be charged a lab fee for personal protective equipment (PPE). Students will also be responsible for purchasing other equipment, liability insurance and uniforms. Pass/no pass only.

FT 212 Basic Wildland Fire Academy

Units: 4
Hours: 64 hours LEC; 14 hours LAB
Prerequisite: None.
Corequisite: Students must complete the FEMA independent study courses: IS-100 and IS-700 previously or concurrently with the course. These courses may be found online through FEMA's ICS Resource Center. These courses are free of charge and are self-paced online courses. These FEMA courses must be completed before the completion of this course. (www.training.fema.gov/emiweb/is/icsresource/trainingmaterials/)
Advisory: This course includes arduous physical conditioning including hiking with up to 45 pounds of weight and other strenuous outdoor activities.

This course is designed for students who want to gain certification as a wildland firefighter through the National Wildland Coordinating Group (NWCG). This course provides training in hand crew formation, fireline construction, and the use of wildland fire equipment. Certification is included in Human Factors in the Wildland Fire Service (NWCG L-180), Firefighter Training (NWCG S-130), Firefighter Type 1 (NWCG S-131), Introduction to Wildland Fire Behavior (NWCG S-190), Portable Pumps and Water Use (NWCG S-211). Students learn about wildland fire crews (engine crews, hand crews, hotshot crews, helitack crews, and smokejumpers), wildland fire behavior, wildland firefighter personal protective equipment, wildland firefighter safety, helicopter safety, dozer safety, wildland fire pumps, and wildland fire tools. This course includes arduous physical conditioning including hiking with up to 45 pounds of weight and other strenuous outdoor activities. The academy exceeds the United States Forest Service (USFS) minimum training requirements for an entry-level wildland firefighter for certification purposes.

FT 295 Independent Studies in Fire Technology

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

FT 299 Experimental Offering in Fire Technology

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

FT 300 Fire Protection Organization

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU
C-ID: C-ID FIRE 100X

This course provides an introduction to fire protection and emergency services. Fire Protection Organization is recommended as the first course in the series of fire technology courses. Topics covered include: career opportunities in fire protection and related fields; culture and history of emergency services; philosophy and history of fire protection; fire loss analysis; organization and function of public and private fire protection services; fire departments as part of local government; laws and regulations affecting the fire service; fire service nomenclature; specific fire protection functions; basic fire chemistry and physics; an introduction to fire protection systems; and an introduction to fire strategy and tactics; life safety initiatives. This course meets the National Fire Academy, Fire and Emergency Services Higher Education (FESHE) curriculum model for the Principles of Emergency Services.

FT 301 Fire Prevention Technology

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: FT 300
Transferable: CSU
C-ID: C-ID FIRE 110X

This course provides fundamental knowledge relating to the field of fire prevention, history and philosophy of fire prevention, organization and operation of a fire prevention bureau, use and application of codes and standards, plans review, fire inspection practices with identification and correction of fire hazards, fire and life safety education, and fire investigation. This course meets the National Fire Academy, Fire and Emergency Services Higher Education (FESHE) curriculum model for Fire Prevention.

FT 302 Fire Protection Equipment and Systems

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: FT 300 with a grade of "C" or better
Transferable: CSU

This course provides information relating to the features of design and operation of fire detection and fire alarm systems, heat and smoke control systems, water-based fire suppression systems, special hazard fire suppression systems, fire protection and sprinkler systems, water supply for fire protection, as well as portable fire extinguishers. This course meets the National Fire Academy, Fire and Emergency Services Higher Education (FESHE) curriculum model for Fire Protection Systems.

FT 303 Building Construction for Fire Protection

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: FT 300 with a grade of "C" or better
Transferable: CSU

This course is the study of the components of building construction that relate to firefighter and life safety. The elements of construction and design of structures are shown to be key factors when inspecting buildings, pre-planning fire operations and operating at fires and other emergencies. The development and evolution of building and fire codes will be studied in relationship to past fires in residential, commercial land industrial occupancies.This course meets the National Fire Academy, Fire and Emergency Services Higher Education (FESHE) curriculum model for Building Construction for Fire Prevention.

FT 304 Fire Behavior and Combustion

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: FT 300 with a grade of "C" or better
Transferable: CSU
General Education: Local GE L5

This course provides the student with theories and fundamentals of how and why fires start, spread and are controlled; an in-depth study of fire chemistry and physics, fire characteristics of materials, extinguishing agents and fire control techniques. This course meets the National Fire Academy, Fire and Emergency Services Higher Education (FESHE) curriculum model for Fire Behavior and Combustion.

FT 305 Firefighter Safety and Survival

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: FT 300
Transferable: CSU

The 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. This course meets the National Fire Academy, Fire and Emergency Services Higher Education (FESHE) curriculum model for Principles of Fire and Emergency Services Safety and Survival.

FT 320 Hazardous Materials

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: FT 300, 301, 302, 303, and 304
Transferable: CSU

This course provides a study of the fire fighting practices related to hazardous chemicals, including their physical properties, uses in industry, and characteristics when involved in spills, fires, and accidents. Basic information regarding health effects and treatment, and fire department protocols and responsibilities.

FT 495 Independent Studies in Fire Technology

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

FT 498 Work Experience in Fire Technology

Units: 0.5 - 4
Hours: 27 - 216 hours LAB
Prerequisite: None.
Corequisite: FT 210 and 211
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position or job related to career goals in Fire Technology.
Transferable: CSU

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in transfer level degree occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and complete 27 hours of related work experience for 0.5 unit. An additional 27 hours of related work experience is required for each additional 0.5 units. 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.

FT 499 Experimental Offering in Fire Technology

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU

This is the experimental courses description.

Firefighting Training Center (FIRE) Courses

FIRE 1130 Company Officer 2A (Human Resource Management for Company Officers)

Units: 1.75
Hours: 33 hours LEC; 7 hours LAB
Prerequisite: Meet the educational requirements for Office of the State Fire Marshal (OSFM) Fire Fighter II. The rank of Officer waives this prerequisite. The CAL FIRE rank of Fire Apparatus Engineer is equivalent to Officer level. Performing in an "acting" capacity does not qualify for this waiver.

This course provides information on the use of human resources to accomplish assignments, evaluate member performance, supervise personnel, and integrate health and safety plans, policies, and procedures into daily activities as well as the emergency scene. Topics include human resource management, and health and safety. This course is offered as a Pass/No Pass course only.

FIRE 1131 Company Officer 2B (General Administration Functions for Company Officers)

Units: 0.75
Hours: 15 hours LEC; 5 hours LAB
Prerequisite: Meet the educational requirements for Office of the State Fire Marshal (OSFM) Fire Fighter II. The rank of Officer waives this prerequisite. The CAL FIRE rank of Fire Apparatus Engineer is equivalent to Officer level. Performing in an "acting" capacity does not qualify for this waiver.

This course provides information on general administrative functions and the implementation of department policies and procedures, and addresses conveying the fire department's role, image, and mission to the public. Topics include administration, and community and government relations. Pass/No Pass only.

FIRE 1132 Company Officer 2C (Fire Inspections and Investigation for Company Officers)

Units: 1.75
Hours: 33 hours LEC; 7 hours LAB
Prerequisite: Meet the educational requirements for Office of the State Fire Marshal (OSFM) Fire Fighter II. The rank of Officer waives this prerequisite. The CAL FIRE rank of Fire Apparatus Engineer is equivalent to Officer level. Performing in an "acting" capacity does not qualify for this waiver.

This course provides information on conducting inspections, identifying hazards and addressing violations, performing a fire investigation to determine preliminary cause, and securing the incident scene and preserving evidence. Topics include orientation, fire and life safety inspections, and fire investigation. Pass/No Pass only.

FIRE 1133 Company Officer 2D (All-Risk Operations for Company Officers)

Units: 1.25
Hours: 20 hours LEC; 20 hours LAB
Prerequisite: Meet the educational requirements for Office of the State Fire Marshal (OSFM) Fire Fighter II. The rank of Officer waives this prerequisite. The CAL FIRE rank of Fire Apparatus Engineer is equivalent to Officer level. Performing in an "acting" capacity does not qualify for this waiver.
Enrollment Limitation: Completion of Incident Command System (I-200), which is an online course offered by Federal Emergency Management Agency (FEMA).

This course provides information on conducting incident size-up, developing and implementing an initial plan of action involving single and multiunit operations for various types of emergency incidents to mitigate the situation following agency safety procedures, conducting preincident planning, and develop and conduct a post-incident analysis. Topics include initial Incident Action Plan (IAP), postincident analysis, operational planning, and service demands. Pass/No Pass only.

FIRE 1134 Company Officer 2E (Wildland Incident Operations for Company Officers)

Units: 1.75
Hours: 28 hours LEC; 12 hours LAB
Prerequisite: Meet the educational requirements for Office of the State Fire Marshal (OSFM) Fire Fighter II. The rank of Officer waives this prerequisite. The CAL FIRE rank of Fire Apparatus Engineer is equivalent to Officer level. Performing in an "acting" capacity does not qualify for this waiver.

This course provides information on evaluating and reporting incident conditions, analyzing incident needs, developing and implementing a plan of action to deploy incident resources completing all operations to suppress a wildland fire, establishing an incident command post, creating and incident action plan, and completing incident records and reports. Topics include report on conditions, ongoing incident conditions, establishing an incident command post, deploying resources, incident needs, suppression operations, personnel needs and issues, and incident records and reports. Pass/No Pass only.

FIRE 1140 Chief Fire Officer 3A: Human Resources Management

Units: 1
Hours: 16.25 hours LEC; 9.75 hours LAB
Prerequisite: Meet the educational requirements for Company Officer, or seeking Fire Marshal Certification or four

(4) years as a career fire fighter, or six (6) years as a volunteer fire fighter.
Enrollment Limitation: Meet the educational requirements for Company Officer.

This course provides students with a basic knowledge of the human resources requirements related to the roles and responsibilities of a chief fire officer. Topics include developing plans for providing employee accommodation, developing hiring procedures, establishing personnel assignments, describing methods of facilitating and encouraging professional development, developing an ongoing education training program, developing promotion procedures, developing proposals for improving employee benefits, and developing a measurable accident and injury prevention program. Pass/No Pass only.

FIRE 1141 Chief Fire Officer 3B: Budget and Fiscal Responsibilities

Units: 0.5
Hours: 9.5 hours LEC; 8.5 hours LAB
Prerequisite: Meet the educational requirements for Company Officer or five (5) years as a career officer (Lieutenant or higher), or seven (7) years as a volunteer officer (Lieutenant or higher) or five (5) years as a CAL FIRE Fire Apparatus Engineer.
Enrollment Limitation: Meet the educational requirements for Company Officer.

This course provides students with a basic knowledge of the budgeting requirements related to the roles and responsibilities of a Chief Fire Officer. Topics include developing a budget management system, developing a division or departmental budget, and describing the process for ensuring competitive bidding. Pass/No Pass only.

FIRE 1142 Chief Fire Officer 3C: General Administration Functions for Chief Fire Officers

Units: 0.75
Hours: 14 hours LEC; 10 hours LAB
Prerequisite: Meet the educational requirements for Company Officer or five (5) years as a career officer (Lieutenant or higher), or seven (7) years as a volunteer officer (Lieutenant or higher) or five (5) years as a CAL FIRE Fire Apparatus Engineer.
Enrollment Limitation: Meet the educational requirements for Company Officer.

This course provides a basic knowledge of the administration requirements related to the roles and responsibilities of a Chief Fire Officer. Topics include directing a department records management system, analyzing and interpreting records and data, developing a model plan for continuous organizational improvement, developing a plan to facilitate approval, preparing community awareness programs, and evaluating the inspection program of the Agency Having Jurisdiction (AHJ). Pass/No Pass only.

FIRE 1144 Chief Fire Officer 3D: Command of Expanding All-Hazard Incidents

Units: 1.25
Hours: 18 hours LEC; 20 hours LAB
Prerequisite: Meet the educational requirements for Company Officer.
Enrollment Limitation: Meet the educational requirements for Company Officer.

This course provides a basic knowledge of the administration requirements related to the roles and responsibilities of a Chief Fire Officer. Topics include developing an agency resource contingency plan, evaluating incident facilities, supervising multiple resources, developing and utilizing an incident action plan, obtaining incident information to facilitate transfer of command, developing and conducting a post-incident analysis, and maintaining incident records. Pass/No Pass only.

FIRE 1520 Fire Apparatus Driver/ Operator 1A - Pumping Apparatus

Units: 1.25
Hours: 19.5 hours LEC; 20.5 hours LAB
Prerequisite: None.
Enrollment Limitation: Valid Class C California Driver's License.

This course provides information on fire apparatus preventive maintenance and driving/operating. Topics include routine tests, inspections, and servicing functions, operate, reverse, maneuver, and turn a fire apparatus in a variety of conditions, and operate all fixed systems and equipment on a fire apparatus. This course is based on the latest edition of NFPA 1002 Standard for Fire Apparatus Driver/Operator Professional Qualifications. This course fulfills the requirements for a Class C Firefighter Endorsement. Pass/No Pass only.

FIRE 1521 Fire Apparatus Driver/ Operator 1B - Pumping Apparatus Operations

Units: 1.25
Hours: 18 hours LEC; 22 hours LAB
Prerequisite: FIRE 1520
Enrollment Limitation: Hold a valid Class C Firefighter Endorsed driver’s license (minimum).

This course provides information on pumping apparatus preventive maintenance and operations. Topics include routine tests, inspections, and servicing functions, producing hand, master, and foam fire streams, relay pump operations, and supplying water to fire sprinkler and standpipe systems. Pass/No Pass only.

FIRE 1760 Low-Angle Rope Rescue Operational (LARRO)

Units: 0.5
Hours: 7 hours LEC; 17 hours LAB
Prerequisite: None.

This course provides the techniques and methods for using rope, webbing, hardware friction devices, and litters in low-angle rescue situations. Topics include rope and related equipment, anchor systems, safety lines, stretcher lashing and rigging, mechanical advantage systems, and single-line and two-line rescue systems. Pass/No Pass only.

FIRE 1800 Firefighter Training (S-130)

Units: 2

Hours: 35 hours LEC; 7 hours LAB
Prerequisite: FFS 1540

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. This course aligns with the National Wildfire Coordinating Group (NWCG) Incident Position Description (IPDs) that serve as the single authoritative source for the essential duties and responsibilities of a NWCG incident position. Pass/No Pass only.

FIRE 1807 Advanced Firefighter Training (S-131)

Units: 0.5
Hours: 8 hours LEC
Prerequisite: None.

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. Pass/No Pass only.

FIRE 1809 Wildland Fire Chain Saws (S-212)

Units: 1
Hours: 11 hours LEC; 25 hours LAB
Prerequisite: None.
Enrollment Limitation: To enroll in this course (FIRE 1809) the student must be an employee of a federal fire fighting agency, or a member of a state or local fire agency. The student must be qualified as a Firefighter Type 2 (FFT2) or State Certified Firefighter I.

This course is designed for prospective chainsaw operators. Topics include introduction to the function, maintenance and use of internal combustion engine powered chain saws, tactical wildland fire applications, and training for firefighters with little or no previous experience in operating a chain saw, providing hands-on cutting experience in surroundings similar to fireline situations. Pass/No pass only.

FIRE 1861 Behavioral Health and Cancer Awareness 1A

Units: 0.5
Hours: 9 hours LEC
Prerequisite: None.

This course provides awareness-level information on behavioral health and cancer for front-line responders, including describing stress and listing stressors; identifying and describing the impacts of stress; describing factors and demonstrating practices for resilience; describing types, prevalence, and causes of cancer; describing exposure to carcinogenic chemicals; and describing and demonstrating minimizing exposure and risk to cancerous contaminants. Pass/No pass only.

FIRE 1862 Behavioral Health and Cancer Awareness 2A

Units: 1.25
Hours: 24 hours LEC
Prerequisite: None.

This course provides leadership-level information on and best practices for cancer awareness, including communicating risk about and minimizing and mitigating toxic exposure and risk; creating a supportive environment, overcoming barriers, and effecting change; and laws, regulations, standards and policies. This course also provides leadership-level information on and best practices for behavioral health, including stressors on members and leaders; stress impacts; overcoming barriers to behavioral health and resiliency, creating a supportive environment, member engagement, and effecting change; support resources and how to access them; and documentation types and requirements. Pass/No pass only.

FIRE 1863 Behavioral Health and Cancer Awareness 3A

Units: 1.25
Hours: 24 hours LEC
Prerequisite: FIRE 1141

This course provides organizational-leadership-level information on the science of cancer, the budgetary and policy impacts, implementing policies and procedures and overcoming challenges to mitigation and minimization of toxic exposure, and developing a cancer-prevention program. It also provides information on the prevalence of behavioral-health issues and the impacts of prevention, implementing policies and procedures and overcoming challenges to increase wellness, and developing a behavioral health and wellness program. Pass/No pass only.

FIRE 1871 Portable Pumps and Water Use (S-211)

Units: 0.5
Hours: 8.5 hours LEC; 7 hours LAB
Prerequisite: None.

This course is designed to provide knowledge and skills to design, setup, operate, troubleshoot, and shut down portable water delivery systems. The focus is on portable pumps - it does not address water delivery for engines. Topics covered include: portable water delivery systems; equipment; roles and responsibilities; and system design and hydraulics. There is also a field exercise where students will apply what they learned in the classroom.

FIRE 1872 Basic Air Operations (S-270)

Units: 0.75
Hours: 16 hours LEC
Prerequisite: None.

This course covers aircraft types and capabilities, aviation management and safety for flying in and working with agency aircraft, tactical and logistical uses of aircraft, and requirements for helicopter take-off and landing areas. Topics include the types of helicopters and air tankers and the criteria that make up each type. Also included are safe firefighting conduct operations when aircraft are being used. Note: The regulations, procedures and policies addressed in this course are primarily those governing federal agency and ICS operations. State, county, or other political subdivisions using this course will need to consult their agency having jurisdiction

with respect to regulations, procedures and policies. Pass/No Pass only.

FIRE 1877 Human Factors in the Wildland Fire Service (L-180)

Units: 0.25
Hours: 5.25 hours LEC
Prerequisite: None.

This course is designed to establish an awareness of human performance issues and how they can impact fire service job performance. This course addresses human performance content that relates to the individual, including situation awareness, communication, decision making, risk management, and teamwork skills.

FIRE 1885 Firing Operations (S-219)

Units: 1
Hours: 16 hours LEC; 8 hours LAB
Prerequisite: None.
Enrollment Limitation: To enroll in this course (FIRE 1885) the student must be an employee of a federal fire fighting agency, or a member of a state or local fire agency.
Advisory: Students must possess the arduous level of physical ability per NWCG guidelines and be in excellent health. Students are required to perform hotline wildland firefighting using hand tools, while carrying 40 pounds of back pumps or drip torches in hot weather.

This course provides information and develops skills required to perform and hold firing operations on wildland fires and prescribed burns. This course contains a mix of online and instructor-led training including live fire exercises. The students will be engaged in wildland firefighting and firing operations. Students are required to complete the online training portion of the course and pre-course quizzes prior to taking the instructor-led training. Pass/No Pass only.

General Education

Cosumnes River College will soon offer a certificate of achievement to satisfy the general education requirements for the California General Education Transfer Curriculum (Cal-GETC) (https://crc.losrios.edu/2025-2026-official-catalog/graduation-and-transfer/preparing-to-transfer/california-general-education-transfer-curriculum-requirements).

General Science

Cosumnes River College's General Science program provides a broad study in the fields of biological and physical sciences. Talk with a counselor if you are interested in transferring to a four-year university in the sciences, as other programs may better prepare you for transfer.

Degrees Offered

A.S. in General Science

Dean Banafsheh Amini
Phone (916) 691-7204
Email aminib2@crc.losrios.edu

Associate Degree

A.S. in General Science

Areas of Study include:

- Biological Anthropology
- Astronomy
- Biology
- Chemistry
- Engineering
- Physical Geography
- Geology
- Physics

Eighteen (18) units of transfer-level course work in science are required. Two laboratory courses must be included: one in the physical sciences and one in the biological sciences. Courses may be selected from astronomy, biology, chemistry, geology, physical geography, biological anthropology, and physics. The student, in consultation with a counselor, should choose science courses to meet their program, transfer, or general education requirements.

Students interested in transferring to a four-year university with a science major are encouraged to complete a science AS or AS-T degree such as Anthropology, Biology, Chemistry, Engineering, Geography, Geology, or Physics. This General Science degree may not include the majors-level transfer courses needed for many science majors. Students are strongly recommended to see a counselor for guidance.

Degree Requirements

Course Code	Course Title	Units
Life Science with Lab :		
A minimum of 4 units from the following:		4
ANTH 300	Biological Anthropology (3)	
and ANTH 301	Biological Anthropology Laboratory (1)	
ANTH 480	Honors Biological Anthropology (3)	
and ANTH 482	Honors Biological Anthropology Laboratory (1)	
BIOL 308	Contemporary Biology (3)	
and BIOL 309	Contemporary Biology Laboratory (1)	
BIOL 400	Principles of Biology (5)	
BIOL 410	Principles of Botany (5)	
BIOL 420	Principles of Zoology (5)	
BIOL 430	Anatomy and Physiology (5)	
BIOL 431	Anatomy and Physiology (5)	
BIOL 440	General Microbiology (4)	
Physical Science with Lab:		
A minimum of 3 units from the following:		3
ASTR 300	Introduction to Astronomy (3)	
and ASTR 400	Astronomy Laboratory (1)	
CHEM 300	Beginning Chemistry (4)	
CHEM 305	Introduction to Chemistry (5)	
CHEM 306	Introduction to Organic and Biological Chemistry (5)	
CHEM 309	Integrated General, Organic, and Biological Chemistry (5)	
CHEM 400	General Chemistry I (5)	
CHEM 401	General Chemistry II (5)	
CHEM 420	Organic Chemistry I (5)	
CHEM 421	Organic Chemistry II (5)	
GEOG 300	Physical Geography: Exploring Earth's Environmental Systems (3)	
and GEOG 301	Physical Geography Laboratory (1)	
GEOL 300	Physical Geology (3)	
and GEOL 301	Physical Geology Laboratory (1)	
GEOL 305	Earth Science (3)	
and GEOL 306	Earth Science Laboratory (1)	
GEOL 310	Historical Geology (3)	
and GEOL 311	Historical Geology Laboratory (1)	
ENGR 304	How Things Work (3)	
PHYS 350	General Physics (4)	
PHYS 360	General Physics (4)	
PHYS 370	Introductory Physics - Mechanics and Thermodynamics (5)	
PHYS 380	Introductory Physics - Electricity and Magnetism, Light and Modern Physics (5)	
PHYS 411	Mechanics of Solids and Fluids (4)	
PHYS 421	Electricity and Magnetism (4)	
PHYS 431	Heat, Waves, Light and Modern Physics (4)	
Additional Science Courses :		
A minimum of 11 units from the following:		11[1]
ANTH 300	Biological Anthropology (3)	
ANTH 301	Biological Anthropology Laboratory (1)	

Course Code	Course Title	Units
ANTH 480	Honors Biological Anthropology (3)	
ANTH 482	Honors Biological Anthropology Laboratory (1)	
ASTR 300	Introduction to Astronomy (3)	
ASTR 400	Astronomy Laboratory (1)	
BIOL 308	Contemporary Biology (3)	
BIOL 309	Contemporary Biology Laboratory (1)	
BIOL 342	The New Plagues: New and Ancient Infectious Diseases Threatening World Health (3)	
BIOL 350	Environmental Biology (3)	
BIOL 352	Conservation Biology (3)	
BIOL 400	Principles of Biology (5)	
BIOL 410	Principles of Botany (5)	
BIOL 420	Principles of Zoology (5)	
BIOL 430	Anatomy and Physiology (5)	
BIOL 431	Anatomy and Physiology (5)	
BIOL 440	General Microbiology (4)	
CHEM 300	Beginning Chemistry (4)	
CHEM 305	Introduction to Chemistry (5)	
CHEM 306	Introduction to Organic and Biological Chemistry (5)	
CHEM 309	Integrated General, Organic, and Biological Chemistry (5)	
CHEM 400	General Chemistry I (5)	
CHEM 401	General Chemistry II (5)	
CHEM 420	Organic Chemistry I (5)	
CHEM 421	Organic Chemistry II (5)	
ENGR 304	How Things Work (3)	
GEOG 300	Physical Geography: Exploring Earth's Environmental Systems (3)	
GEOG 301	Physical Geography Laboratory (1)	
GEOG 305	Global Climate Change (3)	
GEOG 306	Weather and Climate (3)	
GEOL 300	Physical Geology (3)	
GEOL 301	Physical Geology Laboratory (1)	
GEOL 305	Earth Science (3)	
GEOL 306	Earth Science Laboratory (1)	
GEOL 310	Historical Geology (3)	
GEOL 311	Historical Geology Laboratory (1)	
GEOL 330	Introduction to Oceanography (3)	
GEOL 390	Field Studies in Geology (1 - 4)	
PHYS 310	Conceptual Physics (3)	
PHYS 350	General Physics (4)	
PHYS 360	General Physics (4)	
PHYS 370	Introductory Physics - Mechanics and Thermodynamics (5)	
PHYS 380	Introductory Physics - Electricity and Magnetism, Light and Modern Physics (5)	
PHYS 411	Mechanics of Solids and Fluids (4)	
PHYS 421	Electricity and Magnetism (4)	
PHYS 431	Heat, Waves, Light and Modern Physics (4)	
Total Units:		**18**

[1]Courses used in A or B above will not count towards C, except units exceeding the 4 or 3 unit minimum in A and B. For example, a student completing the 5 unit CHEM 309 under B could apply 2 of those units towards C. A total of 18 science units is required.

The General Science Associate in Science (A.S.) degree may be obtained by completion of the required program, plus the local CRC General Education Requirement, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

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

- explain the core perspectives of the scientific method and apply it to at least one scientific discipline. (PSLO 1)
- solve introductory problems of a conceptual and/or numerical nature of at least one scientific discipline. (PSLO 2)
- accurately apply the basic vocabulary and concepts of at least one scientific discipline verbally and in writing. (PSLO 3)
- recognize the use and misuse of scientific concepts in society including politics and the media. (PSLO 4)

General Science (GENSCI) Courses

GENSCI 299 Experimental Offering in General Science

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

GENSCI 499 Experimental Offering in General Science

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

Geography

Geography is the science of place and space. Geographers study the relationships among geographic places, natural systems, society, cultural activities, sustainability, and the interdependence of all these over space.

Degrees and Certificates Offered

A.A.-T. in Geography

A.S. in Environmental Studies & Sustainability

A.S. in General Science

A.S. in Geography

Field Data Mapping and Geographic Information Systems (GIS) Certificate

Sustainability Certificate

Dean Banafsheh Amini

Department Chair Scott Crosier

Phone (916) 691-7204

Email crosies@crc.losrios.edu

Associate Degrees for Transfer

A.A.-T. in Geography

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, plants, etc. Many human and physical geographers 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.

Students must complete the following Associate Degree for Transfer (ADT) requirements:

(1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
(A) The California General Education Transfer Curriculum (Cal-GETC).

(B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

(2) Obtainment of a minimum grade point average of 2.0.

ADTs also require that students must earn a "C" or better in all courses required for the major or area of emphasis. A "P" (Pass) grade is also an acceptable grade for courses in the major if the course is taken on a Pass/No Pass basis.

Upon successful completion of the degree requirements, students will be guaranteed admission to the CSU system with junior status and will not have to repeat lower division coursework. Students are encouraged to meet with a counselor to develop their educational plans as degree options and general education requirements vary for each university.

Degree Requirements

Course Code	Course Title	Units
Core:		
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
Elective List A:		
A minimum of 6 units from the following:		6
GEOG 306	Weather and Climate (3)	
GEOG 320	World Regional Geography (3)	
GEOG 322	Geography of California (3)	
GEOG 331	Exploring Maps and Geographic Technologies (3)	
GEOG 335	Introduction to Geographic Information Systems Applications (3)	
GEOG 391	Field Studies in Geography: Mountain Landscapes (1 - 4)	
GEOG 392	Field Studies in Geography: Coastal Landscapes (1 - 4)	
GEOG 393	Field Studies in Geography: Arid Landscapes (1 - 4)	
GEOG 394	Field Studies in Geography: Volcanic Landscapes (1 - 4)	
Elective List B:		
A minimum of 6 units from the following:		6[1]
GEOG 302	Environmental Studies & Sustainability (3)	
GEOG 305	Global Climate Change (3)	
ANTH 310	Cultural Anthropology (3)	
GEOL 300	Physical Geology (3)	
POLS 310	Introduction to International Relations (3)	
PSYC 330	Introductory Statistics for the Behavioral Sciences (3)	
or ECON 310	Statistics for Business and Economics (3)	
or STAT C1000E	Introduction to Statistics (4)	
Total Units:		**19**

[1]Students may also substitute courses from Elective List A not already counted toward the degree.

The Associate in Arts in Geography for Transfer (AA-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) the California General Education Transfer Curriculum (Cal-GETC) Requirement.

Student Learning Outcomes

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

- demonstrate understanding of the global natural and cultural environments and the geographic methods by which they are studied. (PSLO1)</p>
- compare and contrast the general biophysical and socio-cultural differences and similarities among world regions that operate through time and over space. (PSLO2)</p>
- evaluate and analyze critical geographic issues facing the world today. (PSLO3)</p>
- recognize the diversity of peoples, places, and events globally as well as within specific geographic regions. (PSLO4)</p>
- interpret maps and mapped data utilizing basic map elements, including scales, common coordinate systems, and map symbols. (PSLO5)</p>
- use a computer effectively to research, map and analyze geographic information. (PSLO6)</p>
- compare and contrast common geographic technologies such as geographic information systems (GIS) and the global positioning system (GPS). (PSLO7)</p>
- communicate geographic information effectively in oral, written, and graphic form. (PSLO8)</p>

Career Information

The AA-T in Geography provides students with the foundational knowledge necessary for transfer to a 4-year Bachelor of Arts (BA) degree program. Career 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 Conservation; International Development; Urban and Regional Planning; Education (K-12 through University); Tourism; International Business; Cartography; Climatology; Transportation Planning; Real Estate; International Business; Marketing; Land Surveying; Demography; and many other fields (please contact the program for additional information). Some careers may require additional training. NOTE TO TRANSFER STUDENTS: The Associate Degree for Transfer program is designed for students who plan to transfer to a campus of the California State University (CSU). Other than the required core, the courses you choose to complete this degree will depend to some extent on the selected CSU for transfer. In addition, some Cal-GETC requirements can also be completed using courses required for this associate degree for transfer major (known as “double-counting”). Meeting with a counselor to determine the most appropriate course choices will facilitate efficient completion of your transfer requirements. For students wishing to transfer to other universities (UC System, private, or out-of-state), the Associate Degree for Transfer may not provide adequate preparation for upper-division transfer admissions; it is critical that you meet with a CRC counselor to select and plan the courses for the major, as programs vary widely in terms of the required preparation. **Students planning to transfer to a CSU are strongly advised to take GEOG 331 (Exploring Maps and Geographic Technologies) because it is a required lower-division course at many campuses, including CSU Sacramento.**

Associate Degrees

A.S. in Environmental Studies & Sustainability

The Environmental Studies & Sustainability Associate of Science degree is an interdisciplinary and multidisciplinary program of study that presents a broad overview of ecological issues from a variety of perspectives in the natural, physical, and social sciences. The coursework examines the interplay between natural and social systems, and the ideological foundations of humankind's attitudes and behaviors with respect to their ever-changing environment. This program is designed to prepare students to research, analyze, and propose solutions to the myriad environmental challenges facing the world today.

This degree is designed to correlate with the lower division courses required to transfer into an Environmental Studies program at many four-year institutions as well as provide broad-based environmental education for transfer in related disciplines.

The disciplines of environmental studies and geography are complementary fields, both focused on aspects of human-environment interaction. This complementarity is reflected in the many 4-year institutions that house combined Geography and Environmental Study programs. Students interested in double-majoring in these two closely-related disciplines, and/or simultaneously earning a Certificate in Geographic Information Systems, are encouraged to examine the required coursework and plan their program of study accordingly.

Students should use PROJECT ASSIST (http://www.assist.org) to research lower division major requirements at the transfer institution of their choice and should also work with the program adviser and a counselor to determine the appropriate transfer coursework.

Students interested in pursuing an Environmental Science major should consult with science faculty and counselors to tailor the specific coursework necessary to transfer to the 4-year institution of their choice.

Degree Requirements

Course Code	Course Title	Units
Core Courses:		
GEOG 302	Environmental Studies & Sustainability	3
BIOL 350	Environmental Biology (3)	3

Course Code	Course Title	Units
or BIOL 352	Conservation Biology (3)	
ECON 306	Environmental Economics	3
Field/Applied Courses:		
ECON 304	Principles of Microeconomics	3
Natural Science/Ecology Courses:		
GEOG 310	Human Geography: Exploring Earth's Cultural Landscapes	3
Chemistry Courses:		
A minimum of 3 units from the following:		3
GEOG 391	Field Studies in Geography: Mountain Landscapes (1 - 4)	
GEOG 392	Field Studies in Geography: Coastal Landscapes (1 - 4)	
GEOG 393	Field Studies in Geography: Arid Landscapes (1 - 4)	
GEOG 394	Field Studies in Geography: Volcanic Landscapes (1 - 4)	
GEOL 390	Field Studies in Geology (1 - 4)	
GEOG 331	Exploring Maps and Geographic Technologies (3)	
GEOG 335	Introduction to Geographic Information Systems Applications (3)	
Earth Science Courses:		
A minimum of 3 units from the following:		3
BIOL 308	Contemporary Biology (3)	
BIOL 309	Contemporary Biology Laboratory (1)	
BIOL 400	Principles of Biology (5)	
Quantitative Courses:		
A minimum of 4 units from the following:		4
CHEM 305	Introduction to Chemistry (5)	
CHEM 400	General Chemistry I (5)	
Social Science Courses:		
A minimum of 3 units from the following:		3
GEOG 300	Physical Geography: Exploring Earth's Environmental Systems (3)	
GEOG 301	Physical Geography Laboratory (1)	
GEOG 305	Global Climate Change (3)	
GEOL 300	Physical Geology (3)	
GEOL 301	Physical Geology Laboratory (1)	
A minimum of 3 units from the following:		3
ECON 310	Statistics for Business and Economics (3)	
PSYC 330	Introductory Statistics for the Behavioral Sciences (3)	
STAT C1000E	Introduction to Statistics (4)	
MATH 400	Calculus I (5)	
STAT C1000H	Introduction to Statistics - Honors (4)	
Total Units:		**31**

The Environmental Studies & Sustainability Associate in Science (A.S.) degree may be obtained by completion of the required program, plus the local CRC General Education Requirement, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

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

- PSLO-1: Articulate an understanding of the natural environment and human societies' relationship to it. This includes the ability to:
- 1. Communicate effectively about environmental issues and sustainability, correctly utilizing vocabulary while indicating a complex understanding of disciplines in the program.
- 2. Articulate an awareness of the relevance of environmental studies to the student's life and wider community at both local and global scales.
- 3. Recognize the importance of interdisciplinary and multidisciplinary approaches to solving environmental problems.<P ...>
- PSLO-2: Evaluate and analyze environmental processes and human impacts on the natural environment. This includes the ability to:
- 1. Use logical and quantitative reasoning to solve environmental problems.
- 2. Analyze critical environmental problems facing the world today.
- 3. Evaluate data and draw reasonable conclusions.
- 4. Utilize the scientific method.
- 5. Employ information-gathering tools to investigate environmental ideas.<P ...>
- PSLO-3: Recognize the ethical dimensions of decisions and actions and engage in the ethical reasoning necessary to be a responsible local and global citizen. This includes the ability to:
- 1. Recognize the ethical implications of research and the responsibility to use knowledge wisely.
- 2. Articulate the value of understanding environmental systems.<P ...>
- PSLO-4: Transfer to a 4-year program and further prepare for employment in an environmental career.

Career Information

Natural Resource Management; Forestry; Range Management; Park Ranger; Wildlife Biology; Agriculture; Soil and Water Conservation; Land Use Planning; Waste Management; Environmental Education; Environmental Policy And Planning; Environmental Law; Environmental Consulting; Environmental Lobbying; Environmental Planning; Environmental Protection; Environmental Compliance; Environmental Engineering; Air Quality Control; Landscape Architecture; Urban and Regional Planning; Alternative Energy Development; Risk Analysis; Contaminated Lands Reclamation; Research; Consulting

A.S. in General Science

Areas of Study include:

- Biological Anthropology
- Astronomy

- Biology
- Chemistry
- Engineering
- Physical Geography
- Geology
- Physics

Eighteen (18) units of transfer-level course work in science are required. Two laboratory courses must be included: one in the physical sciences and one in the biological sciences. Courses may be selected from astronomy, biology, chemistry, geology, physical geography, biological anthropology, and physics. The student, in consultation with a counselor, should choose science courses to meet their program, transfer, or general education requirements.

Students interested in transferring to a four-year university with a science major are encouraged to complete a science AS or AS-T degree such as Anthropology, Biology, Chemistry, Engineering, Geography, Geology, or Physics. This General Science degree may not include the majors-level transfer courses needed for many science majors. Students are strongly recommended to see a counselor for guidance.

Degree Requirements

Course Code	Course Title	Units
Life Science with Lab :		
A minimum of 4 units from the following:		4
ANTH 300	Biological Anthropology (3)	
and ANTH 301	Biological Anthropology Laboratory (1)	
ANTH 480	Honors Biological Anthropology (3)	
and ANTH 482	Honors Biological Anthropology Laboratory (1)	
BIOL 308	Contemporary Biology (3)	
and BIOL 309	Contemporary Biology Laboratory (1)	
BIOL 400	Principles of Biology (5)	
BIOL 410	Principles of Botany (5)	
BIOL 420	Principles of Zoology (5)	
BIOL 430	Anatomy and Physiology (5)	
BIOL 431	Anatomy and Physiology (5)	
BIOL 440	General Microbiology (4)	
Physical Science with Lab:		
A minimum of 3 units from the following:		3
ASTR 300	Introduction to Astronomy (3)	
and ASTR 400	Astronomy Laboratory (1)	
CHEM 300	Beginning Chemistry (4)	
CHEM 305	Introduction to Chemistry (5)	
CHEM 306	Introduction to Organic and Biological Chemistry (5)	
CHEM 309	Integrated General, Organic, and Biological Chemistry (5)	
CHEM 400	General Chemistry I (5)	
CHEM 401	General Chemistry II (5)	
CHEM 420	Organic Chemistry I (5)	
CHEM 421	Organic Chemistry II (5)	
GEOG 300	Physical Geography: Exploring Earth's Environmental Systems (3)	
and GEOG 301	Physical Geography Laboratory (1)	
GEOL 300	Physical Geology (3)	
and GEOL 301	Physical Geology Laboratory (1)	
GEOL 305	Earth Science (3)	
and GEOL 306	Earth Science Laboratory (1)	
GEOL 310	Historical Geology (3)	
and GEOL 311	Historical Geology Laboratory (1)	
ENGR 304	How Things Work (3)	
PHYS 350	General Physics (4)	
PHYS 360	General Physics (4)	
PHYS 370	Introductory Physics - Mechanics and Thermodynamics (5)	
PHYS 380	Introductory Physics - Electricity and Magnetism, Light and Modern Physics (5)	
PHYS 411	Mechanics of Solids and Fluids (4)	
PHYS 421	Electricity and Magnetism (4)	
PHYS 431	Heat, Waves, Light and Modern Physics (4)	
Additional Science Courses :		
A minimum of 11 units from the following:		11[1]
ANTH 300	Biological Anthropology (3)	
ANTH 301	Biological Anthropology Laboratory (1)	
ANTH 480	Honors Biological Anthropology (3)	
ANTH 482	Honors Biological Anthropology Laboratory (1)	
ASTR 300	Introduction to Astronomy (3)	
ASTR 400	Astronomy Laboratory (1)	
BIOL 308	Contemporary Biology (3)	
BIOL 309	Contemporary Biology Laboratory (1)	
BIOL 342	The New Plagues: New and Ancient Infectious Diseases Threatening World Health (3)	
BIOL 350	Environmental Biology (3)	
BIOL 352	Conservation Biology (3)	
BIOL 400	Principles of Biology (5)	
BIOL 410	Principles of Botany (5)	
BIOL 420	Principles of Zoology (5)	
BIOL 430	Anatomy and Physiology (5)	
BIOL 431	Anatomy and Physiology (5)	
BIOL 440	General Microbiology (4)	
CHEM 300	Beginning Chemistry (4)	
CHEM 305	Introduction to Chemistry (5)	
CHEM 306	Introduction to Organic and Biological Chemistry (5)	
CHEM 309	Integrated General, Organic, and Biological Chemistry (5)	
CHEM 400	General Chemistry I (5)	
CHEM 401	General Chemistry II (5)	

Course Code	Course Title	Units
CHEM 420	Organic Chemistry I (5)	
CHEM 421	Organic Chemistry II (5)	
ENGR 304	How Things Work (3)	
GEOG 300	Physical Geography: Exploring Earth's Environmental Systems (3)	
GEOG 301	Physical Geography Laboratory (1)	
GEOG 305	Global Climate Change (3)	
GEOG 306	Weather and Climate (3)	
GEOL 300	Physical Geology (3)	
GEOL 301	Physical Geology Laboratory (1)	
GEOL 305	Earth Science (3)	
GEOL 306	Earth Science Laboratory (1)	
GEOL 310	Historical Geology (3)	
GEOL 311	Historical Geology Laboratory (1)	
GEOL 330	Introduction to Oceanography (3)	
GEOL 390	Field Studies in Geology (1 - 4)	
PHYS 310	Conceptual Physics (3)	
PHYS 350	General Physics (4)	
PHYS 360	General Physics (4)	
PHYS 370	Introductory Physics - Mechanics and Thermodynamics (5)	
PHYS 380	Introductory Physics - Electricity and Magnetism, Light and Modern Physics (5)	
PHYS 411	Mechanics of Solids and Fluids (4)	
PHYS 421	Electricity and Magnetism (4)	
PHYS 431	Heat, Waves, Light and Modern Physics (4)	
Total Units:		**18**

[1]Courses used in A or B above will not count towards C, except units exceeding the 4 or 3 unit minimum in A and B. For example, a student completing the 5 unit CHEM 309 under B could apply 2 of those units towards C. A total of 18 science units is required.

The General Science Associate in Science (A.S.) degree may be obtained by completion of the required program, plus the local CRC General Education Requirement, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

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

- explain the core perspectives of the scientific method and apply it to at least one scientific discipline. (PSLO 1)
- solve introductory problems of a conceptual and/or numerical nature of at least one scientific discipline. (PSLO 2)
- accurately apply the basic vocabulary and concepts of at least one scientific discipline verbally and in writing. (PSLO 3)
- recognize the use and misuse of scientific concepts in society including politics and the media. (PSLO 4)

A.S. in Geography

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, plants, etc. Many human and physical geographers 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 CRC Geography program offers courses that satisfy lower division General Education requirements in both the physical and social sciences. In addition, the program offers an Associate Degree in Geography that provides students with a solid foundation in geography as well as the standard prerequisites for upper-division coursework leading to the baccalaureate degree. Students may also earn a certificate in Geographic Information Systems (GIS). Students planning to transfer to a four-year school with a major in Geography should consult the lower division requirements at the university they plan to attend.

Note to Transfer Students:
If you are interested in transferring to a four-year college or university to pursue a bachelor’s degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate’s degree in this major may be different from the requirements needed for the Bachelor’s degree.

Highlights include:
* Comprehensive course offerings including a Physical Laboratory as well as specialized training in Geographic Information Systems (GIS)
* Program’s students have won top awards at state-level competitions annually since 1999
* Field study courses to Yosemite, Pt. Reyes, Monterey/Big Sur, Tahoe, and the Eastern Sierra
* Internships available with State of California, County of Sacramento, and Federal Land Management Agencies
* Three courses fulfill the CRC and CSU multicultural requirement
* Day, evening, and online sections

Degree Requirements

Course Code	Course Title	Units
Fall or Spring semester:		

Course Code	Course Title	Units
GEOG 300	Physical Geography: Exploring Earth's Environmental Systems	3[1]
Fall or Spring semester (best if concurrent with GEOG 300):		
GEOG 301	Physical Geography Laboratory	1
Fall or Spring semester:		
GEOG 310	Human Geography: Exploring Earth's Cultural Landscapes	3
Fall Semester:		
GEOG 331	Exploring Maps and Geographic Technologies (3)	3
Check with departments for scheduled offering:		
PSYC 330	Introductory Statistics for the Behavioral Sciences (3)	3 - 4
or STAT C1000E	Introduction to Statistics (4)	
or STAT C1000H	Introduction to Statistics - Honors (4)	
or ECON 310	Statistics for Business and Economics (3)	
Check with departments for scheduled offering:		
A minimum of 6 units from the following:		6
ANTH 310	Cultural Anthropology (3)	
BIOL 308	Contemporary Biology (3)	
or BIOL 309	Contemporary Biology Laboratory (1)	
or BIOL 350	Environmental Biology (3)	
ECON 302	Principles of Macroeconomics (3)	
or ECON 304	Principles of Microeconomics (3)	
GEOG 302	Environmental Studies & Sustainability (3)	
GEOG 305	Global Climate Change (3)	
GEOG 306	Weather and Climate (3)	
GEOG 320	World Regional Geography (3)	
GEOG 322	Geography of California (3)	
GEOG 335	Introduction to Geographic Information Systems Applications (3)	
GEOG 391	Field Studies in Geography: Mountain Landscapes (1 - 4)	
GEOG 392	Field Studies in Geography: Coastal Landscapes (1 - 4)	
GEOG 393	Field Studies in Geography: Arid Landscapes (1 - 4)	
GEOG 394	Field Studies in Geography: Volcanic Landscapes (1 - 4)	
GEOL 300	Physical Geology (3)	
GEOL 301	Physical Geology Laboratory (1)	
GEOL 330	Introduction to Oceanography (3)	
HIST 307	History of World Civilizations to 1500 (3)	
or HIST 308	History of World Civilizations, 1500 to Present (3)	
or HIST 360	History of African Civilizations (3)	
or HIST 370	History of the Americas through the 19th Century Wars of Independence (3)	
or HIST 371	History of the Americas from the 19th Century Wars of Independence to the Present (3)	
HUM 320	Asian Humanities (3)	
or HUM 324	Global Islam: Culture and Civilization (3)	
or HUM 332	American Humanities (3)	
PHIL 352	Introduction to World Religions (3)	
POLS 310	Introduction to International Relations (3)	
SOC 300	Introductory Sociology (3)	
Total Units:		**19 - 20**

[1]A minimum of 60 units is required for the A.S. degree which includes core courses, electives, and general education (GE) graduation requirements. Geography majors are encouraged to complete additional GE requirements from a list of suggested courses on file in the Geography Department and at the Counseling Center. Students should use PROJECT ASSIST (http://www.assist.org) to research lower division major requirements at the transfer institution of their choice and also work with a counselor to determine the most appropriate transfer coursework.

The Geography Associate in Science (A.S.) degree may be obtained by completion of the required program, plus the local CRC General Education Requirement, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

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

- SLO#1: demonstrate understanding of the global natural and cultural environments and the geographic methods by which they are studied.
- SLO#2: compare and contrast the general biophysical and socio-cultural differences and similarities among world regions that operate through time and over space.
- SLO#3: evaluate and analyze critical geographic issues facing the world today.
- SLO#4: recognize the diversity of peoples, places, and events globally as well as within specific geographic regions.
- SLO#5: interpret maps and mapped data utilizing basic map elements, including scales, common coordinate systems, and map symbols.
- SLO#6: use a computer effectively to research, map and analyze geographic information.
- SLO#7: compare and contrast common geographic technologies such as geographic information systems (GIS) and the global positioning system (GPS).
- SLO#8: communicate geographic information effectively in oral, written, and graphic form.

Career Information

Natural Resource Management; Environmental Conservation; International Development; Urban and Regional Planning;

Education (K-12 through University); Tourism; Cartographer; Climatologist; Park Ranger; Transportation Specialist; Real Estate Analyst; International Business; Marketing Analyst; Land Surveyor; Research Scientist; Remote Sensing Specialist; Demographer; GIS Analyst; and many more (please contact the program for additional information). Some career options may require more than two years of college study.

Certificates of Achievement

Field Data Mapping and Geographic Information Systems (GIS) Certificate

Students interested in research related to field data collection and analysis will need certain skills to correctly find locations in the field, identify locations, map sites, and integrate collected data into a Geographic Information System (GIS) for display and analysis. This interdisciplinary certificate program provides students with the tools needed to collect, map, display, and analyze data collected in a field-based setting and coordinate this with other mapping data and sources.

Certificate Requirements

Course Code	Course Title	Units
GEOG 335	Introduction to Geographic Information Systems Applications	3
GEOG 331	Exploring Maps and Geographic Technologies	3
A minimum of 6 units from the following:		6
GEOG 300	Physical Geography: Exploring Earth's Environmental Systems (3)	
GEOG 302	Environmental Studies & Sustainability (3)	
GEOG 310	Human Geography: Exploring Earth's Cultural Landscapes (3)	
ANTH 300	Biological Anthropology (3)	
ANTH 310	Cultural Anthropology (3)	
ANTH 323	Introduction to Archaeology (3)	
BIOL 350	Environmental Biology (3)	
BIOL 352	Conservation Biology (3)	
GEOL 300	Physical Geology (3)	
Total Units:		**12**

Student Learning Outcomes

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

- SLO #1: DEMONSTRATE AN UNDERSTANDING OF THE MAJOR MODES OF GEOGRAPHIC INQUIRY.
- SLO #2: DEMONSTRATE AN UNDERSTANDING OF MAPPING CONCEPTS, GIS, AND THE ABILITY TO INTERPRET MAPS AND MAPPED DATA.
- SLO #3: DEMONSTRATE AN UNDERSTANDING OF COMMON GEOGRAPHIC TECHNOLOGIES AND THE ABILITY TO USE THEM TO COLLECT, ANALYZE, AND DISPLAY GEOSPATIAL DATA.
- SLO #4: ORGANIZE, MANIPULATE, ANALYZE AND DISPLAY TABULAR DATA INTO SPATIAL VISUALIZATIONS.
- SLO #5: EXHIBIT SKILLS LEARNED THROUGH MAPPING AND GIS PROJECT DEVELOPMENT.

Sustainability Certificate

This certificate advances student's understanding of the principles of sustainability and sustainable practices with respect to ecosystems, green buildings, business, agriculture, nutrition, natural resource management and conservation, waste management, energy, transportation systems, urban planning and design, and more. Theoretical and practical aspects of sustainability are explored including social, economic, and environmental dimensions.

Certificate Requirements

Course Code	Course Title	Units
GEOG 302	Environmental Studies & Sustainability	3
A minimum of 9 units from the following:		9
ARCH 332	Design Awareness (3)	
ARCH 342	Introduction to Green Buildings (3)	
BIOL 350	Environmental Biology (3)	
BIOL 352	Conservation Biology (3)	
CONST 143	Solar Photovoltaic Systems (3)	
ECON 306	Environmental Economics (3)	
GEOG 300	Physical Geography: Exploring Earth's Environmental Systems (3)	
GEOG 305	Global Climate Change (3)	
HORT 300	Introduction to Horticulture (3)	
HORT 302	Soils, Soil Management, and Plant Nutrition (3)	
or PLTS 310	Soils, Soil Management, and Plant Nutrition (3)	
HORT 313	Sustainable Agriculture (3)	
NUTRI 303	Plant-Based Nutrition (3)	
NUTRI 331	Plant-Based Food Principles and Preparation (3)	
Total Units:		**12**

Student Learning Outcomes

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

- PSLO#1: Communicate effectively about environmental issues and sustainability, utilizing correct vocabulary.
- PSLO#2: Articulate an awareness of the relevance of sustainability to the student’s life and wider community at both local and global scales.
- PSLO#3: Evaluate and analyze environmental problems facing the world today and propose sustainable solutions.
- PSLO#4: Employ information-gathering tools to investigate theoretical and practical aspects of sustainability in the context of energy consumption, transportation systems, food production, water resources, industry, the built environment, and socio-cultural institutions and practices.

Career Information

This certificate 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 those pursuing additional coursework include positions in environmental economics, sustainable business practices, green building, natural resource management, food systems, energy, environmental justice, transportation, and urban planning.

Geography (GEOG) Courses

GEOG 300 Physical Geography: Exploring Earth's Environmental Systems

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Concurrent enrollment in GEOG 301 (Physical Geography Lab) is suggested. GEOG 301 meets the UC and CSU transfer requirement for a 1-unit science lab.
Transferable: CSU; UC
General Education: Local GE L5; Cal-GETC Area 5A
C-ID: C-ID GEOG 110

This course investigates the interrelationships between Earth and humans, with an emphasis on natural systems (solar energy balance, weather and climate, water resources, landforms, natural hazards, vegetation, and soil). Relevant application of these elements to today's world is stressed to help students better understand Earth's physical environment as well as human-environment interaction. A field trip (whether in-person or virtual) may be required to relate class discussions to the real world.

GEOG 301 Physical Geography Laboratory

Units: 1
Hours: 54 hours LAB
Prerequisite: None.
Corequisite: GEOG 300; GEOG 300 may be taken during a previous semester. Grade of "C" or better required if taken previously.
Transferable: CSU; UC
General Education: Cal-GETC Area 5C
C-ID: C-ID GEOG 111

This course provides "hands-on" study of the basic principles and concepts involved in understanding Earth's environment systems. Labs feature observation, collection, analysis and display of data related to the study of Earth's energy balance, weather and climate, vegetation, tectonic processes, landforms, and natural hazards. Additionally, labs involve geographic methods and technology, including interpretation of maps and other geographic imagery, weather instrumentation, navigation equipment such as a compass and the Global Positioning System (GPS), and other relevant computer and Internet applications. A field trip may be required.

GEOG 302 Environmental Studies & Sustainability

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L4; Local GE L5; Cal-GETC Area 4

This introductory course offers an interdisciplinary perspective on the major environmental problems confronting society and explores solutions directed toward producing a more sustainable future. Course topics include an introduction to environmental issues, and related values, ethics and politics; a primer on Earth system science — the interconnected nature of the atmosphere, hydrosphere, lithosphere, and biosphere; a global survey of natural resources and exploitation; changing global climates; the world water crisis; the demography of human population, and contrasts between less- and more-developed countries; agricultural and food supply challenges; renewable and nonrenewable energy resources; and land use patterns and related issues. Throughout the course, human impacts on the environment, environmental impacts on human societies, and the sustainability of economies and practices at local, regional, and global scales are investigated. A field trip may be required to relate class discussions to the real world.

GEOG 305 Global Climate Change

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L5; Cal-GETC Area 5A

This interdisciplinary course explores the natural and human factors causing the Earth’s climate to change. Students will be provided with the scientific tools to analyze evidence that climate change is a looming threat. Through lectures, readings, discussions and projects, students will examine the Earth’s present and past climates as well as the influence of climate on the geographical distribution of plants, animals and human societies.

GEOG 306 Weather and Climate

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L5; Cal-GETC Area 5A
C-ID: C-ID GEOG 130

This course is an introduction to atmospheric processes including energy and moisture exchanges, atmospheric pressure, winds, and global circulation. Severe weather conditions such as hurricanes and tornadoes are also studied. World, regional, and local climates are investigated. Student work will include weather observations and analysis of atmospheric data using charts, weather maps and radar and satellite imagery from the Internet and other sources.

GEOG 310 Human Geography: Exploring Earth's Cultural Landscapes

Units: 3
Hours: 54 hours LEC

Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L4; Cal-GETC Area 4
C-ID: C-ID GEOG 120

This course investigates the diverse patterns of human settlement, development, and movement on earth, which evolved as a result of cultural and environmental factors. Emphasis is placed on understanding global population and migration patterns, language, religion, ethnicity, political and economic systems, development issues, agriculture and urbanization.

GEOG 320 World Regional Geography

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L4; Cal-GETC Area 4
C-ID: C-ID GEOG 125

This course is a global survey of the world's major geographic realms: their physical environments, cultures and economies; their origins, interactions and global roles. Geographic concepts and ideas are used to study and compare cultures, landscapes, resources, livelihood and land use across Earth. Explanation for the globalization of culture and economy, the widening gap between rich and poor countries, and ethnic diversity in the United States and abroad is stressed throughout the course. A major goal of this course is to improve each student's "mental map of the world."

GEOG 322 Geography of California

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L4; Cal-GETC Area 4
C-ID: C-ID GEOG 140

This course investigates California's physical, cultural, and economic environments, analyzing cardinal changes resulting from both natural and human interaction. The emphasis is on cultural diversity, human alteration of the landscape, and contemporary problems resulting from accelerated competition for natural, financial, and human resources.
Some field trips may be required.

GEOG 331 Exploring Maps and Geographic Technologies

Units: 3
Hours: 48 hours LEC; 18 hours LAB
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L5
C-ID: C-ID GEOG 150

Maps are the most effective way to communicate spatial information. This course introduces students to the quickly changing world of maps (both hardcopy and digital) and geographic techniques and technologies such as map and aerial photograph interpretation, spreadsheet operations, basic statistics, cartography, Global Positioning Systems (GPS), Internet mapping, remote sensing and Geographic Information Systems (GIS) that aid in data collection, analysis and presentation.

GEOG 335 Introduction to Geographic Information Systems Applications

Units: 3
Hours: 45 hours LEC; 27 hours LAB
Prerequisite: None.
Advisory: CISC 302
Transferable: CSU
C-ID: C-ID GEOG 155

Geographic Information Systems (GIS) are computer-based mapping programs that analyze spatial data. This course provides the foundation for using desktop GIS software. A conceptual overview along with hands-on experience will be used to explore basic GIS software functionality. Emphasis will be placed on display characteristics, attribute querying, database exploration and management, spatial analysis, data creation, and cartographic presentation.

GEOG 391 Field Studies in Geography: Mountain Landscapes

Units: 1 - 4
Hours: 6 - 24 hours LEC; 36 - 144 hours LAB
Prerequisite: None.
Transferable: CSU
C-ID: C-ID GEOG 160

This course involves the study of geographic principles and processes in mountain environments. The course content will vary 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, etc.), human geography (e.g., cultural landscapes, economic activities, transportation issues, land use patterns, etc.), and introduction to tools and techniques used for geographic field research (e.g., map and compass use, the Global Positioning System (GPS), Geographic Information Systems (GIS), etc.). Field excursions are required.

GEOG 392 Field Studies in Geography: Coastal Landscapes

Units: 1 - 4
Hours: 6 - 24 hours LEC; 36 - 144 hours LAB
Prerequisite: None.
Transferable: CSU
C-ID: C-ID GEOG 160

This is a field studies course of the geography of coastal landscapes. Physical and cultural processes, characteristics and landscapes will be observed and analyzed. Specific content will vary by geographic region. A field trip is required. Units may vary based on the time requirements for the specific course.

GEOG 393 Field Studies in Geography: Arid Landscapes

Units: 1 - 4
Hours: 6 - 24 hours LEC; 36 - 144 hours LAB
Prerequisite: None.
Transferable: CSU
C-ID: C-ID GEOG 160

This course involves the study of geographic principles and processes in arid environments. The course content will vary 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, etc.), human geography (e.g., cultural landscapes, economic activities, transportation issues, land use patterns, etc.), and introduction to tools and techniques used for geographic field research (e.g., map and compass use, the Global Positioning System (GPS), Geographic Information Systems (GIS), etc.). Field excursions are required.

GEOG 394 Field Studies in Geography: Volcanic Landscapes

Units: 1 - 4
Hours: 6 - 24 hours LEC; 36 - 144 hours LAB
Prerequisite: None.
Transferable: CSU
C-ID: C-ID GEOG 160

This course involves the study of geographic principles and processes in volcanic environments. The course content will vary 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, etc.), human geography (e.g., cultural landscapes, economic activities, transportation issues, land use patterns, etc.), and introduction to tools and techniques used for geographic field research (e.g., map and compass use, the Global Positioning System (GPS), Geographic Information Systems (GIS), etc.). Field excursions are required.

GEOG 495 Independent Studies in Geography

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

GEOG 499 Experimental Offering in Geography

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU; UC (Credit for variable topics courses is given only after a review of the scope and content of the course by the enrolling UC campus.)

This is the experimental courses description.

Geology

Geology is the study of the origin and evolution of the earth, utilizing the principles of mathematics, chemistry, physics and biology. The concept of geologic time and the principles of uniformitarianism help geologists to understand the processes that shape the earth and its environments. Geologists study rocks, minerals and fossils in an effort to draw conclusions about both the earth's observable surface processes that meet the eye, and the earth's interior.

Degrees Offered

A.S.-T. in Geology

A.S. in General Science

A.S. in Geology

Dean Banafsheh Amini

Department Chair Scott Crosier

Phone (916) 691-7204

Email crosies@crc.losrios.edu

Associate Degrees for Transfer

A.S.-T. in Geology

The Associate in Science in Geology for Transfer Degree (AA-T) is designed to provide a seamless transfer pathway for students interested in pursuing at least one Geology degree option in the California State University (CSU) system.

Students must complete the following Associate Degree for Transfer (ADT) requirements:

(1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
(A) The California General Education Transfer Curriculum (Cal-GETC).
(B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

(2) Obtainment of a minimum grade point average of 2.0.

ADTs also require that students must earn a “C” or better in all courses required for the major or area of emphasis. A “P” (Pass) grade is also an acceptable grade for courses in the major if the course is taken on a Pass/No Pass basis.

Upon successful completion of the degree requirements, students will be guaranteed admission to the CSU system with junior status and will not have to repeat lower division coursework. Students are encouraged to meet with a counselor to develop their educational plans as degree options and general education requirements vary for each university.

Degree Requirements

Course Code	Course Title	Units
GEOL 300	Physical Geology	3
GEOL 301	Physical Geology Laboratory	1
GEOL 310	Historical Geology	3
GEOL 311	Historical Geology Laboratory	1
CHEM 400	General Chemistry I	5
CHEM 401	General Chemistry II	5
MATH 400	Calculus I	5
MATH 401	Calculus II	5
Total Units:		**28**

The Associate in Science in Geology for Transfer (AS-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) the California General Education Transfer Curriculum (Cal-GETC) Requirement.

Student Learning Outcomes

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

- Understand the culture and practice of science. (PSLO 1)
- Evaluate how nature and humans exist in various dimensions of space and time. (PSLO 2)
- Integrate geoscience technologies and information resources. (PSLO 3)
- Analyze critical geoscience issues facing the world today. (PSLO 4)
- Communicate geoscience concepts and information effectively in various forms (e.g., verbal, written, graphic). (PSLO 5)
- Assess the use and limits of natural resources. (PSLO 6)
- Analyze the impacts of natural processes on humanity. (PSLO 7)

Career Information

The AS-T in Geology can provide students with the foundational knowledge necessary for transfer to a 4-year Bachelor of Art or Science (BA or BS) degree program. Career opportunities for students who have earned Bachelor's degrees in Geology include but are not limited to Geologist (for private industry or the government), Environmental Planner or Consultant, Earth Science Educator (middle school through university), Paleontologist, Petrologist, Land Use and Natural Resource Management, Cartographer/Stratigrapher, Park Naturalist, Hydrologist, GIS Specialist, and Oceanographer. Some careers may require additional training. NOTE TO TRANSFER STUDENTS: The Associate Degree for Transfer program is designed for students who plan to transfer to a campus of the California State University (CSU). Other than the required core, the courses you choose to complete this degree will depend to some extent on the selected CSU for transfer. In addition, some Cal-GETC requirements can also be completed using courses required for this associate degree for transfer major (known as “double-counting”). Meeting with a counselor to determine the most appropriate course choices will facilitate efficient

completion of your transfer requirements. For students wishing to transfer to other universities (UC System, private, or out-of-state), the Associate Degree for Transfer may not provide adequate preparation for upper-division transfer admissions; it is critical that you meet with a CRC counselor to select and plan the courses for the major, as programs vary widely in terms of the required preparation.

Associate Degrees

A.S. in General Science

Areas of Study include:

- Biological Anthropology
- Astronomy
- Biology
- Chemistry
- Engineering
- Physical Geography
- Geology
- Physics

Eighteen (18) units of transfer-level course work in science are required. Two laboratory courses must be included: one in the physical sciences and one in the biological sciences. Courses may be selected from astronomy, biology, chemistry, geology, physical geography, biological anthropology, and physics. The student, in consultation with a counselor, should choose science courses to meet their program, transfer, or general education requirements.

Students interested in transferring to a four-year university with a science major are encouraged to complete a science AS or AS-T degree such as Anthropology, Biology, Chemistry, Engineering, Geography, Geology, or Physics. This General Science degree may not include the majors-level transfer courses needed for many science majors. Students are strongly recommended to see a counselor for guidance.

Degree Requirements

Course Code	Course Title	Units
Life Science with Lab :		
A minimum of 4 units from the following:		4
ANTH 300	Biological Anthropology (3)	
and ANTH 301	Biological Anthropology Laboratory (1)	
ANTH 480	Honors Biological Anthropology (3)	
and ANTH 482	Honors Biological Anthropology Laboratory (1)	
BIOL 308	Contemporary Biology (3)	
and BIOL 309	Contemporary Biology Laboratory (1)	
BIOL 400	Principles of Biology (5)	
BIOL 410	Principles of Botany (5)	
BIOL 420	Principles of Zoology (5)	
BIOL 430	Anatomy and Physiology (5)	
BIOL 431	Anatomy and Physiology (5)	
BIOL 440	General Microbiology (4)	
Physical Science with Lab:		
A minimum of 3 units from the following:		3
ASTR 300	Introduction to Astronomy (3)	
and ASTR 400	Astronomy Laboratory (1)	
CHEM 300	Beginning Chemistry (4)	
CHEM 305	Introduction to Chemistry (5)	
CHEM 306	Introduction to Organic and Biological Chemistry (5)	
CHEM 309	Integrated General, Organic, and Biological Chemistry (5)	
CHEM 400	General Chemistry I (5)	
CHEM 401	General Chemistry II (5)	
CHEM 420	Organic Chemistry I (5)	
CHEM 421	Organic Chemistry II (5)	
GEOG 300	Physical Geography: Exploring Earth's Environmental Systems (3)	
and GEOG 301	Physical Geography Laboratory (1)	
GEOL 300	Physical Geology (3)	
and GEOL 301	Physical Geology Laboratory (1)	
GEOL 305	Earth Science (3)	
and GEOL 306	Earth Science Laboratory (1)	
GEOL 310	Historical Geology (3)	
and GEOL 311	Historical Geology Laboratory (1)	
ENGR 304	How Things Work (3)	
PHYS 350	General Physics (4)	
PHYS 360	General Physics (4)	
PHYS 370	Introductory Physics - Mechanics and Thermodynamics (5)	
PHYS 380	Introductory Physics - Electricity and Magnetism, Light and Modern Physics (5)	
PHYS 411	Mechanics of Solids and Fluids (4)	
PHYS 421	Electricity and Magnetism (4)	
PHYS 431	Heat, Waves, Light and Modern Physics (4)	
Additional Science Courses :		
A minimum of 11 units from the following:		11[1]
ANTH 300	Biological Anthropology (3)	
ANTH 301	Biological Anthropology Laboratory (1)	
ANTH 480	Honors Biological Anthropology (3)	
ANTH 482	Honors Biological Anthropology Laboratory (1)	
ASTR 300	Introduction to Astronomy (3)	
ASTR 400	Astronomy Laboratory (1)	
BIOL 308	Contemporary Biology (3)	
BIOL 309	Contemporary Biology Laboratory (1)	
BIOL 342	The New Plagues: New and Ancient Infectious Diseases Threatening World Health (3)	
BIOL 350	Environmental Biology (3)	

Course Code	Course Title	Units
BIOL 352	Conservation Biology (3)	
BIOL 400	Principles of Biology (5)	
BIOL 410	Principles of Botany (5)	
BIOL 420	Principles of Zoology (5)	
BIOL 430	Anatomy and Physiology (5)	
BIOL 431	Anatomy and Physiology (5)	
BIOL 440	General Microbiology (4)	
CHEM 300	Beginning Chemistry (4)	
CHEM 305	Introduction to Chemistry (5)	
CHEM 306	Introduction to Organic and Biological Chemistry (5)	
CHEM 309	Integrated General, Organic, and Biological Chemistry (5)	
CHEM 400	General Chemistry I (5)	
CHEM 401	General Chemistry II (5)	
CHEM 420	Organic Chemistry I (5)	
CHEM 421	Organic Chemistry II (5)	
ENGR 304	How Things Work (3)	
GEOG 300	Physical Geography: Exploring Earth's Environmental Systems (3)	
GEOG 301	Physical Geography Laboratory (1)	
GEOG 305	Global Climate Change (3)	
GEOG 306	Weather and Climate (3)	
GEOL 300	Physical Geology (3)	
GEOL 301	Physical Geology Laboratory (1)	
GEOL 305	Earth Science (3)	
GEOL 306	Earth Science Laboratory (1)	
GEOL 310	Historical Geology (3)	
GEOL 311	Historical Geology Laboratory (1)	
GEOL 330	Introduction to Oceanography (3)	
GEOL 390	Field Studies in Geology (1 - 4)	
PHYS 310	Conceptual Physics (3)	
PHYS 350	General Physics (4)	
PHYS 360	General Physics (4)	
PHYS 370	Introductory Physics - Mechanics and Thermodynamics (5)	
PHYS 380	Introductory Physics - Electricity and Magnetism, Light and Modern Physics (5)	
PHYS 411	Mechanics of Solids and Fluids (4)	
PHYS 421	Electricity and Magnetism (4)	
PHYS 431	Heat, Waves, Light and Modern Physics (4)	
Total Units:		**18**

[1]Courses used in A or B above will not count towards C, except units exceeding the 4 or 3 unit minimum in A and B. For example, a student completing the 5 unit CHEM 309 under B could apply 2 of those units towards C. A total of 18 science units is required.

The General Science Associate in Science (A.S.) degree may be obtained by completion of the required program, plus the local CRC General Education Requirement, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

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

- explain the core perspectives of the scientific method and apply it to at least one scientific discipline. (PSLO 1)
- solve introductory problems of a conceptual and/or numerical nature of at least one scientific discipline. (PSLO 2)
- accurately apply the basic vocabulary and concepts of at least one scientific discipline verbally and in writing. (PSLO 3)
- recognize the use and misuse of scientific concepts in society including politics and the media. (PSLO 4)

A.S. in Geology

This degree is designed to meet common lower division requirements for a major in Geology.

All CRC Geology courses satisfy lower division General Education requirements for the A.A., A.S., B.A., and B.S. degrees. For transfer students earning a Baccalaureate Degree in Geology, satisfactory completion of the CRC Geology curriculum provides a solid foundation and the standard prerequisites for upper division coursework. Geology majors planning to transfer to four-year institutions should take GEOL 300, 301, 310, and 311.

HIGHLIGHTS
*Comprehensive lower division course offerings, including a Physical Laboratory, Mineral Laboratory, and Field Course
*Dynamic geologic environment near the Sierra Nevada, San Andreas Fault, and Sacramento Delta
*Internships available with State of California, County of Sacramento, and Federal Land Management Agencies
*A Mathematics, Engineering and Science Achievement (MESA) program

Degree Requirements

Course Code	Course Title	Units
CHEM 400	General Chemistry I	5
CHEM 401	General Chemistry II	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
Total Units:		**28**

The Geology Associate in Science (A.S.) degree may be obtained by completion of the required program, plus the local CRC General Education Requirement, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

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

- SLO 1: Understand the culture and practice of science.
- SLO 2: Evaluate how nature and humans exist in various dimensions of space and time.
- SLO 3: Integrate geoscience technologies and information resources.
- SLO 4: Analyze critical geoscience issues facing the world today.
- SLO 5: Communicate geoscience concepts and information effectively in various forms (e.g., verbal, written, graphic).
- SLO 6: Assess the use and limits of natural resources.
- SLO 7: Analyze the impacts of natural processes on humanity.

Career Information

Geologist (for private industry or the government); Environmental Planner or Consultant; Earth Science Educator (middle school through university); Paleontologist; Petrologist; Land Use and Natural Resource Management; Cartographer/ Stratigrapher; Park Naturalist; Hydrology; GIS Specialist; Oceanographer Most career options require additional college study.

Geology (GEOL) Courses

GEOL 300 Physical Geology

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Concurrent enrollment in GEOL 301.
Transferable: CSU; UC
General Education: Local GE L5; Cal-GETC Area 5A
C-ID: C-ID GEOL 100

Physical Geology introduces the composition and dynamics of Earth from the atomic scale of minerals to the global scale of plate tectonics. Major themes include the composition of minerals and rock, volcanism, Earth structures, earthquakes, erosion and surface processes, geologic time, geologic hazards, and plate tectonics. This course analyzes human interactions with geologic processes and the physical environment. Successful completion of physical geology prepares the student to recognize, understand, and appreciate the physical processes which continually change Earth over geologic time.

GEOL 301 Physical Geology Laboratory

Units: 1
Hours: 54 hours LAB
Prerequisite: None.
Corequisite: GEOL 300 (may be taken previously)
Transferable: CSU; UC
General Education: Cal-GETC Area 5C
C-ID: C-ID GEOL 100L

This course provides "hands-on" experience with the tools and skills discussed in Physical Geology (GEOL 300). Lab topics include mineral and rock identification, map and air photograph interpretation and landform identification, and introduction to the study of geologic maps and cross-sections.

GEOL 305 Earth Science

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC (No transfer credit for GEOL 305 or 306, if taken after GEOL 300, 301, 310, or 311)
General Education: Local GE L5; Cal-GETC Area 5A
C-ID: C-ID GEOL 120

This course is an introductory course covering major topics in geology, oceanography, meteorology, astronomy, scientific method, and philosophy of science. This course is designed for non-science majors. This course is not open to students who have received credit for GEOL 300 or GEOL 310.

GEOL 306 Earth Science Laboratory

Units: 1
Hours: 54 hours LAB
Prerequisite: None.
Corequisite: GEOL 305
Transferable: CSU; UC (No transfer credit for GEOL 305 or 306, if taken after GEOL 300, 301, 310, or 311)
General Education: Cal-GETC Area 5C
C-ID: C-ID GEOL 120L

This course emphasizes scientific methods and systematic laboratory procedures. Topics include weather analysis, rock and mineral identification, study of geologic concepts by means of topographic maps, and exercises in astronomy and oceanography. One field trip may be required. Not open to students who have received credit for GEOL 300 or GEOL 301.

GEOL 310 Historical Geology

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: GEOL 300 or 305; An introductory geology or earth science course.
Transferable: CSU; UC
General Education: Local GE L5; Cal-GETC Area 5A
C-ID: C-ID GEOL 110

This course explores the origin and geologic history of Earth and the evolution of its plant and animal inhabitants. Plate tectonic theory is used to explain changes in composition and structure of rocks in Earth's crust from the formation of Earth to the present. Emphasis is placed on the formation of sedimentary rocks for the purpose of understanding how they and the fossils contained within them record changes in Earth environment and processes. Evolution and extinction are studied to understand how they reflect environmental changes in Earth's ocean, atmosphere, and surface. Present day Earth processes are used as a model to understand past activity.

GEOL 311 Historical Geology Laboratory

Units: 1
Hours: 54 hours LAB
Prerequisite: None.

Corequisite: GEOL 310
Advisory: GEOL 300 and 301
Transferable: CSU; UC
General Education: Cal-GETC Area 5C
C-ID: C-ID GEOL 110L

Laboratory studies will accompany and complement GEOL 310, Historical Geology. Use of sedimentary rocks, fossils, geologic maps, and cross sections will aid in interpreting ancient environments, tectonic settings, and geologic history. Other concepts addressed include age relations and correlation of rock and time units, and introduction to fossil identification and biostratigraphy. At least one field trip or an appropriate alternative activity will be required as an introduction to sedimentary environments and field methods in geology.

GEOL 330 Introduction to Oceanography

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L5; Cal-GETC Area 5A

The course will provide an introduction to the basic principles and practices of oceanography. Topics will be presented in terms of the applications of physics, geology, chemistry, and biology to a study of the world's oceans. Specific topics will include planetary science and earth origin, the geologic timescale, geography and location systems, matter, marine provinces, sediments, seismology, plate tectonics, seawater composition, geochemical distributions, deep ocean circulations, winds and surface circulation, waves, tides, estuarine environment, biological production, nekton, plankton, and benthic organisms.

GEOL 390 Field Studies in Geology

Units: 1 - 4
Hours: 6 - 24 hours LEC; 36 - 144 hours LAB
Prerequisite: None.
Advisory: GEOL 300 or 305
Transferable: CSU; UC

This course covers the study of geologic principles and processes of specific areas (mountains, deserts, great valley, coastal region, etc.). A multi-day field trip and camping may be required. For specific details, see the course description(s) listed in the schedule.

GEOL 495 Independent Studies in Geology

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

GEOL 499 Experimental Offering in Geology

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU

This is the experimental courses description.

Health Education

Courses in Health Education are designed to provide students the essential information for the evaluation, protection and maintenance of individual health.

Dean Collin Pregliasco

Department Chair Minet Gunther

Phone (916) 691-7261

Email PregliC@crc.losrios.edu

Health Education (HEED) Courses

HEED 300 Health Science

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L7B

The aim of this course is to help people achieve a high level of wellness and prevent disease by assisting them to maximize both their personal lifestyles and their environments. This course will help you to identify the various factors influencing your current and future levels of wellness. Information presented will include, but not be exclusive to: mental health, stress management, nutrition, weight control, fitness, sexuality, addictive substances, and disease.

HEED 350 Personal Wellness

Same As: KINES 301
Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU
General Education: Local GE L7B

This course takes a personal approach to lifetime healthy habits. The students will relate their own lives to topics that include: fitness, weight management, nutrition, stress management, risky behaviors and prevention of diseases. Evaluation, plans for change and reinforcement will be applied through the use of journals, projects, written assignments, physical assessments and exams. This course is the same as KINES 301, and only one may be taken for credit.

HEED 495 Independent Studies in Health Education

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

HEED 499 Experimental Offering in Health Education

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU

This is the experimental courses description.

Health Information Technology

The CRC Health Information Technology program is designed to train health information professionals with the knowledge and skills to process, analyze, disseminate and maintain health care information. A career as a health information professional offers a unique opportunity to combine an interest in health information, business, and computer information science.

The Health information Technology Program is accredited by Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM). The College's associate degree in Health Information Technology has been reaccredited through 2029. All inquiries about the program's accreditation status should be directed to:

CAHIIM logo

CAHIIM
200 East Randolph Street, Suite 5100
Chicago, IL 60601
(312) 235-3255
info@cahiim.org
CAHIIM Program Directory (https://www.cahiim.org/programs/program-directory)

Degrees and Certificates Offered

A.S. in Health Information Technology

Health Information Coding Specialist Certificate

Dean Kris Hubbard

Department Liasons Cori Burns
Kristen Borth, Program Coordinator

Phone (916) 691-7452

Email borthk@crc.losrios.edu

Associate Degree

A.S. in Health Information Technology

The CRC Health Information Technology A.S. degree program is designed to train health information technology professionals with the knowledge and skills to process, analyze, disseminate and maintain health information. A career as a health information technology professional offers a unique opportunity to combine an interest in health information, business, and computer information science. Employment opportunities are available in long-term care, ambulatory care, and acute care facilities; state and federal health agencies; and private industry.

HIGHLIGHTS

According to the Bureau of Labor Statistics, employment of medical records and health information technicians is expected to increase by 11 percent from 2018 to 2028, faster than the average for all occupations.

*The HIT A.S. Degree Program is accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM) in cooperation with the Council on Accreditation of the American Health Information Management Association

*A Non-paid clinical experience at an affiliated health-related agency is required as part of this Program.

*This is a fully online program

To be eligible for enrollment in the program, the student must meet the following criteria:
-A grade of "C" or better in the following courses: AH 311 (formerly AH 110), AH 120, AH 124, and BIOL 100 or 102.
-Completion of the HIT Application form. See the Program website for more information.

Degree Requirements

Course Code	Course Title	Units
HIT 100	Introduction to Health Information Technology: Part 1	3
HIT 102	Introduction to Health Information Technology: Part 2	3
HIT 110	Medical Legal Aspects of Health Information	3
HIT 120	Basic ICD-CM Coding	3
HIT 122	Advanced ICD Coding	3
HIT 123	Current Procedural Terminology (CPT) Coding	1
HIT 140	Computerized Health Information Systems	3
HIT 150	Continuous Quality Improvement	3
CISA 320	Introduction to Database Management	1
CISC 310	Introduction to Computer Information Science	3
HIT 160	Supervision for the Allied Health Professional	3
HIT 170	Health Information Technology Directed Practice	1
CISA 321	Intermediate Database Management	1
STAT C1000E	Introduction to Statistics	4
HIT 176	Health Information Technology Review	2
Total Units:		**37**

The Health Information Technology Associate in Science (A.S.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Enrollment Eligibility

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

- Completion of AH 311 (formerly AH 110), AH 120, AH 124, and Biology 100 or 102 with grades of C or better.
- Completion of the HIT Application form. The form is available online on the Health Information Technology website. The application form will be available online from January 27 through June 15. Instructions for how to complete the application are included in the form.

Enrollment Process

Eligible students are selected for the program according to the following steps:

- Only students who meet the pre-enrollment requirements will be considered for the program. Applications must be received by June 15.
- Students will be randomly selected for admission into the program if the number of successful applicants exceeds the seats available.

Student Learning Outcomes

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

- PSLO #1: Competence in HIM data structure, contents, and information governance standards.
- PSLO #2: Competency in the application of information protection: access, use, disclosure, privacy, & security.
- PSLO #3: Competency in the application of informatics, analytics, and data use.
- PSLO #4: Competency in the management of revenue cycle.
- PSLO #5: Comprehend organizational management & leadership in relation to HIM.

Career Information

Employment Opportunities are possible in the Following Settings Ambulatory Care Long-Term Care/Rehabilitation State and Federal Health Agencies Professional Review Organizations Insurance Companies Educational Settings Consulting Firms Mental Health/Chemical Dependency Acute Care Some career options may require experience in addition to two years of college study.

Certificate of Achievement

Health Information Coding Specialist Certificate

The Health Information Coding Specialist Certificate prepares the student to apply medical coding classifications to health care encounters using industry standards through both theory and practical (externship) applications for the purpose of: meeting health care industry needs; preparing students for appropriate certification exams; and providing career ladder opportunities for health care workers.
A career as a health information coding specialist offers a unique opportunity to combine an interest in health information, business, and computer information science. Employment opportunities are available in long-term care, ambulatory care, and acute care facilities; state and federal health agencies; and private industry.

The Certificate of Achievement Health Information Coding Specialist Program is not accredited by the Commission on Accreditation for Health Informatics and Information Education (CAHIIM).

HIGHLIGHTS

Employment of medical records and health information technicians is expected to increase by 21 percent from 2010 to 2020, faster than the average for all occupations.

This is an online program.

Enrollment Eligibility:
To be eligible for enrollment in the Health Information Coding Specialist Program, the student must meet the following criteria:
A grade of "C" or better in the following courses: AH 311 (formerly AH 110), AH 120, AH 124, and BIOL 100 or 102.

Completion of a pre-enrollment form. The form is available online on the Health Information Technology website.

Certificate Requirements

Course Code	Course Title	Units
HIT 100	Introduction to Health Information Technology: Part 1	3
HIT 102	Introduction to Health Information Technology: Part 2	3
HIT 110	Medical Legal Aspects of Health Information	3
HIT 120	Basic ICD-CM Coding	3
HIT 122	Advanced ICD Coding	3
HIT 123	Current Procedural Terminology (CPT) Coding	1
HIT 150	Continuous Quality Improvement	3
HIT 170	Health Information Technology Directed Practice	1
CISC 310	Introduction to Computer Information Science	3
STAT C1000E	Introduction to Statistics	4
Total Units:		**27**

Enrollment Eligibility

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

- Completion of AH 311 (formerly AH 110), AH 120, AH 124, and Biology 100 or 102 with grades of C or better.
- Completion of the HIT Application form. The form is available online on the Health Information Technology website. The application form will be available online from January 27 through June 15. Instructions for how to complete the application are included in the form.

Enrollment Process

Eligible students are selected for the program according to the following steps:

- Only students who meet the enrollment eligibility criteria will be considered for the program.
- Students will be randomly selected if there are more successful candidates than there are seats available.

Student Learning Outcomes

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

- PSLO #1: Competence in HIM data structure, contents, and information governance standards.
- PSLO #2: Competency in the application of information protection: access, use, disclosure, privacy, & security.
- PSLO #3: Competency in the application of informatics, analytics, and data use.
- PSLO #4: Competency in the management of Revenue Cycle.
- PSLO #5: Comprehend organizational management & leadership in relation to HIM.

Career Information

Employment Opportunities Are Possible in the Following Settings Ambulatory Care Long-Term Care/Rehabilitation State and Federal Health Agencies Professional Review Organizations Insurance Companies Consulting Firms Mental Health/Chemical Dependency Acute Care Some career options may require experience in addition to at least one year of college study.

Health Information Technology (HIT) Courses

HIT 100 Introduction to Health Information Technology: Part 1

Units: 3
Hours: 54 hours LEC
Prerequisite: BIOL 100 or BIOL 102; and AH 110, AH 120, and AH 124 with grades of "C" or better
Enrollment Limitation: Enrollment is limited to those that have met the program prerequisites and have been formally accepted into the program through the application process.
Advisory: CISA 320, CISA 321, and CISC 310

This course is an introduction to the field of health information management. It includes an overview of the U.S. healthcare delivery system, health information functions, and responsibilities. The requirements, regulations, and standards for health information are emphasized.

HIT 102 Introduction to Health Information Technology: Part 2

Units: 3
Hours: 54 hours LEC
Prerequisite: HIT 100 with a grade of "C" or better
Enrollment Limitation: Enrollment is limited to those that have met the program prerequisites and have been formally accepted into the program through the application process.
Advisory: CISA 320, CISA 321, and CISC 310

This course focuses on the concepts of health information management in alternate health care setting including ambulatory care, long-term care, mental health, and rehabilitation. An overview of the regulatory and accrediting bodies governing these settings is provided.

HIT 110 Medical Legal Aspects of Health Information

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Enrollment Limitation: Enrollment is limited to those that have met the program prerequisites and have been formally accepted into the program through the application process.
Advisory: CISA 320, CISA 321, and CISC 310

This course explores the legal aspects surrounding the maintenance, use, disclosure, and protection of health information. Policies and procedures that guide the handling of health information to prevent inappropriate use and improper disclosure will be discussed. Risk management including privacy, security and compliance.

HIT 120 Basic ICD-CM Coding

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Enrollment Limitation: Enrollment is limited to those that have met the program prerequisites and have been formally accepted into the program through the application process.

This course provides instruction in the basic principles of coding diseases and procedures using the current versions of the International Classification of Diseases, Clinical Modification (CM), and Procedural Coding System (PCS). Code format, conventions, sequencing, and coding guidelines will be emphasized.

HIT 122 Advanced ICD Coding

Units: 3
Hours: 54 hours LEC
Prerequisite: HIT 120 with a grade of "C" or better
Enrollment Limitation: Enrollment is limited to those that have met the program prerequisites and have been formally accepted into the program through the application process.

This course provides instruction in advanced coding principles using the current versions of the International Classification of Diseases, Clinical Modification (CM), and Procedural Coding System (PCS). The class will focus on learning and applying higher level coding skills. In addition, the Prospective Payment System (PPS) and Diagnosis Related Groups (DRGs) will be introduced. Computerized encoders and groupers may be emphasized.

HIT 123 Current Procedural Terminology (CPT) Coding

Units: 1
Hours: 18 hours LEC
Prerequisite: None.
Enrollment Limitation: Enrollment is limited to those that have met the program prerequisites and have been formally accepted into the program through the application process.

The principles and mechanics of coding for services and procedures using the Current Procedural Terminology (CPT) coding system are taught in this course. The utilization of the Healthcare Common Procedure Coding System (HCPCS) codes is introduced.

HIT 130 Health Statistics

Units: 2
Hours: 27 hours LEC; 27 hours LAB
Prerequisite: HIT 100 with a grade of "C" or better

This course will introduce the principles of health care statistics including the process of abstracting data from medical records, the preparation of administrative and medical reports, the use of statistics in medical research, the applications of automated systems, and the interpretation of reports and the registration of vital statistics. Automated abstracting and vital statistics systems, as well as the use of spreadsheet packages for data display will be introduced.

HIT 140 Computerized Health Information Systems

Units: 3
Hours: 54 hours LEC
Prerequisite: CISC 310 with a grade of "C" or better
Enrollment Limitation: Enrollment is limited to those that have met the program prerequisites and have been formally accepted into the program through the application process.

This course explores the electronic health record (EHR) and healthcare information systems. The concepts of project management, data infrastructure, interoperability, system implementation, and optimization are reviewed. Emphasis is also placed on database management in the manipulation and use of health information.

HIT 150 Continuous Quality Improvement

Units: 3
Hours: 54 hours LEC
Prerequisite: HIT 100 with a grade of "C" or better
Enrollment Limitation: Enrollment is limited to those that have met the program prerequisites and have been formally accepted into the program through the application process.

This course provides an overview of continuous quality improvement as it relates to healthcare. The roles and responsibilities of individuals involved in medical staff peer review, utilization review and risk management will be reviewed. The concept of an organized medical staff will be discussed, as well as the role of the medical staff office.

HIT 155 Healthcare Reimbursement

Units: 2
Hours: 36 hours LEC
Prerequisite: HIT 100, 102, and 120 with grades of "C" or better
Enrollment Limitation: Enrollment is limited to those that have met the program prerequisites and have been formally accepted into the program through the application process.

This course integrates information about all US healthcare payment systems. The topics covered include reimbursement methodologies, clinical coding and compliance, voluntary and government sponsored insurance plans, revenue cycle management and value-based purchasing. Medicare and Medicaid prospective payment systems are also addressed in acute, post-acute, ambulatory, hospice and long term care settings.

HIT 160 Supervision for the Allied Health Professional

Units: 3
Hours: 54 hours LEC
Prerequisite: HIT 100 and 140 with grades of "C" or better
Enrollment Limitation: Enrollment is limited to those that have met the program prerequisites and have been formally accepted into the program through the application process.

This course studies basic management theory and leadership principles and applies them to the healthcare setting. The principles of leadership, motivation, ethics, and decision-making are explored. The role of the health information manager in training and the budgeting process will be introduced.

HIT 170 Health Information Technology Directed Practice

Units: 1
Hours: 54 hours LAB
Prerequisite: HIT 102, 110, 122, 123, and 150 with grades of "C" or better
Enrollment Limitation: Enrollment is limited to those that have met the program prerequisites and have been formally accepted into the program through the application process.

This course provides practical work experience in community health-related institutions. The clinical experience is performed under professional supervision and will perform delineated functions which allow application of studied HIT knowledge in a professional setting. This will include hands on experience and technical experience. Directed Practice is conducted as a non-paid laboratory experience.

HIT 172 Directed Practice: Health Information Coding Specialist

Units: 2
Hours: 27 hours LEC; 27 hours LAB
Prerequisite: HIT 122 and 123 with grades of "C" or better

HIT 172 provides the student with practical work experience in community health-related institutions. The clinical experience is performed under professional supervision. Students perform coding and abstracting and other delineated functions and will complete handbook questions about various health information management topics. Students shall have the status of learner and shall not be considered agency employees, nor shall they replace agency staff. Directed Practice is conducted as a non-paid laboratory experience. Students must have a TB clearance and any other immunization required by the clinical facility. A drug screen and background check may be required. Students must have an established Agency Agreement with a sponsoring site prior to the beginning of the first day of class. Contact the Career and Technology Main Office for information about the Agency Agreement.

HIT 176 Health Information Technology Review

Units: 2
Hours: 36 hours LEC
Prerequisite: HIT 170 with a grade of "C" or better

Enrollment Limitation: Enrollment is limited to those that have met the program prerequisites and have been formally accepted into the program through the application process.

This review course is designed to refresh skills on all coursework taken in the HIT program and to prepare the student to sit for the National RHIT exam. Focus is on test-taking and studying techniques which will be achieved through mock test questions, discussion boards and other resources to prepare for the national exam.

HIT 295 Independent Studies in Health Information Technology

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

HIT 299 Experimental Offering in Health Information Technology

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

History

The CRC History program offers a study of history which contributes to cultural literacy and develops critical thinking skills while helping students understand connections between the past and present.

Degrees Offered

A.A.-T. in History

Dean Emilie Mitchell

Department Chair Gabriel Gorman

Phone (916) 691-7656

Email mitchee@crc.losrios.edu

Associate Degree for Transfer

A.A.-T. in History

The Associate in Arts in History for Transfer degree provides a clearly articulated curricular track for students who wish to transfer to a CSU campus, while also serving the diverse needs of students interested in the breadth and depth of the field of 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 Associate in Arts in History for Transfer Degree (AA-T) is designed to provide a seamless transfer pathway for students interested in pursuing a History degree in the California State University (CSU) system. The degree is comprised of lower division coursework typically required by CSU institutions. Students must complete a total of 60 transferable semester units with a minimum 2.0 GPA, to include the California General Education Transfer Curriculum (Cal-GETC) pattern; students must also earn a grade of C or better (or "P" if taken Pass/No Pass) in all the courses for the major as described in the Required Program. Upon successful completion of the degree requirements, students will be guaranteed admission to the CSU system with junior status and will not have to repeat lower division coursework. Students are encouraged to meet with a counselor to develop their educational plans as degree options and general education requirements vary for each university.

Degree Requirements

Course Code	Course Title	Units
US History:		
HIST 310	History of the United States (To 1877)	3
HIST 311	History of the United States (1865 - Present)	3
HIST 301	History of Europe and Mediterranean World to 1550 (3)	3
or HIST 307	History of World Civilizations to 1500 (3)	
World History or Western Civilization:		
HIST 302	History of Europe Since 1500 (3)	3
or HIST 308	History of World Civilizations, 1500 to Present (3)	
A minimum of 3 units from the following:		3[1]
HIST 320	History of the United States: African-American Emphasis (3)	
HIST 321	History of the United States: African-American Emphasis (3)	
HIST 331	Women in American History (3)	
HIST 344	Survey of California History: A Multicultural Perspective (3)	
HIST 360	History of African Civilizations (3)	
HIST 364	Asian Civilization (3)	
HIST 365	Asian Civilization (3)	
HIST 370	History of the Americas through the 19th Century Wars of Independence (3)	
HIST 371	History of the Americas from the 19th Century Wars of Independence to the Present (3)	
HIST 380	History of the Middle East (3)	
A minimum of 3 units from the following:		3[2]
HIST 301	History of Europe and Mediterranean World to 1550 (3)	
HIST 302	History of Europe Since 1500 (3)	
HIST 307	History of World Civilizations to 1500 (3)	
HIST 308	History of World Civilizations, 1500 to Present (3)	
HIST 314	Recent United States History (3)	
or HIST 485	Recent United States History - Honors (3)	
HIST 320	History of the United States: African-American Emphasis (3)	
HIST 321	History of the United States: African-American Emphasis (3)	
HIST 331	Women in American History (3)	
HIST 344	Survey of California History: A Multicultural Perspective (3)	
HIST 360	History of African Civilizations (3)	
HIST 364	Asian Civilization (3)	
HIST 365	Asian Civilization (3)	
HIST 370	History of the Americas through the 19th Century Wars of Independence (3)	
HIST 371	History of the Americas from the 19th Century Wars of Independence to the Present (3)	
HIST 373	History of Mexico (3)	
HIST 380	History of the Middle East (3)	
POLS C1000	American Government and Politics (3)	
or POLS C1000H	American Government and Politics - Honors (3)	
POLS 302	Comparative Politics (3)	
POLS 304	Introduction to Government: California (3)	
POLS 310	Introduction to International Relations (3)	
POLS 312	Politics of the Middle East (3)	
POLS 313	Latin America (3)	
POLS 314	Modern Europe and the Unification Process (3)	

Course Code	Course Title	Units
POLS 315	Pacific Rim (3)	
POLS 317	Global Studies: Africa (3)	
POLS 318	Global Studies: Central Asia (3)	
POLS 319	Global Studies: Southeast Asia (3)	
HUM 300	Classical Humanities (3)	
HUM 310	Modern Humanities (3)	
HUM 320	Asian Humanities (3)	
HUM 324	Global Islam: Culture and Civilization (3)	
HUM 331	Latin American Humanities (3)	
HUM 332	American Humanities (3)	
SOC 300	Introductory Sociology (3)	
SOC 301	Social Problems (3)	
SOC 321	Race, Ethnicity and Inequality in the United States (3)	
SOC 341	Sex and Gender in the U.S. (3)	
ANTH 310	Cultural Anthropology (3)	
ANTH 316	Global Forces in Culture Change (3)	
ANTH 324	World Prehistory (3)	
ANTH 331	The Anthropology of Religion (3)	
ANTH 332	Native Peoples of California (3)	
ANTH 334	Native Peoples of North America (3)	
Total Units:		**18**

[1]Students completing both HIST 310 and 320, or both HIST 311 and 321, may not receive credit for both courses at all universities. Please see a counselor for more information.

[2]One course from the following group if not used in World History/Western Civilization or List B above.

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) the California General Education Transfer Curriculum (Cal-GETC) Requirement.

Student Learning Outcomes

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

- PSLO #1:Analyze and describe key developments and events in United States History.
- Analyze and describe key developments and events in Western and World Histories to 1500.
- Analyze and describe key developments and events in Western and World Histories from 1500 to the present.
- PSLO #2: Demonstrate an understanding of the historian's methods in reconstructing the past using primary and secondary sources.
- Identify and explain the sequence of cause and effect in history.
- Research and compose written work based on extensive research of primary and secondary source materials.
- PSLO #3: Evaluate the diversity in American and world societies with particular attention on race, ethnicity, class, gender, religion, and nation.
- Appreciate the role of geography in history.

History (HIST) Courses

HIST 301 History of Europe and Mediterranean World to 1550

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGL C1000
Transferable: CSU; UC
General Education: Local GE L3; Local GE L4; Cal-GETC Area 4
C-ID: C-ID HIST 170

History 301 is a survey course on Western Civilization from c. 3000 BCE to 1550 CE. The course will trace the origins, development, and advancement of European Civilization from antiquity to early modernization. In addition to political analysis, emphasis will be placed upon the socio-economic structures of various peoples discussed during this time period. Finally, the birth, growth, and later fragmentation of Christianity will be covered.

HIST 302 History of Europe Since 1500

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGL C1000
Transferable: CSU; UC
General Education: Local GE L3; Local GE L4; Cal-GETC Area 4
C-ID: C-ID HIST 180

This is a survey of Western Civilization from 1500 to the present. The course will trace the development and advancement of European nation-states from early modernization to the crises of the World Wars. In addition to political analysis, emphasis will be placed upon the ideological and socio-economic structures that developed during this time period. Finally, the effects of the Cold War and decolonization will also be addressed.

HIST 307 History of World Civilizations to 1500

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGL C1000, or placement through the assessment process.
Transferable: CSU; UC
General Education: Local GE L3; Local GE L4; Cal-GETC Area 4
C-ID: C-ID HIST 150

History 307 is a survey course on world civilization from c. 3000 BCE to 1500 CE. The course will trace the development of various peoples beginning with the first civilizations of Mesopotamia, India, and China to the establishment of great empires and infant nations of the world. In addition to political

analysis, emphasis will be placed upon the advancement of various world cultures and social structures. Particular attention will be placed on the lives of the common people of various civilizations discussed during the four thousand, five hundred year time period. Finally, various world religions will be highlighted during the duration of the course.

HIST 308 History of World Civilizations, 1500 to Present

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGL C1000, or placement through the assessment process.
Transferable: CSU; UC
General Education: Local GE L3; Local GE L4; Cal-GETC Area 4
C-ID: C-ID HIST 160

History 308 is a survey course on world civilization from 1500 to the present age. The course will cover the political, economic, and intellectual developments of various world social and cultural structures. Particular emphasis will be placed upon the increased integration of peoples and cultures as a result of globalization. Additional focus will center upon the influencing effects of modern warfare, military technology, and international politics in shaping world society. Analysis of these revolutionary changes of the past five hundred years will offer a better understanding of world society today.

HIST 310 History of the United States (To 1877)

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGL C1000 with a grade of "C" or better
Transferable: CSU (Previously HIST 312); UC (History 310 & 320 combined: Maximum transfer credit is one course.)
General Education: Local GE L4; Cal-GETC Area 4
C-ID: C-ID HIST 130

This course was formerly known as HIST 310 History of the United States (To 1877).

This is a survey course on the establishment and development of the United States from its colonial beginnings to the end of Reconstruction in 1877. Particular emphasis will be placed upon the political, economic, social, and cultural developments of the United States during the designated time period. The course will cover the ideological influences that were instrumental in shaping the Constitution and other related government structures. Additionally, the course will address the institution of slavery and how the divisive issue dismembered the nation and further complicated the process of Reconstruction.

HIST 311 History of the United States (1865 - Present)

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGL C1000 with a grade of "C" or better
Transferable: CSU (Previously HIST 313.); UC (HIST 311 & 321 combined: Max transfer credit is one course.)
General Education: Local GE L4; Cal-GETC Area 4
C-ID: C-ID HIST 140

This course was formerly known as HIST 311 History of the United States (1865 - Present).

This is a survey course on the development and growth of the United States from Reconstruction to the present day. Particular emphasis will be placed upon the political, economic, social and cultural developments during the designated time period. The course will cover the establishment and evolutionary status of the U.S. as a leading world power. Additionally, the course will address the changes to American society resulting from various revolutionary movements on race, gender, orientation, and labor. Includes coverage of California state and local government.

HIST 314 Recent United States History

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGL C1000
Transferable: CSU; UC
General Education: Local GE L4; Cal-GETC Area 4

This is a survey of the development and growth of the United States from the conclusion of World War II in 1945 to the present. Particular emphasis will be placed upon the political, economic, social, and cultural developments of the United States during the designated time period. The course will also address the establishment of the United States as a world power following the Second World War. Finally, particular emphasis will center upon the social and economical conditions of various minority groups, especially African Americans.

HIST 320 History of the United States: African-American Emphasis

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGL C1000
Transferable: CSU; UC (HIST 312 and 320 combined: maximum transfer credit is one course)
General Education: Local GE L4; Cal-GETC Area 4

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-American women as well as men in the growth and development of the nation. The U.S. Constitution and the establishment of American government institutions are also covered.

HIST 321 History of the United States: African-American Emphasis

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGL C1000
Transferable: CSU; UC (HIST 313 and 321 combined: maximum transfer credit is one course)
General Education: Local GE L4; Cal-GETC Area 4

U.S. History from 1865 to the present, including coverage of the state and local government, with an increased emphasis on

the role of black women as well as men, spelling out their specific contributions in the growth and development of the nation. It includes coverage of California state and local government.

HIST 331 Women in American History

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGL C1000
Transferable: CSU; UC
General Education: Local GE L4; Cal-GETC Area 4

Survey history of the United States from 1607 to the present, emphasizing the economic and social conditions that gave women more actual respect and some public power. Course includes the roles of women in Native American tribes, the English heritage of the colonists, the contributions of women in creating new homes and farms, and the role of women in times of war. Emphasis on the role of women in the three major social issues of the 19th century: labor, abolition, and women's rights. Includes present-day issues and the legacy of how women in the past dealt with similar issues.

HIST 344 Survey of California History: A Multicultural Perspective

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGL C1000
Transferable: CSU; UC
General Education: Local GE L3; Local GE L4; Cal-GETC Area 4

This is a survey course on the development and growth of California from its origins to the present time. Particular emphasis will be placed upon California's multicultural heritage and the state's significant local history. The course will examine, compare, and evaluate the historical experiences of Native Californians, Spanish, Mexican, Asian, African, and European Americans. Trips to sites of historical significance in California may be required.

HIST 360 History of African Civilizations

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGL C1000
Transferable: CSU; UC
General Education: Local GE L4; Cal-GETC Area 4

This course is an introductory survey of the history of Africa from earliest times to the present. Major topics will include origins of humanity and society, civilizations of the Nile Valley, the peopling of Sub-Saharan Africa, African societies to 1500 A.D. , precolonial Saharan and Sub-Saharan Africa, colonial Africa and the emergence of modern state in Africa.

HIST 364 Asian Civilization

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGL C1000
Transferable: CSU; UC
General Education: Local GE L3; Local GE L4; Cal-GETC Area 3B

This is a survey of Asian History from the birth of civilization to 1600 C.E. With particular emphasis on East Asia, the course will evaluate the political, economical, social, and cultural developments of China, Japan, and Korea. Additional topics will include the effects of foreign interactions with peoples from India, the Middle East, and Europe.

HIST 365 Asian Civilization

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGL C1000
Transferable: CSU; UC
General Education: Local GE L3; Local GE L4; Cal-GETC Area 3B

This is a survey of Asian History from 1600 C.E. to the present. With particular emphasis on China, Japan, Korea, and Vietnam, the course will evaluate the political, economical, social, and cultural effects of Western involvement in East Asia. Additional topics will include the rise of nationalism in East Asia during the Cold War, as well as China's rising participation in world events.

HIST 370 History of the Americas through the 19th Century Wars of Independence

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligibility for ENGL C1000 (formerly known as ENGWR 300).
Transferable: CSU; UC
General Education: Local GE L4; Cal-GETC Area 4

This course is a general historical survey of North, Central, and South America from the earliest civilizations through to the 19th century wars of independence. The focus is on the roles played by political, economic, cultural, and religious forces in shaping the western hemisphere.

HIST 371 History of the Americas from the 19th Century Wars of Independence to the Present

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligibility for ENGL C1000 (formerly known as ENGWR 300).
Transferable: CSU; UC
General Education: Local GE L4; Cal-GETC Area 4

This course is a general historical survey of North, Central, and South America from the wars of independence to the present day. Special emphasis is placed on a review of the North American colonies, the road to revolution, independence from England, and the constitutional period as well as subsequent Latin American - United States relations.

HIST 373 History of Mexico

Units: 3

Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligibility for ENGL C1000 (formerly known as ENGWR 300).
Transferable: CSU; UC
General Education: Local GE L3; Local GE L4; Cal-GETC Area 4

History 373 is a survey course on the origins and development of Mexico from c. 2500 BCE to the present. In addition to discussing the early civilizations of Mesoamerica, the course will evaluate the political, economical, social, and cultural evolution of Mexico from the colonial era to the present day. Finally, Mexico's relationship with the United States and other western powers will be addressed.

HIST 380 History of the Middle East

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligibility for ENGL C1000 (formerly known as ENGWR 300).
Transferable: CSU; UC
General Education: Local GE L3; Local GE L4; Cal-GETC Area 3B

This course surveys the history of the Middle East and North Africa with emphasis on the period from the 6th century C.E. (A.D.) to the present. The course focuses on the major social, economic, political and cultural transformations of the region, while taking into account both regional and global contexts of interaction and change in a comparative format. This course will provide students with a historical understanding of the impact of European colonialism, the discovery of petroleum and its consequences, the Palestinian-Israeli conflict, and the role played by the United States in the region.

HIST 399 Studying in Italy: Italian History and Culture

Units: 4
Hours: 72 hours LEC
Prerequisite: None.
Transferable: CSU
General Education: Local GE L3

This course, offered as a study abroad course in Italy, surveys Italian history to provide a background for exploring and appreciating Italian life and culture. The focus is on examining the historical context of Italian cultural and artistic expression, thereby informing and enriching our understanding and enjoyment of Italian art and culture. In Rome, this course focuses on the ancient and religious sources of Italian culture. In Florence, it explores and examines how human expression in art, literature, and philosophy served to create a new sense of the possible during the Renaissance. This course also studies how culture reflects human values and how those values can be transformed and at times ennobled by creative genius. A portion of this course may be offered in a TBA component of 25-35 hours which may include museum visits, historical monument and building visits, and Italian cultural and historical site visits.

HIST 485 Recent United States History - Honors

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Enrollment Limitation: Enrollment is limited to students that are eligible for the Cosumnes River College Honors Program.
Transferable: CSU; UC
General Education: Local GE L3; Local GE L4; Cal-GETC Area 3B

This course is an introduction to the study of American history from 1945 to the present day. It is an honors course that uses an intensive instructional methodology designed to challenge motivated students and cultivate advanced critical thinking skills. Particular emphasis will be placed on the role played by complex interrelationships of political, economic, social, and cultural forces in United States history after World War II, and the role played by multiple ethnic groups as well. This course is not open to students who have completed HIST 314. Enrollment is limited to Honors Program students. Details about the Honors Program can be found in the front of the Catalog and on the CRC website. This course is the same as HONOR 366 and only one may be taken for credit.

HIST 495 Independent Studies in History

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

HIST 499 Experimental Offering in History

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU

This is the experimental courses description.

Hmong

CRC offers the basic grammar and conversation courses in Hmong. Students will be able to understand the spoken language, to speak with reasonable fluency, and to write at their speaking level.

Dean Emmanuel Sigauke

Department Chair Blanca Gill

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Hmong (HMONG) Courses

HMONG 401 Elementary Hmong

Units: 4
Hours: 72 hours LEC
Prerequisite: None.
Transferable: CSU; UC (UC Transfer Credit: Corresponds to two years of high school study)
General Education: Local GE L3

This course will provide an introduction to the Hmong language at the elementary level, which is characterized by an emerging ability to understand and produce appropriate responses in high-frequency situation utilizing learned materials, standardized messages, phrases and expressions including terms for addressing, numbers, time, dates, days, weather, and kinship terms. Speaking and writing will be comprehensible to a sympathetic listener, including a native speaker used to interacting with non-native speakers. Verbal and written expression is limited to short, culturally appropriate communication. Students will also acquire knowledge of the geography, culture and people of regions where Hmong is spoken as well as Hmong-speakers' contributions to North American and world-wide cultures.

HMONG 402 Elementary Hmong II

Units: 4
Hours: 72 hours LEC
Prerequisite: HMONG 401 with a grade of "C" or better
Transferable: CSU; UC
General Education: Local GE L3

This is the second course in the Elementary Hmong sequence. It is designed for students who have completed Hmong 401 and provides refinement of skills learned in Hmong 401. Students will gain increased accuracy and ability to understand and produce appropriate responses in high frequency situations utilizing learned materials. Speaking and writing will be comprehensible to a sympathetic listener. Verbal and written expression will be limited to short, culturally appropriate communication on a broader scale than at the 401 level. Students will acquire a knowledge of the geography, culture, and people of regions where Hmong is spoken and of Hmong speakers' contributions to North American and world cultures.

HMONG 499 Experimental Offering in Hmong

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

Honors

Designed specifically for academically accomplished students or those with the potential for high academic achievement, CRC's Honors program provides enhanced General Education study opportunities supporting intellectual growth, scholarly relationships with peers, and faculty-student engagement beyond that generally associated with lower-division undergraduate programs. Honors Program participation supports enhanced transfer and scholarship opportunities at select transfer colleges and universities including UCLA, in whose Transfer Alliance Partnership CRC is a member. Honors Program students receive enhanced access to career and academic advising as well as enhanced opportunities for scholarship, including the opportunity to pursue their own original research.

Certificates Offered

Honors Certificate

Program Coordinator Rick Schubert

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Certificate of Achievement

Honors Certificate

Honors students who complete 15 units or more in Honors-approved coursework will earn special recognition as an Honors Scholar, a distinction that may entitle students to enhanced transfer and scholarship opportunities at select transfer colleges and universities. 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 institutions and enables students to participate in CRC's Transfer Alliance Program partnership with UCLA. A maximum of 6 units of approved Honors coursework completed at other colleges may be applied towards satisfaction of the 15 unit requirement. The units from a maximum of one 400's level STEM course can be applied towards satisfaction of the 15 unit requirement. A minimum of 9 of the 15 required units must be earned by successfully completing honors courses at Cosumnes River College. Interested students should contact their counselor, the Honors Program Coordinator, or the Vice President of Instruction and Student Learning. Honors students should meet regularly with an Honors faculty advisor to ensure completion of Honors Scholar requirements in a timely fashion. Courses that qualify as part of the program are listed below.

Certificate Requirements

Course Code	Course Title	Units
A minimum of 15 units from the following:		15[1]
HONOR 340	Honors Seminar: Political Campaign Communication (3)	
or COMM 480	Honors Seminar: Political Campaign Communication (3)	
COMM 482	Honors Seminar: Persuasion within Social Issues (3)	
HONOR 350	Honors Seminar: Introduction to Critical Theory (3)	
or FMS 488	Honors Seminar: Introduction to Critical Theory (3)	
HONOR 352	Honors Seminar: The Films of Alfred Hitchcock (3)	
or FMS 489	Honors Seminar: The Films of Alfred Hitchcock (3)	
PHIL 486	Honors Seminar in Critical Thinking and Composition: Philosophy of Happiness (3)	
HONOR 364	Honors Seminar: Philosophy of the Martial Arts (3)	
or PHIL 485	Honors Seminar: Philosophy of the Martial Arts (3)	
HONOR 366	Recent United States History - Honors (3)	
or HIST 485	Recent United States History - Honors (3)	
HONOR 367	Introduction to Government: United States – Honors (3)	
or POLS C1000H	American Government and Politics - Honors (3)	
HONOR 368	International Political Economy - Honors (3)	
or POLS 482	International Political Economy - Honors (3)	
ENGL C1000H	Academic Reading and Writing - Honors (3)	
HONOR 378	Honors - Literature Adapted into Film (3)	
or ENGLT 488	Honors - Literature Adapted into Film (3)	
HONOR 385	Honors Seminar in Genetics (3)	
or BIOL 485	Honors Seminar in Genetics (3)	
ANTH 480	Honors Biological Anthropology (3)	
ANTH 482	Honors Biological Anthropology Laboratory (1)	
HONOR 391	Honors Seminar in Mathematics - Introduction to Mathematical Proof (1)	
or MATH 483	Honors Seminar in Mathematics - Introduction to Mathematical Proof (1)	
HONOR 392	Honors Seminar in Mathematics - Topics in Number Theory (1)	
or MATH 484	Honors Seminar in Mathematics - Topics in Number Theory (1)	
HONOR 393	Introduction to Probability and Statistics - Honors (4)	
or STAT C1000H	Introduction to Statistics - Honors (4)	
All 400-level STEM courses: BIOL, CISD, CISP, CISW, CHEM, ENGR, MATH, PHYS.		
Total Units:		**15**

[1]A maximum of 6 units of approved Honors coursework completed at other colleges may be applied towards satisfaction of the 15 unit requirement. A minimum of 9 units of CRC honors-designated courses must be applied towards satisfaction of the 15 unit requirement. The units from a maximum of one 400's level STEM course can be applied towards satisfaction of the 15 unit requirement.

Enrollment Eligibility

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

- HONORS PATHWAY ONE: Students who have completed at least 12 transfer-level college units are eligible if they have a minimum 3.0 GPA and are eligible for, or have successfully completed, ENGL C1000 (formerly known as ENGWR 300). If you are taking HONORS PATHWAY ONE, please attach a copy of your transcript to the Honors Program General Application available immediately below. (The Honors Program General Application and your attached transcript are your completed application.)
- HONORS PATHWAY TWO: Students who have completed less than 12 transfer-level college units are eligible if they have a minimum 3.0 high school GPA and at least one of the following: a grade of B or better in AP-preparatory Honors English or a grade of B or better in AP English or a score of 4 or 5 on the AP English Exam.
- HONORS PATHWAY THREE (CHALLENGE PATHWAY): Any student is eligible for the Honors Program if they submit a successful Honors Program Challenge Application, demonstrating to the satisfaction of the Honors Admissions Committee their interest, motivation, preparation and potential for Honors Program study.

Enrollment Process

Eligible students are selected for the program according to the following steps:

- Students must establish eligibility for the Honors Program by successfully completing the Honors Program Application Process found on the CRC website.

Student Learning Outcomes

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

- EXPRESS IDEAS CLEARLY IN WELL-ORGANIZED WRITTEN MESSAGES (P-SLO1-Effective Communication)
- UTILIZE MODES OF ANALYSIS AND CRITICAL THINKING IN A DISCIPLINE OF STUDY AS APPLIED TO SIGNIFICANT ISSUES AND/OR PROBLEMS (P-SLO2-Critical Habits of Mind)
- ACTIVELY ENGAGE IN INTELLECTUAL INQUIRY BEYOND THAT REQUIRED IN ORDER TO PASS A COURSE OF STUDY (P-SLO3-Relevant Knowledge)
- RECOGNIZE THE ETHICAL DIMENSIONS OF DECISIONS AND ACTIONS (P-SLO4-Social Responsibility).
- ARTICULATE AN AWARENESS OF A VARIETY OF PERSPECTIVES WITHIN A DISCIPLINE AND THE RELEVANCE OF THESE PERSPECTIVES TO ONE'S OWN LIFE (P-SLO5-Cultural Understanding, Social Justice, and Equity)

Career Information

This certificate supports enhanced transfer opportunities. Career opportunities are those available to transfer students. Many of the relevant career opportunities will require study beyond this certificate.

Honors (HONOR) Courses

HONOR 387 Biological Anthropology Laboratory-Honors

Units: 1
Hours: 54 hours LAB
Prerequisite: None.
Corequisite: ANTH 300, ANTH 480, or HONOR 386
Enrollment Limitation: Enrollment is limited to Honors Program students. Details about the Honors Program can be found in the front of the Catalog and on the CRC website.
Transferable: CSU; UC
General Education: Cal-GETC Area 5C

This course is an introductory laboratory course designed to provide students with an opportunity to become familiar with the methods of the science of biological anthropology while investigating topics in laboratory and field situations. Topics covered in the course are: the scientific method, sources of biological variation and forces of evolution, human osteology (bone identification), human variation, taxonomy and comparative osteology of the primates, comparative behavior, and the fossil evidence for human evolution. A field trip to the local zoo may be included. This course is designed as a companion course to Anthropology 300 - Biological Anthropology, Anthropology 480-Honors Biological Anthropology or Honors 386-Honors Biological Anthropology. This honors course offers rigorous preparation in critical thinking, and analytic reading and writing skills for students intending to transfer to a four-year college or university. It provides an opportunity to engage contemporary biological and anthropological issues through small group discussion, debates and activities, reading analysis requiring higher-level thinking tasks, and collaborative projects. This course will also provide in depth opportunities for students to complete extensive hands-on study of pertinent fossil material. This course is not open to students who have already completed ANTH 301 or ANTH 482. Enrollment is limited to Honors Program students. Details about the Honors Program can be found in the front of the Catalog and on the CRC website. This course is the same as ANTH 482. This course, under either name (ANTH 482 or HONOR 387), may be taken only one time for credit.

Horticulture

These CRC programs offer students the opportunity to blend the disciplines of horticulture, construction, drafting and business into a unique professional opportunity. A wide variety of employment opportunities are available in the Sacramento area for students completing the associate's degree or one of the certificate programs. The continued growth of the area and the need for specialized training are creating a demand for qualified individuals. A student majoring in a degree option program should, upon completion, be able to meet the standards imposed by local industries for proper placement within the selected job area of the student's choice. It should, however, be noted that each employment situation may require that additional standards be met.

Degrees and Certificates Offered

A.S. in General Agriculture

A.S. in Horticulture, Sustainable Landscape Technology

Horticulture, General Horticulture Certificate

Horticulture, Sustainable Irrigation and Water Management Technology Certificate

Horticulture, Sustainable Landscape Design Certificate

Horticulture, Sustainable Landscape Technology Certificate

Regenerative Foodways Certificate

Dean Kris Hubbard

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Associate Degrees

A.S. in General Agriculture

Agriculture is a vital component of our local, state, and national economies and offers many exciting employment opportunities. In addition to the production of a wide range of valuable agricultural commodities, the Sacramento region is home to numerous multi-national agricultural corporations and statewide governmental agencies. It is also a center for international agricultural trade and commerce. This program is designed for students majoring in Agriculture while also allowing the student to select courses that fit his/her individual needs and desires.

As a General Agriculture major, you will:

*Study a general agriculture curriculum representing all of the departments of the Cosumnes River College agriculture program including: agriculture business, horticulture, welding, veterinary technology and plant science.

*Develop your leadership and communication skills.

*Identify the agricultural career you are most interested in and build a course of study to better qualify you for a profession.

HIGHLIGHTS

*As the only community college agriculture program in the Sacramento region, the CRC General Agriculture program provides an excellent opportunity for individuals who wish to pursue a career in agriculture and receive a General Agriculture Associate of Science degree.

*The faculty in this program works closely with the five California agricultural degree offering universities to provide a quality program for students interested in agriculture business, management and economics.

*The Sacramento region is fortunate to have some of the best high school agriculture programs in California. The faculty in the CRC Ag program works closely with these feeder schools to articulate coursework and facilitate the successful transition of agriculture students from high school to the university.

*Internships in agriculture are available for students interested in work experience opportunities.

NOTE TO TRANSFER STUDENTS: If you are interested in transferring to a four-year college or university to pursue a bachelor's degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate's degree in this major may be different from the requirements needed for the Bachelor's degree.

Degree Requirements

Course Code	Course Title	Units
AGB 310	Agriculture Computer Applications	3[1]
AGB 320	Agriculture Accounting	3
AGB 321	Agriculture Economics	3
AMT 306	Small Engine Repair	3
HORT 300	Introduction to Horticulture	3
PLTS 310	Soils, Soil Management, and Plant Nutrition (3)	3
or HORT 302	Soils, Soil Management, and Plant Nutrition (3)	
ANSC 300	Introduction to Animal Science	3
PLTS 300	Introduction to Plant Science	3
WELD 100	Introduction to Welding & Safety	1.5
A minimum of 2 units from the following:		2
WEXP 498	Work Experience in (Subject) (0.5 - 4)	
Subtotal Units:		**27.5**

Agriculture Business

Course Code	Course Title	Units
AGB 300	Introduction to Agriculture Business	3
AGB 330	Agriculture Sales and Communication	3
AGB 331	Agriculture Marketing	3
Agriculture Business Units:		9
Total Units:		**36.5**

Horticulture

Course Code	Course Title	Units
HORT 305	Plant Identification-Fall Selections	3
HORT 312	Plant Propagation	3
Horticulture Units:		6
Total Units:		**33.5**

Landscape

Course Code	Course Title	Units
HORT 320	Sustainable Landscape Construction	3
HORT 324	Sustainable Landscape Maintenance	3
Landscape Units:		6
Total Units:		**33.5**

Welding

Course Code	Course Title	Units
WELD 110	Shielded Metal Arc Welding Procedures	4
Welding Units:		4
Total Units:		**31.5**

[1]This major requires that you complete all courses in the required program plus one area of concentration.

The General Agriculture Associate in Science (A.S.) degree may be obtained by completion of the required program, plus the local CRC General Education Requirement, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

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

- PSLO 1: Demonstrate knowledge and hands-on experience in the basic concepts of all aspects of agriculture.
- PSLO 2: Demonstrate the ability to logically breakdown aspects of a project/problem and be able to resolve an issue in the agriculture industry.
- PSLO 3: Demonstrate independent & group learning expressing effective communication skills, both orally & written.
- PSLO 4: Participate in leadership opportunities to develop life-long learning traits.

Career Information

Management; Supervision; Finance; Insurance; Government; Marketing; Distribution; International Trade; Sales and Service Nursery Management and Operations; Park Maintenance; Landscape Design, Teaching, Communication; Contracting & Maintenance; Fertilizer & Insecticide Application; Research; Retail/Wholesale; Estimator; Consultant; Government Agency employee; Welding Technician; Inspection; Welding Engineering; Sculpting; Home/Handicraft & Hobby; Construction; Trucking & Automotive Some positions, however, require a four-year degree for which CRC's program is a good base for transfer.

A.S. in Horticulture, Sustainable Landscape Technology

A variety of professional career opportunities are available to those who wish to provide professional landscape installation and/or support services. Landscapers design, install, and maintain private and public outdoor spaces where people live, work, and play. The Sustainable Landscape Technology A.S. Degree concentrates on those courses that develop the knowledge, skills, and attitudes essential to creating, constructing, and maintaining functional and sustainable landscapes, green spaces, and irrigation systems, as well as for careers in arboriculture, and landscape material, supply, and specialty services. The courses of this degree focus on sound horticultural science and principles, plant identification, proper soil development and management, sustainable landscape and irrigation design, water conservation, sustainable construction and landscape and turf maintenance practices, tree care, integrated pest management, licensing and certification, and horticultural business practices.

Degree Requirements

Course Code	Course Title	Units
HORT 105	Pest Control Licensing or Certification	2
HORT 300	Introduction to Horticulture	3
HORT 302	Soils, Soil Management, and Plant Nutrition (3)	3
or PLTS 310	Soils, Soil Management, and Plant Nutrition (3)	
HORT 303	Integrated Pest Management (3)	3[1]
or PLTS 332	Integrated Pest Management (3)	
A minimum of 6 units from the following:		6
HORT 305	Plant Identification-Fall Selections (3)	
HORT 306	Plant Identification-Spring Selections (3)	
HORT 307	Plant Identification - Sustainable and CA Native Selections (3)	
HORT 320	Sustainable Landscape Construction (3)	3
or MAT 300	Introduction to Agriculture Mechanics (3)	
HORT 324	Sustainable Landscape Maintenance (3)	3
HORT 340	Landscape and Irrigation Graphics and Design	3[2]
HORT 350	Landscape Irrigation	3
HORT 351	Drip and Subsurface Irrigation	2
HORT 353	Sustainable Water Management	3
HORT 360	Introduction to Tree Care and Urban Forestry	3
A minimum of 2 units from the following:		2
HORT 498	Work Experience in Horticulture (0.5 - 4)	
Total Units:		**39**

[1]Horticulture 100 at American River College meets the Hort 303 course requirement.

[2]Horticulture 322 at American River College meets the Hort 340 course requirement.

The Horticulture, Sustainable Landscape Technology Associate in Science (A.S.) degree may be obtained by completion of the

required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Student Learning Outcomes

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

- PSLO 1: Demonstrate a fundamental understanding of basic horticultural principles and practices.
- PSLO 2: Demonstrate a fundamental understanding of soils, soil development, soil building and preparation, and sustainable soil management.
- PSLO 3: Demonstrate a fundamental understanding of plant identification, selection, use, and maintenance of plant material best suited for conventional and sustainable landscapes.
- PSLO 4: Demonstrate a fundamental understanding of basic landscape design principles and practices.
- PSLO 5: Demonstrate proficiency at implementing sustainable landscape construction principles and practices to install landscapes and landscape systems.
- PSLO 6: Demonstrate proficiency at implementing sustainable tree care, landscape maintenance, and integrated pest management principles and practices to care for and maintain landscapes and green spaces.
- PSLO 7: Demonstrate proficiency at implementing the principles and practices of irrigation design and installation to design, install, and manage water efficient irrigation systems.

Career Information

Students who complete the Sustainable Landscape Technology A.S. degree may find employment in a wide range of areas including landscape contracting, landscape construction and installation, landscape and grounds maintenance, turf management, arboriculture and tree care, parks and recreation, landscape irrigation and water management, landscape design and consulting, nurseries and garden centers, landscape pest management, horticulture materials supply and power equipment servicing, and/or in a variety of other horticultural specialties.

Certificates of Achievement

Horticulture, General Horticulture Certificate

This program provides students with the essential knowledge and skills for entry level employment in the Horticulture industry. Students gain core knowledge and skills in basic plant science, soil science, integrated pest management, and plant identification and use. Students then complete two advanced horticulture courses of their choice. This is the base certificate in a stackable series that leads to an additional certificate or degree in Horticulture.

Certificate Requirements

Course Code	Course Title	Units
HORT 300	Introduction to Horticulture	3
HORT 302	Soils, Soil Management, and Plant Nutrition (3)	3
or PLTS 310	Soils, Soil Management, and Plant Nutrition (3)	
HORT 303	Integrated Pest Management (3)	3[1]
or PLTS 332	Integrated Pest Management (3)	
A minimum of 3 units from the following:		3
HORT 305	Plant Identification-Fall Selections (3)	
or HORT 306	Plant Identification-Spring Selections (3)	
or HORT 307	Plant Identification - Sustainable and CA Native Selections (3)	
A minimum of 6 units from the following:		6
HORT 105	Pest Control Licensing or Certification (2)	
or HORT 350	Landscape Irrigation (3)	
or HORT 351	Drip and Subsurface Irrigation (2)	
or HORT 498	Work Experience in Horticulture (0.5 - 4)	
HORT 320	Sustainable Landscape Construction (3)	
or HORT 324	Sustainable Landscape Maintenance (3)	
or HORT 360	Introduction to Tree Care and Urban Forestry (3)	
or MAT 300	Introduction to Agriculture Mechanics (3)	
Total Units:		**18**

[1]Horticulture 100 at American River College meets the Hort 303 course requirement.

Student Learning Outcomes

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

- PSLO 1: Demonstrate a fundamental understanding of basic horticultural principles and practices.
- PSLO 2: Demonstrate the knowledge and skills required to sustainably manage landscape soil.
- PSLO 3: Demonstrate the knowledge and skills required to perform basic landscape and nursery operations.
- PSLO 4: Demonstrate the knowledge and skills required to design and implement a successful integrated pest management program.
- PSLO 5: Demonstrate the ability to identify selected plant material and make appropriate recommendations for its use in the landscape.
- PSLO 6: Demonstrate knowledge and skills in one or more horticulture specialties through advanced coursework, and/or a combination of courses, work experience in horticulture, or independent studies in horticulture.

Career Information

A multitude of entry-level opportunities awaits those who earn a certificate in General Horticulture. Students may find gainful employment opportunities in landscape construction and maintenance, irrigation systems installation and maintenance, landscape planning, tree care, wholesale or retail nursery sales and support, landscape materials sales and/or services, or other specialty areas in Horticulture.

Horticulture, Sustainable Irrigation and Water Management Technology Certificate

The certificate in Sustainable Irrigation and Water Management Technology concentrates on those courses that develop the knowledge, skills, and attitudes essential to designing, installing, and managing water efficient irrigation systems that are compliant with current California state and local ordinances. The required courses are designed to develop a strong foundational understanding of basic botany and plant growth requirements, and provide advanced education and training in sound principles of soil/water relationship testing and evaluation, soil development and management, proper sprinkler and drip irrigation design, irrigation systems troubleshooting and retrofitting, and irrigation systems management for water conservation. Students will have the opportunity to become QWEL (Qualified Water Efficient Landscaper) certified through this certificate program. QWEL is an EPA WaterSense Partnership program.

Certificate Requirements

Course Code	Course Title	Units
HORT 300	Introduction to Horticulture	3
HORT 302	Soils, Soil Management, and Plant Nutrition (3)	3
or PLTS 310	Soils, Soil Management, and Plant Nutrition (3)	
HORT 350	Landscape Irrigation	3
HORT 351	Drip and Subsurface Irrigation	2
HORT 353	Sustainable Water Management	3
A minimum of 2 units from the following:		2
HORT 498	Work Experience in Horticulture (0.5 - 4)	
Total Units:		**16**

Student Learning Outcomes

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

- PSLO 1: Demonstrate a fundamental understanding of basic horticultural principles and practices.
- PSLO 2: Demonstrate the knowledge and skills required to sustainably manage landscape soils.
- PSLO 3: Demonstrate the knowledge and skills required to perform basic tasks related to landscape irrigation systems design, installation, and maintenance.
- PSLO 4: Demonstrate the knowledge and skills required to perform advanced tasks related to sustainable irrigation systems design, installation, retrofitting, and troubleshooting.
- PSLO 5: Demonstrate the knowledge and skills required to perform advanced tasks related to landscape water use efficiency and sustainable water management.

Career Information

Students who complete a certificate in Sustainable Irrigation and Water Management Technology can find employment opportunities in sprinkler and surface/subsurface irrigation design, consultation, installation, maintenance and irrigation/water management. Students may be self-employed, or find employment with landscape and/or irrigation design firms, landscape contractors, landscape maintenance companies, golf courses, parks departments, water agencies, or other water/water service providers. This certificate will also prepare students for advanced training and certification through industry sponsored programs such as the Irrigation Association's (IA) Certified Irrigation Designer, Certified Irrigation Contractor, Certified Water Auditor, and Certified Water Manager programs, as well as the California Landscape Contractors Association (CLCA) Water Management Certification program.

Horticulture, Sustainable Landscape Design Certificate

The certificate in Sustainable Landscape Design concentrates on those courses that develop the knowledge, skills, and attitudes essential to creating landscape and irrigation designs that make best use of local resources including soil, water, and construction materials. The courses of this certificate focus on sound horticultural science and principles, proper soil development and management, sustainable landscape and irrigation design, water conservation, sustainable landscape construction and maintenance practices, and integrated pest management.

Certificate Requirements

Course Code	Course Title	Units
HORT 300	Introduction to Horticulture	3
HORT 302	Soils, Soil Management, and Plant Nutrition (3)	3
or PLTS 310	Soils, Soil Management, and Plant Nutrition (3)	
HORT 303	Integrated Pest Management (3)	3[1]
or PLTS 332	Integrated Pest Management (3)	
HORT 305	Plant Identification-Fall Selections (3)	3
or HORT 306	Plant Identification-Spring Selections (3)	
or HORT 307	Plant Identification - Sustainable and CA Native Selections (3)	
HORT 340	Landscape and Irrigation Graphics and Design	3[2]
HORT 350	Landscape Irrigation	3
HORT 351	Drip and Subsurface Irrigation	2
A minimum of 2 units from the following:		2
HORT 498	Work Experience in Horticulture (0.5 - 4)	
Total Units:		**22**

[1]Horticulture 100 at American River College meets the Hort 303 course requirement.

[2]Horticulture 322 at American River College meets the Hort 340 course requirement.

Student Learning Outcomes

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

- PSLO 1. Demonstrate a fundamental understanding of basic horticultural principles and practices.
- PSLO 2. Demonstrate a fundamental understanding of soils, soil development, soil building and preparation, and sustainable soil management.
- PLSO 3. Demonstrate a fundamental understanding of plant identification, selection, and use of plant material best suited for sustainable landscapes.
- PSLO 4. Demonstrate a fundamental understanding of basic landscape design principles and practices.
- PSLO 5. Demonstrate a fundamental understanding of hydraulics and irrigation design, installation, and water management principles and practices.
- PSLO 6. Propose landscape design concepts based on sound, sustainable soil management, water conservation, construction and maintenance, and integrated pest management best practices.

Career Information

The certificate in Sustainable Landscape Design provides a strong horticulture foundation, along with the specialized skills and technical knowledge to prepare students for employment opportunities in the field of sustainable landscape planning and irrigation design. Students who complete a certificate in Sustainable Landscape Design find employment in landscape and irrigation design, planning, consultation, installation management, and water systems management. Students may be self-employed, or find employment with landscape design firms, landscape contractors, landscape maintenance firms, or other related service providers. Students will have the opportunity to become QWEL (Qualified Water Efficient Landscaper) certified through this certificate program. QWEL is an EPA WaterSense Partnership program. This certificate will also prepare students for advanced training and certification through industry sponsored programs such as the Irrigation Association (IA) Certified Water Auditor and Certified Water Manager programs.

Horticulture, Sustainable Landscape Technology Certificate

A variety of professional career opportunities are available to those who wish to provide professional landscape installation and/or support services. Landscapers design, install, and maintain private and public outdoor spaces where people live, work, and play. The Sustainable Landscape Technology Certificate concentrates on those courses that develop the knowledge, skills, and attitudes essential for entry-level careers in developing, constructing, and maintaining functional and sustainable landscapes, green spaces, and irrigation systems, as well as careers in tree care, and landscape material, supply, and specialty services. The courses in this certificate focus on sound horticultural science and principles, plant identification, proper soil development and management, sustainable landscape and irrigation design, water conservation, sustainable construction and landscape maintenance, tree care, and integrated pest management.

Certificate Requirements

Course Code	Course Title	Units
HORT 300	Introduction to Horticulture	3
HORT 302	Soils, Soil Management, and Plant Nutrition (3)	3
or PLTS 310	Soils, Soil Management, and Plant Nutrition (3)	
HORT 303	Integrated Pest Management (3)	3[1]
or PLTS 332	Integrated Pest Management (3)	
HORT 305	Plant Identification-Fall Selections (3)	3
or HORT 306	Plant Identification-Spring Selections (3)	
or HORT 307	Plant Identification - Sustainable and CA Native Selections (3)	
HORT 320	Sustainable Landscape Construction (3)	3
or HORT 324	Sustainable Landscape Maintenance (3)	
or HORT 360	Introduction to Tree Care and Urban Forestry (3)	
or MAT 300	Introduction to Agriculture Mechanics (3)	
HORT 350	Landscape Irrigation	3
A minimum of 2 units from the following:		2
HORT 498	Work Experience in Horticulture (0.5 - 4)	
Total Units:		**20**

[1]Horticulture 100 at American River College meets the Hort 303 course requirement.

Student Learning Outcomes

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

- PSLO 1: Demonstrate a fundamental understanding of basic horticultural principles and practices.
- PSLO 2: Demonstrate a fundamental understanding of soils, soil development, soil building and preparation, and sustainable soil management.
- PSLO 3: Demonstrate a fundamental understanding of plant identification, selection, use, and maintenance of plant material best suited for sustainable landscapes.
- PSLO 4: Demonstrate proficiency at implementing the principles and practices of Integrated Pest Management for sustainable landscapes.
- PSLO 5: Demonstrate proficiency at implementing the principles and practices of sustainable landscape construction, sustainable landscape maintenance, or arboriculture to install and/or maintain sustainable landscapes.
- PSLO 6: Demonstrate proficiency at implementing the principles and practices of irrigation design and water efficiency to design, install, and manage landscape irrigation systems.

Career Information

Students who complete a certificate in Sustainable Landscape Technology may find entry-level employment in a wide range of

areas including landscape contracting, landscape construction and installation, landscape and grounds maintenance, turf management, tree care, parks and recreation, landscape irrigation, landscape design and consulting, nurseries and garden centers, landscape pest management, and horticulture materials supply and power equipment servicing.

Regenerative Foodways Certificate

The Regenerative Foodways Certificate brings the intersection of food, health, and environment into the classroom. The courses provide hands-on learning in the current fields of sustainable nutrition and regenerative agriculture. Students will explore the benefits of plant-focused eating patterns for both individuals and the planet, learn how to create nourishing meals centered around plants, and discover farming methods that promote fairness and sustainability in food production.

Contact the CRC Nutrition and Foods and/or Horticulture, and/or Ag Counselor regarding transferable courses.

Certificate Requirements

Course Code	Course Title	Units
NUTRI 303	Plant-Based Nutrition	3
NUTRI 331	Plant-Based Food Principles and Preparation	3
HORT 313	Sustainable Agriculture	3
Total Units:		**9**

Student Learning Outcomes

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

- PSLO 1: Demonstrate independent learning and effective communication skills.
- Demonstrate responsibility for personal action and choices.
- Communicate effectively both orally and in writing.
- PSLO 2: Explain the principles of nutrition and its effect on health.
- Relate the dietary causes of chronic diseases.
- Evaluate the role of plant-based foods on health and the environment.
- PSLO 3: Demonstrate a fundamental understanding of health behaviors on nutritional and health status.
- Schematize the effects of personal food choice on health, the environment and public policy.
- PSLO 4: Basic and advanced plant science/horticulture skills development and improvement.
- Demonstrate and apply the theories of sustainable and organic agriculture.
- Demonstrate a fundamental understanding of soils, soil development, soil building and preparation and sustainable soil management.
- Demonstrate a fundamental understanding of hydraulics and irrigation design, installation, and water management principles and practices.
- Create agriculture design concepts based on sound, sustainable soil management, water conservation, construction and maintenance, and integrated pest management best practices.
- PSLO 5: Effectively and accurately prepare and analyze raw ingredients and prepared foods.
- Evaluate food through sensory evaluation of texture, taste, color, presentation, smell and umami.
- Identify optimal cooking procedures/heat transfer to maximize nutrient content as well as the quality of the ingredients and dish as a whole.
- Analyze quality defects in cooked products and specify possible errors in techniques or ingredient selection.
- PSLO 6: Implement proper sanitary and safety techniques.
- Demonstrate appropriate food handling and sanitary techniques.
- Utilize kitchen tools/equipment appropriately.

Career Information

In restaurants, food service facilities, farms, urban farms, sustainable/organic farms, school garden, health education. Some of these career options may require more than the certificate and two years of college study. Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.

Horticulture (HORT) Courses

HORT 105 Pest Control Licensing or Certification

Units: 2
Hours: 36 hours LEC
Prerequisite: None.
Advisory: HORT 300, HORT 303, PLTS 300, or PLTS 332

This course covers the laws, regulations, and safety requirements for individuals preparing to obtain a Qualified Applicator's Certificate (QAC) in California Department of Pesticide Regulation (CDPR) category Q or a Qualified Applicator's License (QAL) in CDPR category B. This course will also cover the requirements and process of obtaining a Maintenance Gardener Pest Control Business License. Topics include pesticide safety and application, pesticide modes of action, pesticide regulation, applicator licensing and certification, accepted standards for integrated pest management, and the methods and practices of preventing and controlling common landscape weeds, invertebrate and vertebrate pests, nematodes, and infectious and noninfectious plant diseases. Environmental concerns regarding pesticide resistance, surface and groundwater contamination, and other exposures will be covered.

HORT 299 Experimental Offering in Horticulture

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

HORT 300 Introduction to Horticulture

Units: 3
Hours: 54 hours LEC

Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L5

Introduction to Horticulture is a general, entry level course into environmental horticulture with an emphasis on basic plant science, plant use and care, and the landscape and nursery industries. Topics include basic botany, cultural practices, propagation, structures and layout, pest management, planting, container gardening, plant identification, turfgrass installation and care, and a survey of career opportunities.

HORT 302 Soils, Soil Management, and Plant Nutrition

Same As: PLTS 310
Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: HORT 300 and PLTS 300
Transferable: CSU; UC
General Education: Local GE L5; Cal-GETC Area 5A; Cal-GETC Area 5C
C-ID: C-ID AG - PS 128L

This course provides a basic knowledge of the physical, chemical, and biological properties of soils. Course content includes fundamental soil properties, soil and plant relationships, principles of soil formation, soil biology, fertilizers and soil management, salinity, pH, erosion management, and non-agricultural uses. Field trips may be required and may require a fee. This course is the same as PLTS 310, and only one may be taken for credit.

HORT 303 Integrated Pest Management

Same As: PLTS 332
Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: HORT 300 and PLTS 300
Transferable: CSU

This course is a study of the identification and management of common plant pests encountered in horticultural and agricultural settings. The focus of this course will be on the selection and application of appropriate Integrated Pest Management strategies for weeds, infectious plant diseases, non-infectious / abiotic plant disorders, vertebrate and invertebrate pests, and other pest organisms. Topics include the recognition and diagnosis of plant problems, pest types and life cycles, host and habitat relationships, and the integrated pest management strategies and best management practices to achieve control. Field trips may be required and may require a fee. This course is the same as PLTS 332, and only one may be taken for credit.

HORT 305 Plant Identification-Fall Selections

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: HORT 300
Transferable: CSU; UC (HORT 305 and 306 combined: maximum transfer credit is one course)
C-ID: C-ID AG - EH 112L

This course is the identification and study of the growth habits, cultural practices, and ornamental uses of landscape and indoor plants adapted to California climates. Plants emphasized will come from the current list(s) of recommended plants to study in preparation for industry certification exams. This course will focus on those plants best suited to the Sacramento region and observed during the fall / winter seasons. Students may be required to attend off-campus field trips.

HORT 306 Plant Identification-Spring Selections

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: HORT 300
Transferable: CSU; UC (HORT 305 and 306 combined: maximum transfer credit is one course)
C-ID: C-ID AG - EH 108L

This course is the identification and study of the growth habits, cultural practices, and ornamental uses of landscape and indoor plants adapted to California climates. Plants emphasized will come from the current list(s) of recommended plants to study in preparation for industry certification exams. This course will focus on those plants best suited to the Sacramento region and observed during the spring / summer seasons. College sponsored field trips may be required.

HORT 307 Plant Identification - Sustainable and CA Native Selections

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: HORT 300
Transferable: CSU; UC

This course is the identification and study of the growth habits, cultural practices, and ornamental uses of California native plants, as well as non-native plant species that are well adapted to California climates and appropriate for sustainable landscaping. Plants emphasized will come from the current list(s) of recommended plants to study in preparation for industry certification exams. College sponsored field trips may be required.

HORT 312 Plant Propagation

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: HORT 300 with a grade of "C" or better
Transferable: CSU
C-ID: C-ID AG - EH 116L

This course is a study of the fundamental principles and production practices involved in the propagation of plant species, with an emphasis on ornamental plant production for the nursery industry. Topics include propagule selection and techniques utilized to make more plants; sexual and asexual reproduction; planting, transplanting, fertilizing, and plant pest and disease control; structures and site layout; preparation and use of propagating and planting mediums; use and maintenance of common tools and equipment; marketing and sales; and regulations pertaining to plant propagation and nursery production.

HORT 313 Sustainable Agriculture

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L5

This course provides a comprehensive study of sustainable agriculture that addresses many environmental and social concerns while providing innovative and economically viable techniques for growers. It integrates the theoretical aspects of sustainable agriculture, principles and practices with field-based laboratory and participatory learning of sustainable agriculture practices. College sponsored field trips may be required.

HORT 320 Sustainable Landscape Construction

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: HORT 300
Transferable: CSU

This course covers the fundamentals of landscape construction, including soil preparation, paving and construction materials, hand and power tool use, turf and plant installation, plan reading, estimating, and bid preparation. It will emphasize approved traditional industry construction methods, as well as sustainable alternative and techniques. Local codes and state requirements will also be covered. This course is an initial step in preparation for the California State C-27 Landscape Contractor License exam. Field trips may be required.

HORT 324 Sustainable Landscape Maintenance

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: HORT 300 with a grade of "C" or better
Transferable: CSU

This course is a study of landscape management practices and prepares students to evaluate and improve the function and aesthetic value of residential and commercial landscapes, parks, highways, and public buildings by applying appropriate, sustainable maintenance techniques. Topics include the safe operation and maintenance of hand tools and power equipment for the trade, basic lawn care, basic tree and shrub care, planting and transplanting, pruning, water-efficient irrigation, sustainable plant nutrition and soils management, integrated pest management, and landscape maintenance business practices. Both interior and exterior landscape maintenance will be discussed. Students may be required to attend off-campus field trips.

HORT 340 Landscape and Irrigation Graphics and Design

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: HORT 300 with a grade of "C" or better
Advisory: HORT 305, 306, or 307
Transferable: CSU

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 Computer-Aided Drafting and Design (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. Students may be required to attend off-campus field trips.

HORT 350 Landscape Irrigation

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: HORT 300 and 340; Hort 322 from ARC with a grade of "C" or better satisfies the Hort 340 advisory.
Transferable: CSU

This course prepares students to design, install, and maintain water efficient landscape irrigation systems. Topics include current California State water use regulations and ordinances, water supply, basic hydraulics, component identification and terminology, system layout, pipe sizing, water application devices, valves, and controllers. Students can earn QWEL (Qualified Water Efficient Landscaper) certification by achieving a passing score on the final exam. (Minimum passing score will be announced in class). Students may be required to attend off-campus field trips.

HORT 351 Drip and Subsurface Irrigation

Units: 2
Hours: 27 hours LEC; 27 hours LAB
Prerequisite: None.
Advisory: HORT 300, 340, and 350
Transferable: CSU

This course prepares students to design, install and maintain water efficient, surface and subsurface drip irrigation systems. Topics include component identification and terminology, system layout, pipe sizing, water application equipment. College sponsored field trips may be required.

HORT 353 Sustainable Water Management

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: HORT 350 with a grade of "C" or better; Hort 105 from ARC with a grade of "C" or better satisfies the Hort 350 prerequisite.
Advisory: HORT 300
Transferable: CSU

This course prepares students to maintain and manage water efficient landscape irrigation systems utilizing the latest irrigation technology including water efficient application equipment, traditional and smart controllers, and environmental sensors. Topics include the review of the current California State Model Water Efficient Landscape Ordinance, inspection and performance assessment of irrigation systems, determining sprinkler precipitation and consumption rates, calculating water budgets, assessing soil/water relationships of the landscape, installing smart controllers and environmental

sensors, controller programming, developing water schedules, and irrigation system management for efficient water use. Students can earn QWEL (Qualified Water Efficient Landscaper) certification by achieving a passing score on the final exam. (Minimum passing score will be announced in class). College sponsored field trips may be required.

HORT 360 Introduction to Tree Care and Urban Forestry

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: HORT 300 with a grade of "C" or better
Transferable: CSU

This course is an introductory study and application of the principles and practices of tree care and urban forestry. This course will focus on tree biology, tree identification, plant health care, soils, plant nutrition, planting, worker safety, climbing, pruning, and the safe and effective use of tree-care tools and equipment. This course prepares the student to obtain a Certified Arborist designation through the International Society of Arboriculture. College sponsored field trips may be required.

HORT 495 Independent Studies in Horticulture

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

HORT 498 Work Experience in Horticulture

Units: 0.5 - 4
Hours: 27 - 216 hours LAB
Prerequisite: None.
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position or job related to career goals in Horticulture.
Transferable: CSU

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in transfer level degree occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and complete 27 hours of related work experience for 0.5 unit. An additional 27 hours of related work experience is required for each additional 0.5 units. 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 499 Experimental Offering in Horticulture

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU

This is the experimental courses description.

Human/Career Development

Human/Career Development courses are designed to assist students with recognizing their full potential through developing self awareness, educational management and lifelong independent career planning skills. Instruction includes obtaining skills necessary to succeed in college and make positive and productive work/life decisions.

Dean Kris Hubbard

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Human/Career Development (HCD) Courses

HCD 89 Study Strategies Lab

Units: 0.25 - 1
Hours: 13.5 - 54 hours LAB
Prerequisite: None.

This course will provide non-traditional individualized instructional support for students with disabilities who are enrolled in other college classes. Graded on a Pass/No Pass basis. This is an open-entry, open-exit class that can be taken for 0.25-1.0 units, and where a student may enroll at any time during first nine (9) weeks of the semester.

HCD 110 Building Foundations for Success

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
General Education: Local GE L7B

This course provides success strategies and support services to entry level students. The strategies and support services are threaded through three critical areas that enhance student success: academic skills, personal life management, and educational navigation.

HCD 112 College Survival

Units: 0.25 - 1
Hours: 4.5 - 18 hours LEC
Prerequisite: None.

The purpose of this course is to help the entry-level college student develop the confidence, knowledge, and skills necessary to become successful in college. Topics covered in College Survival include campus resources, academic planning, self-esteem and motivation, assertiveness and interpersonal relationships, as well as the principles of time and stress management.

HCD 122 Study Skills

Units: 1
Hours: 18 hours LEC
Prerequisite: None.
General Education: Local GE L7B

This course covers specific study skills strategies. It provides the opportunity to analyze attitudes toward studying, and current study skill habits. Topics include specific learning styles, strategies for time management, goal setting, note-taking, memory improvement, reading skills, and how to prepare for, and take exams.

HCD 299 Experimental Offering in Human Career Development

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

HCD 310 College Success

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L7B

This course is designed to assist students in obtaining the skills and knowledge necessary to reach their educational objectives. Topics to be covered include: motivation and discipline, memory development, time management, communication skills, career planning, study skills and techniques, question-asking skills and personal issues that face many college students. Campus resources and information competency will also be covered. It is highly recommended for first time college students; however, continuing students also benefit from this course. The course may be offered for specific populations. Career and/or Learning Styles assessments may be required, and a field trip may be required.

HCD 320 Skills for Online Student Success

Units: 1
Hours: 18 hours LEC
Prerequisite: None.
Transferable: CSU

This course is designed to familiarize students with the skills required to succeed in an online course. Students will explore how to use various Internet tools to effectively learn in an online environment. Topics include online course equipment needs; using a word processor to support class assignments; sending email attachments; effective use of discussion groups, email, and synchronous chat sessions; researching on the Internet; evaluating Internet sources; working collaboratively online. This course is graded on a pass/no pass basis.

HCD 330 Life and Career Planning

Units: 1
Hours: 18 hours LEC
Prerequisite: None.

Transferable: CSU
General Education: Local GE L7B

This course is a comprehensive approach to life and career planning based on extensive measurement of aptitude, interests, personality type, values, and skills. Personal and career goals will be formulated using career research and decision making strategies. Course topics will include changing career trends and job search techniques.

HCD 346 Career and Workforce Skills

Units: 1
Hours: 18 hours LEC
Prerequisite: None.
Transferable: CSU
General Education: Local GE L7B

This course provides students with opportunities to develop marketable skills in preparation for employment and assists students in learning about the world of work. Course content includes understanding the application of education to the workforce, developing workplace skills and competencies. The content of this course covers the orientation materials and meets the orientation requirement for Work Experience 198, 298 and 498 at Cosumnes River College.

HCD 382 Learning Strategies for College and Life

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L7B

This course provides a universal learning environment that supports students with specific learning differences, through adaptive strategies and techniques essential for achieving academic and personal success. Topics include adaptive technology, organization, learning modalities, time management, memory development, motivation, note-taking, personal wellness, study skills, testing techniques, and critical thinking methods. Also covered are communication approaches, personal and academic barriers, and disability awareness. Additionally, campus/community resources, college regulations, and proficiency expectations are covered.

HCD 495 Independent Studies in Human Career Development

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

HCD 499 Experimental Offering in Human Career Development

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

HCD 1000 Supervised Tutoring

Units: 0
Prerequisite: None.

This course offers individualized tutoring designed to assist students to increase their success in college courses. Students may enroll for support of more than one college course per semester. Content will vary depending upon the adjunct course. Attention will be given to essential study skills and utilization of campus learning resources. May be repeated in subsequent semesters.

Humanities

This program offers an interdisciplinary approach to the study of classical, modern, American and non-Western humanities. Cultural understanding and sensitivity are fostered by examining arts, philosophy, religion, politics and social events in cultural context. CRC offers an A.A. Degree in Interdisciplinary Studies, Humanities. Students interested in pursuing a degree in Humanities can find further information in the Interdisciplinary Studies Program.

Degrees Offered

A.A. in American Studies

A.A. in Humanities

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Associate Degrees

A.A. in American Studies

American Studies is the study of American culture, which includes an exploration of the arts, ideas, skills and institutions in US society.

Highlights include:
- A broad foundation for a variety of career or transfer opportunities in the study of culture
- Professional, student-centered, diverse and innovative staff committed to providing the best possible American Studies education
- A diverse set of course offerings which allows students to select based on their interests

Note to Transfer Students:
If you are interested in transferring to a four-year college or university to pursue a bachelor's degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate's degree in this major may be different from the requirements needed for the Bachelor's degree.

Degree Requirements

Course Code	Course Title	Units
HUM 332	American Humanities	3
SOC 321	Race, Ethnicity and Inequality in the United States	3
HIST 310	History of the United States (To 1877) (3)	3
or HIST 311	History of the United States (1865 - Present) (3)	
or HIST 314	Recent United States History (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 331	Women in American History (3)	
A minimum of 12 units from the following:		12
ANTH 334	Native Peoples of North America (3)	
ARTH 325	Native American Art History (3)	
BUS 345	Law and Society (3)	
DANCE 310	Jazz Dance I (1)	
or DANCE 351	Hip Hop I (1)	
DEAF 351	Introduction to American Deaf Culture (3)	
ENGLT 320	American Literature I (3)	
or ENGLT 321	American Literature II (3)	
or ENGLT 330	African American Literature (3)	
or ENGLT 336	Race and Ethnicity in Contemporary American Literature (3)	
ETHNS 300	Introduction to Ethnic Studies (3)	
or ETHNS 320	Introduction to African American Studies (3)	
or ETHNS 330	Introduction to Asian American Studies (3)	
or ETHNS 360	Introduction to Chicana/o/x Studies (3)	
or ETHNS 344	The Latino Experience in America (3)	
HUM 339	African American Humanities (3)	
MUFHL 308	Introduction to Music: Rock & Roll (3)	
or MUFHL 315	Jazz History (3)	
POLS C1000	American Government and Politics (3)	
or POLS C1000H	American Government and Politics - Honors (3)	
SPAN 427	Introduction to Spanish American Literature (3)	
TA 306	Diversity in American Drama (1960 to Present) (3)	
Total Units:		**21**

The American Studies Associate in Arts (A.A.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Student Learning Outcomes

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

- PSLO 1: Synthesize multiple disciplines focusing on U.S. society, such as history, art appreciation, music appreciation, and philosophy to achieve cultural literacy.
- PSLO 2: Practice college level critical thinking and writing in the interdisciplinary courses within the American Studies major.
- PSLO 3: Evaluate cross-cultural links between multiple disciplines focusing on U.S. society, with an emphasis

on commonalities of cultural expression between different subcultures in the U.S.

- PSLO 4: Develop a foundation for cultural pluralism, a rejection of previous personal prejudices, and knowledge of and comfort with others unlike themselves.

Career Information

Research; Archivist; Education; Historian; Law; Politics Some career options may require more than two years of college study. Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.

A.A. in Humanities

Humanities is the study of culture. This CRC major is intended for students who wish a general background in the areas of humanities or social science at the community college level. Several options are offered in specific interest areas but all are intended to give the student an interdisciplinary foundation for further study or an overview of the area chosen. Students who also wish to transfer to a four-year college should plan their programs to meet general education and lower division major requirements. All students are encouraged to consult with a counselor.
Highlights include:
* A valuable foundation for a variety of career or transfer opportunities
* Diversified and talented faculty
* Overview of theoretical and cultural principles

Note to Transfer Students:
If you are interested in transferring to a four-year college or university to pursue a bachelor's degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate's degree in this major may be different from the requirements needed for the Bachelor's degree.

Degree Requirements

Course Code	Course Title	Units
HUM 300	Classical Humanities	3
HUM 310	Modern Humanities	3
HUM 320	Asian Humanities	3
A minimum of 3 units from the following:		3
HUM 301	Introduction to the Humanities (3)	
HUM 324	Global Islam: Culture and Civilization (3)	
HUM 331	Latin American Humanities (3)	
HUM 332	American Humanities (3)	
HUM 339	African American Humanities (3)	
HUM 370	Women and the Creative Imagination (3)	
A minimum of 9 units from the following:		9
ARTH 300	Art Appreciation (3)	
ENGCW 400	Creative Writing (3)	
ENGLT 310	English Literature I (3)	
ENGLT 311	English Literature II (3)	
ENGLT 320	American Literature I (3)	
ENGLT 321	American Literature II (3)	
ENGLT 330	African American Literature (3)	
ENGLT 340	World Literature I (3)	
ENGLT 341	World Literature II (3)	
MUFHL 300	Introduction to Music (3)	
MUFHL 310	Survey of Music History and Literature (Greek Antiquity to 1750) (3)	
MUFHL 311	Survey of Music History and Literature (1750 to the present) (3)	
MUFHL 330	World Music (3)	
PHIL 300	Introduction to Philosophy (3)	
PHIL 310	Introduction to Ethics (3)	
PHIL 320	Logic and Critical Reasoning (3)	
TA 300	Introduction to the Theatre (3)	
Total Units:		**21**

The Humanities Associate in Arts (A.A.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Student Learning Outcomes

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

- PSLO 1: Synthesize multiple disciplines such as history, art appreciation, music appreciation, and philosophy to achieve cultural literacy.
- PSLO 2: Use the interdisciplinary nature of Humanities courses to facilitate college level proficiency in critical thinking and writing.
- PSLO 3: Evaluate cross-cultural links between multiple Humanities disciplines, emphasizing commonalities of human expression between different cultures and shared ideas about the human experience.
- PSLO 4: Develop a greater understanding and tolerance of cultures other than the student's own by exposing the student to artistic materials not from their own culture or time period.

Career Information

Archivist; Librarian; Research; Teacher; Law; Administrator; Attorney; Historian; Foreign Service Some career options may require more than two years of college study. Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.

Humanities (HUM) Courses

HUM 300 Classical Humanities

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligibility for ENGL C1000 (formerly known as ENGWR 300).
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3B

The course focuses upon Western culture in its attempt to interpret human experience and identity. The course examines basic human values as exemplified in the arts, philosophy and history. Emphasis is on the Greeks, the Romans, and the Judeo-Christian tradition up to the end of the Middle Ages.

HUM 301 Introduction to the Humanities

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligibility for ENGL C1000 (formerly known as ENGWR 300).
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3B

This course introduces students to the Humanities and the Arts. Emphasis is placed on appreciation. Students develop the tools necessary to analyze and appreciate masterworks from diverse cultures and time periods.

HUM 310 Modern Humanities

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3B

This course focuses upon Western culture in its attempt to interpret human experience and identity. The course examines basic human values as exemplified in the arts, philosophy, and history. Emphasis is on the Renaissance, the Baroque period, and the Modern World.

HUM 320 Asian Humanities

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3B

This course focuses on ancient Indian, Chinese and Japanese cultures to interpret human experience and identity. The quest for truth is traced in various forms of humanistic self-expression--literature, art, music, philosophy and history.

HUM 324 Global Islam: Culture and Civilization

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3B

The course is an introduction to global Islamic cultures from the 7th century to contemporary times, with emphasis on religious/philosophic concepts, and their expression in literature and the arts. Focus is placed upon Arab, Persian, African, Asian and American contributions. Students may be required to attend a live performance or museum visit.

HUM 331 Latin American Humanities

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3B

This interdisciplinary course focuses on understanding the cultures, societies, economics, politics and artistic expressions of Mexico, Central America and South America. The quest for understanding culture includes an exploration of literature, art, architecture, music, theatre, history, philosophy, politics, race, gender, and class. Emphasis is placed on Pre-Contact, Post-Conquest and Colonial, Post-Independence, Contemporary and Diasporic Latin American humanistic expressions of culture.

HUM 332 American Humanities

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligibility for ENGL C1000 (formerly known as ENGWR 300).
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3B

This course examines ideas and values about the American experience in the 20th century by analyzing the literature, art, music, philosophy and history of the past 100 years. The course draws upon the arts of African American, Native American, Asian American, Anglo and Latino cultures as avenues for understanding issues of race, ethnicity, class, and gender as they intersect with mainstream American values in the past 100 years. Students may be required to attend a live performance or museum exhibition that may require an entrance fee.

HUM 339 African American Humanities

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3B

This course examines African American experience in the United States through the products of culture created by Black Americans. The course synthesizes the production of music, art, literature, politics and philosophy to understand historic and contemporary influences and experiences of African American identity and expression. Students may be required to attend and analyze at least one live performance of the arts (music, theater, dance) or museum.

HUM 370 Women and the Creative Imagination

Units: 3

Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3B

This course examines the creative powers of women throughout the history of art from antiquity to the present. The course offers an interdisciplinary perspective on the contributions of women artists as evidenced in literature and the visual and performing arts. Using gender as the primary lens of analysis, this course seeks to uncover the broader contexts of female experience by probing the relationship women artists had to the historical periods in which they lived and worked. Students may be required to attend a live performance or museum visit.

HUM 495 Independent Studies in Humanities

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

HUM 499 Experimental Offering in Humanities

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU

This is the experimental courses description.

Interdisciplinary Studies

This CRC major is intended for students who wish a general background across several academic disciplines at the community college level. Several areas of interest are offered, but all are intended to supply the student with an interdisciplinary foundation for further study and an overview of the interest area chosen.

Students who also wish to transfer to a four-year college should plan their programs to meet general education and lower division major requirements. All students are encouraged to consult with a counselor.

Degrees Offered

A.A. in Interdisciplinary Studies, Ethnic Studies

A.A. in Interdisciplinary Studies, Women's Studies

A.A. in Liberal Arts - Arts and Humanities

A.A. in Liberal Arts - Communication and Writing

A.A. in Liberal Arts - Social and Behavioral Sciences

A.S. in Liberal Arts - Math and Science

Dean Emilie Mitchell

Phone (916) 691-7656

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Associate Degrees

A.A. in Interdisciplinary Studies, Ethnic Studies

This CRC major is intended for students who wish a general background in the areas of humanities or social science at the community college level. Several options are offered in specific interest areas but all are intended to give the student an interdisciplinary foundation for further study or an overview of the area chosen. Students who also wish to transfer to a four-year college should plan their programs to meet general education and lower division major requirements. All students are encouraged to consult with a counselor.
Highlights include:
* A valuable foundation for a variety of career or transfer opportunities
* Diversified and talented faculty
* Overview of theoretical and cultural principles

Note to Transfer Students:
If you are interested in transferring to a four-year college or university to pursue a bachelor's degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate's degree in this major may be different from the requirements needed for the Bachelor's degree.

Degree Requirements

Course Code	Course Title	Units
SOC 321	Race, Ethnicity and Inequality in the United States	3
A minimum of 9 units from the following:		9[1]
ANTH 334	Native Peoples of North America (3)	
ENGLT 330	African American Literature (3)	
HIST 320	History of the United States: African-American Emphasis (3)	
or HIST 321	History of the United States: African-American Emphasis (3)	
A minimum of 9 units from the following:		9[2]
BUS 300	Introduction to Business (3)	
ENGLT 320	American Literature I (3)	
or ENGLT 321	American Literature II (3)	
HIST 314	Recent United States History (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 331	Women in American History (3)	
HUM 332	American Humanities (3)	
PHIL 350	Philosophy of Religion (3)	
POLS C1000	American Government and Politics (3)	
SOC 300	Introductory Sociology (3)	
or SOC 301	Social Problems (3)	
Total Units:		**21**

[1]No more than one course from each group (e.g. no more than one History course).

[2]No more than one course from each group (e.g. no more than one History course).

The Interdisciplinary Studies, Ethnic Studies Associate in Arts (A.A.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Career Information

Religious Service; Human Service Careers; Research; Teacher; Law;Administrator; Attorney; Historian; Foreign Service; Archivist; Social Worker;Public Relations Consultant; Employment Counselor; Probation Officer; Counselor Some career options may require more than two years of college study. Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.

A.A. in Interdisciplinary Studies, Women's Studies

This CRC major is intended for students who wish a general background in the areas of humanities or social science at the community college level. Several options are offered in specific interest areas but all are intended to give the student an interdisciplinary foundation for further study or an overview of the area chosen. Students who also wish to transfer to a four-year college should plan their programs to meet general education and lower division major requirements. All students are encouraged to consult with a counselor.

This program is designed for both men and women, focusing on women and their
* Achievements
* Behavior, Feelings, and Experience
* Historical Significance
* Cultural and Social Contribution
* Roles in Society and the Political System
* Literary Significance, and
* Positions in the Business World

Highlights include:
* A valuable foundation for a variety of career or transfer opportunities
* Diversified and talented faculty
* Overview of theoretical and cultural principles

Note to Transfer Students:
If you are interested in transferring to a four-year college or university to pursue a bachelor's degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate's degree in this major may be different from the requirements needed for the Bachelor's degree.

Degree Requirements

Course Code	Course Title	Units
A minimum of 9 units from the following:		9
ENGLT 360	Women in Literature (3)	
or HIST 331	Women in American History (3)	
or PSYC 356	Human Sexuality (3)	
A minimum of 12 units from the following:		12[1]
ANTH 334	Native Peoples of North America (3)	
BUS 300	Introduction to Business (3)	
ENGLT 310	English Literature I (3)	
or ENGLT 311	English Literature II (3)	
or ENGLT 320	American Literature I (3)	
or ENGLT 321	American Literature II (3)	
or ENGLT 330	African American Literature (3)	
or ENGLT 340	World Literature I (3)	
or ENGLT 341	World Literature II (3)	
or ENGLT 360	Women in Literature (3)	
HIST 314	Recent United States History (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 331	Women in American History (3)	
HUM 332	American Humanities (3)	
PHIL 310	Introduction to Ethics (3)	
or PHIL 320	Logic and Critical Reasoning (3)	
or PHIL 338	Contemporary Philosophy (3)	
POLS C1000	American Government and Politics (3)	
PSYC 356	Human Sexuality (3)	
SOC 300	Introductory Sociology (3)	
or SOC 301	Social Problems (3)	
or SOC 321	Race, Ethnicity and Inequality in the United States (3)	
Total Units:		**21**

[1]No more than one course from each group (e.g. no more than one English course).

The Interdisciplinary Studies, Women's Studies Associate in Arts (A.A.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Career Information

Religious Service; Human Service Careers; Research; Teacher; Law;Administrator; Attorney; Historian; Foreign Service; Archivist; Social Worker;Public Relations Consultant; Employment Counselor; Probation Officer; Counselor Some career options may require more than two years of college study. Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.

A.A. in Liberal Arts - Arts and Humanities

The Associate Degree in Liberal Arts - Arts and Humanities is designed for students who wish a broad knowledge of the arts and humanities. Students must satisfactorily complete 60 units of collegiate coursework with a "C" (2.0) grade point average in curriculum that the district accepts toward this degree.

Note: If you plan to transfer to a CSU, consider an Associates in Arts for Transfer degree such as the Art History, Art Design, History, Music, Spanish, Studio Arts or Theatre Arts AA-T rather than this degree. Please see a counselor for assistance with selecting the most appropriate transfer courses (i.e. 300 or higher numbered courses). If you plan to transfer to a UC campus or a private college or university, please see a

counselor to determine if this degree is the most appropriate choice.

Degree Requirements

Course Code	Course Title	Units
A minimum of 18 units from the following:		18
Courses must be chosen from at least two disciplines:		
ARCH 310	History of Architecture (3)	
ARCH 332	Design Awareness (3)	
ART 300	Drawing and Composition I (3)	
ART 302	Drawing and Composition II (3)	
ART 304	Figure Drawing I (3)	
ART 305	Figure Drawing II (3)	
ART 312	Portrait Drawing (3)	
ART 320	Design: Fundamentals (3)	
ART 323	Design: Color Theory (3)	
ART 324	Collage and Assemblage (3)	
ART 327	Painting I (3)	
ART 328	Painting II (3)	
ART 361	Printmaking: Survey (3)	
ART 370	Three Dimensional Design (3)	
ART 372	Sculpture (3)	
ART 430	Art and Children (3)	
ARTH 300	Art Appreciation (3)	
ARTH 303	Art Survey: Ancient to 14th Century (3)	
ARTH 309	Art Survey: Renaissance to 19th Century (3)	
ARTH 311	Art Survey: Modern Art (3)	
ARTH 312	Women in Art (3)	
ARTH 324	Art of the Americas (3)	
ARTH 325	Native American Art History (3)	
ARTH 328	Survey of African Art (3)	
ARTH 332	Asian Art (3)	
ARTH 333	Introduction to Islamic Art (3)	
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)	
ENGCW 400	Creative Writing (3)	
ENGCW 410	Fiction Writing Workshop (3)	
ENGLT 303	Introduction to the Short Story (3)	
ENGLT 310	English Literature I (3)	
ENGLT 311	English Literature II (3)	
ENGLT 320	American Literature I (3)	
ENGLT 321	American Literature II (3)	
ENGLT 330	African American Literature (3)	
ENGLT 336	Race and Ethnicity in Contemporary American Literature (3)	
ENGLT 340	World Literature I (3)	
ENGLT 341	World Literature II (3)	
ENGLT 343	Contemporary Regional World Literature (3)	
ENGLT 345	Mythologies of the World (3)	
ENGLT 360	Women in Literature (3)	
ENGLT 370	Children and Literature (3)	
ENGLT 402	Introduction to Shakespeare and Film (3)	
ENGWR 301	College Composition and Literature (3)	
FMS 300	Introduction to Film Studies (3)	
FMS 305	Film History I (1895-1949) (3)	
FMS 320	Film Genre (3)	
FMS 488	Honors Seminar: Introduction to Critical Theory (3)	
HIST 364	Asian Civilization (3)	
HIST 365	Asian Civilization (3)	
HIST 380	History of the Middle East (3)	
HUM 300	Classical Humanities (3)	
HUM 301	Introduction to the Humanities (3)	
HUM 310	Modern Humanities (3)	
HUM 320	Asian Humanities (3)	
HUM 324	Global Islam: Culture and Civilization (3)	
HUM 331	Latin American Humanities (3)	
HUM 332	American Humanities (3)	
MUFHL 300	Introduction to Music (3)	
MUFHL 308	Introduction to Music: Rock & Roll (3)	
MUFHL 310	Survey of Music History and Literature (Greek Antiquity to 1750) (3)	
MUFHL 311	Survey of Music History and Literature (1750 to the present) (3)	
MUFHL 315	Jazz History (3)	
MUFHL 321	Basic Musicianship (3)	
MUFHL 330	World Music (3)	
MUFHL 400	Music Theory and Musicianship I (4)	
MUIVI 310	Voice Class I (2)	
MUIVI 311	Voice Class II (2)	
MUIVI 340	Beginning Piano (2)	
MUIVI 341	Piano II (2)	
MUIVI 350	Piano III (2)	
MUIVI 351	Piano IV (2)	
MUIVI 370	Beginning Guitar (2)	
MUIVI 371	Intermediate Guitar (2)	
MUIVI 495	Independent Studies in Music Instrumental/Voice Instruction (1 - 3)	
MUSM 370	Music for Children (3)	
MUP 310	Orchestra (2)	
MUP 320	Jazz Band (2)	
MUP 350	Concert Choir I (2)	
MUP 357	College Chorus (2)	
MUP 360	Chamber Singers (2)	
PHIL 300	Introduction to Philosophy (3)	

Course Code	Course Title	Units
PHIL 304	Introduction to Asian Philosophy (3)	
PHIL 310	Introduction to Ethics (3)	
PHIL 330	History of Classical Philosophy (3)	
PHIL 331	History of Modern Philosophy (3)	
PHIL 338	Contemporary Philosophy (3)	
PHIL 350	Philosophy of Religion (3)	
PHIL 352	Introduction to World Religions (3)	
PHIL 356	Introduction to the Bible (3)	
PHIL 360	Social/Political Philosophy (3)	
PHOTO 301	Beginning Photography (3)	
PHOTO 420	History of Photography (3)	
RTVF 305	Film History I (1895-1949) (3)	
RTVF 378	Acting for the Camera (3)	
SPAN 401	Elementary Spanish I (4)	
SPAN 402	Elementary Spanish II (4)	
SPAN 411	Intermediate Spanish (4)	
SPAN 412	Intermediate Spanish (4)	
SPAN 413	Spanish for Native Speakers I (4)	
SPAN 415	Spanish for Native Speakers II (4)	
SPAN 425	Advanced Reading and Conversation (3)	
SPAN 426	Introduction to Mexican American Literature (3)	
SPAN 427	Introduction to Spanish American Literature (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 350	Theory and Techniques of Acting I (3)	
TA 356	Acting for the Camera I (3)	
TA 401	Children's Literature and Creative Drama (3)	
VIET 401	Elementary Vietnamese (4)	
VIET 402	Elementary Vietnamese (4)	
VIET 411	Intermediate Vietnamese (4)	
VIET 412	Intermediate Vietnamese (4)	
Total Units:		**18**

The Liberal Arts - Arts and Humanities Associate in Arts (A.A.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Student Learning Outcomes

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

- Demonstrate an appreciation of artistic endeavors, cultural expressions, ideas and/or institutions through nonempirical, analytic, interpretive studies and critical thinking projects. (PSLO 1)
- Articulate the development of and relationships between different civilizations, cultural traditions, ideas and/or institutions through the application of non-empirical, analytical reasoning. (PSLO 2)
- Evaluate critically the analyses and interpretations by others (including significant historical or contemporary analyses and interpretations) of arts, ideas, skills (including language), and/or institutions. (PSLO 3)
- Express clearly her or his own analyses and interpretations of arts, ideas, skills (including language), and/or institutions, and will properly use the vocabulary appropriate to the field. (PSLO 4)

A.A. in Liberal Arts - Communication and Writing

The Associate Degree in Liberal Arts - Communication and Writing is designed for students who wish a broad knowledge of communication studies and writing. Students must satisfactorily complete 60 units of collegiate coursework with a "C" (2.0) grade point average in curriculum that the district accepts toward this degree.

Note: If you plan to transfer to a CSU, consider completing an Associates in Arts for Transfer degree such as the Communications Studies, English, or Journalism AA-T rather than this degree. Please see a counselor for assistance with selecting the most appropriate transfer courses (i.e. 300 or higher numbered courses). If you plan to transfer to a UC campus or a private college or university, please see a counselor to determine if this degree is the most appropriate choice.

Degree Requirements

Course Code	Course Title	Units
A minimum of 18 units from the following:		18
Courses must be chosen from at least two disciplines:		
COMM C1000	Introduction to Public Speaking (3)	
COMM 311	Argumentation and Debate (3)	
COMM 315	Persuasion (3)	
COMM 331	Group Discussion (3)	
COMM 361	The Communication Experience (3)	
ENGL C1000	Academic Reading and Writing (3)	
ENGWR 301	College Composition and Literature (3)	
ENGL C1001	Critical Thinking and Writing (3)	
ENGRD 310	Critical Reading as Critical Thinking (3)	
PHIL 300	Introduction to Philosophy (3)	
PHIL 320	Logic and Critical Reasoning (3)	
PHIL 325	Symbolic Logic (3)	
SOC 305	Critical Thinking in the Social Sciences (3)	
Total Units:		**18**

The Liberal Arts - Communication and Writing Associate in Arts (A.A.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Student Learning Outcomes

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

- Conduct audience analysis to design an appropriate purpose, topic, style and speech structure within formal presentations. Express their ideas clearly in well-organized written messages. (PSLO 1)
- Construct an effective presentation to a specific topic by collecting relevant information and employing credible evidence with proper documentation. (PSLO 2)
- Determine and use appropriate communications technologies to convey information. (PSLO 3)
- Use correct and appropriate conventions of mechanics, usage, and style in written communication. (PSLO 4)

A.A. in Liberal Arts - Social and Behavioral Sciences

The Associate Degree in Liberal Arts - Social and Behavioral Sciences is designed for students who wish a broad knowledge of social and behavioral sciences. Students must satisfactorily complete 60 units of collegiate coursework with a "C" (2.0) grade point average in curriculum that the district accepts toward this degree.

Note: If you plan to transfer to a CSU after completing this Liberal Arts - Social and Behavioral Sciences degree, please consider an Associate in Arts for Transfer degree such as the Anthropology, Communication Studies, Early Childhood Education, Geography, History, Psychology or Sociology AA-T rather than this degree. See a counselor for assistance with selecting the most appropriate transfer courses (i.e. 300 or higher numbered courses). If you plan to transfer to a UC campus or a private college or university, please see a counselor to determine if this degree is the most appropriate choice.

Degree Requirements

Course Code	Course Title	Units
A minimum of 18 units from the following:		18
Courses must be chosen from at least two disciplines:		
AGB 321	Agriculture Economics (3)	
ANTH 310	Cultural Anthropology (3)	
ANTH 316	Global Forces in Culture Change (3)	
ANTH 323	Introduction to Archaeology (3)	
ANTH 324	World Prehistory (3)	
ANTH 331	The Anthropology of Religion (3)	
ANTH 332	Native Peoples of California (3)	
ANTH 334	Native Peoples of North America (3)	
ANTH 341	Introduction to Linguistics (3)	
ANTH 374	Birth to Death: The Anthropology of Primate Culture and Behavior (3)	
BUS 330	Managing Diversity in the Workplace (3)	
BUS 345	Law and Society (3)	
COMM 325	Intercultural Communication (3)	
COMM 341	Organizational Communication (3)	
COMM 363	Introduction to Communication Theory (3)	
COMM 480	Honors Seminar: Political Campaign Communication (3)	
ECE 312	Child Development (3)	
ECE 314	The Child, the Family and the Community (3)	
ECON 302	Principles of Macroeconomics (3)	
ECON 304	Principles of Microeconomics (3)	
ECON 306	Environmental Economics (3)	
ETHNS 300	Introduction to Ethnic Studies (3)	
ETHNS 320	Introduction to African American Studies (3)	
ETHNS 330	Introduction to Asian American Studies (3)	
ETHNS 360	Introduction to Chicana/o/x Studies (3)	
ETHNS 344	The Latino Experience in America (3)	
GEOG 302	Environmental Studies & Sustainability (3)	
GEOG 310	Human Geography: Exploring Earth's Cultural Landscapes (3)	
GEOG 322	Geography of California (3)	
HIST 301	History of Europe and Mediterranean World to 1550 (3)	
HIST 302	History of Europe Since 1500 (3)	
HIST 307	History of World Civilizations to 1500 (3)	
HIST 308	History of World Civilizations, 1500 to Present (3)	
HIST 310	History of the United States (To 1877) (3)	
HIST 311	History of the United States (1865 - Present) (3)	
HIST 314	Recent United States 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 331	Women in American History (3)	
HIST 344	Survey of California History: A Multicultural Perspective (3)	
HIST 360	History of African Civilizations (3)	
HIST 364	Asian Civilization (3)	
HIST 365	Asian Civilization (3)	
HIST 370	History of the Americas through the 19th Century Wars of Independence (3)	
HIST 371	History of the Americas from the 19th Century Wars of Independence to the Present (3)	
HIST 373	History of Mexico (3)	
HIST 380	History of the Middle East (3)	
JOUR 310	Mass Media and Society (3)	
or RTVF 300	Mass Media and Society (3)	
JOUR 320	Race and Gender in the Media (3)	

Course Code	Course Title	Units
PHIL 360	Social/Political Philosophy (3)	
POLS C1000	American Government and Politics (3)	
POLS 302	Comparative Politics (3)	
POLS 304	Introduction to Government: California (3)	
POLS 310	Introduction to International Relations (3)	
POLS 312	Politics of the Middle East (3)	
POLS 313	Latin America (3)	
POLS 314	Modern Europe and the Unification Process (3)	
POLS 315	Pacific Rim (3)	
POLS 317	Global Studies: Africa (3)	
POLS 318	Global Studies: Central Asia (3)	
POLS 319	Global Studies: Southeast Asia (3)	
POLS 320	Introduction to Political Theory (3)	
PSYC C1000	Introduction to Psychology (3)	
PSYC 312	Biological Psychology (4)	
PSYC 320	Social Psychology (3)	
PSYC 335	Research Methods in Psychology (3)	
PSYC 340	Abnormal Behavior (3)	
PSYC 356	Human Sexuality (3)	
PSYC 371	Life Span Developmental Psychology (3)	
SOC 300	Introductory Sociology (3)	
SOC 301	Social Problems (3)	
SOC 302	Introduction to Social Research Methods (3)	
SOC 305	Critical Thinking in the Social Sciences (3)	
SOC 321	Race, Ethnicity and Inequality in the United States (3)	
SOC 341	Sex and Gender in the U.S. (3)	
TA 306	Diversity in American Drama (1960 to Present) (3)	
Total Units:		**18**

The Liberal Arts - Social and Behavioral Sciences Associate in Arts (A.A.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Student Learning Outcomes

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

- Apply accurately the basic vocabulary and concepts of at least one social or behavioral science discipline verbally and in writing. (PSLO 1)
- Examine the possible causes and suggest solutions to introductory problems of a conceptual nature using the methods of at least one social or behavioral scientific discipline. (PSLO 2)
- Recognize the use and misuse of social and behavioral science concepts in society including politics and the media. (PSLO 3)
- Describe both verbally and in writing the role of diverse ethnic, religious and social groups in American political, economic and social development. (PSLO 4)

A.S. in Liberal Arts - Math and Science

The Associate Degree in Liberal Arts - Math and Science is designed for students who wish a broad knowledge of mathematics and the sciences. Students must satisfactorily complete 60 units of collegiate coursework with a "C" (2.0) grade point average in curriculum that the district accepts toward this degree.

Note: If you plan to transfer to the CSU after completing this degree, consider an Associates in Science for Transfer degree such as the Biology, Geography, Geology, Math, or Physics AS-T rather than this degree. Please see a counselor for assistance with selecting the most appropriate transfer courses (i.e. 300 or higher numbered courses). If you plan to transfer to a UC campus or a private college or university, please see a counselor to determine if this degree is the most appropriate choice.

Degree Requirements

Course Code	Course Title	Units
Students must select 3 - 6 units in mathematics/statistics and 12 - 15 units in the remaining science disciplines:		
A minimum of 18 units from the following:		18
ANTH 300	Biological Anthropology (3)	
or ANTH 480	Honors Biological Anthropology (3)	
ANTH 301	Biological Anthropology Laboratory (1)	
or ANTH 482	Honors Biological Anthropology Laboratory (1)	
ASTR 300	Introduction to Astronomy (3)	
ASTR 400	Astronomy Laboratory (1)	
BIOL 308	Contemporary Biology (3)	
BIOL 309	Contemporary Biology Laboratory (1)	
BIOL 342	The New Plagues: New and Ancient Infectious Diseases Threatening World Health (3)	
BIOL 350	Environmental Biology (3)	
BIOL 352	Conservation Biology (3)	
BIOL 400	Principles of Biology (5)	
BIOL 410	Principles of Botany (5)	
BIOL 420	Principles of Zoology (5)	
BIOL 430	Anatomy and Physiology (5)	
BIOL 431	Anatomy and Physiology (5)	
BIOL 440	General Microbiology (4)	
BIOL 485	Honors Seminar in Genetics (3)	
CHEM 300	Beginning Chemistry (4)	
CHEM 305	Introduction to Chemistry (5)	
CHEM 306	Introduction to Organic and Biological Chemistry (5)	
CHEM 309	Integrated General, Organic, and Biological Chemistry (5)	
CHEM 400	General Chemistry I (5)	

Course Code	Course Title	Units
CHEM 401	General Chemistry II (5)	
CHEM 420	Organic Chemistry I (5)	
CHEM 421	Organic Chemistry II (5)	
GEOG 300	Physical Geography: Exploring Earth's Environmental Systems (3)	
GEOG 301	Physical Geography Laboratory (1)	
GEOG 305	Global Climate Change (3)	
GEOG 306	Weather and Climate (3)	
GEOL 300	Physical Geology (3)	
GEOL 301	Physical Geology Laboratory (1)	
GEOL 305	Earth Science (3)	
GEOL 310	Historical Geology (3)	
GEOL 311	Historical Geology Laboratory (1)	
GEOL 330	Introduction to Oceanography (3)	
MATH 300	Introduction to Mathematical Ideas (3)	
MATH 310	Mathematical Discovery (3)	
MATH 311	Mathematical Concepts for Elementary School Teachers - Number Systems (3)	
MATH 335	Trigonometry with College Algebra (5)	
MATH 341	Calculus for Business and Economics (4)	
MATH 343	Modern Business Mathematics (4)	
MATH 355	Calculus for Biology and Medicine I (4)	
MATH 356	Calculus for Biology and Medicine II (4)	
MATH 370	Pre-Calculus Mathematics (5)	
MATH 372	College Algebra for Calculus (4)	
MATH 373	Trigonometry for Calculus (4)	
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)	
PHYS 310	Conceptual Physics (3)	
PHYS 350	General Physics (4)	
PHYS 360	General Physics (4)	
PHYS 370	Introductory Physics - Mechanics and Thermodynamics (5)	
PHYS 380	Introductory Physics - Electricity and Magnetism, Light and Modern Physics (5)	
PHYS 411	Mechanics of Solids and Fluids (4)	
PHYS 421	Electricity and Magnetism (4)	
PHYS 431	Heat, Waves, Light and Modern Physics (4)	
PSYC 312	Biological Psychology (4)	
STAT C1000E	Introduction to Statistics (4)	
or ECON 310	Statistics for Business and Economics (3)	
or PSYC 330	Introductory Statistics for the Behavioral Sciences (3)	
Total Units:		**18**

[1]Students must select 3 - 6 units in mathematics/statistics and 12 - 15 units in the remaining science disciplines.

The Liberal Arts - Math and Science Associate in Science (A.S.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Student Learning Outcomes

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

- Explain the core perspectives of the scientific method and apply it to at least one scientific discipline. (PSLO 1)
- Solve introductory problems of a conceptual and/or quantitative nature in at least one scientific discipline. (PSLO 2)
- Apply accurately the basic vocabulary and concepts of at least one scientific discipline verbally and in writing. (PSLO 3)
- Recognize the use and misuse of scientific concepts in society including politics and the media. (PSLO 4)
- Use appropriate quantitative skills at college level to solve problems applicable to occupational and personal activities. (PSLO 5)

Interdisciplinary Studies (INDIS) Courses

INDIS 299 Experimental Offering in Interdisciplinary Studies

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

INDIS 310 Mathematics, Computer Information Science, Engineering and Science Achievement

Units: 0.5
Hours: 9 hours LEC
Prerequisite: None.
Transferable: CSU

This course introduces the student to MESA and to the skills needed for academic success in mathematics, computer information science, engineering, and science. The course covers college resources and transfer processes as they relate to the study of math and science. The course is intended for students who will transfer to universities in a calculus-based major (biology, computer science, chemistry, engineering, mathematics, physics, etc.). This is the first 1/2 unit of a 1 unit combination of courses that will provide academic and career support to MESA students and other students in math-based majors who wish to develop study skills specific to those disciplines. (INDIS 311 or 312 complete the combination.) This course is graded on a Pass/No-Pass basis only.

INDIS 311 Academic Skills for a Career in Engineering, Computer Information Science, Mathematics, Physics and Related Disciplines

Units: 0.5
Hours: 9 hours LEC
Prerequisite: None.
Advisory: INDIS 310
Transferable: CSU

This course introduces the MESA student to academic skills and career exploration needed for advanced study toward a career in Mathematics, Engineering, Computer Information Science, Architecture, and Physics. This course will provide an overview of careers in engineering, math, computer information science, architecture, and physics, including the education, type of work conducted by professionals, and employment opportunities in these fields. The course is the second 1/2 unit of a 1 unit package of courses (see INDIS 310) that will provide academic and career support to MESA students. This course is graded on a pass/no-pass basis only.

INDIS 312 Academic Skills for a Career in Chemistry, Biology and Related Disciplines

Units: 0.5
Hours: 9 hours LEC
Prerequisite: None.
Advisory: INDIS 310
Transferable: CSU

This course introduces the MESA student to academic skills and career exploration needed for advanced study toward a career in Biology, Chemistry, and related fields - including dentistry, medicine, pharmacy, and veterinary medicine. This course will provide an overview of careers in Biology, Chemistry, and related fields, including the education, type of work conducted by professionals, and employment opportunities. The course is the second 1/2 unit of a 1 unit package of courses (see INDIS 310) that will provide academic and career support to MESA students. This course is graded on a pass/no-pass basis only.

INDIS 313 Freshman Seminar

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L7B

This course will assist new college students in achieving academic success. Topics covered will include discipline-specific academic language and culture, the value and demands of a college education, problem-solving strategies, the use of technology in education, academic integrity, campus resources and services, and life during and after college. The course will introduce students to one or more academic disciplines or areas of study and discuss the academic and professional expectations and experiences of those disciplines.

INDIS 350 Life and Culture in Study Abroad

Units: 1 - 3
Hours: 18 - 54 hours LEC
Prerequisite: None.
Enrollment Limitation: The student must complete the pre-enrollment process into the Los Rios Community College District Study Abroad program.
Transferable: CSU

This course is designed to allow students to acquire a level of global competence while enrolled in the Los Rios Study Abroad program. Global competence is a continuing process of acquiring specific economic, historical, and geo-political knowledge which support the intercultural communication skills and authentic lived experiences that allow a person to function in another culture, and result in attitudes of cultural appreciation and interdependence. While participating in a specific Study Abroad program the student will have opportunities to study and generally survey the host country's historical, cultural, and geopolitical influences, as well as the societal structures to develop an understanding and appreciation of the host culture as different from U. S. American culture.

INDIS 499 Experimental Offering in Interdisciplinary Studies

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

Journalism

The Journalism program is designed to train students in the writing, reporting and critical thinking skills required for jobs in the news media or for transfer to a journalism program at a four-year institution.

Degrees Offered

A.A.-T. in Journalism

A.A. in Journalism

Dean Brian Rickel

Department Chair Adam Wadenius

Phone (916) 691-7171

Email wadenia@crc.losrios.edu

Associate Degrees for Transfer

A.A.-T. in Journalism

The Journalism AA-T degree offers students the opportunity to take courses in media theories, news writing and reporting, and writing for publication, which readies them for the courses that offer hands-on experience at the award-winning, student-produced publications: The Connection, a biweekly print newspaper, and www.thecrcconnection.com, the daily online news outlet.

The Journalism AA-T degree is for students who have a goal of transferring to the California State University to attain a Bachelor of Arts or Science in Journalism for the purpose of becoming journalism or communications professionals. Some students pursuing this degree may plan to minor in journalism at a CSU. Lower-division requirements for the major and minor in Journalism may be completed through the Journalism AA-T degree.

The Journalism AA-T degree may be obtained by completing a total of 60 transferable semester units with a minimum 2.0 GPA, to include the California General Education Transfer Curriculum (Cal-GETC); students must also earn a grade of C or better (or "P" if taken pass/no pass) in all the courses for the major as described in the Required Program. Upon successful completion of the degree requirements, students will be guaranteed admission to the CSU system with junior status and will not have to repeat lower division coursework. Students are encouraged to meet with a counselor to develop their educational plans as degree options and general education requirements vary for each university.

Degree Requirements

Course Code	Course Title	Units
CORE COURSES:		
JOUR 310	Mass Media and Society (3)	3
or RTVF 300	Mass Media and Society (3)	
JOUR 300	Newswriting and Reporting	3
JOUR 410	College Media Production I	3
ELECTIVE LIST A - at least 1 course from the following:		
A minimum of 3 units from the following:		3
JOUR 351	Public Relations Writing and Media Techniques (3)	
JOUR 411	College Media Production II (3)	
ELECTIVE LIST B - at least 2 courses from the following:		
A minimum of 6 units from the following:		6
JOUR 320	Race and Gender in the Media (3)	
COMM 311	Argumentation and Debate (3)	
COMM 363	Introduction to Communication Theory (3)	
ECON 302	Principles of Macroeconomics (3)	
or ECON 304	Principles of Microeconomics (3)	
ENGL C1001	Critical Thinking and Writing (3)	
PHOTO 302	Beginning Digital Photography (3)	
POLS C1000	American Government and Politics (3)	
or POLS C1000H	American Government and Politics - Honors (3)	
POLS 302	Comparative Politics (3)	
STAT C1000E	Introduction to Statistics (4)	
or STAT C1000H	Introduction to Statistics - Honors (4)	
Total Units:		**18**

The Associate in Arts in Journalism 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 California General Education Transfer Curriculum (Cal-GETC) Requirement.

Student Learning Outcomes

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

- Write clear and concise stories that adhere to journalistic conventions.
- Conduct research and evaluate information using appropriate methods.
- Demonstrate an understanding of basic news and feature writing in print, broadcast, and on-line media.
- Evaluate their own work and that of others for accuracy, fairness, appropriate style, and grammatical correctness.
- Produce news and feature articles, photographs, and/or multimedia packages for publication in a newspaper or on-line publication.
- Understand and apply the principles of the First Amendment and other laws appropriate to professional practice.
- Apply ethical principles in pursuit of truth, accuracy, fairness, and diversity.
- Identify and explain the processes, elements, history, theory, and effects of modern mass media in society.

Career Information

The AA-T degree in Journalism can provide students with the foundational knowledge necessary for transfer to a 4-year Bachelor of Arts (BA) degree program. Career opportunities for students who have earned BS or BA degrees in Journalism include but are not limited to: news reporter, news editor, broadcast news writer, broadcast news producer, online news editor, online news producer, advertising copy writer, public relations representative. Some careers may require additional training. NOTE TO TRANSFER STUDENTS: The Associate Degree for Transfer program is designed for students who plan to transfer to a campus of the California State University (CSU). Other than the required core, the courses you choose to complete this degree will depend to some extent on the selected CSU for transfer. In addition, some Cal-GETC requirements can also be completed using courses required for this associate degree for transfer major (known as “double-counting”). Meeting with a counselor to determine the most appropriate course choices will facilitate efficient completion of your transfer requirements. For students wishing to transfer to other universities (UC System, private, or out-of-state), the Associate Degree for Transfer may not provide adequate preparation for upper-division transfer admissions; it is critical that you meet with a CRC counselor to select and plan the courses for the major, as programs vary widely in terms of the required preparation.

Associate Degrees

A.A. in Journalism

The Journalism program is designed to train students in the writing, reporting and critical thinking skills required for jobs in the news media or for transfer to a journalism program at a four-year institution.

Highlights include:
* Hands-on experience publishing the college's award-winning newspaper, The Connection. The newspaper showcases students' work in writing, photography, editing, graphic illustration and publication design
* Hands-on experience producing the newspaper's award-winning website. The website allows students to publish breaking news, showcase photo galleries, and post audio and video clips to accompany stories.
* Instruction and practice in desktop publishing, digital photography and graphics applications in the department's Macintosh laboratory or in the campus PC computer laboratory
* Opportunities to attend state journalism conferences, compete for awards in writing, photography, editing and graphic art, and qualify for scholarships
* Opportunities for internships at newspapers, magazines, websites, broadcast television stations, and in public relations firms

Note to Transfer Students:
If you are interested in transferring to a four-year college or university to pursue a bachelor’s degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate’s degree in this major may be different from the requirements needed for the Bachelor’s degree.

Degree Requirements

Course Code	Course Title	Units
JOUR 310	Mass Media and Society (3)	3
JOUR 300	Newswriting and Reporting	3
JOUR 404	Editing and Production	3
JOUR 410	College Media Production I	3
PHOTO 301	Beginning Photography (3)	3
or PHOTO 302	Beginning Digital Photography (3)	
A minimum of 9 units from the following:		9
CISC 305	Introduction to the Internet (1)	
CISC 306	Introduction to Web Page Creation (1)	
JOUR 330	Computer Familiarization (2)	
or CISC 302	Computer Familiarization (2)	
JOUR 320	Race and Gender in the Media (3)	
JOUR 340	Writing for Publication (3)	
PHOTO 400	Digital Imaging (3)	
JOUR 301	Advanced Newswriting and Reporting (3)	
Total Units:		**24**

The Journalism Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus the local CRC General Education Requirement, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

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

- PSLO 1: Write clear and concise stories that adhere to journalistic conventions.
- PSLO 2: Conduct research and evaluate information using appropriate methods.
- PSLO 3: Demonstrate an understanding of basic news and feature writing in print, broadcast, and on-line media.
- PSLO 4: Evaluate their own work and that of others for accuracy, fairness, appropriate style, and grammatical correctness.
- PSLO 5: Produce news and feature articles, photographs, and/or multimedia packages for publication in a newspaper or on-line publication.
- PSLO 6: Understand and apply the principles of the First Amendment and other laws appropriate to professional practice.
- PSLO 7: Apply ethical principles in pursuit of truth, accuracy, fairness, and diversity.
- PSLO 8: Identify and explain the processes, elements, history, theory, and effects of modern mass media in society.
- PSLO 9: Demonstrate an understanding of the fundamentals of mass media theories, concepts, and practices as they relate to gender, ethnicity, and class constructs.

Career Information

Career Options Journalist; Newspaper Reporter; Magazine Editor; Editor; Columnist; Desktop Publishing Specialist; Public Information Officer; Web Writer/Editor/Producer; Script Writer; Copy Writer; Broadcast News Writer; Broadcast News Producer. Some career options may require more than two years of college study. Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.

Journalism (JOUR) Courses

JOUR 299 Experimental Offering in Journalism

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

JOUR 300 Newswriting and Reporting

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligibility for ENGL C1000 (formerly known as ENGWR 300).
Transferable: CSU
C-ID: C-ID JOUR 110

This is an introductory course in basic news writing and reporting. This course concentrates on fundamental writing techniques for mass media. This course also emphasizes the legal and ethical responsibilities of the news media with critical analysis of current news reporting practices.

JOUR 301 Advanced Newswriting and Reporting

Units: 3
Hours: 54 hours LEC
Prerequisite: JOUR 300 with a grade of "C" or better
Advisory: ENGL C1000
Transferable: CSU

This course focuses on interpretive news writing with emphasis on public affairs, specialized reporting, mastery of fundamental reporting techniques, an introduction to feature and editorial writing, and an introduction to the tools of multimedia reporting.

JOUR 310 Mass Media and Society

Same As: RTVF 300
Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L4; Cal-GETC Area 4
C-ID: C-ID JOUR 100

Survey of the mass media: history, philosophy, structure and trends, as well as theories which help to explain effects and the importance of mass communications as a social institution. Exploration of economics, technology, law, ethics, and social issues, including cultural and ethnic diversity. This course is the same as RTVF 300, and only one may be taken for credit. (C-ID JOUR 100)

JOUR 320 Race and Gender in the Media

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L4; Cal-GETC Area 4

This course examines the roles of ethnic minorities and women in American society as depicted, documented and distorted in the mass media. Students will study ethnic, racial and gender issues in mass media content, development, policy, and professions, including media stereotypes, contributions of diverse groups to the media and mass communications as an agent of social change.

JOUR 330 Computer Familiarization

Same As: CISC 302
Units: 2
Hours: 36 hours LEC
Prerequisite: None.
Advisory: BUSTEC 302
Transferable: CSU

This is an introductory course to provide general knowledge on how computers work, computer terminology and the impact of computers on society and the work environment. Beginning level hands-on instruction using an operating system, word processing software, spreadsheet software, database software, email and the Internet will be emphasized. Students will be reading and interpreting written and oral instructions of a technical nature. This course is the same as CISC 302, and only one may be taken for credit. See "Cross-Listed Courses" in the catalog.

JOUR 335 Introduction to Desktop Publishing

Same As: CISA 330
Units: 2
Hours: 27 hours LEC; 27 hours LAB
Prerequisite: None.
Advisory: CISC 302, CISC 310, or JOUR 330
Transferable: CSU

This course will cover the introductory elements of desktop publishing. The course is taught in three modules with a project attached to each module. The course covers hardware and software, elements of design, computer graphics, text composition, page layout, and integration of text and graphics. Projects may include, but are not limited to: business cards, stationary, logos, covers, flyers, brochures, newsletters. Students may receive two units credit for each topic offered. Consult the class schedule for specific topics. Recommended courses: CISA 305; ARCH 330 or ART 320; and CISA 340. This course is the same as CISA 330. This course under either name, may be taken a total of four times for credit on different topics. See "Cross-Listed Courses" in the catalog.

JOUR 336 Intermediate Desktop Publishing

Same As: CISA 331
Units: 2
Hours: 27 hours LEC; 27 hours LAB
Prerequisite: CISA 330 or JOUR 335 with a grade of "C" or better
Transferable: CSU

This course builds upon previous desktop publishing software concepts and study. Topics include working with color, applying styles, importing and linking graphics, tabs and tables, and working with transparency effects. It also covers producing long documents and book features, output and exporting to PDF format, and creating interactive documents for online use. This course is the same as CISA 331, and only one may be taken for credit.

JOUR 340 Writing for Publication

Same As: ENGWR 330
Units: 3
Hours: 54 hours LEC
Prerequisite: ENGL C1000, ENGL C1000H, or JOUR 300 with a grade of "C" or better
Transferable: CSU

This is an introductory course in writing nonfiction for publication. Emphasis will be on developing magazine articles that sell; finding ideas; analyzing magazines; writing query letters; researching and interviewing; organizing, writing and illustrating articles. Individual and class criticism of student work will be featured. This course is the same as ENGWR 330, and only one may be taken for credit.

JOUR 351 Public Relations Writing and Media Techniques

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU
C-ID: C-ID JOUR 150

This course is a study of the practice of public relations (PR); planning PR campaigns; preparing promotional messages for newspapers, magazines, radio, television, and online; using public relations techniques in business, education, entertainment, social service and other fields.

JOUR 404 Editing and Production

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Corequisite: JOUR 420 or 421
Transferable: CSU

This course includes instruction and practice in editing and designing newspapers, magazines, technical reports, and online publications. Topics include copy editing, headline writing, photo editing, page make-up and design, and production methods. Editorial writing, press ethics, and press law are also discussed.

JOUR 410 College Media Production I

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: Eligibility for ENGL C1000 (formerly known as ENGWR 300).
Advisory: Completion of or concurrent enrollment in one of the following: JOUR 300 or PHOTO 302.
Transferable: CSU
C-ID: C-ID JOUR 130

This course focuses on writing and producing student news media, using the school news website The Connection at www.thecrcconnection.com as a practical laboratory that produces journalistic stories for distribution to a college-wide audience. Students will work primarily in one of the following areas: researching, writing, and editing articles for the publication; taking photographs and creating graphic illustrations; developing multimedia stories; or designing web pages. Ethical and legal aspects of communication are also covered.

JOUR 411 College Media Production II

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: JOUR 410 with a grade of "C" or better
Advisory: Completion of or concurrent enrollment in one of the following: JOUR 300 or PHOTO 302.
Transferable: CSU
C-ID: C-ID JOUR 131

This course builds on experience gained in Journalism 410. During this second-semester course, students focus on intermediate writing and production skills, using the school news website The Connection at www.thecrcconnection.com as a practical laboratory that produces journalistic stories for distribution to a college-wide audience. Students will work in at least two of the following areas: researching, writing, and editing articles for the student news publication; taking photographs and creating graphic illustrations; developing multimedia stories; or designing web pages. Ethical and legal aspects of communication are also covered.

JOUR 412 College Media Production III

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: JOUR 300 and 411 with grades of "C" or better
Corequisite: JOUR 422
Transferable: CSU

This course builds on the experience gained in Journalism 411. During this third-semester course, students focus on advanced intermediate writing and production skills, using the school news website The Connection at www.thecrcconnection.com as a practical laboratory that produces journalistic stories for distribution to a college-wide audience. Students will 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

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: JOUR 412 with a grade of "C" or better

Corequisite: JOUR 423
Transferable: CSU

This course builds on the experience gained in Journalism 412. During this fourth-semester course, students focus on advanced writing and production skills, using the school newspaper The Connection and its online companion www.thecrcconnection.com, as a practical laboratory. Students will 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 should serve in leadership roles.

JOUR 420 College Media Production Lab I

Units: 0.5 - 3
Hours: 27 - 162 hours LAB
Prerequisite: None.
Corequisite: JOUR 404 and 410
Transferable: CSU

This lab course helps students improve their writing, editing, photography, design, and computer skills as an addition to their enrollment in College Media Production I (JOUR 410) and/or Editing and Production (JOUR 404).

JOUR 421 College Media Production Lab II

Units: 0.5 - 3
Hours: 27 - 162 hours LAB
Prerequisite: JOUR 420 with a grade of "C" or better
Corequisite: JOUR 411
Transferable: CSU

This lab course helps students build on skills gained in Journalism 410 and 420. During this second-semester course, students will continue to improve their skills in at least two of the following areas: writing, editing, photography, design, and web production skills as an addition to their enrollment in College Media Production II (JOUR 411).

JOUR 422 College Media Production Lab III

Units: 0.5 - 3
Hours: 27 - 162 hours LAB
Prerequisite: JOUR 421 with a grade of "C" or better
Corequisite: JOUR 412
Transferable: CSU

This lab course helps students build on skills gained in Journalism 411 and 421. During this third-semester course, students will continue to improve their skills in at least three of the following areas: writing, editing, photography, design, and web production skills as an addition to their enrollment in College Media Production III (JOUR 412).

JOUR 423 College Media Production Lab IV

Units: 0.5 - 3
Hours: 27 - 162 hours LAB
Prerequisite: JOUR 422 with a grade of "C" or better
Transferable: CSU

This lab course helps students build on skills gained in Journalism 412 and 422. During this fourth-semester course, students will continue to improve their skills in at least four of the following areas: writing, editing, photography, design, and web production skills as an addition to their enrollment in College Media Production IV (JOUR 413).

JOUR 495 Independent Studies in Journalism

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

JOUR 498 Work Experience in Journalism

Units: 0.5 - 4
Hours: 27 - 216 hours LAB
Prerequisite: None.
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position or job related to career goals in Journalism.
Transferable: CSU

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in transfer level degree occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and complete 27 hours of related work experience for 0.5 unit. An additional 27 hours of related work experience is required for each additional 0.5 units. 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.

JOUR 499 Experimental Offering in Journalism

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU

This is the experimental courses description.

Kinesiology

The Cosumnes River College Kinesiology program offers a wide variety of classes, including fitness, aquatics, individual sports, team sports, intercollegiate athletics, and kinesiology classes.

The Kinesiology Department supports CRC's mission by preparing students along their pathways to reach degree, transfer, and career goals in an environment of academic excellence. The Kinesiology Department courses meet CRC's associate degree requirements. Most courses also meet the transfer degree requirement for a bachelor's degree at CSU and most other four-year institutions. Kinesiology courses provide students the opportunity to prepare to transfer to degree programs in Physical Education and Kinesiology. Students can earn an associate degree in Kinesiology preparing them for advanced degrees at four-year institutions. The department promotes student access with distance learning options.

Degrees Offered

A.A.-T. in Kinesiology

A.A. in Kinesiology

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Associate Degrees for Transfer

A.A.-T. in Kinesiology

The Associate in Arts in Kinesiology for Transfer Degree (AA-T) is designed to meet common lower-division requirements for a major in Kinesiology at California State University (CSU) campuses. Upon successful completion of the degree requirements, students will be guaranteed admission to the CSU system with junior status. Students are encouraged to meet with a counselor to develop their educational plan as degree options and general education requirements vary for each university.

The Associate Degree for Transfer (ADT) student completion requirements (as stated in SB 1440 law):

1. 60 semester or 90 quarter CSU-transferable units

-The California General Education Transfer Curriculum (Cal-GETC).

-A minimum of 18 semester units or 27 quarter units in the major or area of emphasis, as determined by the community college district.

2. Obtainment of a minimum GPA of 2.0.

ADT's also require that students must earn a "C" or better in all courses required for the major or area of emphasis. A "P" (Pass) grade is also an acceptable grade for courses in the major if the course is taken on a Pass/No Pass basis.

Degree Requirements

Course Code	Course Title	Units
CORE REQUIREMENTS:		
KINES 300	Introduction to Kinesiology	3
BIOL 430	Anatomy and Physiology	5
BIOL 431	Anatomy and Physiology	5
A minimum of 6 units from the following:		6
STAT C1000E	Introduction to Statistics (4)	
or PSYC 330	Introductory Statistics for the Behavioral Sciences (3)	
CHEM 305	Introduction to Chemistry (5)	
or CHEM 400	General Chemistry I (5)	
PHYS 350	General Physics (4)	
PSYC C1000	Introduction to Psychology (3)	
or SOC 300	Introductory Sociology (3)	
A minimum of 3 units from the following:		3
Select 1 course maximum from 3 of the following areas: Aquatics, Fitness, Individual Sports, Team Sports.		
Aquatics		
FITNS 440	Swimming I (1)	
FITNS 441	Swimming II (1)	
Fitness		
FITNS 306	Aerobics: Cardio-Kickboxing (1)	
FITNS 320	Body Fitness (1)	
FITNS 323	Core Conditioning II: Fitness Ball (1)	
FITNS 324	Mat Pilates (1)	
FITNS 326	Mat Pilates II (1)	
FITNS 328	Core Conditioning III: Thighs, Abs, Glutes (1)	
FITNS 331	Boot Camp I (1)	
FITNS 348	High-Intensity Interval Training (1)	
FITNS 352	Core Conditioning IV: Power Sculpting (1)	
FITNS 380	Circuit Weight Training (1)	
FITNS 381	Weight Training (0.5 - 1)	
FITNS 384	Weight Training II (1)	
FITNS 390	Basic Yoga (1)	
FITNS 393	Yoga II (1)	
FITNS 401	Walking I (0.5 - 1)	
FITNS 406	Running I (1)	
FITNS 407	Walking II (0.5 - 1)	
Individual Sports		
PACT 310	Badminton I (1)	
PACT 311	Badminton II (1)	
PACT 381	Table Tennis I (1)	
PACT 390	Tennis I (1)	
PACT 391	Tennis II (1)	
PACT 430	Pickleball I (1)	
PACT 431	Pickleball II (1)	

Course Code	Course Title	Units
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 320	Basketball (1)	
TMACT 321	Basketball II (1)	
TMACT 330	Volleyball (1)	
TMACT 331	Volleyball II (1)	
Total Units:		**22**

[1]Select 1 course maximum from 3 of the following areas: Aquatics, Fitness, Individual Sports, Team Sports.

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) the California General Education Transfer Curriculum (Cal-GETC) Requirement.

Student Learning Outcomes

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

- Utilize the theories of biomechanics and exercise physiology and apply them to sport and fitness pedagogy. (PSLO #1)
- Discuss how sociological, psychological, historical, and philosophical factors influence the field of kinesiology and sport. (PSLO #2)
- Evaluate the unique and overlapping roles of each body system in promoting homeostasis and how such body systems adapt to the demands of activity and sport. (PSLO #3)
- Evaluate anatomical and physiological information and apply findings to decision making. (PSLO #4)
- Assess and measure improvements in fitness levels through a comprehensive analysis of aerobic capacity, body composition, muscular endurance, and flexibility. (PSLO #5)
- Define and understand how to properly execute fitness and sport training techniques. (PSLO #6)
- Understand all of the career pathways and what each entails, in the field of Kinesiology. (PSLO #7)

Career Information

The AA-T in Kinesiology can provide students with the foundational knowledge necessary for transfer to a 4-year Bachelor of Science (BS) or Bachelor of Arts (BA) degree program. Career opportunities for students who have earned BS or BA degrees in Kinesiology include but are not limited to: Exercise physiologist, physical therapy, physical therapy aide, physical therapy assistant, occupational therapy, occupational therapy aide, occupational therapy assistant, personal trainer, recreation director, group fitness instructor, health club manager, athletic coach, athletic trainer, activities director, K-12 physical education teacher, cardiac rehabilitation technician, massage therapist, chiropractor, sports psychologist, corporate fitness director, sport information director, sports media, strength and conditioning coach or a sports agent. Some careers may require additional training.

Associate Degrees

A.A. in Kinesiology

The Kinesiology Associate of Arts degree provides an opportunity for students to explore the areas of health, fitness and kinesiology. The degree is designed to provide an introductory foundation in these areas and to prepare students for success by developing a core of knowledge, skills and attitudes. Students will develop and learn to promote an active and healthy lifestyle. Other topics may include nutrition, sport psychology, recreation, sport management, women in sport, sport and society and sport ethics. This Kinesiology AA degree does not guarantee transfer to a CSU or UC.

Degree Requirements

Course Code	Course Title	Units
KINES 300	Introduction to Kinesiology	3
CHEM 305	Introduction to Chemistry (5)	5
or CHEM 400	General Chemistry I (5)	
HEED 300	Health Science	3
A minimum of 12 units from the following:		12
STAT C1000E	Introduction to Statistics (4)	
NUTRI 300	Nutrition (3)	
PHYS 350	General Physics (4)	
KINES 301	Personal Wellness (3)	
or HEED 350	Personal Wellness (3)	
KINES 308	Women in Sport (3)	
KINES 416	Psychology of Sport (3)	
KINES 304	Introduction to Sports Management (3)	
KINES 460	Sport in Society (3)	
BIOL 308	Contemporary Biology (3)	
and BIOL 309	Contemporary Biology Laboratory (1)	
KINES 455	Sport Ethics (3)	
RECR 320	Recreation Activity Leadership (3)	
Electives:		
A minimum of 3 units from the following:		3
Any activity class under these top codes: ADAPT, FITNS, PACT, TMACT, and SPORT.		
Total Units:		**26**

The Kinesiology Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus the local CRC General Education Requirement, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

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

- List various occupations in the field of Kinesiology.
- Examine and evaluate physical activities and their relationship to wellness and fitness.
- Construct a philosophy for physical activity and its importance in our society.
- Evaluate current theories, philosophies and trends in kinesiology.
- Summarize the educational requirements for employment for various occupations within the field of kinesiology.
- Identify fitness concepts and apply them to fitness programs.

Career Information

The Kinesiology AA degree can lead to the following job opportunities, but not limited to: Personal training, health education, coaching, and employment at fitness clubs. Students transferring to a 4-year institution are advised to meet with a counselor for specific general education course requirements needed for the many careers associated with a Kinesiology degree.

Adapted Physical Education (ADAPT) Courses

ADAPT 300 Adapted Physical Education

Units: 1 - 2
Hours: 9 - 18 hours LEC; 27 - 54 hours LAB
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L7A

In adapted physical education, the instructor works under the recommendation/direction of the student's physician. Class activities are adapted or modified to meet individual needs. Each student performs at an individual level of ability without pressure or competition. Students with both temporary and permanent disabilities are served as well as students with major health problems. Students must have a physician's statement indicating (a) the disability, (b)specific restrictions, and (c)recommended activities.

ADAPT 332 Adapted Aquatics

Units: 1
Hours: 54 hours LAB
Prerequisite: None.
Enrollment Limitation: A physician's statement verifying the disability, contraindications, and recommended activities.
Transferable: CSU; UC
General Education: Local GE L7A

This physical education class is a personal water safety and fitness class adapted for individuals who are physically challenged. The class will be tailored for the individual's abilities and needs. Topics covered will include stroke mechanics, water safety, movement through water, and the use of water for resistive exercises.

ADAPT 333 Adapted Shallow Water Aerobics

Units: 1
Hours: 9 hours LEC; 27 hours LAB
Prerequisite: None.
Advisory: Although swimming skills are not needed, it is suggested that students are comfortable in an aquatic environment.
Transferable: CSU; UC
General Education: Local GE L7A

This class is designed for individuals who are physically challenged and uses the resistance of the water for low impact weight bearing exercise. It will be tailored to each student's individual abilities. The class will include exercises in shallow water; working on cardiovascular endurance and fitness, muscular strength and endurance as well as increase overall flexibility. Students must have a doctor's recommendation on file. No swimming skills are needed or required as students will be in shallow water and use equipment to help with flotation.

ADAPT 334 Adapted Deep Water Aerobics

Units: 1
Hours: 9 hours LEC; 27 hours LAB
Prerequisite: None.
Advisory: Although swimming skills are not necessary, it is strongly suggested that students enrolled in this course are comfortable in an aquatic environment, especially in deep water.
Transferable: CSU; UC
General Education: Local GE L7A

This course is designed to allow students with disabilities or challenges, the opportunity to improve their overall fitness through a no-impact, non-weight bearing class in the water. In this class, cardiovascular exercises and endurance will be stressed. Additionally, due to the resistance of the water, students will improve their overall strength and flexibility.

ADAPT 336 Motor Development for the Physically Challenged

Units: 1 - 2
Hours: 54 - 108 hours LAB
Prerequisite: None.
Enrollment Limitation: A physician's statement verifying the disability, contraindications, and recommended activities.
Transferable: CSU; UC
General Education: Local GE L7A

This course gives the student individual instruction which promotes and develops overall physical fitness and psychomotor skills. This activity class for the physically challenged includes exercises in flexibility, strength development, aerobic activity and relaxation training. Students must have a doctor's recommendation on file.

ADAPT 339 Walk and Wheel

Units: 2
Hours: 18 hours LEC; 54 hours LAB

Prerequisite: None.
Enrollment Limitation: A statement from a health care professional verifying the disability, contraindications, and recommended activities.
Transferable: CSU; UC
General Education: Local GE L7A

This course is designed for students who are disabled and/or physically challenged and want to participate in a general physical education activity course. Individualized walking or wheeling programs are designed to enhance cardiovascular and cardio-respiratory 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 495 Independent Studies in Adapted Physical Education

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L7A

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

ADAPT 499 Experimental Offering in Adapted Physical Education

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L7A

This is the experimental courses description.

Fitness (FITNS) Courses

FITNS 306 Aerobics: Cardio-Kickboxing

Units: 1
Hours: 54 hours LAB
Course Family: Group Cardio Fitness Training
Prerequisite: None.
Transferable: CSU; UC (Any or all PE Activity courses combined: maximum credit, 4 units)
General Education: Local GE L7A

This course emphasizes proper alignment, execution, and timing of faster paced movements from kickboxing, boxing, and aerobic dance to improve cardiovascular fitness. Various training methods will also be used to improve individual strength and flexibility.

FITNS 314 Aquatic Fitness III- Deep Water Jogging

Units: 1
Hours: 54 hours LAB
Course Family: Aerobic Water Fitness
Prerequisite: None.
Advisory: Although no swimming skills are needed or required, it is strongly suggested that students enrolled in this class are comfortable in an aquatic environment, especially deep water.
Transferable: CSU; UC
General Education: Local GE L7A

This jogging/running course uses the resistance of deep water to build and/or improve muscular strength and endurance, cardiovascular fitness and increases flexibility while wearing a flotation belt to maintain a vertical position in the water. It is a fitness class for those individuals who want to improve their current fitness level with non-weight bearing exercise in the water.

FITNS 320 Body Fitness

Units: 1
Hours: 54 hours LAB
Course Family: Group Cardio Fitness Training
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L7A

This course is designed to assess and improve physical fitness levels, enhance weight control, and encourage a healthy attitude toward lifelong fitness. Students receive theories and practical activities involved in obtaining and maintaining a healthy weight and appropriate level of fitness.

FITNS 323 Core Conditioning II: Fitness Ball

Units: 1
Hours: 54 hours LAB
Course Family: Total Body Sculpting
Prerequisite: None.
Transferable: CSU; UC (Any or all PE Activity courses combined: maximum credit, 4 units)
General Education: Local GE L7A

The fitness ball is a valuable tool for developing core strength (middle of your body), flexibility and balance. Because of the fitness ball's inherent instability, the effect of traditional strength training exercises is intensified when performed in conjunction with the fitness ball. Students will learn to safely and effectively execute strengthening exercises for all the major muscle groups with and without hand weights, flexibility exercises, and balancing exercises. Specific topics and exercises may vary each semester depending on the needs of the students.

FITNS 324 Mat Pilates

Units: 1
Hours: 54 hours LAB
Course Family: Total Body Sculpting
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L7A

This beginning course is a unique methodology that offers improvement in core strength, posture and flexibility. Mat Pilates is designed to work with the deepest muscles with a sequence of fundamental exercises to achieve improved balance and position control while strengthening and toning the entire body.

FITNS 326 Mat Pilates II

Units: 1
Hours: 54 hours LAB
Course Family: Total Body Sculpting
Prerequisite: None.
Advisory: FITNS 324
Transferable: CSU; UC
General Education: Local GE L7A

This intermediate course is designed to improve core strength and overall body awareness using the unique methodology of Mat Pilates. Mat Pilates II will include a sequence of fundamental exercises with the addition of intermediate level exercises. The addition of equipment (i.e. fitness balls, resistance bands, etc.) will be introduced.

FITNS 327 Mat Pilates III

Units: 1
Hours: 54 hours LAB
Course Family: Total Body Sculpting
Prerequisite: None.
Advisory: FITNS 324 and 326
Transferable: CSU; UC
General Education: Local GE L7A

This course will use Mat Pilates training for muscle groups through controlled exercises taught at an advanced level. The advanced course is designed to improve strength, posture, flexibility, and coordination. This course will include resistance methods of training and use of equipment (i.e., fitness balls, resistance bands, etc.) to help build strength and improve mobility.

FITNS 328 Core Conditioning III: Thighs, Abs, Glutes

Units: 1
Hours: 54 hours LAB
Course Family: Total Body Sculpting
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L7A

This course is designed to be a workout specific to the thighs, abdominal and gluteal muscles included as part of the Cross Training family of Power Sculpting and Fitness Ball. This class will include workouts using a variety of calisthenics/exercises designed to enhance muscular strength and endurance, including core strength.

FITNS 331 Boot Camp I

Units: 1
Hours: 54 hours LAB
Course Family: High Intensity Training
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L7A

This course is designed to be a physically intense and challenging fitness class. Training exercises used during this class will include jogging, interval training, hill running training, obstacle courses, and performing a variety of calisthenics designed to enhance muscular strength and endurance. In addition, students will be challenged to understand and apply fitness training principles. The students will train individually, with a partner or in a team setting.

FITNS 348 High-Intensity Interval Training

Units: 1
Hours: 54 hours LAB
Course Family: High Intensity Training
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L7A

This course is designed to be a physically intense and total body workout included as part of the Cross Training family of Boot Camp Fitness. This class will include workouts using running, obstacle courses, and performing a variety of calisthenics designed to enhance muscular strength and endurance used through high intensity intervals.

FITNS 352 Core Conditioning IV: Power Sculpting

Units: 1
Hours: 54 hours LAB
Course Family: Total Body Sculpting
Prerequisite: None.
Transferable: CSU; UC (Any or all PE Activity courses combined: maximum credit, 4 units)
General Education: Local GE L7A

Power Sculpting is a non-impact conditioning course designed to enhance muscular fitness (muscular endurance and muscular strength), balance, and improve body composition by sculpting and defining muscles through the use of resistance equipment (other than weight machines), core training, calisthenics, and flexibility exercises.

FITNS 355 Workforce Fitness

Units: 1
Hours: 54 hours LAB
Course Family: Workforce Fitness
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L7A

This physical education course emphasizes concepts related to health, physical fitness and recreation as they relate to the industrial worker. Exercise programs will be designed to improve specific muscle groups impacted in the occupational setting.

FITNS 375 Introduction to Meditation

Units: 1
Hours: 54 hours LAB
Course Family: Yoga
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L7A

This course emphasizes various meditation techniques to increase concentration, relieve stress and improve well-being.

FITNS 380 Circuit Weight Training

Units: 1
Hours: 54 hours LAB
Course Family: Group Cardio Fitness Training
Prerequisite: None.
Transferable: CSU; UC (Any or all PE activity courses combined: 4 units maximum)
General Education: Local GE L7A

Circuit Weight Training shall introduce the student to a fitness program of progressive resistive exercises designed to promote improvement in muscular strength and endurance, cardiovascular endurance, and flexibility, as well as, decrease in body fat percentage. The student will move in a prescribed circuit (alternating timed lifting with active recovery) utilizing machines, free weights, cardiovascular activities, and flexibility training.

FITNS 381 Weight Training

Units: 0.5 - 1
Hours: 27 - 54 hours LAB
Course Family: Weight Training
Prerequisite: None.
Transferable: CSU; UC (Any or all PE Activity courses combined: maximum credit 4 units)
General Education: Local GE L7A

This physical education course is designed to develop fitness strength through weight training. Students will learn basic weight training techniques using the weight machines and basic free lifts. The student will be able to design and implement their own weight training program for future use after taking this class.

FITNS 384 Weight Training II

Units: 1
Hours: 54 hours LAB
Course Family: Weight Training
Prerequisite: None.
Advisory: FITNS 381
Transferable: CSU; UC
General Education: Local GE L7A

This physical education course is designed to stress the proper guidelines, principles and techniques of weight lifting and the development of muscular strength and endurance at an intermediate level. The students will design and implement their own weight training program.

FITNS 386 Weight Training III

Units: 1
Hours: 54 hours LAB
Course Family: Weight Training
Prerequisite: None.
Advisory: FITNS 384 with a grade of "C" or better
Transferable: CSU; UC
General Education: Local GE L7A

This physical education course is designed to stress the proper guidelines, principles and techniques of weight training and the development of muscular strength, endurance and power at an advanced level. More emphasis will be placed on free weights as the student progresses. The students will design and implement their own weight training program.

FITNS 390 Basic Yoga

Units: 1
Hours: 54 hours LAB
Course Family: Yoga
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L7A

Yoga is an East Indian method of mind/body exercise designed to stretch, strengthen, and enhance muscle tone through the practice of asanas (poses) and pranayama (breathing exercises). This course will introduce the student to the basics of yoga in both the physical and the philosophical aspects. This course is designed to assist any and all of those goals through support and guidance in a safe and nurturing learning environment. Students will be required to purchase a yoga mat.

FITNS 393 Yoga II

Units: 1
Hours: 54 hours LAB
Course Family: Yoga
Prerequisite: FITNS 390 with a grade of "C" or better
Transferable: CSU; UC
General Education: Local GE L7A

Yoga is an East Indian method of mind/body exercise designed to stretch, strengthen, and enhance muscle tone through the practice of asanas (poses) and pranayama (breathing exercises). Yoga practice plus meditation helps decrease stress and increase energy levels while improving focus, concentration, and self-realization. The variety of health benefits a yoga practice offers are: for inner harmony, balance, and overall well-being, for spiritual connection and growth; or for stretching and strengthening a variety of muscle groups involved in a yoga practice. This course is designed to assist any and all of those goals through support and guidance in a safe and nurturing learning environment. Students will be required to purchase a yoga mat.

FITNS 394 Yoga III

Units: 1
Hours: 54 hours LAB
Course Family: Yoga
Prerequisite: FITNS 390 or 393 with a grade of "C" or better
Transferable: CSU; UC
General Education: Local GE L7A

This is an advanced yoga course that allows students to continue to explore and develop their yoga practice, and to learn a deeper focus for stress reduction and relaxation. This class is designed to advance the practice of the individual through stretching, strengthening, and enhancing muscle tone. This will be done through the practice of advanced asanas (poses) and pranayama (breathing exercises). Yoga practice plus meditation helps decrease stress and increase energy levels while improving focus, concentration, and self-realization. Students will be required to purchase a yoga mat.

FITNS 401 Walking I

Units: 0.5 - 1
Hours: 54 hours LAB
Course Family: Cardio Fitness
Prerequisite: None.

Transferable: CSU; UC
General Education: Local GE L7A

Walking I is a physical education course that is designed to instruct the student in the basic fundamentals and techniques of walking for fitness. The course will concentrate on improving the physical capacity and efficiency of the body with the emphasis on development of muscular and cardiovascular endurance as influenced by such factors as body type, diet, health status, and rest, for those beginning their fitness journey.

FITNS 406 Running I

Units: 1
Hours: 54 hours LAB
Course Family: Cardio Fitness
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L7A

Running I is a physical education course that is designed to instruct the student in the basic fundamentals and techniques of running. The course will concentrate on improving the physical capacity and efficiency of the body with the emphasis on development of muscular and cardiovascular endurance as influenced by such factors as body type, diet, health status, rest, and genetic potential. This course may be taken one time for credit.

FITNS 407 Walking II

Units: 0.5 - 1
Hours: 27 - 54 hours LAB
Course Family: Cardio Fitness
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L7A

This physical education course is designed to promote and improve the student's level of fitness, physical appearance, and well being as the foundation was established in Walking I. This course will concentrate on improving walking techniques, cardiovascular endurance, muscle strengthening and flexibility utilizing walking as an activity. Students will be advised to have proper walking shoes or running shoes.

FITNS 440 Swimming I

Units: 1
Hours: 54 hours LAB
Course Family: Swimming
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L7A

This class provides the opportunity for students to become safe and comfortable in the water. Students will develop swimming skills on their front and back. Instruction will emphasize freestyle and backstroke as well as water safety. Each student will progress toward becoming an endurance swimmer for enhanced fitness.

FITNS 441 Swimming II

Units: 1
Hours: 54 hours LAB
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L7A

This course is designed for non-swimmers or those returning to swimming after a long absence. Topics include basic water adjustment skills, floats, glides, basic freestyle and backstroke. It is appropriate for those afraid or not comfortable in deep water or those unable to correctly or continuously swim 25 meters without stopping. Instruction will be given in the physical and psychological adjustment to water.

FITNS 442 Swimming III

Units: 1
Hours: 54 hours LAB
Course Family: Swimming
Prerequisite: FITNS 441 with a grade of "C" or better; Students must be able to swim 50 yards of freestyle with proficient side-breathing and 50 yards of backstroke.
Transferable: CSU; UC (Any or all PE activity courses combined: maximum credit, 4 units)
General Education: Local GE L7A

The purpose of this course is to teach intermediate swimmers, who have mastered basic water acclimation, water safety, and basic swimming skills, swim training protocols and design, further refinement of stroke technique, proper diving technique, and development of cardiovascular capacity. Students will learn and refine the stroke techniques of freestyle, backstroke, and breaststroke. Students will learn flip turns for freestyle and backstroke. Students will be introduced to swim training and workout design

FITNS 443 Swimming IV

Units: 1
Hours: 54 hours LAB
Course Family: Swimming
Prerequisite: FITNS 442 with a grade of "C" or better; Students must demonstrate the ability to swim in deep water and possess, at minimum, intermediate swimming skills using correct stroke mechanics and technique.
Transferable: CSU; UC
General Education: Local GE L7A

This swim class is for advanced intermediate swimmers who want to learn or improve proper training technique specific to the four competitive strokes. Students will also develop or refine underwater efficiency related to increasing speed during entry into the water, turning and breakouts for all of the competitive strokes (free, back, breast and fly). Advanced training protocols, drills and workouts will be used.

FITNS 444 Swimming V

Units: 1
Hours: 54 hours LAB
Course Family: Swimming
Prerequisite: FITNS 442 with a grade of "C" or better; Students must demonstrate the ability to swim in deep water and possess, at minimum, intermediate swimming skills using correct stroke mechanics and technique.
Transferable: CSU; UC (Any or all PE Activity courses combined: maximum credit, 4 units)
General Education: Local GE L7A

This swimming class emphasizes improvement in aerobic fitness. This is a self-paced overload method of training using a

workout approach. Stroke efficiency, aerobic fitness, and personal improvement will be emphasized.

FITNS 495 Independent Studies in Fitness

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU
General Education: Local GE L7A

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

FITNS 499 Experimental Offering in Fitness

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

Kinesiology (KINES) Courses

KINES 300 Introduction to Kinesiology

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC (UC Transfer Credit Limitation: KINES 300, 308, & 460 maximum credit, 8 units.)
General Education: Local GE L7B

This introductory course presents an interdisciplinary approach to the study of human movement. It will provide students with an overview of the sub-disciplines in kinesiology, including the history, philosophy, sociology and psychology of sport; pedagogy; and motor behavior, biomechanics and physiology of physical activity. In addition, students will learn about career opportunities in teaching physical education, coaching, health and fitness, therapeutic exercise and sport management.

KINES 301 Personal Wellness

Same As: HEED 350
Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU
General Education: Local GE L7B

This course takes a personal approach to lifetime healthy habits. The students will relate their own lives to topics that include: Fitness, weight management, relationships, nutrition, stress management, sexual health, risky behaviors, and prevention of diseases. Assessment,
plans for change and reinforcement will be applied through the use of journals, projects, written assignments and tests. This course is the same as HEED 350, and only one may be taken for credit.

KINES 304 Introduction to Sports Management

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU

This course introduces students to the basic theory of sport management. Students will examine the history and development of the profession, discover and evaluate a variety of career opportunities, discuss organizational and managerial strategies, and analyze current trends in sport and recreation management.

KINES 308 Women in Sport

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC (UC Transfer Credit Limitation: KINES 300, 308, & 460 maximum credit, 8 units.)
General Education: Local GE L4; Cal-GETC Area 4

This course examines the relationship between women and sport, primarily in the United States, from multiple perspectives. Consideration is given to the cultural, economic, educational, legal, physiological and social influences on women in sport. Situating the ever-evolving roles that women assume in sport within a historical context, emphasis is placed on using the past to advise the present and effect change in the future. The course covers four broad areas: women's sport in historical context; the benefits and risks of participating in sport and physical activity; women, sport and social location; and women in the sport industry.

KINES 416 Psychology of Sport

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC (effective Fall 2026)
General Education: Local GE L4; Local GE L7B

This course examines the psychological principles influencing sport, physical activity, and athletic performance. Students explore mental training techniques, motivation, arousal regulation, personality factors, group dynamics, injury rehabilitation, and peak performance through sport and exercise science frameworks. Psychological theories and empirical research are applied to enhance athlete well-being and optimize performance across individual and team settings.

KINES 455 Sport Ethics

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L3

This class is designed to examine ethics, moral questions, and value judgments related to sport. Its approach allows students to follow and analyze ethical arguments, think through philosophical issues, and apply them to the artistic expression of sport, both historical and current, as well as to everyday life. Through analysis of works of philosophical, historical, literary, aesthetic, and cultural importance, students will also gain a

broader understanding of sports as they relate to the human condition.

KINES 460 Sport in Society

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC (UC Transfer Credit Limitation: KINES 300, 308, & 460 maximum credit, 8 units.)
General Education: Local GE L4

This course is an introduction to the examination of sport in contemporary society. The course studies human behavior as it pertains to sport and analyzes sport as a social institution. The course examines sports interaction with politics, economics, education, religion, gender, race, media, and ethics.
The course also focuses on the impact of sport on participants, spectators, and society as a whole.

KINES 495 Independent Studies in Physical Education Theory

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

KINES 498 Work Experience in Kinesiology

Units: 0.5 - 4
Hours: 27 - 216 hours LAB
Prerequisite: None.
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position or job related to career goals in Kinesiology.
Transferable: CSU

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in transfer level degree occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and complete 27 hours of related work experience for 0.5 unit. An additional 27 hours of related work experience is required for each additional 0.5 units. 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.

KINES 499 Experimental Offering in Kinesiology

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU

This is the experimental courses description.

Personal Activity (PACT) Courses

PACT 310 Badminton I

Units: 1
Hours: 54 hours LAB
Course Family: Badminton
Prerequisite: None.
Transferable: CSU; UC (All PE Activity courses combined: maximum transfer credit 4 units)
General Education: Local GE L7A

This course provides a review of basic fundamentals, techniques and rules of badminton. The emphasis is on skills and techniques such as play strategies for singles and doubles and shot selection for various play situations. Students will need to wear proper footwear for athletic activity and appropriate work-out attire. Students may be asked to bring shuttlecocks to class.

PACT 311 Badminton II

Units: 1
Hours: 54 hours LAB
Course Family: Badminton
Prerequisite: None.
Transferable: CSU; UC (All PE Activity courses combined: maximum transfer credit 4 units)
General Education: Local GE L7A

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 381 Table Tennis I

Units: 1
Hours: 54 hours LAB
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L7A

This course provides a review of basic fundamentals, techniques and rules for Table Tennis. The emphasis is on skills and techniques such as play strategies for singles and doubles and shot selection for various play situations.

PACT 390 Tennis I

Units: 1
Hours: 54 hours LAB
Course Family: Tennis
Prerequisite: None.

Transferable: CSU; UC (All PE Activity courses combined: maximum transfer credit 4 units.)
General Education: Local GE L7A

This is a beginning tennis course. The course covers skills, rules, etiquette, and strategies of the game. The student will develop basic skills such as ground strokes, serving, volleying, elementary strategies, game rules, and basic knowledge of tennis strategies. The student will also engage in singles play and learn to improve in their play against an opponent. Playing tennis stimulates enjoyable, cooperative, and competitive modes of behavior and promotes awareness of physical activity for life long health and fitness.
This course is designed for students with little or no prior tennis experience.

PACT 391 Tennis II

Units: 1
Hours: 54 hours LAB
Course Family: Tennis
Prerequisite: None.
Advisory: PACT 390 with a grade of "C" or better; Tennis II students should have some playing experience and basic tennis knowledge and skills.
Transferable: CSU; UC
General Education: Local GE L7A

This course reviews basic fundamentals, techniques, rules, and social courtesies of tennis. Intermediate players are encouraged to take this course.

PACT 393 Tennis III

Units: 1
Hours: 54 hours LAB
Course Family: Tennis
Prerequisite: None.
Advisory: PACT 391 with a grade of "C" or better; Tennis III students are recommended to have significant experience, preferably at the high school varsity level.
Transferable: CSU; UC
General Education: Local GE L7A

Tennis III focuses on improving and refining the competitive physical and mental skills and techniques of the sport. Particular attention will be given to the strategic development of the overall player while refining racket strokes that set up and finish points. Hitting patterns, serving placement, and tactical movement will also be introduced and developed.

PACT 430 Pickleball I

Units: 1
Hours: 54 hours LAB
Course Family: Pickleball
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L7A

This course covers the basic technique of strokes, rules of play, simple straits, and the etiquette of pickleball. There may be required materials for this course, including but not limited to pickleball paddles and pickleballs.

PACT 431 Pickleball II

Units: 1
Hours: 54 hours LAB
Course Family: Pickleball
Prerequisite: None.
Transferable: CSU; UC

This course reviews basic fundamentals, techniques, rules, and social courtesies of pickleball. It emphasizes skill and technique development beyond that of a beginning player, as well as intermediate strategies for singles and doubles. A pickleball pad and pickleballs may be required for this course.

PACT 432 Pickleball III

Units: 1
Hours: 54 hours LAB
Course Family: Pickleball
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L7A

This course focuses on improving and refining the physical and mental skills and techniques of pickleball. Particular attention is given to strategic development of the player while refining paddle skills that set up and finish points. Developing patterns, dink placement, and tactical court positioning are introduced and developed.

PACT 495 Independent Studies in Personal Activity

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU
General Education: Local GE L7A

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

PACT 499 Experimental Offering in Personal Activity

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU
General Education: Local GE L7A

This is the experimental courses description.

Sports (SPORT) Courses

SPORT 300 Baseball, Intercollegiate-Men

Units: 3
Hours: 175 hours LAB
Prerequisite: None.
Enrollment Limitation: The student must demonstrate minimum performance standards as determined by the instructor. Students will be required to have a physical uploaded and Electronic Medical Records (EMR) paperwork completed prior to participation in the class. Students will be required to achieve and maintain specific performance standards as determined by the instructor. Continued eligibility

will be and is dependent on maintaining these standards as well as CCCAA academic and decorum rules.
Transferable: CSU; UC
General Education: Local GE L7A

This course is for students who wish to participate in intercollegiate baseball. This course may be repeated a maximum of four times to meet California Community College Athletic Association requirements for eligibility.

SPORT 301 Off Season Conditioning for Baseball

Units: 0.5 - 3
Hours: 27 - 162 hours LAB
Prerequisite: None.
Enrollment Limitation: It is advised that students taking this course have played 2 years of high school varsity baseball. The student must demonstrate minimum performance standards as determined by the instructor. Students will be required to have a physical uploaded and Electronic Medical Records (EMR) paperwork completed prior to participation in the class. Students will be required to achieve and maintain specific performance standards as determined by the instructor. Continued eligibility will be and is dependent on maintaining these standards as well as CCCAA academic and decorum rules.
Transferable: CSU; UC
General Education: Local GE L7A

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 will include: sport specific skill development, sport specific strength training, cardiovascular conditioning, agility work, plyometric jump training, speed training and flexibility exercises. This course is designed to prepare students for intercollegiate baseball competition and may be repeated to meet requirements for CCCAA eligibility.

SPORT 303 Pre-Season Conditioning for Baseball

Units: 0.5 - 3
Hours: 27 - 162 hours LAB
Prerequisite: None.
Enrollment Limitation: The student must demonstrate minimum performance standards as determined by the instructor. Students will be required to have a physical uploaded and Electronic Medical Records (EMR) paperwork completed prior to participation in the class. Students will be required to achieve and maintain specific performance standards as determined by the instructor. Continued eligibility will be and is dependent on maintaining these standards as well as CCCAA academic and decorum rules.
Transferable: CSU; UC
General Education: Local GE L7A

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, plyometric training, speed training, and flexibility exercises. This course is designed to prepare students for participation in intercollegiate competition and may be repeated a maximum of four times to meet California Community College Athletic Association requirements for eligibility.

SPORT 311 Basketball, Intercollegiate-Men, Fall

Units: 1.5
Hours: 85 hours LAB
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L7A

This course is for students who wish to participate in intercollegiate basketball. This course may be repeated a maximum of four times to meet California Community College Athletic Association requirements for eligibility.

SPORT 312 Basketball, Intercollegiate-Men, Spring

Units: 1.5
Hours: 90 hours LAB
Prerequisite: None.
Transferable: CSU; UC

This course is for students who wish to participate in intercollegiate basketball. This course may be repeated a maximum of four times to meet California Community College Athletic Association requirements for eligibility.

SPORT 313 Off Season Conditioning for Basketball

Units: 0.5 - 3
Hours: 27 - 162 hours LAB
Prerequisite: None.
Enrollment Limitation: Once enrolled, the student must demonstrate intercollegiate athletic skills as determined by the coaching staff to remain enrolled in this course.
Transferable: CSU; UC
General Education: Local GE L7A

This course is designed to prepare the collegiate basketball player for the competitive season and reduce risk of injury. Course content will include: collegiate level basketball-specific skill development, a solid aerobic conditioning plan, sport specific strength training, agility work, plyometrics, speed training and flexibility exercises as well as team play combination of activities designed to prepare the athlete both physically and mentally. This course is designed to prepare students
for intercollegiate basketball competition and may be repeated a maximum of four times to meet California Community College Athletic Association requirements for eligibility.

SPORT 314 Pre-Season Conditioning for Basketball

Units: 0.5 - 3
Hours: 27 - 162 hours LAB
Prerequisite: None.
Enrollment Limitation: Once enrolled, the student must demonstrate intercollegiate athletic skills as determined by the coaching staff to remain enrolled in this course.
Transferable: CSU; UC (Any and all PE Activity courses: combined maximum transfer credit, 4 units)
General Education: Local GE L7A

This course is designed to prepare the collegiate basketball player for the competitive season and reduce risk of injury. Course content will include: collegiate level basketball-specific skill development, a solid aerobic conditioning plan, sport specific strength training, agility work, plyometrics, speed training and flexibility exercises as well as team play combination of activities designed to prepare the athlete both physically and mentally. This course is designed to prepare students
for intercollegiate basketball competition and may be repeated a maximum of four times to meet California Community College Athletic Association requirements for eligibility.

SPORT 316 Basketball, Intercollegiate-Women, Fall

Units: 1.5
Hours: 85 hours LAB
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L7A

This course is for students who wish to participate in intercollegiate basketball. This course may be repeated a maximum of four times to meet California Community College Athletic Association requirements for eligibility.

SPORT 317 Basketball, Intercollegiate-Women, Spring

Units: 1.5
Hours: 90 hours LAB
Prerequisite: None.
Transferable: CSU; UC

This course is for students who wish to participate in intercollegiate basketball. This course may be repeated a maximum of four times to meet California Community College Athletic Association requirements for eligibility.

SPORT 318 Post-Season Conditioning for Basketball

Units: 0.5 - 3
Hours: 27 - 162 hours LAB
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L7A

This course is designed to increase sport performance and overall understanding of women's intercollegiate basketball concepts and strategic philosophies. Course content will 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 work, plyometrics and speed training.
This course is designed to prepare students for participation in intercollegiate competition and may be repeated a maximum of four times to meet California Community College Athletic Association requirements for eligibility.

SPORT 350 Soccer, Intercollegiate-Men

Units: 3
Hours: 175 hours LAB
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L7A

This course is for students who wish to participate in intercollegiate soccer. This course may be repeated a maximum of four times to meet California Community College Athletic Association requirements for eligibility.

SPORT 351 Off-Season Conditioning for Men's Soccer

Units: 0.5 - 3
Hours: 27 - 162 hours LAB
Prerequisite: None
Enrollment Limitation: The student must demonstrate minimum performance standards as determined by the instructor. Students will be required to have a physical uploaded and Electronic Medical Records (EMR) paperwork completed prior to participation in the class. Students will be required to achieve and maintain specific performance standards as determined by the instructor. Continued eligibility will be and is dependent on maintaining these standards as well as CCCAA academic and decorum rules.
Transferable: CSU; UC
General Education: Local GE L7A

This course is designed to prepare the collegiate soccer player for the competitive season and reduce the risk of injury. Course content will include: collegiate level soccer-specific skill and tactical development, a solid aerobic conditioning plan, sport specific strength training, agility work, plyometrics, speed training and flexibility exercises as well as team play combination of activities designed to prepare the athlete both physically and mentally. This course is designed to prepare students for intercollegiate soccer competition and may be repeated to meet requirements for CCCAA eligibility.

SPORT 352 Off-Season Conditioning for Women's Soccer

Units: 0.5 - 3
Hours: 27 - 162 hours LAB
Prerequisite: None.
Enrollment Limitation: The student must demonstrate intercollegiate athletic soccer skills as determined by a try-out conducted by the coaching staff to remain in the course.
Transferable: CSU; UC (All PE Activity courses: combined maximum transfer credit, 4 units)
General Education: Local GE L7A

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. Students will need to provide themselves with appropriate soccer attire, soccer cleats, and shin guards. This course may be repeated a maximum of four times to meet California Community College Athletic Association requirements for eligibility.

SPORT 355 Soccer, Intercollegiate-Women

Units: 3
Hours: 175 hours LAB
Prerequisite: None.
Enrollment Limitation: The student must demonstrate minimum performance standards as determined by the

instructor. Students will be required to have a physical uploaded and Electronic Medical Records (EMR) paperwork completed prior to participation in the class. Students will be required to achieve and maintain specific performance standards as determined by the instructor. Continued eligibility will be and is dependent on maintaining these standards as well as CCCAA academic and decorum rules.
Transferable: CSU; UC
General Education: Local GE L7A

This course is for students who wish to participate in intercollegiate soccer. This course may be repeated a maximum of four times to meet California Community College Athletic Association requirements for eligibility.

SPORT 357 Pre-Season Conditioning For Women's Soccer

Units: 0.5 - 3
Hours: 27 - 162 hours LAB
Prerequisite: None.
Transferable: CSU; UC (All PE Activity courses: combined maximum transfer credit, 4 units)
General Education: Local GE L7A

This course is designed to increase sport performance and overall understanding of intercollegiate soccer concepts and strategic philosophies. Course content will 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. This course is designed to prepare students for intercollegiate soccer competition and may be repeated a maximum of four times to meet California Community College Athletic Association requirements for eligibility.

SPORT 358 Pre-Season Conditioning for Men's Soccer

Units: 0.5 - 3
Hours: 27 - 162 hours LAB
Prerequisite: None.
Transferable: CSU; UC (All PE activity courses combined: maximum credit, 4 units)
General Education: Local GE L7A

This course is designed to increase sport performance and overall understanding of intercollegiate soccer concepts and strategic philosophies. Course content will 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. This course may be repeated a maximum of four times to meet California Community College Athletic Association requirements for eligibility.

SPORT 365 Softball, Intercollegiate-Women

Units: 3
Hours: 175 hours LAB
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L7A

This course is for students who wish to participate in intercollegiate softball. This course may be repeated a maximum of four times to meet California Community College Athletic Association requirements for eligibility.

SPORT 366 Off Season Conditioning for Softball

Units: 0.5 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Enrollment Limitation: It is advised that athletes taking this course have participated at the varsity level in high school or competed on a summer travel ball team.
Transferable: CSU; UC
General Education: Local GE L7A

This physical education course involves a combination of basic skills and strategy tactics with an emphasis on a fitness component for the sport of softball. The course will also offer a mental training component for peak performance. This course is designed to prepare students for intercollegiate softball competition and may be repeated a maximum of four times to meet California Community College Athletic Association requirements for eligibility.

SPORT 368 Pre-Season Conditioning for Softball

Units: 0.5
Hours: 27 hours LAB
Prerequisite: None.
Enrollment Limitation: Once enrolled, the student must demonstrate intercollegiate athletic skills as determined by the coaching staff to remain enrolled in this course. It is advised that athletes taking this course have participated at the varsity level in high school or competed on a summer travel ball team.
Transferable: CSU; UC
General Education: Local GE L7A

This physical education course involves a combination of basic skills and strategy tactics with an emphasis on a fitness component for the sport of softball. The course will also offer a mental training component for peak performance. This course is designed to prepare students for intercollegiate softball competition and may be repeated a maximum of four times to meet California Community College Athletic Association requirements for eligibility.

SPORT 370 Swimming and Diving, Intercollegiate-Men

Units: 3
Hours: 175 hours LAB
Prerequisite: None.
Enrollment Limitation: It is advised that students taking this course have played 2 years of high school varsity baseball. The student must demonstrate minimum performance standards as determined by the instructor. Students will be required to have a physical uploaded and Electronic Medical Records (EMR) paperwork completed prior to participation in the class. Students will be required to achieve and maintain specific performance standards as determined by the instructor. Continued eligibility will be and is dependent on maintaining these standards as well as CCCAA academic and decorum rules.
Transferable: CSU; UC

General Education: Local GE L7A

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 is designed to prepare students for intercollegiate competition and may be repeated a maximum of four times to meet California Community College Athletic Association requirements for eligibility.

SPORT 375 Swimming and Diving, Intercollegiate-Women

Units: 3
Hours: 175 hours LAB
Prerequisite: None.
Enrollment Limitation: The student must demonstrate minimum performance standards as determined by the instructor. Students will be required to have a physical uploaded and Electronic Medical Records (EMR) paperwork completed prior to participation in the class. Students will be required to achieve and maintain specific performance standards as determined by the instructor. Continued eligibility will be and is dependent on maintaining these standards as well as CCCAA academic and decorum rules.
Transferable: CSU; UC (All PE Activity courses: combined maximum transfer credit, 4 units)
General Education: Local GE L7A

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 is designed to prepare students for intercollegiate competition and may be repeated a maximum of four times to meet California Community College Athletic Association requirements for eligibility.

SPORT 376 Off Season Swim & Dive

Units: 0.5 - 3
Hours: 27 - 162 hours LAB
Prerequisite: None.
Enrollment Limitation: Once enrolled, the student must demonstrate intercollegiate athletic skills as determined by the coaching staff to remain enrolled in this course.
Transferable: CSU; UC (All PE Activity courses: combined maximum transfer credit, 4 units)
General Education: Local GE L7A

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 is designed to prepare students for intercollegiate competition and may be repeated a maximum of four times to meet California Community College Athletic Association requirements for eligibility. The participant must adhere to CCCAA eligibility requirements.

SPORT 377 Pre-Season Conditioning Swim & Dive

Units: 0.5 - 3
Hours: 27 - 162 hours LAB
Prerequisite: None.
Enrollment Limitation: Once enrolled, the student must demonstrate intercollegiate athletic skills as determined by the coaching staff to remain enrolled in this course.
Transferable: CSU; UC (All PE Activity courses: combined maximum transfer credit, 4 units)
General Education: Local GE L7A

This course is a preparation for the competitive swimming and dive intercollegiate season. It also offers a dry-land and weight training components for peak performance. This course is designed to prepare students for intercollegiate competition and may be repeated a maximum of four times to meet California Community College Athletic Association requirements for eligibility.

SPORT 380 Tennis, Intercollegiate-Men

Units: 3
Hours: 175 hours LAB
Prerequisite: None.
Transferable: CSU; UC (All PE Activity courses: combined maximum transfer credit, 4 units)

This course covers fundamentals, rules, and individual and/or team strategy appropriate to intercollegiate athletic competition in tennis. It may be repeated a maximum of four times to meet California Community College Athletic Association requirements for eligibility.

SPORT 385 Tennis, Intercollegiate-Women

Units: 3
Hours: 175 hours LAB
Prerequisite: None.
Transferable: CSU; UC (All PE Activity courses: combined maximum transfer credit, 4 units)

This course is for students who wish to participate in intercollegiate tennis. This course may be repeated a maximum of four times to meet California Community College Athletic Association requirements for eligibility.

SPORT 403 Pre-Season Conditioning for Volleyball

Units: 0.5 - 3
Hours: 27 - 162 hours LAB
Prerequisite: None.
Enrollment Limitation: The student must demonstrate minimum performance standards as determined by the instructor. Students will be required to have a physical uploaded and Electronic Medical Records (EMR) paperwork completed prior to participation in the class. Students will be required to achieve and maintain specific performance standards as determined by the instructor. Continued eligibility will be and is dependent on maintaining these standards as well as CCCAA academic and decorum rules.
Transferable: CSU; UC (All PE Activity courses: combined maximum transfer credit, 4 units)
General Education: Local GE L7A

This course involves a combination of skill development and tactical strategies with an emphasis on a fitness component for the sport of volleyball. The course will also offer a mental training component for peak performance. This course is designed to prepare students for intercollegiate volleyball competition and may be taken a maximum of four times to

meet California Community College Athletic Association requirements for eligibility.

SPORT 405 Volleyball, Intercollegiate-Women

Units: 3
Hours: 175 hours LAB
Prerequisite: None.
Enrollment Limitation: The student must demonstrate minimum performance standards as determined by the instructor. Students will be required to have a physical uploaded and Electronic Medical Records (EMR) paperwork completed prior to participation in the class. Students will be required to achieve and maintain specific performance standards as determined by the instructor. Continued eligibility will be and is dependent on maintaining these standards as well as CCCAA academic and decorum rules.
Transferable: CSU; UC
General Education: Local GE L7A

This course is for students who wish to participate in intercollegiate volleyball. This course may be repeated a maximum of four times to meet California Community College Athletic Association requirements for eligibility.

SPORT 406 Off Season Conditioning for Volleyball

Units: 0.5 - 3
Hours: 27 - 162 hours LAB
Prerequisite: None.
Enrollment Limitation: The student must demonstrate minimum performance standards as determined by the instructor. Students will be required to have a physical uploaded and Electronic Medical Records (EMR) paperwork completed prior to participation in the class. Students will be required to achieve and maintain specific performance standards as determined by the instructor. Continued eligibility will be and is dependent on maintaining these standards as well as CCCAA academic and decorum rules.
Transferable: CSU; UC
General Education: Local GE L7A

This course is designed to prepare the collegiate volleyball player for the competitive season and reduce risk of injury. Course content will include: Collegiate level volleyball-specific skill development, a solid aerobic conditioning plan, sport specific strength training, agility work, plyometric jump training, speed training and flexibility exercises as well as team play combination of activities designed to prepare the athlete both physically and mentally. This course is designed to prepare students for intercollegiate volleyball competition and may be repeated a maximum of four times to meet California Community College Athletic Association requirements for eligibility.

SPORT 407 Pre-Season Conditioning for Beach Volleyball

Units: 0.5
Hours: 27 hours LAB
Prerequisite: None.
Enrollment Limitation: The student must demonstrate minimum performance standards as determined by the instructor. Students will be required to have a physical uploaded and Electronic Medical Records (EMR) paperwork completed prior to participation in the class. Students will be required to achieve and maintain specific performance standards as determined by the instructor. Continued eligibility will be and is dependent on maintaining these standards as well as CCCAA academic and decorum rules.
Transferable: UC
General Education: Local GE L7A

This course is designed to optimize sports performance and reduce the risk of injury for the pre-season intercollegiate athlete in the sport of beach volleyball. Course content includes sport-specific skill development, sport-specific strength training, cardiovascular conditioning, agility work, plyometric training, speed training, and flexibility exercises. This course is designed to prepare students for participation in intercollegiate competitions and may be repeated a maximum of four times to meet California Community College Athletic Association requirements for eligibility.

SPORT 408 Intercollegiate Beach Volleyball

Units: 3
Hours: 162 hours LAB
Prerequisite: None.
Enrollment Limitation: The student must demonstrate minimum performance standards as determined by the instructor. Students will be required to have a physical uploaded and Electronic Medical Records (EMR) paperwork completed prior to participation in the class. Students will be required to achieve and maintain specific performance standards as determined by the instructor. Continued eligibility will be and is dependent on maintaining these standards as well as CCCAA academic and decorum rules.
Transferable: UC
General Education: Local GE L7A

This course is an advanced beach volleyball team activity for student athletes. This course is designed to teach student athletes' fundamentals, skills, rules and team strategies to compete in intercollegiate athletic competition. This course gives students an opportunity to train and participate in intercollegiate beach volleyball.

SPORT 495 Independent Studies in Sport

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU
General Education: Local GE L7A

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

SPORT 499 Experimental Offering in Sport

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU
General Education: Local GE L7A

This is the experimental courses description.

Team Activity (TMACT) Courses

TMACT 300 Soccer, Indoor

Units: 1
Hours: 54 hours LAB
Course Family: Soccer
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L7A

The purpose of this course is to provide the student with beginning level knowledge and skills associated with indoor soccer. This course emphasizes defense, offense, passing, ball control, heading, and shooting. It covers the skills, strategy, and rules that govern the play of indoor soccer.

TMACT 301 Indoor Soccer II

Units: 1
Hours: 54 hours LAB
Course Family: Soccer
Prerequisite: None.
Advisory: TMACT 300; Student should have completed Indoor Soccer I, played 1 year of High School Varsity Soccer, completed 1 year of College Soccer, or satisfy the professor with a level of proficiency.
Transferable: CSU; UC
General Education: Local GE L7A

The purpose of this course is to provide the student with an intermediate level player environment to challenge the players knowledge and skills associated with indoor soccer. This course emphasizes an intermediate level of defending, attacking, and technical ability. It covers the skills, strategy, and rules that govern the play of indoor soccer. This class is not for beginners.

TMACT 302 Soccer - Outdoor

Units: 1
Hours: 54 hours LAB
Course Family: Soccer
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L7A

The purpose of this course is to provide the student with beginning level knowledge and skills associated with outdoor soccer. This course emphasizes defense, offense, passing, ball control, heading, and shooting. It covers the skills, strategy, and rules that govern the play of outdoor soccer.

TMACT 303 Outdoor Soccer II

Units: 1
Hours: 54 hours LAB
Course Family: Soccer
Prerequisite: None.
Advisory: TMACT 302; Student should have completed Outdoor Soccer I, played 1 year of High School Varsity Soccer, completed 1 year of College Soccer, or satisfy the professor with a level of proficiency.
Transferable: CSU; UC
General Education: Local GE L7A

The purpose of this course is to provide the student with an intermediate level player environment to challenge and improve the player's knowledge and skills associated with outdoor soccer. This course emphasizes an intermediate level of defending, attacking, and technical ability. It covers the skills, strategy, and rules that govern the play of outdoor soccer. This class is not for beginners.

TMACT 304 Outdoor Soccer III

Units: 1
Hours: 54 hours LAB
Course Family: Soccer
Prerequisite: None.
Advisory: TMACT 303; Student should have completed Outdoor Soccer II, played 2 years of High School Varsity Soccer, played at the competitive level of youth soccer, completed 1 year of College Soccer, or satisfy the professor with a level of proficiency.
Transferable: CSU; UC
General Education: Local GE L7A

The purpose of this course is to provide the student with an advanced level player environment to challenge the player's knowledge and skills associated with outdoor soccer. This course emphasizes an advanced level of defending, attacking, and technical ability. It covers the skills, strategy, and rules that govern the play of outdoor soccer. This class is not for beginners or intermediate players.

TMACT 308 Indoor Soccer III

Units: 1
Hours: 54 hours LAB
Course Family: Soccer
Prerequisite: TMACT 301 with a grade of "C" or better
Transferable: CSU (effective Fall 2026); UC (effective Fall 2026)

The purpose of this course is to provide students with an advanced level player environment to challenge their knowledge and skills associated with indoor soccer. This course emphasizes an advanced level of defending, attacking, and technical ability. It covers the skills, strategy, and rules that govern the play of indoor soccer. This class is not for beginners or intermediate players.

TMACT 320 Basketball

Units: 1
Hours: 54 hours LAB
Course Family: Basketball
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L7A

This course is a physical education course that covers a complete review of the basic fundamentals, tactics, rules, and systems of play, and will enhance the student's understanding and ability.

TMACT 321 Basketball II

Units: 1
Hours: 54 hours LAB
Course Family: Basketball
Prerequisite: None.
Advisory: TMACT 320

Transferable: CSU; UC
General Education: Local GE L7A

This is a physical education course that covers a complete review of the intermediate fundamentals, tactics, rules, and systems of play. The student will develop a better understanding of how to play competitive basketball in a team setting.

TMACT 322 Basketball III

Units: 1
Hours: 54 hours LAB
Course Family: Basketball
Prerequisite: None.
Advisory: TMACT 321; Advanced level basketball students must demonstrate a post-intermediate level of basketball skill and comprehension to be considered for enrollment in this advanced basketball course.
Transferable: CSU; UC
General Education: Local GE L7A

This is a competitive physical education basketball course. This course will cover the basic as well as advanced fundamentals and skills of basketball, in addition to basic strategies, rules, and systems of competitive play. This course is designed to enhance the students comprehension and ability.

TMACT 323 Basketball IV

Units: 1
Hours: 54 hours LAB
Course Family: Basketball
Prerequisite: None.
Advisory: TMACT 321; Advanced level basketball students must demonstrate a post-intermediate level of basketball skill and comprehension to be considered for enrollment in this advanced basketball course.
Transferable: CSU; UC
General Education: Local GE L7A

This is an advanced basketball course. Instruction, demonstration, and participation will provide the student with knowledge of tournament, and bracketed style play for basketball at an advanced level. This course will focus on 2 on 2, 3 on 3, and 5 on 5 tournament style competition.

TMACT 330 Volleyball

Units: 1
Hours: 54 hours LAB
Course Family: Volleyball
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L7A

This is a beginning volleyball class. Lecture, demonstration and participation will provide the student with sufficient knowledge for continued participation in volleyball. The fundamentals of passing, setting, serving, attacking, blocking, digging, rules of play and simple strategies will be covered.

TMACT 331 Volleyball II

Units: 1
Hours: 54 hours LAB
Course Family: Volleyball
Prerequisite: None.
Advisory: TMACT 330; Intermediate volleyball students should have some playing experience and basic volleyball knowledge and skills.
Transferable: CSU; UC
General Education: Local GE L7A

This is an intermediate volleyball class. Lecture, demonstration and participation will provide the student with sufficient knowledge for continued participation in volleyball. This class will focus on refining basic skills, introducing more complicated techniques and teaching more advanced strategies.

TMACT 333 Volleyball III

Units: 1
Hours: 54 hours LAB
Course Family: Volleyball
Prerequisite: None.
Advisory: TMACT 331; Advanced volleyball students are recommended to have significant experience, preferably at the high school varsity level.
Transferable: CSU; UC
General Education: Local GE L7A

This is an advanced volleyball class. Lecture, demonstration and participation will provide the student with sufficient knowledge for continued participation in volleyball at an advanced level. In advanced volleyball, students work on improving the more complicated skills and techniques of the sport and competitive play takes a higher priority.

TMACT 335 Volleyball IV

Units: 1
Hours: 54 hours LAB
Course Family: Volleyball
Prerequisite: None.
Advisory: TMACT 331; Advanced volleyball students are recommended to have significant experience, preferably at the high school varsity level.
Transferable: CSU; UC
General Education: Local GE L7A

This course is designed to teach advanced skills, principles and techniques necessary and fundamental to understanding and playing at an expert level. Emphasis is placed on the 6-2 and 5-1 team offensive/defensive systems and strategies. Includes participation in organized round robin competition preceded by a brief period of appropriate warm-up, skill development, and activities.

TMACT 495 Independent Studies in Team Activity

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU
General Education: Local GE L7A

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

TMACT 499 Experimental Offering in Team Activity

Units: 0.5 - 4

Prerequisite: None.
Transferable: CSU
General Education: Local GE L7A

This is the experimental courses description.

Liberal Arts

The Associate Degree in Liberal Arts is designed for students who wish a broad knowledge of liberal arts and sciences, plus additional studies in one of four “Areas of Emphasis.” An area of emphasis can be an appropriate choice for a student planning to transfer to the California State University (CSU) or the University of California (UC), as the student may satisfy general education requirements, plus focus on transferable coursework that relates to majors at CSU or UC. Students must satisfactorily complete 60 units of collegiate coursework with a “C” (2.0) grade point average in curriculum that the district accepts toward this degree.

Degrees Offered

A.A. in Liberal Arts - Arts and Humanities

A.A. in Liberal Arts - Communication and Writing

A.A. in Liberal Arts - Social and Behavioral Sciences

A.S. in Liberal Arts - Math and Science

Dean Hong Pham

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Associate Degrees

A.A. in Liberal Arts - Arts and Humanities

The Associate Degree in Liberal Arts - Arts and Humanities is designed for students who wish a broad knowledge of the arts and humanities. Students must satisfactorily complete 60 units of collegiate coursework with a "C" (2.0) grade point average in curriculum that the district accepts toward this degree.

Note: If you plan to transfer to a CSU, consider an Associates in Arts for Transfer degree such as the Art History, Art Design, History, Music, Spanish, Studio Arts or Theatre Arts AA-T rather than this degree. Please see a counselor for assistance with selecting the most appropriate transfer courses (i.e. 300 or higher numbered courses). If you plan to transfer to a UC campus or a private college or university, please see a counselor to determine if this degree is the most appropriate choice.

Degree Requirements

Course Code	Course Title	Units
A minimum of 18 units from the following:		18
Courses must be chosen from at least two disciplines:		
ARCH 310	History of Architecture (3)	
ARCH 332	Design Awareness (3)	
ART 300	Drawing and Composition I (3)	
ART 302	Drawing and Composition II (3)	
ART 304	Figure Drawing I (3)	
ART 305	Figure Drawing II (3)	
ART 312	Portrait Drawing (3)	
ART 320	Design: Fundamentals (3)	
ART 323	Design: Color Theory (3)	
ART 324	Collage and Assemblage (3)	
ART 327	Painting I (3)	
ART 328	Painting II (3)	
ART 361	Printmaking: Survey (3)	
ART 370	Three Dimensional Design (3)	
ART 372	Sculpture (3)	
ART 430	Art and Children (3)	
ARTH 300	Art Appreciation (3)	
ARTH 303	Art Survey: Ancient to 14th Century (3)	
ARTH 309	Art Survey: Renaissance to 19th Century (3)	
ARTH 311	Art Survey: Modern Art (3)	
ARTH 312	Women in Art (3)	
ARTH 324	Art of the Americas (3)	
ARTH 325	Native American Art History (3)	
ARTH 328	Survey of African Art (3)	
ARTH 332	Asian Art (3)	
ARTH 333	Introduction to Islamic Art (3)	
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)	
ENGCW 400	Creative Writing (3)	
ENGCW 410	Fiction Writing Workshop (3)	
ENGLT 303	Introduction to the Short Story (3)	
ENGLT 310	English Literature I (3)	
ENGLT 311	English Literature II (3)	
ENGLT 320	American Literature I (3)	
ENGLT 321	American Literature II (3)	
ENGLT 330	African American Literature (3)	
ENGLT 336	Race and Ethnicity in Contemporary American Literature (3)	
ENGLT 340	World Literature I (3)	
ENGLT 341	World Literature II (3)	
ENGLT 343	Contemporary Regional World Literature (3)	
ENGLT 345	Mythologies of the World (3)	
ENGLT 360	Women in Literature (3)	
ENGLT 370	Children and Literature (3)	
ENGLT 402	Introduction to Shakespeare and Film (3)	
ENGWR 301	College Composition and Literature (3)	
FMS 300	Introduction to Film Studies (3)	
FMS 305	Film History I (1895-1949) (3)	
FMS 320	Film Genre (3)	
FMS 488	Honors Seminar: Introduction to Critical Theory (3)	

Course Code	Course Title	Units
HIST 364	Asian Civilization (3)	
HIST 365	Asian Civilization (3)	
HIST 380	History of the Middle East (3)	
HUM 300	Classical Humanities (3)	
HUM 301	Introduction to the Humanities (3)	
HUM 310	Modern Humanities (3)	
HUM 320	Asian Humanities (3)	
HUM 324	Global Islam: Culture and Civilization (3)	
HUM 331	Latin American Humanities (3)	
HUM 332	American Humanities (3)	
MUFHL 300	Introduction to Music (3)	
MUFHL 308	Introduction to Music: Rock & Roll (3)	
MUFHL 310	Survey of Music History and Literature (Greek Antiquity to 1750) (3)	
MUFHL 311	Survey of Music History and Literature (1750 to the present) (3)	
MUFHL 315	Jazz History (3)	
MUFHL 321	Basic Musicianship (3)	
MUFHL 330	World Music (3)	
MUFHL 400	Music Theory and Musicianship I (4)	
MUIVI 310	Voice Class I (2)	
MUIVI 311	Voice Class II (2)	
MUIVI 340	Beginning Piano (2)	
MUIVI 341	Piano II (2)	
MUIVI 350	Piano III (2)	
MUIVI 351	Piano IV (2)	
MUIVI 370	Beginning Guitar (2)	
MUIVI 371	Intermediate Guitar (2)	
MUIVI 495	Independent Studies in Music Instrumental/Voice Instruction (1 - 3)	
MUSM 370	Music for Children (3)	
MUP 310	Orchestra (2)	
MUP 320	Jazz Band (2)	
MUP 350	Concert Choir I (2)	
MUP 357	College Chorus (2)	
MUP 360	Chamber Singers (2)	
PHIL 300	Introduction to Philosophy (3)	
PHIL 304	Introduction to Asian Philosophy (3)	
PHIL 310	Introduction to Ethics (3)	
PHIL 330	History of Classical Philosophy (3)	
PHIL 331	History of Modern Philosophy (3)	
PHIL 338	Contemporary Philosophy (3)	
PHIL 350	Philosophy of Religion (3)	
PHIL 352	Introduction to World Religions (3)	
PHIL 356	Introduction to the Bible (3)	
PHIL 360	Social/Political Philosophy (3)	
PHOTO 301	Beginning Photography (3)	
PHOTO 420	History of Photography (3)	
RTVF 305	Film History I (1895-1949) (3)	
RTVF 378	Acting for the Camera (3)	
SPAN 401	Elementary Spanish I (4)	
SPAN 402	Elementary Spanish II (4)	
SPAN 411	Intermediate Spanish (4)	
SPAN 412	Intermediate Spanish (4)	
SPAN 413	Spanish for Native Speakers I (4)	
SPAN 415	Spanish for Native Speakers II (4)	
SPAN 425	Advanced Reading and Conversation (3)	
SPAN 426	Introduction to Mexican American Literature (3)	
SPAN 427	Introduction to Spanish American Literature (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 350	Theory and Techniques of Acting I (3)	
TA 356	Acting for the Camera I (3)	
TA 401	Children's Literature and Creative Drama (3)	
VIET 401	Elementary Vietnamese (4)	
VIET 402	Elementary Vietnamese (4)	
VIET 411	Intermediate Vietnamese (4)	
VIET 412	Intermediate Vietnamese (4)	
Total Units:		**18**

The Liberal Arts - Arts and Humanities Associate in Arts (A.A.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Student Learning Outcomes

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

- Demonstrate an appreciation of artistic endeavors, cultural expressions, ideas and/or institutions through nonempirical, analytic, interpretive studies and critical thinking projects. (PSLO 1)
- Articulate the development of and relationships between different civilizations, cultural traditions, ideas and/or institutions through the application of non-empirical, analytical reasoning. (PSLO 2)
- Evaluate critically the analyses and interpretations by others (including significant historical or contemporary analyses and interpretations) of arts, ideas, skills (including language), and/or institutions. (PSLO 3)
- Express clearly her or his own analyses and interpretations of arts, ideas, skills (including language), and/or institutions, and will properly use the vocabulary appropriate to the field. (PSLO 4)

A.A. in Liberal Arts - Communication and Writing

The Associate Degree in Liberal Arts - Communication and Writing is designed for students who wish a broad knowledge of communication studies and writing. Students must satisfactorily complete 60 units of collegiate coursework with a "C" (2.0) grade point average in curriculum that the district accepts toward this degree.

Note: If you plan to transfer to a CSU, consider completing an Associates in Arts for Transfer degree such as the Communications Studies, English, or Journalism AA-T rather than this degree. Please see a counselor for assistance with selecting the most appropriate transfer courses (i.e. 300 or higher numbered courses). If you plan to transfer to a UC campus or a private college or university, please see a counselor to determine if this degree is the most appropriate choice.

Degree Requirements

Course Code	Course Title	Units
A minimum of 18 units from the following:		18
Courses must be chosen from at least two disciplines:		
COMM C1000	Introduction to Public Speaking (3)	
COMM 311	Argumentation and Debate (3)	
COMM 315	Persuasion (3)	
COMM 331	Group Discussion (3)	
COMM 361	The Communication Experience (3)	
ENGL C1000	Academic Reading and Writing (3)	
ENGWR 301	College Composition and Literature (3)	
ENGL C1001	Critical Thinking and Writing (3)	
ENGRD 310	Critical Reading as Critical Thinking (3)	
PHIL 300	Introduction to Philosophy (3)	
PHIL 320	Logic and Critical Reasoning (3)	
PHIL 325	Symbolic Logic (3)	
SOC 305	Critical Thinking in the Social Sciences (3)	
Total Units:		**18**

The Liberal Arts - Communication and Writing Associate in Arts (A.A.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Student Learning Outcomes

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

- Conduct audience analysis to design an appropriate purpose, topic, style and speech structure within formal presentations. Express their ideas clearly in well-organized written messages. (PSLO 1)
- Construct an effective presentation to a specific topic by collecting relevant information and employing credible evidence with proper documentation. (PSLO 2)
- Determine and use appropriate communications technologies to convey information. (PSLO 3)
- Use correct and appropriate conventions of mechanics, usage, and style in written communication. (PSLO 4)

A.A. in Liberal Arts - Social and Behavioral Sciences

The Associate Degree in Liberal Arts - Social and Behavioral Sciences is designed for students who wish a broad knowledge of social and behavioral sciences. Students must satisfactorily complete 60 units of collegiate coursework with a "C" (2.0) grade point average in curriculum that the district accepts toward this degree.

Note: If you plan to transfer to a CSU after completing this Liberal Arts - Social and Behavioral Sciences degree, please consider an Associate in Arts for Transfer degree such as the Anthropology, Communication Studies, Early Childhood Education, Geography, History, Psychology or Sociology AA-T rather than this degree. See a counselor for assistance with selecting the most appropriate transfer courses (i.e. 300 or higher numbered courses). If you plan to transfer to a UC campus or a private college or university, please see a counselor to determine if this degree is the most appropriate choice.

Degree Requirements

Course Code	Course Title	Units
A minimum of 18 units from the following:		18
Courses must be chosen from at least two disciplines:		
AGB 321	Agriculture Economics (3)	
ANTH 310	Cultural Anthropology (3)	
ANTH 316	Global Forces in Culture Change (3)	
ANTH 323	Introduction to Archaeology (3)	
ANTH 324	World Prehistory (3)	
ANTH 331	The Anthropology of Religion (3)	
ANTH 332	Native Peoples of California (3)	
ANTH 334	Native Peoples of North America (3)	
ANTH 341	Introduction to Linguistics (3)	
ANTH 374	Birth to Death: The Anthropology of Primate Culture and Behavior (3)	
BUS 330	Managing Diversity in the Workplace (3)	
BUS 345	Law and Society (3)	
COMM 325	Intercultural Communication (3)	
COMM 341	Organizational Communication (3)	
COMM 363	Introduction to Communication Theory (3)	
COMM 480	Honors Seminar: Political Campaign Communication (3)	
ECE 312	Child Development (3)	
ECE 314	The Child, the Family and the Community (3)	
ECON 302	Principles of Macroeconomics (3)	
ECON 304	Principles of Microeconomics (3)	
ECON 306	Environmental Economics (3)	
ETHNS 300	Introduction to Ethnic Studies (3)	

Course Code	Course Title	Units
ETHNS 320	Introduction to African American Studies (3)	
ETHNS 330	Introduction to Asian American Studies (3)	
ETHNS 360	Introduction to Chicana/o/x Studies (3)	
ETHNS 344	The Latino Experience in America (3)	
GEOG 302	Environmental Studies & Sustainability (3)	
GEOG 310	Human Geography: Exploring Earth's Cultural Landscapes (3)	
GEOG 322	Geography of California (3)	
HIST 301	History of Europe and Mediterranean World to 1550 (3)	
HIST 302	History of Europe Since 1500 (3)	
HIST 307	History of World Civilizations to 1500 (3)	
HIST 308	History of World Civilizations, 1500 to Present (3)	
HIST 310	History of the United States (To 1877) (3)	
HIST 311	History of the United States (1865 - Present) (3)	
HIST 314	Recent United States 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 331	Women in American History (3)	
HIST 344	Survey of California History: A Multicultural Perspective (3)	
HIST 360	History of African Civilizations (3)	
HIST 364	Asian Civilization (3)	
HIST 365	Asian Civilization (3)	
HIST 370	History of the Americas through the 19th Century Wars of Independence (3)	
HIST 371	History of the Americas from the 19th Century Wars of Independence to the Present (3)	
HIST 373	History of Mexico (3)	
HIST 380	History of the Middle East (3)	
JOUR 310	Mass Media and Society (3)	
or RTVF 300	Mass Media and Society (3)	
JOUR 320	Race and Gender in the Media (3)	
PHIL 360	Social/Political Philosophy (3)	
POLS C1000	American Government and Politics (3)	
POLS 302	Comparative Politics (3)	
POLS 304	Introduction to Government: California (3)	
POLS 310	Introduction to International Relations (3)	
POLS 312	Politics of the Middle East (3)	
POLS 313	Latin America (3)	
POLS 314	Modern Europe and the Unification Process (3)	
POLS 315	Pacific Rim (3)	
POLS 317	Global Studies: Africa (3)	
POLS 318	Global Studies: Central Asia (3)	
POLS 319	Global Studies: Southeast Asia (3)	
POLS 320	Introduction to Political Theory (3)	
PSYC C1000	Introduction to Psychology (3)	
PSYC 312	Biological Psychology (4)	
PSYC 320	Social Psychology (3)	
PSYC 335	Research Methods in Psychology (3)	
PSYC 340	Abnormal Behavior (3)	
PSYC 356	Human Sexuality (3)	
PSYC 371	Life Span Developmental Psychology (3)	
SOC 300	Introductory Sociology (3)	
SOC 301	Social Problems (3)	
SOC 302	Introduction to Social Research Methods (3)	
SOC 305	Critical Thinking in the Social Sciences (3)	
SOC 321	Race, Ethnicity and Inequality in the United States (3)	
SOC 341	Sex and Gender in the U.S. (3)	
TA 306	Diversity in American Drama (1960 to Present) (3)	
Total Units:		**18**

The Liberal Arts - Social and Behavioral Sciences Associate in Arts (A.A.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Student Learning Outcomes

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

- Apply accurately the basic vocabulary and concepts of at least one social or behavioral science discipline verbally and in writing. (PSLO 1)
- Examine the possible causes and suggest solutions to introductory problems of a conceptual nature using the methods of at least one social or behavioral scientific discipline. (PSLO 2)
- Recognize the use and misuse of social and behavioral science concepts in society including politics and the media. (PSLO 3)
- Describe both verbally and in writing the role of diverse ethnic, religious and social groups in American political, economic and social development. (PSLO 4)

A.S. in Liberal Arts - Math and Science

The Associate Degree in Liberal Arts - Math and Science is designed for students who wish a broad knowledge of mathematics and the sciences. Students must satisfactorily complete 60 units of collegiate coursework with a "C" (2.0) grade point average in curriculum that the district accepts toward this degree.

Note: If you plan to transfer to the CSU after completing this degree, consider an Associates in Science for Transfer degree such as the Biology, Geography, Geology, Math, or Physics AS-T

rather than this degree. Please see a counselor for assistance with selecting the most appropriate transfer courses (i.e. 300 or higher numbered courses). If you plan to transfer to a UC campus or a private college or university, please see a counselor to determine if this degree is the most appropriate choice.

Degree Requirements

Course Code	Course Title	Units
Students must select 3 - 6 units in mathematics/statistics and 12 - 15 units in the remaining science disciplines:		
A minimum of 18 units from the following:		18
ANTH 300	Biological Anthropology (3)	
or ANTH 480	Honors Biological Anthropology (3)	
ANTH 301	Biological Anthropology Laboratory (1)	
or ANTH 482	Honors Biological Anthropology Laboratory (1)	
ASTR 300	Introduction to Astronomy (3)	
ASTR 400	Astronomy Laboratory (1)	
BIOL 308	Contemporary Biology (3)	
BIOL 309	Contemporary Biology Laboratory (1)	
BIOL 342	The New Plagues: New and Ancient Infectious Diseases Threatening World Health (3)	
BIOL 350	Environmental Biology (3)	
BIOL 352	Conservation Biology (3)	
BIOL 400	Principles of Biology (5)	
BIOL 410	Principles of Botany (5)	
BIOL 420	Principles of Zoology (5)	
BIOL 430	Anatomy and Physiology (5)	
BIOL 431	Anatomy and Physiology (5)	
BIOL 440	General Microbiology (4)	
BIOL 485	Honors Seminar in Genetics (3)	
CHEM 300	Beginning Chemistry (4)	
CHEM 305	Introduction to Chemistry (5)	
CHEM 306	Introduction to Organic and Biological Chemistry (5)	
CHEM 309	Integrated General, Organic, and Biological Chemistry (5)	
CHEM 400	General Chemistry I (5)	
CHEM 401	General Chemistry II (5)	
CHEM 420	Organic Chemistry I (5)	
CHEM 421	Organic Chemistry II (5)	
GEOG 300	Physical Geography: Exploring Earth's Environmental Systems (3)	
GEOG 301	Physical Geography Laboratory (1)	
GEOG 305	Global Climate Change (3)	
GEOG 306	Weather and Climate (3)	
GEOL 300	Physical Geology (3)	
GEOL 301	Physical Geology Laboratory (1)	
GEOL 305	Earth Science (3)	
GEOL 310	Historical Geology (3)	
GEOL 311	Historical Geology Laboratory (1)	
GEOL 330	Introduction to Oceanography (3)	
MATH 300	Introduction to Mathematical Ideas (3)	
MATH 310	Mathematical Discovery (3)	
MATH 311	Mathematical Concepts for Elementary School Teachers - Number Systems (3)	
MATH 335	Trigonometry with College Algebra (5)	
MATH 341	Calculus for Business and Economics (4)	
MATH 343	Modern Business Mathematics (4)	
MATH 355	Calculus for Biology and Medicine I (4)	
MATH 356	Calculus for Biology and Medicine II (4)	
MATH 370	Pre-Calculus Mathematics (5)	
MATH 372	College Algebra for Calculus (4)	
MATH 373	Trigonometry for Calculus (4)	
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)	
PHYS 310	Conceptual Physics (3)	
PHYS 350	General Physics (4)	
PHYS 360	General Physics (4)	
PHYS 370	Introductory Physics - Mechanics and Thermodynamics (5)	
PHYS 380	Introductory Physics - Electricity and Magnetism, Light and Modern Physics (5)	
PHYS 411	Mechanics of Solids and Fluids (4)	
PHYS 421	Electricity and Magnetism (4)	
PHYS 431	Heat, Waves, Light and Modern Physics (4)	
PSYC 312	Biological Psychology (4)	
STAT C1000E	Introduction to Statistics (4)	
or ECON 310	Statistics for Business and Economics (3)	
or PSYC 330	Introductory Statistics for the Behavioral Sciences (3)	
Total Units:		**18**

[1]Students must select 3 - 6 units in mathematics/statistics and 12 - 15 units in the remaining science disciplines.

The Liberal Arts - Math and Science Associate in Science (A.S.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Student Learning Outcomes

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

- Explain the core perspectives of the scientific method and apply it to at least one scientific discipline. (PSLO 1)

- Solve introductory problems of a conceptual and/or quantitative nature in at least one scientific discipline. (PSLO 2)
- Apply accurately the basic vocabulary and concepts of at least one scientific discipline verbally and in writing. (PSLO 3)
- Recognize the use and misuse of scientific concepts in society including politics and the media. (PSLO 4)
- Use appropriate quantitative skills at college level to solve problems applicable to occupational and personal activities. (PSLO 5)

Library

CRC Library courses are designed to equip students with vital research and critical skills, enabling their success in college classes and on the job. The student will gain “research survival skills” to cope with the information rich environment in which we live and work.

Library technical careers are accessible by completing a Library Technology program at a community college, such as Sacramento City College. Librarian careers require an advanced degree.

Dean Gladis Sanchez

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Library (LIBR) Courses

LIBR 318 Library Research and Information Literacy

Units: 1
Hours: 18 hours LEC
Prerequisite: None.
Transferable: CSU; UC (UC Transfer Credit Limitation: Library 318 and 324 combined: maximum transfer credit is one course)
General Education: Local GE L7B

This course will help students acquire the information competency skills necessary to conduct academic or personal research. It provides a step-by-step guide to the research process that is applicable to term papers, course work and life-long learning.

LIBR 324 Critical Thinking and Information Literacy

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGRD 113; Proficient computer skills are critical for successful completion of this course.
Transferable: CSU; UC (UC Transfer Credit Limitation: Library 318 and 324 combined: maximum transfer credit is one course)
General Education: Local GE L1B

This course teaches critical thinking and information literacy to allow students to thoughtfully navigate an information-rich environment. Students will learn to critically seek, access, evaluate, and use information in a variety of contexts. This includes recognizing and using inductive and deductive reasoning, rhetorical appeals, and identifying flawed logic in information sources. These are skills that are invaluable for the college classroom, the workplace, and for lifelong information consumers.

LIBR 495 Independent Studies in Library

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

LIBR 499 Experimental Offering in Library

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU

This is the experimental courses description.

Management

This broad-based management program offers introductory courses as well as more specialized ones ranging from studies of the standard corporate organization to analyzing the small business. Managers help organizations achieve their objectives through effective planning, organizing, directing, and controlling. The management program attempts to develop an understanding of the importance and diversity of its related fields. This program prepares students for entry into a company management training program and upgrades the skills of those already working in industry, allowing them to advance to supervisory positions. Students planning vocations in personnel services or analyst positions in state or federal government service should also consider this degree program.

Degrees and Certificates Offered

A.A. in Management

Management in Business Certificate

Dean Tyler Rollins

Department Chair Eric Granquist

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Associate Degree

A.A. in Management

This program provides an overview of business fundamentals for students interested in most business occupations. Topics include management communication, human resources, organizational behavior, and diversity management.

Degree Requirements

Course Code	Course Title	Units
BUS 300	Introduction to Business	3
BUS 340	Business Law	3
ACCT 301	Financial Accounting	4
ECON 302	Principles of Macroeconomics	3
MKT 300	Principles of Marketing	3
MGMT 362	Techniques of Management	3
MGMT 372	Human Relations and Organizational Behavior	3
A minimum of 6 units from the following:		6
BUS 310	Business Communications (3)	
BUS 330	Managing Diversity in the Workplace (3)	
BUS 350	Small Business Management/Entrepreneurship (3)	
MGMT 308	Personnel and Human Resources Management (3)	
MGMT 495	Independent Studies in Management (1 - 3)	
MGMT 498	Work Experience in Management (0.5 - 4)	
A minimum of 3 units from the following:		3
CISC 310	Introduction to Computer Information Science (3)	
CISA 305	Beginning Word Processing (2)	
CISA 315	Introduction to Electronic Spreadsheets (2)	
CISA 320	Introduction to Database Management (1)	
Total Units:		**31**

The Management Associate in Arts (A.A.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Student Learning Outcomes

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

- Incorporate leadership skills and abilities that are effective in managing a multicultural workforce.
- Analyze practical business problems.
- Apply current management philosophies to current management problems.
- Integrate management principles in relationship to finance, personnel, products, services and information.
- Communicate effectively verbally and in writing in various business settings.
- Utilize critical thinking and research skills in the evaluation of alternative solutions.

Certificate of Achievement

Management in Business Certificate

This Certificate of Achievement provides an overview of business fundamentals for students interested in most business occupations. Topics include management techniques, human resources, and organizational behavior. Students wanting to earn the A.A. degree in Business, General can do so by taking additional courses beyond the 18 units required for this certificate. Please seek advice from your counselor to verify the correct courses to take towards the A.A degree.

Certificate Requirements

Course Code	Course Title	Units
MGMT 362	Techniques of Management	3
MGMT 372	Human Relations and Organizational Behavior	3
BUS 300	Introduction to Business	3
MKT 300	Principles of Marketing	3
BUS 340	Business Law	3
A minimum of 3 units from the following:		3
MGMT 308	Personnel and Human Resources Management (3)	
BUS 310	Business Communications (3)	
BUS 330	Managing Diversity in the Workplace (3)	

Course Code	Course Title	Units
BUS 350	Small Business Management/Entrepreneurship (3)	
ACCT 301	Financial Accounting (4)	
CISC 310	Introduction to Computer Information Science (3)	
Total Units:		**18**

Student Learning Outcomes

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

- P-SLO 1: Skills/Knowledge: Demonstrate skill and comprehension in respective subject areas as indicated by course outcomes
- Incorporate leadership skills and abilities that are effective in managing a multicultural workforce
- Apply current management techniques to resolving personnel and organizational problems in the work place
- P-SLO 2: Critical Thinking Skills: Demonstrate the ability to think critically and analyze problems
- Integrate management principles in relationship to finance, personnel, products, services and information

Career Information

First-line Supervisor or Manager in general business or government service settings.

Management (MGMT) Courses

MGMT 295 Independent Studies in Management

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

MGMT 299 Experimental Offering in Management

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

MGMT 308 Personnel and Human Resources Management

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU

This course presents the student with the materials necessary to begin the complex study and analysis of such areas as civil rights, labor law, the personnel "Human Resources" organization and various management theories currently found in both public and private sector organization.

MGMT 362 Techniques of Management

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU

This is a basic course in management that introduces a variety of modern management concepts. This course includes the basic management functions of planning, organization, staffing, leadership, and control. In addition, such concepts as team development, communication, business ethics, and global management perspectives will be discussed.

MGMT 372 Human Relations and Organizational Behavior

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU

Effective human interaction principles that build confidence, competence and positive attitudes in work organizations are learned in this course. Topics that include the basis for human behavior, perception, communication, motivation, performance improvement, group behavior, ethics and social responsibility are major areas of emphasis. This course emphasizes the psychology of human relations management.

MGMT 495 Independent Studies in Management

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

MGMT 498 Work Experience in Management

Units: 0.5 - 4
Hours: 27 - 216 hours LAB
Prerequisite: None.
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position or job related to career goals in Management.
Transferable: CSU

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in transfer level degree occupational programs. Course content includes understanding the application of education to the

workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and complete 27 hours of related work experience for 0.5 unit. An additional 27 hours of related work experience is required for each additional 0.5 units. 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.

MGMT 499 Experimental Offering in Management

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU

This is the experimental courses description.

Marketing

Marketing is a dynamic area of study that provides immediate job and career opportunities after one course or the completion of a degree. The skills learned are easily converted into well-paying careers by many students. There is no limit to your success when these areas of study are utilized successfully. The skills learned are essential for international and domestic business and for companies large and small. Please refer to the Business section for additional marketing courses.

Degrees and Certificates Offered

A.A. in Marketing

Marketing Certificate

Dean Tyler Rollins

Department Chair Eric Granquist

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Associate Degree

A.A. in Marketing

The Marketing degree provides an opportunity for students to acquire knowledge and training for careers in sales, advertising, and marketing. The competency-based curriculum is designed to prepare students for a variety of positions and to provide basic training for advancement to management positions and for transfer to four-year universities.

Degree Requirements

Course Code	Course Title	Units
BUS 300	Introduction to Business	3
BUS 340	Business Law	3
ACCT 301	Financial Accounting	4
ECON 302	Principles of Macroeconomics	3
MKT 300	Principles of Marketing	3
MKT 310	Selling Professionally	3
MKT 314	Advertising	3
A minimum of 6 units from the following:		6
MKT 330	Internet Marketing (3)	
MKT 312	Retailing (3)	
BUS 310	Business Communications (3)	
BUS 330	Managing Diversity in the Workplace (3)	
BUS 350	Small Business Management/Entrepreneurship (3)	
MKT 495	Independent Studies in Marketing (1 - 3)	
MKT 498	Work Experience in Marketing (0.5 - 4)	
A minimum of 3 units from the following:		3
CISC 310	Introduction to Computer Information Science (3)	
CISA 305	Beginning Word Processing (2)	
CISA 315	Introduction to Electronic Spreadsheets (2)	
CISA 320	Introduction to Database Management (1)	
Total Units:		**31**

The Marketing Associate in Arts (A.A.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Student Learning Outcomes

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

- Integrate the functions of the marketing mix.
- Identify and examine consumer's buying behavior and evaluate which marketing communications medium will most effectively meet the needs of the marketplace.
- Incorporate principles of product development, pricing, distribution strategies, promotion strategies and market research.
- Apply the marketing mix to create and analyze various marketing strategies.
- Plan, produce and select the appropriate media for advertising.
- Communicate effectively verbally and in writing in various business settings.

Career Information

Buyer, Account Executive, Entrepreneur; Investment Counselor, Marketing Services, Purchasing Agent, Salesperson, Shipping Clerk, Marketing Manager, or Importer/Exporter. Some career options may require more than two years of college study.

Certificate of Achievement

Marketing Certificate

This Certificate of Achievement in Marketing provides an opportunity for students to acquire knowledge and training for business marketing and prepares them for careers in sales, advertising, customer service, and business development. Students wanting to earn the A.A. degree in Marketing can do so by taking additional courses beyond the 18 units required for this certificate. Please seek advice from your counselor to verify the correct courses to take towards the A.A degree.

Certificate Requirements

Course Code	Course Title	Units
MKT 300	Principles of Marketing	3
MKT 310	Selling Professionally	3
MKT 314	Advertising	3
BUS 300	Introduction to Business	3
BUS 340	Business Law	3

Course Code	Course Title	Units
A minimum of 3 units from the following:		3
BUS 310	Business Communications (3)	
BUS 330	Managing Diversity in the Workplace (3)	
BUS 350	Small Business Management/Entrepreneurship (3)	
MKT 495	Independent Studies in Marketing (1 - 3)	
MKT 498	Work Experience in Marketing (0.5 - 4)	
Total Units:		**18**

Student Learning Outcomes

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

- P-SLO 1: Skills/Knowledge: Demonstrate skill and comprehension in the field of marketing as indicated by course outcomes
- Incorporate principles of product development, pricing, distribution strategies, promotion strategies and market research.
- P-SLO 2: Critical Thinking Skills: Demonstrate the ability to think critically and analyze problems
- Apply the marketing mix to create and analyze various marketing strategies
- Integrate the functions of the marketing mix to develop a marketing plan for a business
- P-SLO 3: Communication: Express ideas and facts clearly and completely
- Communicate effectively verbally and in writing in various business settings

Career Information

Account Executive, Salesperson, Customer Service Representative, Marketing Assistant.

Marketing (MKT) Courses

MKT 120 Survey of International Business

Units: 3
Hours: 54 hours LEC
Prerequisite: None.

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, and the operation of multi-national corporations.

MKT 295 Independent Studies in Marketing

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

MKT 299 Experimental Offering in Marketing

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

MKT 300 Principles of Marketing

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU

This course is a general overview of marketing principles. The course covers the process of planning and executing the conception, pricing, promotion, and distribution of ideas, goods and services to create exchanges that satisfy individual and organizational goals. Elements of the marketing environment such as government regulation, environmental protection, competition, and consumer behavior will be analyzed.

MKT 310 Selling Professionally

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU

This course shows the importance of good selling techniques and the personal qualifications required for effective selling. It emphasizes the development of a business personality and its application to the approach direction, and closing of a sale. It also examines various kinds of selling experience: direct, industrial, wholesale and retail. This course is recommended for men and women preparing for various technical fields as well as all business majors.

MKT 312 Retailing

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU

Retailing is a business that provides goods and services to customers for their personal use. This course will study modern retail operations with emphasis on consumer behavior, store location and layout, sourcing of goods, pricing, organization, promotion, management and other pertinent factors of retail operations.

MKT 314 Advertising

Same As: RTVF 376
Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU

This course is an introduction to the field of advertising, its history, purpose, institutions, and functions. Studies are made of the various media used in general advertising, as well as the effective use of these media. Students will produce ads and advertising campaigns. This course is the same as RTVF 376, and only one may be taken for credit.

MKT 330 Internet Marketing

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU

This course introduces students to the use of social media and other Internet technologies, with an emphasis on the theory and practice of marketing in an electronic environment. Topics will include strategies to help students build customer relations through technological strategies. Students will have a good understanding of how this technology can be used to help his/her business be more successful.

MKT 495 Independent Studies in Marketing

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

MKT 498 Work Experience in Marketing

Units: 0.5 - 4
Hours: 27 - 216 hours LAB
Prerequisite: None.
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position or job related to career goals in Marketing.
Transferable: CSU

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in transfer level degree occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and complete 27 hours of related work experience for 0.5 unit. An additional 27 hours of related work experience is required for each additional 0.5 units. 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.

MKT 499 Experimental Offering in Marketing

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU

This is the experimental courses description.

Mathematics and Statistics

CRC's Mathematics program offers a comprehensive mathematics curriculum addressing the needs of both transfer and non-transfer students. The study of mathematics provides students with the ability to think logically and abstractly and to use problem-solving and computational skills necessary for success in any field of study.

View the CRC Math and Statistics Course Sequence (https://crc.losrios.edu/2025-2026-official-catalog/programs-of-study/list-of-programs/math-and-statistics-course-sequence) and the Math and Statistics Placement (https://crc.losrios.edu/admissions/placement/math-placement) webpage.

Degrees Offered

A.S.-T. in Mathematics

A.S. in Mathematics

Dean Camille Moreno

Department Chair Phuong Le

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Associate Degrees for Transfer

A.S.-T. in Mathematics

The Associate in Science in Mathematics for Transfer degree is designed to meet common lower-division requirements for a major in mathematics at most California State University (CSU) campuses. Satisfactory completion of the CRC Associate in Science in Mathematics for Transfer (AS-T) degree provides a solid foundation and satisfies the standard prerequisites for upper division coursework for mathematics majors at most CSU and other four-year universities. However, it is highly recommended that students meet with a counselor since major and general education requirements vary for each college/university.

Students must complete the following Associate Degree for Transfer (ADT) requirements:

(1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
(A) The California General Education Transfer Curriculum (Cal-GETC).
(B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

(2) Obtainment of a minimum grade point average of 2.0.

ADTs also require that students must earn a "C" or better in all courses required for the major or area of emphasis. A "P" (Pass) grade is also an acceptable grade for courses in the major if the course is taken on a Pass/No Pass basis.

Degree Requirements

Course Code	Course Title	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
Total Units:		**22**

The Associate in Science in Mathematics for Transfer (AS-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) the California General Education Transfer Curriculum (Cal-GETC) Requirement.

Student Learning Outcomes

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

- explain and apply basic concepts of single variable calculus including various forms of derivatives and integrals, their interconnections, and their uses in analyzing and solving real-world problems.
- explain and apply basic concepts of multivariable calculus, linear algebra, or differential equation techniques, their interconnections, and their uses in analyzing and solving real-world problems.
- prepare logical arguments and use them to prove basic mathematical theorems.
- solve real-world application problems using appropriate mathematical problem-solving skills.

Career Information

Mathematicians work as statisticians, analysts, computer programmers, actuaries, researchers, planners, and educators. NOTE TO TRANSFER STUDENTS: The Associate Degree for Transfer program is designed for students who plan to transfer to a campus of the California State University (CSU). Other than the required core, the courses you choose to complete this degree will depend to some extent on the selected CSU for transfer. In addition, some California General Education Transfer Curriculum (Cal-GETC) requirements can also be completed using courses required for this associate degree for transfer major (known as "double-counting"). Meeting with a counselor to determine the most appropriate course choices will facilitate efficient completion of your transfer requirements. For students wishing to transfer to other universities (UC System, private, or out-of-state), the Associate Degree for Transfer may not provide adequate preparation for upper-division transfer admissions; it is critical that you meet with a CRC counselor to select and plan the courses for the major, as programs vary widely in terms of the required preparation.

Associate Degrees

A.S. in Mathematics

This degree is designed to provide a foundation in mathematics and to meet common lower-division requirements for a major in Mathematics or Statistics at many four-year institutions. It is highly recommended that students meet with a counselor because major and general education requirements vary for each college/university.

NOTE TO TRANSFER STUDENTS:
If you are interested in transferring to a four-year college or university to pursue a bachelor's degree in Mathematics, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate's degree in Mathematics may be different from the courses required for the Bachelor's degree.

Degree Requirements

Course Code	Course Title	Units
MATH 400	Calculus I	5
MATH 401	Calculus II	5
MATH 402	Calculus III	5
MATH 420	Differential Equations	4
MATH 410	Introduction to Linear Algebra	3
A minimum of 4 units from the following:		
CISP 360	Introduction to Structured Programming (4)	4
or CISP 370	Beginning Visual Basic (4)	
or CISP 400	Object Oriented Programming with C++ (4)	
or CISP 401	Object Oriented Programming with Java (4)	
or STAT C1000E	Introduction to Statistics (4)	
Total Units:		**26**

The Mathematics Associate in Science (A.S.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Student Learning Outcomes

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

- explain and apply basic concepts of single variable calculus including various forms of derivatives and integrals, their interconnections, and their uses in analyzing and solving real-world problems.(P-SLO #1)
- explain and apply basic concepts of multivariable calculus, linear algebra, or differential equation techniques, their interconnections, and their uses in analyzing and solving real-world problems. (P-SLO #2)
- prepare logical arguments and use them to prove basic mathematical theorems. (P-SLO #3)
- solve real-world application problems using appropriate mathematical problem-solving skills. (P-SLO #4)
- use mathematics in the context of computer programming or statistics. (P-SLO #5)

Career Information

Mathematicians work as statisticians, analysts, computer programmers, actuaries, researchers, planners, and educators. Most of these careers require education beyond the two-year college level.

Mathematics (MATH) Courses

MATH 20 Arithmetic

Units: 5
Hours: 90 hours LEC
Prerequisite: None.

This course provides instruction in the fundamentals of arithmetic with emphasis on computational skills. Topics include whole numbers, fractions, decimals, percents, ratios, proportions, problem solving, and applications.

MATH 30 Pre-Algebra Mathematics

Units: 5
Hours: 90 hours LEC
Prerequisite: MATH 20 with a grade of "C" or better; or equivalent skills demonstrated through the assessment process.

This pre-algebra mathematics course emphasizes: fundamental operations on integers, fractions, and decimals; formulas involving geometric figures; measurement; and solving basic equations. Topics include: fractions; decimals; signed numbers; properties of exponents; scientific notation; conversions; metric system; square and cube roots; formula evaluation; solving equations; ratios; proportions; algebraic manipulations; descriptive statistics; the rectangular coordinate system; and elementary calculator use.

MATH 70 Arithmetic Skills Lab

Units: 0.25 - 2
Hours: 13.5 - 108 hours LAB
Prerequisite: None.
Corequisite: MATH 20

This laboratory course provides the student with assistance in arithmetic skills via enrollment in the campus' Math Center. It is recommended for students who are encountering difficulties in the areas of math anxiety, basic skills, problem solving, and/or arithmetic concepts. Students may enter the Skills Lab course at any time during the first 12 weeks of the semester. It is recommended that the student register for 0.25 units. This recommended unit enrollment will require the student to spend a minimum of 13.5 hours throughout the semester in the Math Center studying for the relevant course. Students can take this course again in subsequent semesters until 2.0 total units have been completed. Students must be concurrently enrolled in an arithmetic-level course (MATH 20 - 29) in order to enroll in MATH 70. Placement into this Skills Lab can be made through student request, instructor recommendation, or an assessment process. This course is graded on a pass/no-pass basis.

MATH 71 Pre-Algebra Skills Lab

Units: 0.25 - 2
Hours: 13.5 - 108 hours LAB
Prerequisite: None.
Corequisite: MATH 30

This laboratory course provides the student with assistance in pre-algebra skills via enrollment in the campus' Math Center. It is recommended for students who are encountering difficulties in the areas of math anxiety, basic skills, problem solving, algebraic manipulations and/or algebra concepts. Students may enter the Skills Lab course at any time during the first 12 weeks of the semester. It is recommended that the student register for 0.25 units. This recommended unit enrollment will require the student to spend a minimum of 13.5 hours throughout the semester in the Math Center studying for the relevant course. Students can take this course again in subsequent semesters until 2.0 total units have been completed. Students must be concurrently enrolled in a pre-algebra-level course (MATH 30 - 39) in order to enroll in MATH 71. Placement into this Skills Lab can be made through student request, instructor recommendation, or an assessment process. This course is graded on a pass/no-pass basis.

MATH 72 Elementary Algebra Skills Lab

Units: 0.25 - 2
Hours: 13.5 - 108 hours LAB
Prerequisite: None.
Corequisite: MATH 100 or STAT 100

This laboratory course provides the student with assistance in elementary algebra skills via enrollment in the campus' Math Center. It is recommended for students who are encountering difficulties in the areas of math anxiety, basic skills, problem solving, algebraic manipulations and/or algebra concepts. Students may enter the Skills Lab course at any time during the first 12 weeks of the semester. It is recommended that the student register for 0.25 units. This recommended unit enrollment will require the student to spend a minimum of 13.5 hours throughout the semester in the Math Center studying for the relevant course. Students can take this course again in subsequent semesters until 2.0 total units have been completed. Students must be concurrently enrolled in an elementary algebra-level course (MATH 100 - 109) in order to enroll in MATH 72. Placement into this Skills Lab can be made through student request, instructor recommendation, or an assessment process. This course is graded on a pass/no-pass basis.

MATH 73 Intermediate Algebra/Math Literacy Skills Lab

Units: 0.25 - 2
Hours: 13.5 - 108 hours LAB
Prerequisite: None.
Corequisite: MATH 120, 125, or 144

This laboratory course provides the student with assistance in intermediate algebra skills via enrollment in the campus' Math Center. It is recommended for students who are encountering difficulties in the areas of math anxiety, basic skills, problem solving, algebraic manipulations and/or intermediate algebra concepts. Students may enter the Skills Lab course at any time during the first 12 weeks of the semester. It is recommended that the student register for 0.25 units. This recommended unit enrollment will require the student to spend a minimum of 13.5 hours throughout the semester in the Math Center studying for the relevant course. Students can take this course again in subsequent semesters until 2.0 total units have been completed. Students must be concurrently enrolled in an intermediate algebra-level course (MATH 120 - 129), including any mathematical literacy course (MATH 140 - 149) in order to enroll in MATH 73. Placement into this Skills Lab can be made through student request, instructor recommendation, or an assessment process. This course is graded on a pass/no-pass basis.

MATH 74 Statistics/Geometry Skills Lab

Units: 0.25 - 2
Hours: 13.5 - 108 hours LAB
Prerequisite: None.
Corequisite: MATH 110 or STAT C1000E

This laboratory course provides the student with assistance in statistics and/or geometry skills via enrollment in the campus' Math Center. It is recommended for students who are encountering difficulties in the areas of math anxiety, basic skills, problem solving, algebraic manipulations, statistics and/or geometry concepts. Students may enter the Skills Lab course at any time during the first 12 weeks of the semester. It is recommended that the student register for 0.25 units. This recommended unit enrollment will require the student to spend a minimum of 13.5 hours throughout the semester in the Math Center studying for the relevant course. Students can take this course again in subsequent semesters until 2.0 total units have been completed. Students must be concurrently enrolled in a statistics (STAT C1000E, formerly known as STAT 300) or Geometry (MATH 110) course in order to enroll in MATH 74. Placement into this Skills Lab can be made through student request, instructor recommendation, or an assessment process. This course is graded on a pass/no-pass basis.

MATH 75 Skills Lab for Miscellaneous Non-Transferable Math

Units: 0.25 - 2
Hours: 13.5 - 108 hours LAB
Prerequisite: None.

This laboratory course provides the student with assistance in all non-transfer-level math courses via enrollment in the campus' Math Center. It is recommended for students who are encountering difficulties in the areas of math anxiety, basic skills, problem solving, algebraic manipulations, and/or algebra concepts. Students may enter the Skills Lab course at any time during the first 12 weeks of the semester. It is recommended that the student register for 0.25 units. This recommended unit enrollment will require the student to spend a minimum of 13.5 hours throughout the semester in the Math Center studying for the relevant course. Students can take this course again in subsequent semesters until 2.0 total units have been completed. Students must be concurrently enrolled in a non-transferable math course (MATH 20 – 199) in order to enroll in MATH 75. MATH 75 should only be used as a Skills Lab if there is not already a relevant Skills Lab course available that better fits the student's main math course. Placement into this Skills Lab can be made through student request, instructor recommendation, or an assessment process. This course is graded on a pass/no-pass basis.

MATH 76 Trigonometry/Precalculus Skills Lab

Units: 0.25 - 2
Hours: 13.5 - 108 hours LAB
Prerequisite: None.
Corequisite: MATH 335 or 370

This laboratory course provides the student with assistance in trigonometry and/or precalculus (including college algebra) skills via enrollment in the campus' Math Center. It is recommended for students who are encountering difficulties in the areas of math anxiety, advanced algebra skills, problem solving, trigonometric concepts, functions, graphs, etc. Students may enter the Skills Lab course at any time during the first 12 weeks of the semester. It is recommended that the student register for 0.25 units. This recommended unit enrollment will require the student to spend a minimum of 13.5 hours throughout the semester in the Math Center studying for the relevant course. Students can take this course again in subsequent semesters until 2.0 total units have been completed. Students must be concurrently enrolled in a trigonometry (MATH 335) or precalculus (MATH 370) course in order to enroll in MATH 76. Placement into this Skills Lab can be made through student request, instructor recommendation, or an assessment process. This course is graded on a pass/no-pass basis.

MATH 77 Calculus I/II Skills Lab

Units: 0.25 - 2
Hours: 13.5 - 108 hours LAB
Prerequisite: None.
Corequisite: MATH 355, 356, 400, or 401

This laboratory course provides the student with assistance in differential and/or integral calculus skills via enrollment in the campus' Math Center. It is recommended for students who are encountering difficulties in the areas of math anxiety, advanced algebra skills, problem solving, calculus concepts, etc. Students may enter the Skills Lab course at any time during the first 12 weeks of the semester. It is recommended that the student register for 0.25 units. This recommended unit enrollment will require the student to spend a minimum of 13.5 hours throughout the semester in the Math Center studying for the relevant course. Students can take this course again in subsequent semesters until 2.0 total units have been completed. Students must be concurrently enrolled in a differential or integral calculus course (MATH 355, 356, 400 or 401) in order to enroll in MATH 77. Placement into this Skills Lab can be made through student request or instructor recommendation. This course is graded on a pass/no-pass basis.

MATH 78 Calculus III/DE/Linear Algebra Skills Lab

Units: 0.25 - 2
Hours: 13.5 - 108 hours LAB
Prerequisite: None.
Corequisite: MATH 402, 410, or 420

This laboratory course provides the student with assistance in multi-variable calculus, differential equations, and linear algebra skills via enrollment in the campus' Math Center. It is recommended for students who are encountering difficulties in the areas of math anxiety, advanced algebra skills, problem solving, calculus concepts, etc. Students may enter the Skills Lab course at any time during the first 12 weeks of the semester. It is recommended that the student register for 0.25 units. This recommended unit enrollment will require the student to spend a minimum of 13.5 hours throughout the semester in the Math Center studying for the relevant course. Students can take this course again in subsequent semesters until 2.0 total units have been completed. Students must be concurrently enrolled in a multi-variable calculus (MATH 402), linear algebra (MATH 410), or differential equations (MATH 420) course in order to enroll in MATH 78. Placement into this Skills Lab can be made through student request, instructor recommendation, or an assessment process. This course is graded on a pass/no-pass basis.

MATH 79 Skills Lab for Miscellaneous Transferable Math

Units: 0.25 - 2
Hours: 13.5 - 108 hours LAB
Prerequisite: None.
Corequisite: MATH 300, or MATH 310, or MATH 335, or MATH 341, or MATH 355, or MATH 356, or MATH 370, or MATH 400, or MATH 401, or MATH 402, or MATH 410, or MATH 420, or MATH 483, or MATH 484, or STAT C1000E (formerly known as STAT 300).

This laboratory course provides the student with assistance in all transfer-level math and statistics courses via enrollment in the campus' Math Center. It is recommended for students who are encountering difficulties in the areas of math anxiety, advanced algebra skills, problem solving, trigonometry, calculus, etc. Students may enter the Skills Lab course at any time during the first 12 weeks of the semester. It is recommended that the student register for 0.25 units. This recommended unit enrollment will require the student to spend a minimum of 13.5 hours throughout the semester in the Math Center studying for the relevant course. Students can take this course again in subsequent semesters until 2.0 total units have been completed. Students must be concurrently enrolled in a transfer-level math course (MATH 300 and above) in order to enroll in MATH 79. MATH 79 should only be used as a Skills Lab if there is not already a relevant Skills Lab course available that better fits the student's main math course. Placement into this Skills Lab can be made through student request, instructor recommendation, or an assessment process. This course is graded on a pass/no-pass basis.

MATH 83 Guided Individualized Math Review

Units: 0.25 - 1
Hours: 13.5 - 54 hours LAB
Prerequisite: None.

The course enables students to build and review math topics that are necessary for success in any level of math/stat course. Learning objectives and the course topics will be designed based on the needs of each individual student with the guidance and support from the instructor and student tutors. This course cannot replace any existing mathematics course, and successful completion of MATH 83 currently does not satisfy any mathematics prerequisite. MATH 83 is a credit/no-credit class. Students do not need to be enrolled in any other math course to enroll in MATH 83.

MATH 85 Math Study Skills

Units: 1

Hours: 18 hours LEC
Prerequisite: None.

This course is designed to assist students in learning mathematics through the development of successful math study skills, specifically at the basic skills level (arithmetic, prealgebra, and beginning algebra). This course addresses topics such as learning styles, tools and techniques for reading a math textbook, using math homework as a learning tool, taking notes in a math class, preparing and taking exams/ quizzes in a math class, and techniques for overcoming math anxiety. It is strongly advised that students be concurrently enrolled in a math course, as an opportunity to apply the learned material in real time. For further guidance and/or recommendations, students are advised to speak with someone in the math department.

MATH 100 Elementary Algebra

Units: 5
Hours: 90 hours LEC
Prerequisite: MATH 30 with a grade of "C" or better; or equivalent skills demonstrated through the assessment process.

This course includes the fundamental concepts and operations of algebra with problem solving skills emphasized throughout. Topics include: properties of real numbers, linear equations and inequalities, integer exponents, polynomials, factoring polynomials. Rational expressions and equations, radical expressions and equations, rational exponents, systems of linear equations and inequalities, the rectangular coordinate system, graphs and equations of lines, and solving quadratic equations.

MATH 110 Elementary Geometry

Units: 5
Hours: 90 hours LEC
Prerequisite: MATH 100 with a grade of "C" or better, or placement through the assessment process.
General Education: Local GE L2

This course introduces Euclidean Geometry. Topics include sets, definitions, postulates, theorems, deductive and inductive reasoning, proof, parallel lines, triangles, polygons, congruence, similarity, constructions, the Pythagorean Theorem, right triangle trigonometry, circles, analytic geometry, and elementary solid geometry.

MATH 120 Intermediate Algebra

Units: 5
Hours: 90 hours LEC
Prerequisite: MATH 100 with a grade of "C" or better; or equivalent skills demonstrated through the assessment process.
General Education: Local GE L2

This course extends the concepts of elementary algebra with problem solving skills and applications emphasized throughout. Topics which are briefly reviewed and subsequently extended include: solving equations (quadratic, radical, rational, and systems of linear equations), graphing linear equations, simplifying expressions (polynomial, rational, radical, and those involving integer exponents), and factoring polynomials. New topics include: solving more complex equations and inequalities (exponential, logarithmic, linear and quadratic inequalities, and systems of non-linear equations), graphing more complex equations (quadratics, circles, and various functions using transformations), functions and their properties, exponential and logarithmic functions and their properties.

MATH 125 Intermediate Algebra for Statistics and Liberal Arts

Units: 4
Hours: 72 hours LEC
Prerequisite: MATH 100 or 102 with a grade of "C" or better; or equivalent skills demonstrated through the assessment process.
General Education: Local GE L2

This course is designed for the intermediate algebra student who plans to continue only into STAT C1000E (formerly known as STAT 300), ECON 310, POLS 382, PSYC 330, MATH 300, MATH 310, or MATH 315. The course topics include linear behavior, functions and graphs, exponential and logarithmic functions, systems, and polynomial, rational, exponential, logarithmic and radical expressions and equations. This course will feature discovery activities, applications to real data sets and problems which are current and relevant.

MATH 144 Math for Contemporary Careers

Units: 3
Hours: 54 hours LEC
Prerequisite: MATH 100 with a grade of "C" or better, or placement through the assessment process.
General Education: Local GE L2

In the current information age, what mathematics should every person know? This course examines the contributions of mathematics in today's world. Students will explore mathematics' on-going role in society beginning with the need for and development of number systems, logical thinking, and current processes for coding and decoding data. A major focus of the course will be contemporary methods for analyzing data and interpreting statistics to make informed decisions. Students will conclude the course by selecting a module of mathematical interest from a list of available topics drawn from vocational programs and contemporary careers such as automotive technology, construction technology, film, digital media and broadcasting, medical records, pharmacy technology or other emerging career fields.

MATH 295 Independent Studies in Mathematics

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

MATH 299 Experimental Offering in Mathematics

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

MATH 300 Introduction to Mathematical Ideas

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: Intermediate Algebra or the equivalent
Transferable: CSU; UC
General Education: Local GE L2; Cal-GETC Area 2

Introduction to Mathematical Ideas allows liberal arts students to meet general education mathematics requirements while exploring concepts and objects of mathematics in a meaningful way. This course is designed to show some of the essence and quality of mathematics, and to enhance precision in the evaluation and expression of ideas, thereby developing a student's quantitative reasoning skills. It is recommended primarily for students who do not plan to major in a math-related field but may also be of interest to others. Course content may include topics from numeration systems, logic, geometry, probability, statistics, algebraic modeling, number theory, consumer mathematics, graph theory, voting and apportionment, and perhaps others; concepts of contemporary mathematics may be covered. Emphasis is placed on the deductive process.

MATH 310 Mathematical Discovery

Units: 3
Hours: 54 hours LEC
Prerequisite: Intermediate Algebra or the high school equivalent (such as Math 3 or Integrated Math 3) or higher with a C or better, or eligibility for transfer-level mathematics.
Transferable: CSU
General Education: Local GE L2

This course is designed to introduce students to the spirit of mathematics by involving them in the mathematical process of exploration, conjecture, and proof. Students will explore mathematical patterns and relations, formulate conjectures, and prove their conjectures. Areas of mathematics from which content may be derived include number theory, statistics, probability, geometry, and sequences and series. This course is recommended for students interested in a career in education.

MATH 311 Mathematical Concepts for Elementary School Teachers - Number Systems

Units: 3
Hours: 54 hours LEC
Prerequisite: Intermediate Algebra (or equivalent in high school) with a grade of C or better, or eligibility for transfer-level mathematics.
Transferable: CSU; UC
General Education: Local GE L2

This course focuses on the development of quantitative reasoning skills through in-depth, integrated explorations of topics in mathematics, including history of real number systems and subsystems, basic number theory, sets and relations, logic, mathematical induction, and current national and state curriculum standards for mathematics. It emphasizes comprehension and critical analysis of mathematical concepts and applications of logical reasoning.

MATH 333 College Algebra for Liberal Arts

Units: 3
Hours: 54 hours LEC
Prerequisite: Eligibility through the Los Rios Placement Process or High School Algebra 2 or Integrated Math 3 or Intermediate Algebra.
Transferable: CSU; UC
General Education: Local GE L2; Cal-GETC Area 2

This course is a transfer-level college algebra course for majors in the Liberal Arts. Topics include absolute value, polynomial, rational, radical, exponential, and logarithmic functions; solving equations involving these functions; graphing these functions using rigid and non-rigid transformations; solving linear and nonlinear inequalities; systems of equations; complex numbers; and inverse functions.

MATH 335 Trigonometry with College Algebra

Units: 5
Hours: 90 hours LEC
Prerequisite: Intermediate Algebra or the high school equivalent (such as Math 3 or Integrated Math 3) or higher with a C or better, or eligibility for transfer-level mathematics.
Transferable: CSU
General Education: Local GE L2

This is a full trigonometry course with algebra concepts reviewed, extended, and integrated when they are relevant to the trigonometric concepts. The trigonometric topics include right triangle trigonometry, unit circle trigonometry, graphs of trigonometric functions, proofs of trigonometric identities, solving trigonometric equations, applications of trigonometric functions (law of sines and cosines), and inverse trigonometric functions. The algebra topics include exponential and logarithmic functions, complex numbers, conic sections, the polar coordinate system, and solving equations, inequalities, and systems of equations.

MATH 341 Calculus for Business and Economics

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: Intermediate Algebra or the high school equivalent (such as Math 3 or Integrated Math 3) or higher with a C or better, or eligibility for transfer-level mathematics.
Transferable: CSU; UC (MATH 341, 350, 355 and 400 combined: maximum transfer credit of one course)
General Education: Local GE L2; Cal-GETC Area 2
C-ID: C-ID MATH 140

This course introduces the concepts and techniques of sets, functions, limits, analytic geometry and the differential and integral calculus. This course is intended for business students; it is not recommended for mathematics, physical or life science majors.

MATH 343 Modern Business Mathematics

Units: 4
Hours: 72 hours LEC
Prerequisite: MATH 120 with a grade of "C" or better, or placement through the assessment process.
Transferable: CSU

General Education: Local GE L2

This course is designed around applications of mathematics in an economic and business context. The major topics included are functions, finance (interest and exponential models), rates of change, optimization, and linear programming. The content of the course is structured to incorporate tables, graphs and data sets collected from real-world situations. This course is not recommended for mathematics or physical science majors.

MATH 355 Calculus for Biology and Medicine I

Units: 4
Hours: 72 hours LEC
Prerequisite: MATH 335 with a grade of "C" or better, or placement through the assessment process.
Transferable: CSU; UC (1) MATH 341, 350, 355 and 400 combined: maximum transfer credit of one course; 2) MATH 350, 351, 355, 356, 400, 401, & 402 combined: maximum transfer credit of one series.)
General Education: Local GE L2; Cal-GETC Area 2

This course is an introduction to differential calculus and elementary differential equations via applications in biology and medicine. It covers limits, derivatives of polynomials, trigonometric and exponential functions, graphing, and applications of the derivative to biology and medicine. Topics include the Fundamental Theorem of Calculus and techniques of integration, including integral tables and numerical methods.

MATH 356 Calculus for Biology and Medicine II

Units: 4
Hours: 72 hours LEC
Prerequisite: MATH 355 with a grade of "C" or better, or placement through the assessment process.
Transferable: CSU; UC (1) MATH 351, MATH 356 and MATH 401 combined: maximum credit, 1 course; 2) MATH 350, 351, 355, 356, 400, 401, & 402 combined: maximum transfer credit of one series.)
General Education: Cal-GETC Area 2

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.

MATH 370 Pre-Calculus Mathematics

Units: 5
Hours: 90 hours LEC
Prerequisite: MATH 335 with a grade of "C" or better; or equivalent skills demonstrated through the assessment process.
Transferable: CSU; UC
General Education: Local GE L2; Cal-GETC Area 2

This course improves upon the foundational mathematics and critical thinking skills required in the calculus sequence for science, technology, engineering, and mathematics majors (MATH 400, 401, and 402). Course content includes a rigorous treatment of the properties of polynomial, rational, exponential, logarithmic, and trigonometric functions. Additional topics include systems of linear and non-linear equations and inequalities, conic sections, sequences and series, analytic geometry, vectors, parametric equations, and polar equations.

MATH 372 College Algebra for Calculus

Units: 4
Hours: 72 hours LEC
Prerequisite: Intermediate Algebra or the high school equivalent (such as Math 3 or Integrated Math 3) or higher with a C or better, or eligibility for transfer-level mathematics.
Transferable: CSU; UC
General Education: Cal-GETC Area 2

This course provides a rigorous treatment of college-level algebra and its applications, focusing on preparing students for the calculus sequence for Science, Technology, Engineering, and Mathematics (STEM) majors. Topics include polynomial, rational, radical, exponential, absolute value, and logarithmic functions, the graphs of these functions, and solving equations involving these functions; systems of equations; the theory of polynomial equations; analytic geometry including conics; sequences and series; and mathematical induction. Emphasis is given to analytical reasoning and problem-solving. Students may take this course concurrently with MATH 373 (Trigonometry for Calculus). Completing both MATH 372 AND MATH 373 with grades of "C" or better meets the prerequisite for MATH 400 (Calculus I).

MATH 373 Trigonometry for Calculus

Units: 4
Hours: 72 hours LEC
Prerequisite: Intermediate Algebra or the high school equivalent (such as Math 3 or Integrated Math 3) or higher with a C or better, or eligibility for transfer-level mathematics.
Transferable: CSU; UC
General Education: Cal-GETC Area 2

This course provides a rigorous treatment of trigonometry and its applications, focusing on preparing students for the calculus sequence for Science, Technology, Engineering, and Mathematics (STEM) majors. Topics include right triangle trigonometry, unit circle trigonometry, graphs of trigonometric functions, proofs of trigonometric identities, solving trigonometric equations, applications of trigonometric functions (laws of sines and cosines), inverse trigonometric functions, the polar coordinate system, and an introduction to vectors. Emphasis is given to analytical reasoning and problem-solving. Students may take this course concurrently with MATH 372 (College-Algebra for Calculus). Completing both MATH 372 AND MATH 373 with grades of "C" or better meets the prerequisite for MATH 400 (Calculus I).

MATH 375 Pre-Calculus

Units: 6
Hours: 108 hours LEC
Prerequisite: Intermediate Algebra or the high school equivalent (such as Math 3 or Integrated Math 3) or higher with a C or better, or eligibility for transfer-level mathematics.
Transferable: CSU; UC (effective Fall 2026)
General Education: Local GE L2

This course provides a rigorous treatment of the foundational mathematical concepts and skills that will prepare students for the calculus sequence for science, technology, engineering, and mathematics (STEM) majors. Topics include polynomial, absolute value, rational, radical, exponential, and logarithmic functions, with graphing and applications; trigonometric

functions and their inverses, including graphs, proving identities, trigonometric equations, and solving triangles; systems of equations and inequalities; analytic geometry and conics; vectors and polar coordinates; and an introduction to sequences and series. It emphasizes analytical reasoning and problem-solving. The maximum UC transfer credit is 5 units for any combination of College Algebra and Precalculus courses. A calculator may be required for this course.

MATH 384 Foundations for Calculus

Units: 4
Hours: 72 hours LEC
Prerequisite: None.
Corequisite: MATHS 84
Transferable: CSU
General Education: Local GE L2

This course is designed for STEM majors who must strengthen their foundational Algebra and Trigonometry skills before entering Calculus I (MATH 400). Topics include solving absolute value, quadratic, exponential, logarithmic, and trigonometric equations. In addition, inequalities involving absolute value, polynomial, and rational expressions are explored. Students will also learn to evaluate and graph functions (including piecewise, exponential, logarithmic, polynomial, rational, and trigonometric functions), and apply the Laws of Logarithms. Topics from Trigonometry include the six trigonometric functions, their inverses, and their applications, primarily from a right triangle perspective, with an introduction to the unit circle.

While this course provides a solid foundation for the student to enter MATH 400, additional topics from Algebra and Trigonometry, taught in the corequisite course to MATH 400, will be required to succeed through Calculus I.

MATH 400 Calculus I

Units: 5
Hours: 90 hours LEC
Prerequisite: MATH 370 (Precalculus Mathematics) with grade of "C" or better, OR MATH 372 (College Algebra for Calculus) AND MATH 373 (Trigonometry for Calculus) with grades of "C" or better, OR by eligibility determined through the placement process.
Transferable: CSU; UC (1) MATH 341, 350, 355 and 400 combined: maximum transfer credit of one course; 2) MATH 350, 351, 355, 356, 400, 401, & 402 combined: maximum transfer credit of one series.)
General Education: Local GE L2; Cal-GETC Area 2
C-ID: C-ID MATH 210

This course explores the basic concepts of analytic geometry, limits (including indeterminate forms), continuity, derivatives, and integrals. Topics covered will include the graphs, derivatives, and integrals of algebraic, trigonometric, exponential, logarithmic, hyperbolic functions, and piecewise functions. Many applications will be covered, including those involving rectilinear motion, differentials, related rates, graphing, and optimization.

MATH 401 Calculus II

Units: 5
Hours: 90 hours LEC
Prerequisite: MATH 400 (Calculus I) with a grade of "C" or better or by eligibility determined through the placement process.
Transferable: CSU; UC (1) MATH 351, MATH 356 and MATH 401 combined: maximum credit, 1 course; 2) MATH 350, 351, 355, 356, 400, 401, & 402 combined: maximum transfer credit of one series.)
General Education: Local GE L2; Cal-GETC Area 2
C-ID: C-ID MATH 220

This course is a continuation of MATH 400. Topics covered include techniques of integration, numerical integration, improper integrals, infinite series, parametric equations, polar coordinates. Many applications will be covered including those involving areas between plane regions, volumes of revolution, work, fluid force, moments, mass, and center of mass, average value, arc length and surface area of functions, parametric equations, and polar coordinates.

MATH 402 Calculus III

Units: 5
Hours: 90 hours LEC
Prerequisite: MATH 401 with a grade of "C" or better
Transferable: CSU; UC (MATH 350, 351, 400, 401 and 402 combined: maximum transfer credit of one series)
General Education: Local GE L2; Cal-GETC Area 2
C-ID: C-ID MATH 230

This course extends the concepts of limits, derivatives and integrals to vector-valued functions and functions of more than one variable. Topics covered will include three-dimensional analytic geometry and vectors, partial derivatives, multiple integrals, line integrals, surface integrals, and the theorems of Green, Gauss (Divergence), and Stokes. Many applications of the calculus will be included.

MATH 410 Introduction to Linear Algebra

Units: 3
Hours: 54 hours LEC
Prerequisite: MATH 401 with a grade of "C" or better
Advisory: MATH 402
Transferable: CSU; UC
General Education: Local GE L2; Cal-GETC Area 2
C-ID: C-ID MATH 250

This course introduces the theory and applications of linear algebra. Topics include matrices, determinants, systems of equations, vector spaces, linear transformations, eigenvectors, and applications. This course is intended for majors in mathematics, engineering, science, and related fields.

MATH 420 Differential Equations

Units: 4
Hours: 72 hours LEC
Prerequisite: MATH 401 with a grade of "C" or better
Advisory: MATH 402 (may be taken concurrently)
Transferable: CSU; UC
General Education: Local GE L2
C-ID: C-ID MATH 240

This course will cover the theory and the applications of the solutions of ordinary differential equations and systems of ordinary differential equations. The course will introduce students to various topics useful in the solution of differential equations including power series, Laplace transforms, matrices, eigenvalues and eigenvectors, and numerical methods.

MATH 483 Honors Seminar in Mathematics - Introduction to Mathematical Proof

Units: 1
Hours: 18 hours LEC
Prerequisite: MATH 370 with a grade of "C" or better
Transferable: CSU; UC (May be taken twice for credit.)

Honors Seminars in Mathematics are special one-unit intensive courses for academically accomplished students or those with the potential for high academic achievement. This particular course will study various methods of mathematical proof in a seminar setting, and will be particularly useful to students planning to study calculus, differential equations, and linear algebra. Topics include: deductive reasoning, proof by axioms, proofs of conditional and biconditional statements, proofs by contrapositive and contradiction, and proof by mathematical induction. Studies will include homework, discussions, oral presentations and lectures. Students will be expected to do independent problem solving and present their solutions to the class. Enrollment is limited to Honors Program students (see catalog). This course is the same as MATH 483. This course, under either name, may be taken one time for credit. This course will be offered in spring semester only.

MATH 484 Honors Seminar in Mathematics - Topics in Number Theory

Units: 1
Hours: 18 hours LEC
Prerequisite: MATH 370 with a grade of "C" or better
Transferable: CSU; UC

Honors Seminars in Mathematics are special one-unit intensive courses for academically accomplished students or those with the potential for high academic achievement. This particular course will study various topics in the field of number theory in a seminar setting. Topics include: the integers and their properties; finding integer solutions to Diophantine equations (equations with more variables than equations); and cryptography (the study of how secret codes are created and broken). Studies will include homework, discussions, oral presentations and lectures. Students will be expected to do independent problem solving and present their solutions to the class. Enrollment is limited to Honors Program students (see catalog). This course is the same as HONOR 392. This course, under either name, may be taken one time for credit. This course will be offered in spring semester only.

MATH 495 Independent Studies in Mathematics

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

MATH 499 Experimental Offering in Mathematics

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU

This is the experimental courses description.

Mathematics Support (MATHS) Courses

MATHS 33 Support for College Algebra for Liberal Arts

Units: 2
Hours: 36 hours LEC
Prerequisite: None.
Corequisite: MATH 333

This course provides intensive instruction and practice in the core mathematical skills, competencies, and concepts necessary for success in MATH 333 (College Algebra for Liberal Arts). Students taking this course must be concurrently enrolled in the corresponding section of MATH 333. The content of this course is designed to provide arithmetic and algebraic support to students as they learn related concepts in their corequisite course. Topics and homework assignments are often connected to assignments in the corequisite course. This course is graded Pass/No Pass and does not meet competency requirements.

MATHS 60 Support for Calculus I

Units: 2
Hours: 36 hours LEC
Prerequisite: None.
Corequisite: MATH 400

This course provides intensive instruction and practice in the core mathematical skills, competencies, and concepts necessary for success in Calculus I (Math 400). Students taking this course must be concurrently enrolled in a corresponding section of MATH 400. The content of this course is designed to provide algebra, geometry, trigonometry, and learning skills support to students as they learn concepts in their Calculus I course. Topics and homework assignments are connected to the content in the Calculus I course. This course is graded Pass/No Pass.

MATHS 72 Support for College Algebra for Calculus

Units: 2
Hours: 36 hours LEC
Prerequisite: None.
Corequisite: MATH 372

This course provides intensive instruction and practice in the core mathematical skills, competencies, and concepts necessary for success in MATH 372 (College Algebra for Calculus). Students taking this course must be concurrently enrolled in the corresponding section of MATH 372. The content of this course is designed to provide arithmetic and algebraic support to students as they learn related concepts in their

corequisite course. Topics and homework assignments are often connected to assignments in the corequisite course. This course is graded Pass/No Pass.

MATHS 73 Support Course for Trigonometry for Calculus

Units: 2
Hours: 36 hours LEC
Prerequisite: None.
Corequisite: MATH 373

This course provides intensive instruction and practice in the core mathematical skills, competencies, and concepts necessary for success in Trigonometry for Calculus (MATH 373). Students taking this course must be concurrently enrolled in the corresponding section MATH 373. The course content is designed to provide arithmetic, algebra, geometry and learning skills support to students as they learn related concepts in their corequisite course. Topics and homework assignments are often connected to students' assignments in the corequisite course. This course is graded Pass/No Pass.

MATHS 84 Support for Foundations for Calculus

Units: 2
Hours: 36 hours LEC
Prerequisite: None.
Corequisite: MATH 384

This course provides intensive instruction and practice in the core mathematical skills, competencies, concepts, and study skills necessary for success in MATH 384. Students taking this course must be concurrently enrolled in the corresponding section of MATH 384. The content of this course is designed to provide support in core Arithmetic, Algebra, and Geometry skills required by students as they learn preparatory concepts in their MATH 384 class. Topics and homework assignments are connected to content in the linked MATH 384 class. This course is graded on a Pass/No Pass basis.

MATHS 299 Experimental Offering in Mathematics Support

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

MATHS 499 Experimental Offering in Mathematics Support

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

Statistics (STAT) Courses

STAT 100 Pre-Statistics

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: MATH 30 with a grade of "C" or better, or placement through the assessment process.

This course prepares students for transfer-level Statistics. Topics include computational mathematics needed for statistics: ratios, rates, and proportional reasoning; arithmetic with fractions, decimals and percents; evaluating expressions, solving equations and inequalities, and analyzing formulas to understand statistical measures; introduction to statistical terminology and use of statistical symbols; introduction to probability, venn diagrams, set theory and two-way statistical tables; graphical and numerical descriptive statistics for quantitative and categorical data; use of linear and exponential functions to model bivariate data. Note: This course is not intended as preparation for the PreCalculus/Trigonometry courses required for students as part of their pathway to science, computer information science, engineering, or mathematics.

STAT C1000E Introduction to Statistics

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: Placement as determined by the college's multiple measures assessment process or completion of a course taught at or above the level of intermediate algebra.
Transferable: CSU; UC (UC transfer credit limitation: STAT 300, STAT 480, STAT C1000E, STAT C1000H, ECON 310 and POLS 382, PSYC 330 combined: maximum credit, 1 course)
General Education: Local GE L2; Cal-GETC Area 2
C-ID: C-ID MATH 110

This course was formerly known as STAT 300 Introduction to Probability and Statistics.

This course is an introduction to statistical thinking and processes, including methods and concepts for discovery and decision-making using data. Topics include descriptive statistics; probability and sampling distributions; statistical inference; correlation and linear regression; analysis of variance, chi-squared, and t-tests; and application of technology for statistical analysis including the interpretation of the relevance of the statistical findings. Students apply methods and processes to applications using data from a broad range of disciplines. This course has embedded support. This course was formerly known as STAT 300: Introduction to Probability and Statistics. This course is not open to students who have successfully passed the honors version of the course, i.e. STAT C1000H, STAT 480, HONOR 393.

STAT C1000H Introduction to Statistics - Honors

Units: 4
Hours: 72 hours LEC
Prerequisite: Placement as determined by the college's multiple measures assessment process or completion of a course taught at or above the level of intermediate algebra.
Enrollment Limitation: Enrollment is limited to Honors Program students. Details about the Honors Program can be found in the Cosumnes River College Catalog.
Transferable: CSU; UC (UC transfer credit limitation: STAT 300, STAT 480, STAT C1000E, STAT C1000H, ECON 310 and POLS 382, PSYC 330 combined: maximum credit, 1 course)
General Education: Local GE L2; Cal-GETC Area 2
C-ID: C-ID MATH 110

This course was formerly known as STAT 480 Introduction to Probability and Statistics - Honors.

This course is an introduction to statistical thinking and processes, including methods and concepts for discovery and decision-making using data. Topics include descriptive statistics; probability and sampling distributions; statistical inference; correlation and linear regression; analysis of variance, chi-squared, and t-tests; and application of technology for statistical analysis including the interpretation of the relevance of the statistical findings. Students apply methods and processes to applications using data from a broad range of disciplines. This is an honors course. Statistical analysis using a statistical software package such as, but not limited to, StatCrunch, R, SAS, SPSS, EXCEL, Minitab, Desmos, and/or graphing calculators is required. This honors section uses an intensive instructional methodology designed to challenge motivated students. Enrollment is limited to Honors Program students. Details about the Honors Program can be found in the Cosumnes River College Catalog. This course was formerly known as STAT 480 or HONOR 393. This course is not open to students who have successfully passed the non-honors version of the course, i.e. STAT C1000 or STAT 300.

STAT 495 Independent Studies in Statistics

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

STAT 499 Experimental Offering in Statistics

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU

(See catalog p. 21)

Math and Statistics Course Sequence

Pathways for Transfer Students

Liberal Arts and Social Sciences Pathway

Choose *one* of the following options, depending on your major:

- **MATH 300: Introduction to Mathematical Ideas**[1,2] (3 units)
- **MATH 333: College Algebra for Liberal Arts**[1](3 units)
- **MATH 333: College Algebra for Liberal Arts**[1] (3 units) and **MATHS 33: Support Course for College Algebra for Liberal Arts**[3] (2 units) – *must be taken concurrently*
- **STAT C1000E: Introduction to Probability and Statistics**[1,2] (4 units)
- **STAT C1000H: HONORS Introduction to Probability and Statistics**[1,4] (4 units)

[1] Transfers to CSU and UC.

[2] Support is embedded via the lab component.

[3] Support course may be required based on the student's math placement.

[4] Honors course requires admission to the CRC Honors Program.

Business, Economics, and Management Pathway

Take the following course:

- **MATH 341: Calculus for Business & Economics**[5,6,7] (4 units)

[5] Transfers to CSU.

[6] Some Business, Economics, and Management Programs also require STAT C1000E.

[7] Some Business, Economics, and Management Programs require MATH 400 instead of MATH 341.

Elementary Education Pathway

This is for students transferring to the CSU Sacramento Liberal Studies program who plan to obtain a teaching credential.

Take the following course:

- **MATH 310: Mathematical Discovery**[8] (3 units)

[8] Transfers to CSU.

STEM: Calculus Pathway

Choose *one* of the following options:

- **Option 1 – complete all of the following courses:**
  - **MATH 372: College Algebra for Calculus**[9] (4 units) and **MATH 72: Support Course for College Algebra for Calculus**[10] (2 units) – *must be taken concurrently*
  - **MATH 373: Trigonometry for Calculus**[9] (4 units) and **MATH 73: Support Course for Trigonometry for Calculus**[10] (2 units) – *must be taken concurrently*

- **Option 2:**
  - **MATH 375: Pre-Calculus**[9] (6 units)
- **Option 3:**
  - **MATH 384: Foundations for Calculus**[11] (4 units) and **MATHS 84: Support Course for Foundations for Calculus**[10] (2 units) – *must be taken concurrently*

Next, choose *one* of the following options:

- **MATH 400: Calculus I**[9] (5 units)
- **MATH 400: Calculus I**[9] (5 units) and **MATHS 60: Support Course for Calculus**[10] (2 units) – *must be taken concurrently*

After completing the previous course(s), take the following courses as required by your major:

- **MATH 401: Calculus II**[9] (5 units)
- **MATH 402: Calculus III**[9] (5 units) – *may be taken concurrently with MATH 410 or MATH 420*
- **MATH 410: Introduction to Linear Algebra**[9] (3 units)
- **MATH 420: Differential Equations**[9] (4 units) – *may be taken concurrently with MATH 402*

[9] Transfers to CSU and UC.

[10] Support course may be required based on the student's math placement.

[11] Transfers to CSU.

STEM: Biology and Medicine Pathway

Choose *one* of the following options:

- **Option 1 – complete all of the following courses:**
  - **MATH 372: College Algebra for Calculus**[12] (4 units) and **MATHS 72: Support Course for College Algebra for Calculus**[13] (2 units) – *must be taken concurrently*
  - **MATH 373: Trigonometry for Calculus**[12] (4 units) and **MATHS 73: Support Course for Trigonometry for Calculus**[13] (2 units) – *must be taken concurrently*
- **Option 2:**
  - **MATH 375: Pre-Calculus**[12] (6 units)
- **Option 3:**
  - **MATH 384: Foundations for Calculus**[14] (4 units) and **MATHS 84: Support Course for Foundations for Calculus**[13] (2 units) – *must be taken concurrently*

Next, choose *one* of the following options:

- **MATH 355: Calculus for Biology & Medicine I**[12,15] (4 units)
- **MATH 355: Calculus for Biology & Medicine I**[12,15] (4 units) and **MATHS 79: Skills Lab for Miscellaneous Transferable Math**[13] (1 unit) – *must be taken concurrently*

After completing the previous course(s), take *all* of the following courses:

- **MATH 356: Calculus for Biology & Medicine II**[12,16] (4 units)

[12] Transfers to CSU and UC.

[13] Support course may be required based on the student's math placement.

[14] Transfers to CSU.

[15] Some transfer institutions require MATH 400 instead of MATH 355.

[16] Some transfer institutions require MATH 401 instead of MATH 356.

Medical Assisting

The Medical Assisting program is designed to prepare competent entry-level medical assistants in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains. Upon completion of the Certificate in Medical Assisting, students may take the CMA certification exam administered by American Association of Medical Assistants (AAMA).

Degrees and Certificates Offered

A.S. in Medical Assisting

Medical Assisting Certificate

Medical Assisting, Administrative Certificate

Medical Assisting, Medical Insurance Billing Certificate

Dean Kris Hubbard

Department Chair Cori Burns

Phone (916) 691-7390

Email hubbark@crc.losrios.edu

Associate Degree

A.S. in Medical Assisting

The CRC Medical Assisting program is designed to prepare competent entry-level medical assistants in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains. Upon completion of the Medical Assisting program, students may take the CMA (AAMA) certification exam administered by the American Association of Medical Assistants (AAMA).

Highlights include:
* According to the Occupational Outlook Handbook published by the Department of Labor's Bureau of Statistics, "Medical Assisting employment is projected to grow much faster than average, ranking medical assistants among some of the fastest growing occupations over the 2023–32 decade. Job opportunities should be excellent, particularly for those with formal training or experience, and certification."

* Eligibility to become members of AAMA and CSMA

* Preparation for national board exams; CRC students have exceeded national averages in the top 5 percent consistently for the past 20 years

* Provides multiple skills for the entry-level health care professional

Degree Requirements

Course Code	Course Title	Units
Fall Semester:		
MEDA 124	Administrative Medical Assisting	3
MEDA 105	General Medical Assisting	3
COMM 325	Intercultural Communication (3)	3[1]
or ANTH 313	Introduction to Cultural Anthropology: Medical Focus (3)	
AH 120	Human Disease	3
PSYC C1000	Introduction to Psychology (3)	3[2]
Spring Semester:		
AH 124	Pharmacology for the Health Care Professional	2
FCS 324	Human Development: A Life Span (3)	3
or PSYC 371	Life Span Developmental Psychology (3)	
MEDA 230	Clinical Procedures	6
Summer Semester:		
MEDA 145	Medical Assisting Certification Review	2
MEDA 140	Medical Assisting Practicum	3[3]
Total Units:		**31**

[1]may be taken either fall or spring semester

[2]may be taken either fall or spring semester

[3]This is the capstone course and should be taken last.

The Medical Assisting Associate in Science (A.S.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Enrollment Eligibility

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

- Completion of the following prerequisite courses with a C or better:
- AH 311 - Medical Language
- BIOL 102 - Essentials of Human Anatomy and Physiology (BIOL 100 or 430 & 431 are acceptable)
- Eligibility for ENGL C1000 (formerly ENGWR 300) OR ENGWR 341 –Introduction to Technical and Professional Writing OR BUS 100 –English for the Professional OR ESL 130- ESL College English Preparation: Advanced-Low
- CISC 302 - Computer Familiarization
- MEDA 100 - Introduction to Medical Assisting (taken within the previous 5 years)

Enrollment Process

Eligible students are selected for the program according to the following steps:

- Only students who meet the pre-enrollment requirements will be considered for the program

- Selection will be based on a random selection process, should the number of qualified applicants exceed available spaces in the program
- Accepted applicants will be notified by the Program Director by July 1
- Students will be required to perform a background and drug clearance screening. Students will also be required to show proof of vaccination or immunity to the following: measles, rubella, rubeola, varicella, TDaP, and possibly influenza. Placement in a clinical location will be contingent upon the results of this screening.

Student Learning Outcomes

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

- Enter the allied health workforce as a competent, entry-level Medical Assistant trained in the cognitive, affective and psychomotor domains of the occupation (PSLO #1).
- Declare eligibility for the AAMA national certification examination with the goal of obtaining the CMA (AAMA) credential (PSLO #2).

Career Information

Administrative Medical Assistant; Clinical Medical Assistant

Certificates of Achievement

Medical Assisting Certificate

The CRC Medical Assisting program is designed to prepare competent entry-level medical assistants in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains. Upon completion of the Medical Assisting program, students may take the CMA (AAMA) certification exam administered by the American Association of Medical Assistants (AAMA).

Highlights include:
* According to the Occupational Outlook Handbook published by the Department of Labor's Bureau of Statistics, "Medical Assisting employment is projected to grow much faster than average, ranking medical assistants among some of the fastest growing occupations over the 2023–32 decade. Job opportunities should be excellent, particularly for those with formal training or experience, and certification."

* Eligibility to become members of AAMA and CSMA

* Preparation for national board exams; CRC students have exceeded national averages in the top 5 percent consistently for the past 20 years

* Provides multiple skills for the entry-level health care professional

Certificate Requirements

Course Code	Course Title	Units
MEDA 124	Administrative Medical Assisting	3
MEDA 105	General Medical Assisting	3
FCS 324	Human Development: A Life Span (3)	3[1]
or PSYC 371	Life Span Developmental Psychology (3)	
COMM 325	Intercultural Communication (3)	3[2]
or ANTH 313	Introduction to Cultural Anthropology: Medical Focus (3)	
PSYC C1000	Introduction to Psychology (3)	3[3]
AH 120	Human Disease	3
AH 124	Pharmacology for the Health Care Professional	2
MEDA 230	Clinical Procedures	6
MEDA 145	Medical Assisting Certification Review	2
MEDA 140	Medical Assisting Practicum	3[4]
Total Units:		**31**

[1]Course may be taken either fall or spring semester

[2]may be taken either fall or spring semester

[3]may be taken either fall or spring semester

[4]This is the capstone course and should be taken last.

Enrollment Eligibility

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

- Completion of the following pre-requisite courses with a C or better:
- AH 311 - Medical Language
- BIOL 102 - Essentials of Human Anatomy and Physiology (BIOL 100 or 430 & 431 are acceptable)
- Eligibility for ENGL C1000 (formerly ENGWR 300) OR ENGWR 341 –Introduction to Technical and Professional Writing OR BUS 100 –English for the Professional OR ESL 130 - ESL College English Preparation: Advanced-Low
- CISC 302 - Computer Familiarization
- MEDA 100 - Introduction to Medical Assisting (within the last 5 years)

Enrollment Process

Eligible students are selected for the program according to the following steps:

- Only students who meet the pre-enrollment requirements will be considered for the program
- Selection will be based on a random selection process, should the number of qualified applicants exceed available spaces in the program
- Accepted applicants will be notified by the Program Director by July 1
- Students will be required to perform a background and drug clearance screening. Students will also be required to show proof of vaccination or immunity to the

following: measles, rubella, rubeola, varicella, TDaP, and possibly influenza. Placement in a clinical location will be contingent upon the results of this screening.

Student Learning Outcomes

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

- Enter the allied health workforce as a competent, entry-level Medical Assistant trained in the cognitive, affective and psychomotor domains of the occupation (PSLO #1).
- Declare eligibility for the AAMA national certification examination with the goal of obtaining the CMA (AAMA) credential (PSLO #2).

Career Information

Clinical Medical Assistant; Administrative Medical Assistant

Medical Assisting, Administrative Certificate

This curriculum is designed to prepare the individual with front office skills for employment as an Administrative Medical Assistant in a physician's office, hospital, clinic, laboratory, pharmaceutical company, or health insurance company.

Certificate Requirements

Course Code	Course Title	Units
AH 311	Medical Language for Health-Care Providers	3
BIOL 100	Introduction to Concepts of Human Anatomy and Physiology (3)	3 - 4[1]
or BIOL 102	Essentials of Human Anatomy and Physiology (4)	
BUS 100	English for the Professional	3
CISC 302	Computer Familiarization	2
MEDA 100	Introduction to Medical Assisting	1.5
MEDA 110	Medical Insurance Procedures	1.5
MEDA 124	Administrative Medical Assisting	3
AH 120	Human Disease	3
Total Units:		**20 - 21**

[1]BIOL 430/431 combo is also acceptable

Enrollment Eligibility

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

- Completion of the following pre-requisite courses with a C or better:
- AH 311 - Medical Language
- BIOL 102 - Essentials of Human Anatomy and Physiology (BIOL 100 or 430 & 431 are acceptable)
- Eligibility for ENGL C1000 (formerly ENGWR 300) OR ENGWR 341 –Introduction to Technical and Professional Writing OR BUS 100 –English for the Professional OR ESL 130 - ESL College English Preparation: Advanced-Low
- CISC 302 - Computer Familiarization
- MEDA 100 - Introduction to Medical Assisting (within the last 5 years)

Enrollment Process

Eligible students are selected for the program according to the following steps:

- Only students who meet the pre-enrollment requirements will be considered for the program
- Selection will be based on a random selection process, should the number of qualified applicants exceed available spaces in the program
- Accepted applicants will be notified by the Program Director by July 1

Student Learning Outcomes

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

- Perform the entry-levels skills of an administrative medical assistant, such as effective scheduling, proper use of a multi-line phone system, ICD and CPT coding, and insurance claims completion. (PSLO #1)

Career Information

Administrative Medical Assistant; entry-level Insurance Biller; Hospital Unit Secretary

Medical Assisting, Medical Insurance Billing Certificate

The CRC Medical Insurance Billing certificate program is designed to prepare students for entry-level positions in insurance billing in an ambulatory medical office setting. The curriculum is designed to give students the desired skills for employment in a physician's office or other ambulatory clinic.

Certificate Requirements

Course Code	Course Title	Units
AH 311	Medical Language for Health-Care Providers	3
AH 120	Human Disease	3
AH 124	Pharmacology for the Health Care Professional	2
BIOL 100	Introduction to Concepts of Human Anatomy and Physiology	3[1]
HIT 120	Basic ICD-CM Coding	3
MEDA 110	Medical Insurance Procedures	1.5
HIT 123	Current Procedural Terminology (CPT) Coding	1
Total Units:		**16.5**

[1]([BIOL 102] or [BIOL 430 and BIOL 431] are also acceptable)

Student Learning Outcomes

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

- Attain entry-level skills in insurance billing.
- Utilize insurance and billing knowledge to obtain entry-level employment in an ambulatory setting.

Career Information

The CRC Medical Insurance Billing Certificate is designed to prepare students for entry-level employment in an ambulatory setting in the insurance and/or billing department. Students will obtain the necessary knowledge for insurance authorizations, billing and reconciliations.

Medical Assisting (MEDA) Courses

MEDA 100 Introduction to Medical Assisting

Units: 1.5
Hours: 27 hours LEC
Prerequisite: None.

This course provides an introduction to the field of Medical Assisting. Students will learn the typical duties of an administrative and clinical MA, including career ladders and types of facilities that employ medical assistants. Students will also be introduced to the desired qualities and characteristics of a successful medical assistant. Additionally, the CRC Medical Assisting Program entrance requirements will be discussed.

MEDA 105 General Medical Assisting

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Enrollment Limitation: Student must be accepted in to the current cohort of the CRC Medical Assisting program to be eligible for enrollment in this course.

This course will cover the topics outlined in the American Association of Medical Assistants (AAMA) General category of knowledge of an entry-level medical assistant, as required for certification. Areas covered will include gross Anatomy, applied Medical Terminology, and Law and Ethics as they pertain to Medical Assisting.

MEDA 110 Medical Insurance Procedures

Units: 1.5
Hours: 27 hours LEC
Prerequisite: None.
Corequisite: AH 311

This course will introduce students to the basics of medical office insurance billing. Students will learn the terminology of health insurance, the differences between the various forms of health insurance, as well as the process for patient billing in a medical office setting.

MEDA 124 Administrative Medical Assisting

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Enrollment Limitation: Acceptance into the CRC Medical Assisting Program

This course is designed to introduce the medical assisting student to the administrative responsibilities encountered in an ambulatory clinic. Typical administrative topics covered include patient reception, scheduling, telephone procedures, documentation and reporting, records management including HIPAA regulations, screening/processing mail, equipment and supply inventory, practice finances, coding and bookkeeping principles.

MEDA 140 Medical Assisting Practicum

Units: 3
Hours: 180 hours LAB
Prerequisite: COMM 325, MEDA 230, PSYC C1000, and PSYC 371 with grades of "C" or better; Students must have been accepted into the CRC Medical Assisting program and completed all required courses prior to receiving consent to enroll in this capstone course. Students must also have completed a drug screen, background clearance and have proof of immunity to varicella, measles, rubella and rubeola.
Enrollment Limitation: Students must have on file with the Program Director the following documents prior to clinical placement: *CPR for the Healthcare Provider through the American Heart Association; *Two negative PPDs - one within two years and another no more than 6 months prior to clinic placement, or negative chest x-ray within 2 years; *MMR and Varicella immunity status; *TDaP vaccination within three years; *May be required to provide documentation of influenza vaccination; *Liability insurance; *Background and drug screening clearance

This course consists of supervised experience in a health care setting performing the tasks and responsibilities of a medical assistant. Those duties include, but are not limited to, administering injections, performing electrocardiograms, obtaining patient history and chief complaints, scheduling appointments, answering telephones, basic clerical functions and other duties as requested by site physician and/or supervisor. Students will be required to show proof of Healthcare Provider CPR from American Heart Association, as well as immunity to Varicella, Measles, Mumps, Rubella and TB prior to beginning the clinical rotation. Students will also have supplementary requirements such as liability insurance, background check and drug screening. This course is for students who have completed all of the CRC Medical Assisting Program requirements.

MEDA 145 Medical Assisting Certification Review

Units: 2
Hours: 36 hours LEC
Prerequisite: MEDA 230 with a grade of "C" or better
Enrollment Limitation: Students must meet the Certifying Agencies examination eligibility requirements to enroll in this course: *Graduate from a CAAHEP or ABHES accredited MA program; OR *Currently employed as an MA by a licensed MD/DO in the United States; OR *At least two years employment within the previous five years as an MA, either in private sector

or military enlisted; OR *Current MA instructor at an accredited institution in the United States.

This course is designed to prepare students for the Medical Assisting certification examinations offered by the three Certifying Agencies approved by the California Medical Board - the American Association of Medical Assistants (AAMA), the American Medical Technologists (AMT), or the California Certifying Board of Medical Assistants (CCBMA). This course is available to students who meet the current exam eligibility requirements for at least one of the Certifying Agencies. Students will be required to provide documentation of eligibility.

MEDA 230 Clinical Procedures

Units: 6
Hours: 54 hours LEC; 162 hours LAB
Prerequisite: MEDA 124 with a grade of "C" or better
Corequisite: AH 120 and 124
Enrollment Limitation: Students must be accepted into the CRC Medical Assisting program to enroll in this course.

This course will instruct the student in the clinical procedures performed by entry-level Medical Assistants according to MAERB Standards and the Medical Assisting Scope of Practice.

MEDA 295 Independent Studies in Medical Assisting

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

MEDA 299 Experimental Offering in Medical Assisting

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

Modern Making

The modern making curriculum in development at Cosumnes River College will be ideal for makers, artists, entrepreneurs, educators, hobbyists, inventors, and anyone interested in enhancing and developing marketable job skills, solving problems, developing products, improving business processes, or creating works of art using state-of-the-art digital fabrication tools and techniques.

Dean Ashu Mishra

Phone (916) 525-4319

Email mishraa@losrios.edu

Modern Making (MAKR) Courses

MAKR 140 Introduction to Making

Units: 2
Hours: 18 hours LEC; 54 hours LAB
Prerequisite: None.

This highly immersive, hands-on introductory survey course introduces students to the principles of making and design thinking through fabricating or producing a finished product. Students learn to design and build physical things or spaces, make them work, and integrate them with electronics, software, or mediums of innovation. Students will gain knowledge of common fabrication techniques and skill using the associated tools, such as: 3D printing, CNC (Computer Numerical Control) machining, laser cutting, woodworking and metalworking, large printer and cutter usage, electronics, microcontroller programming, textile making, weaving looms, food and beverage making and processing, and more. Students will use this knowledge and skill in both individual and team settings, and participate in a capstone project. Supplies are provided for all assigned projects.

MAKR 151 Makerspace Lab I

Units: 0.5 - 1
Hours: 27 - 54 hours LAB
Prerequisite: None.

This lab course provides access to workshops in the methodologies and practices of making in a contemporary Makerspace / fabrication laboratory environment. Via hands-on trainings, workshops, and instruction, students will gain experience using a variety of equipment used in the Makerspace to design and build projects using materials and equipment such as wood, plastics, metals, textiles, organic matter, 3D printing, milling, electronics, large format printing, sewing machines, looms, and food and beverage processors. Supplies are provided for all training projects for this course but not for larger scale commercial projects. Students have access to all equipment after completing the required safety training and any relevant workshops.

MAKR 299 Experimental Offering in Modern Making

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

MAKR 499 Experimental Offering in Modern Making

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

Music

CRC Music Degree programs provide students with the foundational core curriculum in music, designed to prepare and build musicianship through courses in music theory, history, and performance. Music Majors choose an emphasis in either instrumental or vocal performance while pursuing the Associate of Arts and the Associate of Arts for Transfer degrees.

Certificates in Music serve as supplemental areas of specialization and first steps toward a career in music. The CRC Music Department offers one-year certificate programs in Entrepreneurial Arts and Music to support the professional interests of students on campus regardless of their major.

Degrees and Certificates Offered

A.A.-T. in Music

A.A. in Music, General

Entrepreneurial Arts: Independent Music Instructor Certificate

Entrepreneurial Arts: Music Composition Certificate

Music History Certificate

Dean Brian Rickel

Department Chair Maxwell Kiesner

Phone (916) 691-7171

Email kiesnem@crc.losrios.edu

Associate Degrees for Transfer

A.A.-T. in Music

The Associate in Arts in Music for Transfer (AA-T) program provides students with a major that fulfills the general requirements for transfer to a California State University. Students with this degree will receive priority admission with junior status to the California State University system. Students should work closely with their Cosumnes River College counselor to ensure that they are taking the appropriate coursework to prepare for majoring in Music at the institution they wish to transfer to because major and general education requirements may vary for each CSU and the degree may only transfer to specific institutions.

Completion of this degree provides a foundation in music. Program offerings include coursework in music theory and aural skills, applied composition, instrumental and vocal instruction, and ensemble performance.

Students must complete the following Associate Degree for Transfer (ADT) requirements:

(1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
(A) The California General Education Transfer Curriculum (Cal-GETC).
(B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

(2) Obtainment of a minimum grade point average of 2.0.

ADTs also require that students must earn a “C” or better in all courses required for the major or area of emphasis. A “P” (Pass) grade is also an acceptable grade for courses in the major if the course is taken on a Pass/No Pass basis.

Degree Requirements

Course Code	Course Title	Units
MUFHL 400	Music Theory and Musicianship I	4
MUFHL 404	Music Theory II	3
MUFHL 405	Musicianship II	1
MUFHL 412	Music Theory III	3
MUFHL 413	Musicianship III	1
A minimum of 4 units from the following:		4
MUIVI 410	Applied Music (1)	
A minimum of 3 units from the following:		3
MUFHL 310	Survey of Music History and Literature (Greek Antiquity to 1750) (3)	
or MUFHL 311	Survey of Music History and Literature (1750 to the present) (3)	
or MUFHL 414	Music Theory IV (3)	
or MUFHL 415	Musicianship IV (1)	
or MUIVI 340	Beginning Piano (2)	
or MUIVI 341	Piano II (2)	
Subtotal Units:		**19**

Guitarists/Pianists/Composers

Course Code	Course Title	Units
A minimum of 8 units from the following:		8[1]
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 353	Contemporary Gospel Choir (2)	
MUP 357	College Chorus (2)	
MUP 360	Chamber Singers (2)	
MUP 424	Commercial Music Ensemble (2)	
Guitarists/Pianists/Composers Units:		8
Total Units:		**27**

Instrumentalists

Course Code	Course Title	Units
A minimum of 8 units from the following:		8[2]
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)	
Instrumentalists Units:		8
Total Units:		**27**

Vocalists

Course Code	Course Title	Units
A minimum of 8 units from the following:		8[3]
MUP 353	Contemporary Gospel Choir (2)	
MUP 357	College Chorus (2)	
MUP 360	Chamber Singers (2)	
Vocalists Units:		8
Total Units:		**27**

[1]Students can take any of these courses, despite how many are listed, a maximum of 4 times to gain the total amount of credits listed in this section.

[2]Students can take any of these courses, despite how many are listed, a maximum of 4 times to gain the total amount of credits listed in this section.

[3]Students can take any of these courses, despite how many are listed, a maximum of 4 times to gain the total amount of credits listed in this section.

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 California General Education Transfer Curriculum (Cal-GETC) Requirement.

Enrollment Process

Eligible students are selected for the program according to the following steps:

- Students may complete an audition the week before the start of the semester for placement into the appropriate applied music and ensemble courses. For more information about the audition process, please consult the Music Department website.
- Students interested in the program should contact the Applied Music coordinator for more information about a music literacy assessment. The goal of the assessment is to place students into a music theory and literature course appropriate to the student's skill level.

Student Learning Outcomes

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

- PSLO #1: SKILL DEVELOPMENT: Perform music at a level appropriate to the area of specialization; acquire and demonstrate aural awareness and solo performance and ensemble skills.
- PSLO #2: AURAL AWARENESS: Understand, identify and recognize the elements of music (e.g., melody, rhythm, harmony, form).
- PSLO #3: CONTEXTUAL UNDERSTANDING: Establish an historical, geographical and chronological context of music and differentiate different eras and styles of music.
- PSLO #4: CRITICAL LEARNING SKILLS: Acquire skills to analyze and compare musical compositions, scores and performances; Compose music for the purpose of understanding the elements of music within the context of the Baroque, Classical, Romantic and early Twentieth Century.

Career Information

Individuals with four-year degrees in music may teach in the K-12 educational field as well as perform in professional music ensembles, direct religious and community music groups, instruct in private music studios, compose for media and publishing, music therapy, 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. NOTE TO TRANSFER STUDENTS: The Associate Degree for Transfer program is designed for students who plan to transfer to a campus of the California State University (CSU). For students wishing to transfer to other universities (UC System, private, or out-of-state), the Associate Degree for Transfer may not provide adequate preparation for upper-division transfer admissions; it is critical that you meet with a CRC counselor to select and plan the courses for the major, as programs vary widely in terms of the required preparation.

Associate Degrees

A.A. in Music, General

Completion of this degree provides a foundation in music. Program offerings include course work in music theory and aural skills, applied instrumental and vocal instruction, ensemble performance, music history and piano.

Highlights include:
* Various avenues for vocal performance — college chorus, choir, chamber singers, contemporary gospel choir
* Various avenues for instrumental performance—college orchestra, jazz ensemble, concert band

Note to Transfer Students:
If you are interested in transferring to a four-year college or university to pursue a bachelor’s degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an

Associate's degree in this major may be different from the requirements needed for the Bachelor's degree.

Degree Requirements

Course Code	Course Title	Units
MUFHL 310	Survey of Music History and Literature (Greek Antiquity to 1750)	3
MUFHL 311	Survey of Music History and Literature (1750 to the present)	3
MUFHL 400	Music Theory and Musicianship I	4
MUFHL 404	Music Theory II	3
MUFHL 412	Music Theory III	3
MUFHL 414	Music Theory IV	3
MUIVI 340	Beginning Piano	2
MUIVI 341	Piano II	2
MUFHL 405	Musicianship II	1
MUFHL 413	Musicianship III	1
MUFHL 415	Musicianship IV	1
A minimum of 8 units from the following:		8
MUIVI 370	Beginning Guitar (2)	
MUIVI 371	Intermediate Guitar (2)	
MUIVI 350	Piano III (2)	
MUIVI 351	Piano IV (2)	
MUIVI 310	Voice Class I (2)	
MUIVI 311	Voice Class II (2)	
MUIVI 320	Voice Class III (2)	
MUIVI 321	Voice Class IV (2)	
MUIVI 410	Applied Music (1)	
MUIVI 495	Independent Studies in Music Instrumental/Voice Instruction (1 - 3)	
Subtotal Units:		**34**

Instrumental Majors

Course Code	Course Title	Units
A minimum of 8 units from the following:		8[1]
MUP 310	Orchestra (2)	
MUP 320	Jazz Band (2)	
MUP 330	Concert Band (2)	
Instrumental Majors Units:		8
Total Units:		**42**

Keyboard Majors

Course Code	Course Title	Units
A minimum of 8 units from the following:		8[2]
MUP 320	Jazz Band (2)	
MUP 330	Concert Band (2)	
MUP 350	Concert Choir I (2)	
MUP 357	College Chorus (2)	
MUP 310	Orchestra (2)	
MUP 360	Chamber Singers (2)	
Keyboard Majors Units:		8
Total Units:		**42**

Voice Majors

Course Code	Course Title	Units
A minimum of 8 units from the following:		8[3]
MUP 357	College Chorus (2)	
MUP 360	Chamber Singers (2)	
Voice Majors Units:		8
Total Units:		**42**

[1]NOTE: All music major are required to enroll in at least one music performance course each semester they are enrolled.

[2]NOTE: All music majors are required to enroll in at least one music performance class each semester they are enrolled.

[3]NOTE: All music majors are required to enroll in at least one music performance course each semester they are enrolled.

The Music, General Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus the local CRC General Education Requirement, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Enrollment Process

Eligible students are selected for the program according to the following steps:

- Students may complete an audition the week before the start of the semester for placement into the appropriate applied music and ensemble courses. For more information about the audition process, please consult the Music Department website.
- Students interested in the program should contact the Applied Music coordinator for more information about a music literacy assessment. The goal of the assessment is to place students into a music theory and literature course appropriate to the student's skill level.

Student Learning Outcomes

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

- PSLO #1: SKILL DEVELOPMENT: Perform music at a level appropriate to the area of specialization; acquire and demonstrate aural awareness and solo performance and ensemble skills.
- PSLO #2: AURAL AWARENESS: Understand, identify and recognize the elements of music (e.g., melody, rhythm, harmony, form).
- PSLO #3: CONTEXTUAL UNDERSTANDING: Establish an historical, geographical and chronological context of music and differentiate different eras and styles of music.
- PSLO #4: CRITICAL LEARNING SKILLS: Acquire skills to analyze and compare musical compositions, scores, and performances; compose music for the purpose of understanding the elements of music within the context

of the Baroque, Classical, Romantic and early Twentieth Century.

- PSLO #5: PIANO PROFICIENCY: Develop and demonstrate basic piano proficiency (for non-pianist majors.)

Career Information

Music Education; Public and Private Teaching; Vocal Performance; Instrumental Performance; Music Store Employment & Management; Church Music Direction; Composer Some career options may require more than two years of college study. Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.

Certificates of Achievement

Entrepreneurial Arts: Independent Music Instructor Certificate

This certificate provides real world tools for the aspiring music teacher to earn a living as a thriving and successful independent music instructor.

Certificate Requirements

Course Code	Course Title	Units
MUSM 370	Music for Children	3
MUIVI 410	Applied Music	1
MUIVI 321	Voice Class IV (2)	2
or MUIVI 351	Piano IV (2)	
or MUIVI 371	Intermediate Guitar (2)	
MUP 310	Orchestra (2)	1 - 2
or MUP 321	Advanced Jazz Band (1 -2)	
or MUP 330	Concert Band (2)	
or MUP 357	College Chorus (2)	
or MUP 360	Chamber Singers (2)	
BUS 215	Entrepreneurial Opportunity and Business Planning	3
A minimum of 3 units from the following:		3
MUFHL 400	Music Theory and Musicianship I (4)	
or MUFHL 404	Music Theory II (3)	
or MUFHL 412	Music Theory III (3)	
or MUFHL 414	Music Theory IV (3)	
MUSM 498	Work Experience in Music Specializations	0.5 -4
MUFHL 300	Introduction to Music (3)	3
or MUFHL 310	Survey of Music History and Literature (Greek Antiquity to 1750) (3)	
or MUFHL 311	Survey of Music History and Literature (1750 to the present) (3)	
Total Units:		**16.5 - 21**

Student Learning Outcomes

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

- PSLO #1: Students will develop increased artistry and technical mastery with which to attract a more diverse teaching clientele and acquire a knowledge of partner organizations on the local, state, and national levels.
- PSLO #2: Students will be proficient in contemporary technologies for the purposes of research, composition, listening, performance, recording, archiving, and cross-discipline collaboration.
- PSLO #3: Students will acquire necessary independent contractor business skills for their careers as an independent music teacher and develop a mastery of using social media for recruitment and retainment purposes.

Career Information

Career opportunities include the following: independent private music instructor, charter school music instructor, after school program music instructor, children's day care and/or pre school music instructor, private tutor, music school proprietor.

Entrepreneurial Arts: Music Composition Certificate

The Entrepreneurial Arts: Music Composition Certificate prepares students for all aspects of a thriving music career, from performance to music creation to business skills. We give you the tools to grow and survive as an independent contractor in a gig economy.

Certificate Requirements

Course Code	Course Title	Units
MUP 310	Orchestra (2)	2[1]
or MUP 320	Jazz Band (2)	
or MUP 330	Concert Band (2)	
or MUP 353	Contemporary Gospel Choir (2)	
or MUP 357	College Chorus (2)	
or MUP 360	Chamber Singers (2)	
MUSM 346	Audio and Music Production I	3
MUSM 347	Audio and Music Production II	3
MUSM 110	The Business of Music (3)	3

Course Code	Course Title	Units
or BUS 215	Entrepreneurial Opportunity and Business Planning (3)	
MUP 423	Composition Ensemble Workshop (2)	2 - 3
or MUFHL 416	Studies in Contemporary Composition Techniques, Performance, and Literature (3)	
A minimum of 3 units from the following:		3
MUFHL 400	Music Theory and Musicianship I (4)	
or MUFHL 404	Music Theory II (3)	
MUFHL 412	Music Theory III (3)	
or MUFHL 414	Music Theory IV (3)	
Total Units:		**16 - 17**

[1]Two units from the following

Enrollment Process

Eligible students are selected for the program according to the following steps:

- Students may complete an audition the week before the start of the semester for placement into the appropriate applied music and ensemble courses. For more information about the audition process, please consult the Music Department website.
- Students interested in the program should contact the Applied Music coordinator for more information about a music literacy assessment. The goal of the assessment is to place students into a music theory and literature course appropriate to the student's skill level.

Student Learning Outcomes

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

- PSLO #1 STUDENT WILL ACQUIRE PHYSICAL SKILLS/ DEXTERITY WITHIN A DISCIPLINE.
- PSLO #2 STUDENT WILL ESTABLISH AN HISTORICAL, GEOGRAPHICAL, AND CHRONOLOGICAL CONTEXT OF MUSIC.
- PSLO #3 STUDENT WILL LEARN AND USE CRITICAL LISTENING SKILLS TO DISCUSS AND CRITIQUE MUSICAL WORKS AND PERFORMANCES THROUGH SELF ANALYSIS, ENSEMBLE PARTICIPATION, AND PERFORMANCE EVALUATION.
- PSLO #4 STUDENT WILL BE PROFICIENT IN NEW TECHNOLOGIES FOR THE PURPOSES OR RESEARCH, COMPOSITION, LISTENING, PERFORMANCE, RECORDING, ARCHIVING, AND CROSS-DISCIPLINE COLLABORATION.

Career Information

Career opportunities include multiple aspects of the music industry including live performance in classical and/or commercial styles, composition, performance of original compositions, concert promotion, music marketing, music publishing and distribution, music licensing, project management, studio teaching, and other assorted freelance gigging opportunities. This program will be of interest for individuals looking to proceed to professional practice or to further their academic study.

Music History Certificate

Completion of this certificate provides an introductory foundation to the history of music in its historical and cultural contexts. The certificate includes both western and global music history, including traditional and popular styles. Students pursuing an AA or AA-T in Music may complete this certificate as part of their coursework; please consult a counselor for more information.

Certificate Requirements

Course Code	Course Title	Units
MUFHL 310	Survey of Music History and Literature (Greek Antiquity to 1750)	3
MUFHL 311	Survey of Music History and Literature (1750 to the present)	3
MUFHL 330	World Music	3
MUFHL 308	Introduction to Music: Rock & Roll (3)	3
or MUFHL 315	Jazz History (3)	
Total Units:		**12**

Student Learning Outcomes

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

- PLSO #1: Understand, identify, and recognize the elements of music (e.g., melody, rhythm, harmony, and form).
- PSLO #2: Situate musical elements of a particular piece or genre within a broader social, cultural, and historical context.
- PLSO #3: Compare and contrast musical styles and traditions historically and globally, using culturally-relevant vocabulary.
- PLSO #4: Express their knowledge, observations, and opinions on music using specialized vocabulary.

Career Information

Combined with other certificates in a student's area of interest, career opportunities include: music performance, music education, studio music instructor, concert promotion, music marketing, music journalism, and other assorted freelance work.

Music - Fundamentals, History, and Literature (MUFHL) Courses

MUFHL 300 Introduction to Music

Units: 3

Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC (MUFHL 300 and 321 combined: maximum credit of one transfer course)
General Education: Local GE L3; Cal-GETC Area 3A
C-ID: C-ID MUS 100

A brief study of the development of music from the middle ages to music of today, emphasizing the relation of music to the social, cultural, economic and political factors which produced it. Learn to listen to and understand the music of many historic periods and cultures through the features they share: sound sources, time frame, rhythm and meter, pitch, and structure. Concert attendance is required. Designed for the student with no previous musical study and for those who are particularly interested in the humanities or the arts.

MUFHL 308 Introduction to Music: Rock & Roll

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3A

This course examines social, political, cultural and economic issues as they relate to the history of rock and roll music. Musical examples will develop listening skills and the ability to critique the music orally and in written form. This course is designed for students with no previous musical study.

MUFHL 310 Survey of Music History and Literature (Greek Antiquity to 1750)

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3A

This course is a detailed study of the development of music from antiquity to 1750, emphasizing the relation of music to the social, cultural, economic and political factors which produced it. This course is required for music majors pursuing and designed for those particularly interested in the humanities or the arts. No previous musical experience (e.g., reading western music notation) is required for this course.

MUFHL 311 Survey of Music History and Literature (1750 to the present)

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3A

This course provides a detailed study of the development of music from the mid-eighteenth century to the present, emphasizing the relation of music to the social, cultural, economic and political factors which produced it. It is required for music majors and designed for those particularly interested in the humanities or the arts. No previous musical experience (e.g., reading western music notation) is required for this course.

MUFHL 315 Jazz History

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3A

This course is an historical, comprehensive, and comparative listeners survey of the traditions of Jazz music from around the world and in the United States, in which concepts of ethnicity, ethnocentrism, racism, ageism, class differences, and gender issues will be addressed. Guided listening presentations will show how African and early African-American musical traditions have led to the development of various improvisational forms and styles, including Ragtime, Swing, Bebop, Free Jazz, Fusion, and Acid Jazz. Jazz style of the Americas, Asia, Africa, India, and Europe will be covered.

MUFHL 321 Basic Musicianship

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC (No credit for MUFHL 321 if taken after MUFHL 400.)
General Education: Local GE L3; Cal-GETC Area 3A
C-ID: C-ID MUS 110

This course is designed as a starting point for students with limited musical experience or for those wishing a basic course prior to enrollment in MUFHL 400. The course concentrates on learning to read and understand (visually, aurally, and kinesthetically) rhythmic, melodic, and harmonic notation, texture and form through keyboard and/or other instruments including voice as a window to music literacy and creativity.

MUFHL 330 World Music

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3A

This course is a comprehensive, comparative survey of music from around the world (including the Americas, Europe, Central and West Asia, East and Southeast Asia, and Northern, West, and Sub-Saharan Africa). By participating in guided listening activities, students will explore the cultural contexts of musical examples and study music not only as an art but also as a human activity. Course themes include unpacking terms such as "traditional," "folk," and "modern" music; the intersections of music-making and ethnicity, race, gender, sexuality, and socio-economic class; and how musical expression is related to broader issues of ethnocentrism, racism, ageism, ableism, and sexism. Students will also study the disciplinary principles of ethnomusicology, including fieldwork and musical ethnography. No previous musical experience (e.g., reading western music notation) is required for this course.

MUFHL 400 Music Theory and Musicianship I

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: None.

Advisory: MUFHL 321 or MUIVI 340 with a grade of "C" or better
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3A
C-ID: C-ID MUS 125; C-ID MUS 120

This course is the study of scales, intervals, triads, diatonic harmonies, part writing, rhythms, sight singing, ear training, dictation, history and performance. Analysis and composition will be taught. Reading music is a requirement for this course. This course is required for music majors.

MUFHL 401 Music Theory and Musicianship II

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: MUFHL 400 and 400 with grades of "C" or better
Corequisite: MUIVI 341 and 341;
Transferable: CSU; UC
General Education: Local GE L3

With an emphasis on the study of scales, intervals, triads, diatonic harmonies, part writing, rhythms, sight singing, ear training, dictation, history and performance, this course includes analysis and composition. This course is required for music majors. Students may wish to challenge the prerequisite on the basis of equivalent experience.

MUFHL 402 Music Theory I

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Corequisite: MUFHL 403
Enrollment Limitation: Basic piano proficiency is required for this course. Proficiency may be demonstrated by audition or concurrent enrollment in MUIVI 340.
Transferable: CSU; UC
C-ID: C-ID MUS 120

This course, through guided composition and analysis, incorporates the following concepts: rhythm and meter; basic properties of sound; intervals; diatonic scales and triads; diatonic chords, basic cadential formulas and phrase structure; dominant seventh; figured bass symbols; and non-harmonic tones. Students will understand the relationship and use of music theory in relationship to cultural and historical periods including its relationship in different musical styles and cultures. Development of skills in handwritten notation and computer notation is expected. The ability to read music is required for this course. Basic piano proficiency is required and may be passed by exam or concurrent enrollment in MUIVI 340 (Beginning Piano). This course is required for the AA and AA-T degrees in music.

MUFHL 403 Musicianship I

Units: 1
Hours: 54 hours LAB
Prerequisite: None.
Advisory: MUFHL 402; Skills developed concurrently in Music Theory I (MUFHL 402) and in Beginning Piano (MUIVI 340) are advised for success in Musicianship I (MUFHL 403).
Transferable: CSU; UC
C-ID: C-ID MUS 125

This course applies and develops the rhythmic, melodic, and harmonic materials of Music Theory I through ear training, sight singing, analysis, and dictation.

MUFHL 404 Music Theory II

Units: 3
Hours: 54 hours LEC
Prerequisite: MUFHL 400 with a grade of "C" or better
Enrollment Limitation: Basic piano proficiency is required for this course. Proficiency may be demonstrated by audition or concurrent enrollment in MUIVI 341.
Transferable: CSU; UC
C-ID: C-ID MUS 130

This course incorporates the concepts from Music Theory I. In addition, through guided composition and analysis, the course will include: an introduction to two-part counterpoint; voice leading involving four-part chorale writing; diatonic harmony; and an introduction to secondary/applied chords and modulation. Basic piano proficiency is required and may be passed by exam or concurrent enrollment in MUIVI 341. The course is required for the AA and AA-T degrees in Music.

MUFHL 405 Musicianship II

Units: 1
Hours: 54 hours LAB
Prerequisite: MUFHL 402 and 403 with grades of "C" or better
Advisory: MUFHL 404 and MUIVI 341; Skills developed concurrently in Music Theory II (MUFHL 404) and Piano II (MUIVI 341) are advised for success in Musicianship II (MUFHL 405).
Transferable: CSU; UC
C-ID: C-ID MUS 135

This course applies and develops the rhythmic, melodic, and harmonic materials of Music Theory II through ear training, sight singing, analysis, and dictation.

MUFHL 412 Music Theory III

Units: 3
Hours: 54 hours LEC
Prerequisite: MUFHL 404 with a grade of "C" or better
Transferable: CSU; UC
C-ID: C-ID MUS 140

This course incorporates the concepts from Music Theory II. In addition, through writing and analysis, the course will include: introduction to chromatic harmony; secondary/applied chords; modulation; borrowed chords; introduction to Neapolitan and augmented-sixth chords. This course is required for the AA and AA-T degree in music.

MUFHL 413 Musicianship III

Units: 1
Hours: 54 hours LAB
Prerequisite: MUFHL 404 and 405 with grades of "C" or better
Advisory: MUFHL 412; Skills developed concurrently in Music Theory III (MUFHL 412) and in piano study are advised for success in Musicianship III (MUFHL 413).
Transferable: CSU; UC
C-ID: C-ID MUS 145

This course applies and develops the rhythmic, melodic, and harmonic materials of Music Theory III through ear training, sight singing, analysis, and dictation.

MUFHL 414 Music Theory IV

Units: 3
Hours: 54 hours LEC
Prerequisite: MUFHL 412 with a grade of "C" or better
Transferable: CSU; UC
C-ID: C-ID MUS 150

This course incorporates the concepts from Music Theory III. In addition, through writing and analysis, the course will include: post-Romantic techniques such as borrowed chords and modal mixture, chromatic mediants, Neapolitan and augmented-sixth chords, 9th, 11th and 13th chords, altered chords and dominants; and 20th century techniques such as: Impressionism, tone rows, set theory, pandiatonicism and polytonalism, meter and rhythm.

MUFHL 415 Musicianship IV

Units: 1
Hours: 54 hours LAB
Prerequisite: MUFHL 412 with a grade of "C" or better
Advisory: MUFHL 414; Skills developed concurrently in Music Theory IV (MUFHL 414) together with continued piano study are advised for success in Musicianship IV. (Piano study may be obtained by enrollment in a CRC piano class, or by individual instruction.)
Transferable: CSU; UC
C-ID: C-ID MUS 155

This course applies and develops the rhythmic, melodic, and harmonic materials of Music Theory IV through ear training, sight singing, analysis, and dictation.

MUFHL 416 Studies in Contemporary Composition Techniques, Performance, and Literature

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3A

This course focuses on the creation, performance, and literature of 20th and 21st Century concert music. Students will both create original works and analyze existing compositions as we research trends in art and music. This class will focus primarily on music as it developed and evolved from the European classical tradition and took new shape in the Americas. Topics may include: European classical music heritage, American classical and art music, jazz, film music, European avant garde, world music, and minimalism.

MUFHL 421 Advanced Jazz Theory

Units: 2
Hours: 27 hours LEC; 27 hours LAB
Prerequisite: MUFHL 420 with a grade of "C" or better
Advisory: MUIVI 341 and 341
Transferable: CSU; UC

This course provides a continuation of jazz concepts presented in MUFHL 420. The emphasis will be advanced elements of jazz theory including harmonic, melodic and formal analysis in the jazz idiom.

MUFHL 495 Independent Studies in Music Fundamentals/History and Literature

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

MUFHL 499 Experimental Offering in Music Fundamentals/History and Literature

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU

This is the experimental courses description.

Music - Instrumental/Voice Instruction (MUIVI) Courses

MUIVI 310 Voice Class I

Units: 2
Hours: 36 hours LEC; 18 hours LAB
Course Family: Traditional Voice Fundamentals
Prerequisite: None.
Transferable: CSU; UC

Students will experience basic training in the correct use of the singing voice, vocal techniques, and repertoire. This course is strongly recommended for vocal majors, but open to all students desiring to begin the study of voice.

MUIVI 311 Voice Class II

Units: 2
Hours: 36 hours LEC; 18 hours LAB
Course Family: Traditional Voice Fundamentals
Prerequisite: MUIVI 310 with a grade of "C" or better
Transferable: CSU; UC

Students will experience basic training in the correct use of the singing voice, vocal techniques, and repertoire. This course is strongly recommended for vocal majors, but open to all students desiring to begin the study of voice.

MUIVI 320 Voice Class III

Units: 2
Hours: 36 hours LEC; 18 hours LAB
Course Family: Traditional Voice Technique and Repertoire
Prerequisite: MUIVI 311 with a grade of "C" or better;
Transferable: CSU; UC

This course provides opportunity for vocal exercise and intellectual analysis in the development of efficient singing technique and skill in performing vocal literature. Performance in class and in recital is essential. The course is strongly recommended for vocal majors. Students may wish to challenge the prerequisite on the basis of equivalent experience.

MUIVI 321 Voice Class IV

Units: 2
Hours: 36 hours LEC; 18 hours LAB
Course Family: Traditional Voice Technique and Repertoire
Prerequisite: MUIVI 320 with a grade of "C" or better
Transferable: CSU; UC

This course provides opportunity for vocal exercise and intellectual analysis in the development of efficient singing technique and skill in performing vocal literature. Performance in class and in recital is essential. The course is strongly recommended for vocal majors. Students may wish to challenge the prerequisite on the basis of equivalent experience.

MUIVI 340 Beginning Piano

Units: 2
Hours: 36 hours LEC; 18 hours LAB
Course Family: Traditional Piano Fundamentals
Prerequisite: None.
Transferable: CSU; UC

This course is based on conceptual learning that is applicable to all areas of music study. The course includes group activities such as ear training, repertoire study, sight reading and transposition, technique studies, improvisation, and written work. The course aims to enhance literacy and creativity in music through keyboard application. Recommended for all music majors, pre-school and elementary teachers, and required for non-keyboard music majors.

MUIVI 341 Piano II

Units: 2
Hours: 36 hours LEC; 18 hours LAB
Course Family: Traditional Piano Fundamentals
Prerequisite: MUIVI 340 with a grade of "C" or better; or have beginning training in playing piano, determined by the professor per an evaluation for the level of proficiency.
Transferable: CSU; UC

This is the second in a series of four consecutive group piano classes - successful completion of MUIVI 340 with a 'C' or better or a comparable experience is required for enrollment. Students will learn ensemble and solo works, acquire basic rhythmic skills, and will develop fundamental keyboard and music theory skills beyond the major and minor five-note patterns. This course is designed for both music majors planning to transfer as well as for students who are studying primarily for personal enjoyment. Specific skills students will develop include sight reading, improvising, listening skills, primary root position triads, hand-over-hand major and minor arpeggios, intervals, fingering, notation, time signatures, dynamics, basic harmonization, major key signatures, and various methods of tone production.

MUIVI 350 Piano III

Units: 2
Hours: 36 hours LEC; 18 hours LAB
Course Family: Traditional Piano Technique and Repertoire
Prerequisite: MUIVI 341 with a grade of "C" or better
Transferable: CSU; UC

This is the third in a series of four consecutive group piano classes - successful completion of MUIVI 341 with a 'C' or better (or a comparable experience) is required for enrollment. Students will learn advanced intermediate ensemble and solo works, develop more complex rhythmic skills, and will develop fundamental keyboard and music theory skills including three octave scales and performing independent parts in both hands. This course is designed for both music majors planning to transfer as well as for students who are studying primarily for personal enjoyment. Specific skills students will develop include sight reading, improvising, listening skills, primary root position triads, hand-over-hand major and minor arpeggios, intervals, fingering, notation, time signatures, dynamics, basic harmonization, major key signatures, and various methods of tone production.

MUIVI 351 Piano IV

Units: 2
Hours: 36 hours LEC; 18 hours LAB
Course Family: Traditional Piano Technique and Repertoire
Prerequisite: MUIVI 350 with a grade of "C" or better; or have an intermediate training in piano, determined by the professor per an evaluation for the level of proficiency.
Transferable: CSU; UC

This is the fourth in a series of four consecutive group piano classes - successful completion of MUIVI 350 with a 'C' or better (or a comparable experience) is required for enrollment. Students will learn ensemble and solo works, develop more complex rhythmic skills, and will develop fundamental keyboard and music theory skills comparable to advanced level repertoire. This course is designed for both music majors planning to transfer as well as for students who are studying primarily for personal enjoyment. Specific skills students will develop include sight reading, improvising, listening skills, primary root position triads, hand-over-hand major and minor arpeggios, intervals, fingering, notation, time signatures, dynamics, basic harmonization, major key signatures, and various methods of tone production.

MUIVI 370 Beginning Guitar

Units: 2
Hours: 36 hours LEC; 18 hours LAB
Course Family: Traditional Guitar and Bass
Prerequisite: None.
Transferable: CSU; UC

Beginning instruction on the guitar with emphasis on the fundamentals of music as well as basic guitar chord technique and accompaniment figurations.

MUIVI 371 Intermediate Guitar

Units: 2
Hours: 36 hours LEC; 18 hours LAB
Course Family: Traditional Guitar and Bass
Prerequisite: MUIVI 370 with a grade of "C" or better
Transferable: CSU; UC

This course is a continuation of MUIVI 370 with emphasis on increased skills in chording, arpeggiation, accompaniment, improvisation, melodic reading, and development of personal style. Students may wish to challenge the prerequisite on the basis of equivalent experience.

MUIVI 385 Jazz Styles and Improvisation I

Units: 2
Hours: 27 hours LEC; 27 hours LAB
Course Family: Jazz Instrumental
Prerequisite: None.
Advisory: Ability to play a melodic instrument or ability to sing; ability to read music.
Transferable: CSU; UC

This course is the study of instrumental and vocal application of jazz improvisation.

MUIVI 386 Jazz Styles and Improvisation II

Units: 2
Hours: 27 hours LEC; 27 hours LAB
Course Family: Jazz Instrumental
Prerequisite: MUIVI 385 with a grade of "C" or better
Transferable: CSU; UC

This course is the study of advanced instrumental and vocal applications of jazz improvisation.

MUIVI 410 Applied Music

Units: 1
Hours: 18 hours LEC
Course Family: Traditional Applied Music Fundamentals
Prerequisite: None.
Corequisite: MUFHL 400, 404, 412, or 414; Select one large performing ensemble from any MUP course
Enrollment Limitation: Audition required.
Transferable: CSU; UC
C-ID: C-ID MUS 160

This course consists of individualized study of the appropriate techniques and repertoire for the specific instrument or voice being studied. The emphasis is on the progressive development of skills needed for solo performance. The course involves instrumental or vocal study requiring additional hours of individual study through one-on-one instruction. The course also meets one hour per week on campus for instruction and performance. This course may be repeated to meet the major requirement for transfer to CSU, Sacramento, or to other universities with a similar transfer requirement.

MUIVI 495 Independent Studies in Music Instrumental/Voice Instruction

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses.
See the current catalog section of "Special Studies" for full details of Independent Studies. This independent study course is designed to provide instrumental training not offered in other CRC music classes. Components of the course may include private or group instruction, solo and ensemble work, accompanying experience, and programmed learning in music fundamentals and music technology. The course may also be designed for students interested in developing tutorial and/or instrumental skills.

MUIVI 499 Experimental Offering in Music Instrumental/Voice Instruction

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU

This is the experimental courses description.

Music - Performance (MUP) Courses

MUP 302 Jazz Workshop

Units: 2
Hours: 18 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: Students considering enrollment in MUP 320 but do not meet audition requirements should enroll in MUP 302 first.
Transferable: CSU (effective Fall 2026); UC (effective Fall 2026)

Jazz Workshop is a non-audition performance class open to any beginning instrumentalist or vocalist with some prior experience in music performance and reading music. The class focuses on performing music from a variety of jazz genres, with special attention to developing the fundamentals of sight reading, ensemble playing, and improvisation. Students considering enrollment in MUP 320 but do not meet audition requirements should enroll in MUP 302 first.

MUP 310 Orchestra

Units: 2
Hours: 18 hours LEC; 54 hours LAB
Prerequisite: None.
Enrollment Limitation: Previous experience on any instrument type (strings, winds, brass, and percussion, including pianists, guitarists, and composers). Auditions may be held at the beginning of each semester to place students within the ensemble.
Transferable: CSU; UC
C-ID: C-ID MUS 180

The CRC Orchestra is for both music majors and non-music majors with previous experience on any instrument type (strings, winds, brass, and percussion, including pianists, guitarists, and composers). The focus of the CRC Orchestra is to showcase our students through public performance in multiple on and off-campus events, featuring a wide variety of music and original student work. This course may be repeated to meet the major requirement for transfer to CSU, Sacramento, or to other universities with a similar transfer requirement. Auditions may be held at the beginning of each semester to place students within the ensemble.

MUP 311 Advanced Orchestra

Units: 1 - 2
Hours: 9 - 18 hours LEC; 27 - 54 hours LAB
Prerequisite: MUP 310 with a grade of "C" or better; or an audition.
Transferable: CSU; UC

This course is for music majors and non-music majors with previous experience in any instrument type (strings, winds, brass, and percussion, including pianists, guitarists, and composers). The focus of this course is to showcase our students through continuing study and public performance in multiple on and off-campus events, featuring a wide variety of music and original student work. This course may be repeated to meet the major requirement for transfer to CSU Sacramento or other universities with a similar transfer requirement. Auditions may be held at the beginning of each semester to place students within the ensemble.

MUP 312 Orchestra

Units: 1
Hours: 9 hours LEC; 27 hours LAB
Prerequisite: None.
Enrollment Limitation: Previous experience on any instrument type (strings, winds, brass, and percussion, including pianists, guitarists, and composers). Auditions may be held at the beginning of each semester to place students within the ensemble.
Transferable: CSU; UC
C-ID: C-ID MUS 180

The CRC Orchestra is for both music majors and non-music majors with previous experience on any instrument type (strings, winds, brass, and percussion, including pianists, guitarists, and composers). The focus of the CRC Orchestra is to showcase our students through public performance in multiple on and off-campus events, featuring a wide variety of music and original student work. This course may be repeated to meet the major requirement for transfer to CSU, Sacramento, or to other universities with a similar transfer requirement. Auditions may be held at the beginning of each semester to place students within the ensemble.

MUP 320 Jazz Band

Units: 2
Hours: 18 hours LEC; 54 hours LAB
Prerequisite: None.
Enrollment Limitation: Previous experience on any instrument or voice type (strings, winds, brass, and percussion, including vocalists, pianists, guitarists, and composers). Auditions may be held at the beginning of each semester to place students within the ensemble.
Transferable: CSU; UC

This course is the study and performance of jazz band repertoire and techniques for both music majors and non-music majors with previous experience on any instrument or voice type (strings, winds, brass, and percussion, including vocalists, pianists, guitarists, and composers). Public performances and field trips may be required. This course may be repeated to meet the major requirement for transfer to CSU, Sacramento, or to other universities with a similar transfer requirement. Auditions may be held at the beginning of each semester to place students within the ensemble.

MUP 321 Advanced Jazz Band

Units: 1 - 2
Hours: 54 - 108 hours LAB
Prerequisite: MUP 320 with a grade of "C" or better
Enrollment Limitation: Previous experience on any instrument or voice type (strings, winds, brass, and percussion, including vocalists, pianists, guitarists, and composers). Auditions may be held at the beginning of each semester to place students within the ensemble.
Transferable: CSU; UC

This course is the continuing study and performance of jazz band repertoire and techniques for both music majors and non-music majors with previous experience on any instrument or voice type (strings, winds, brass, and percussion, including vocalists, pianists, guitarists, and composers). Additional topics include improvisation, part preparation, listening skills, and section leading. Public performances and field trips may be required. This course may be repeated to meet the major requirement for transfer to CSU, Sacramento, or to other universities with a similar transfer requirement. Auditions may be held at the beginning of each semester to place students within the ensemble.

MUP 330 Concert Band

Units: 2
Hours: 18 hours LEC; 54 hours LAB
Prerequisite: None.
Enrollment Limitation: Previous experience on any instrument type (strings, winds, brass, and percussion, including pianists, guitarists, and composers). Auditions may be held at the beginning of each semester to place students within the ensemble.
Transferable: CSU; UC
C-ID: C-ID MUS 180

This course is for music majors and non-music majors with previous experience in any instrument type (strings, winds, brass, and percussion, including pianists, guitarists, and composers).

The focus of this course is to showcase our students through public performance in multiple on and off-campus events, featuring a wide variety of music and original student work.

This course may be repeated to meet the major requirement for transfer to CSU, Sacramento, or other universities with a similar transfer requirement. Auditions may be held at the beginning of each semester to place students within the ensemble.

MUP 331 Advanced Concert Band

Units: 1 - 2
Hours: 9 - 18 hours LEC; 27 - 54 hours LAB
Prerequisite: MUP 330 (Concert Band) with a grade of "C" or better; or audition.
Transferable: CSU; UC

This course is for music majors and non-music majors with previous experience in any instrument type (strings, winds, brass, and percussion, including pianists, guitarists, and composers). The focus of this course is to showcase our students through continuing study and public performance in multiple on and off-campus events, featuring a wide variety of music and original student work. This course may be repeated

to meet the major requirement for transfer to CSU Sacramento or other universities with a similar transfer requirement. Auditions may be held at the beginning of each semester to place students within the ensemble.

MUP 335 Concert Band

Units: 1
Hours: 9 hours LEC; 27 hours LAB
Prerequisite: None.
Enrollment Limitation: Previous experience on any instrument type (strings, winds, brass, and percussion, including pianists, guitarists, and composers). Auditions may be held at the beginning of each semester to place students within the ensemble.
Transferable: CSU; UC
C-ID: C-ID MUS 180

This course is for music majors and non-music majors with previous experience in any instrument type (strings, winds, brass, and percussion, including pianists, guitarists, and composers). The focus of this course is to showcase our students through public performance in multiple on and off-campus events, featuring a wide variety of music and original student work. This course may be repeated to meet the major requirement for transfer to CSU, Sacramento, or other universities with a similar transfer requirement. Auditions may be held at the beginning of each semester to place students within the ensemble.

MUP 350 Concert Choir I

Units: 2
Hours: 18 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: MUP 357, or placement through the assessment process.
Transferable: CSU; UC
C-ID: C-ID MUS 180

This course covers the study and performance of standard vocal literature from the 16th century to the modern period. Students are urged to enter during their freshman year. Public performances are required. This course may be taken a maximum of four times to meet the major requirement for transfer to CSU, Sacramento, or to other universities with a similar transfer requirement.

MUP 353 Contemporary Gospel Choir

Units: 2
Hours: 18 hours LEC; 54 hours LAB
Course Family: Vocal Ensemble
Prerequisite: None.
Transferable: CSU; UC

This course is designed for the college student who is interested in learning the history of gospel music, improving their general musicianship, enhancing their vocal technique, and performing chorale repertoire from different eras of gospel music. No previous musical experience is necessary. Multiple public performances of the repertoire rehearsed and learned, and a brief biographic paper on a gospel figure are required. This course may be repeated to meet the major requirement for transfer to CSU, Dominguez Hills, or to other universities with a similar transfer requirement.

MUP 357 College Chorus

Units: 2
Hours: 18 hours LEC; 54 hours LAB
Prerequisite: None.
Enrollment Limitation: Voice placement or audition required.
Transferable: CSU; UC
C-ID: C-ID MUS 180

This course is designed for the college student who is interested in a musical experience. Singers study and perform standard choral literature. Ability to match pitch, maintain rhythmic integrity and produce a good tone will be assessed by voice placement or audition in the initial rehearsals. This course may be repeated to meet the major requirement for transfer to CSU, Sacramento, or to other universities with a similar transfer requirement.

MUP 358 College Chorus Chorale

Units: 1
Hours: 9 hours LEC; 27 hours LAB
Prerequisite: None.
Enrollment Limitation: Voice placement or audition required.
Transferable: CSU; UC
C-ID: C-ID MUS 180

This course is designed for the college student who is interested in a musical experience. Singers study and perform standard choral literature. Ability to match pitch, maintain rhythmic integrity and produce a good tone will be assessed by voice placement or by audition during the initial rehearsals. This course may be repeated to meet the major requirement for transfer to CSU, Sacramento, or to other universities with a similar transfer requirement.

MUP 360 Chamber Singers

Units: 2
Hours: 18 hours LEC; 72 hours LAB
Prerequisite: None.
Enrollment Limitation: Audition required.
Advisory: MUP 350, 350, or 357; Students are strongly advised to document previous choral experience.
Transferable: CSU; UC
C-ID: C-ID MUS 180

Singers study and perform standard choral literature, especially written for chamber ensemble. Prospective members should have considerable previous choral experience. Public performances are required. Singers will perform outside of class, including evening concerts, participation in collegiate choral festivals, and on short
tours. Ability to match pitch, maintain rhythmic integrity and produce a good tone will be assessed by voice placement or by audition in the initial rehearsals. This course may be repeated to meet the major requirement for transfer to CSU, Sacramento, or to other universities with a similar transfer requirement.

MUP 362 Chamber Singers Chorale

Units: 1
Hours: 9 hours LEC; 27 hours LAB
Prerequisite: None.
Enrollment Limitation: Audition required.
Advisory: MUP 350, 350, 357, or 358; Students are strongly advised to document previous choral experience.
Transferable: CSU; UC

C-ID: C-ID MUS 180

Singers study and perform standard choral literature, especially written for chamber ensemble. Prospective members should have considerable previous choral experience. Public performances are required. Singers will perform outside of class, including evening concerts, participation in collegiate choral festivals, choral exchanges, and on short tours. Ability to match pitch, maintain rhythmic integrity and produce a good tone will be assessed by audition during the initial rehearsals. This course may be repeated to meet the major requirement for transfer to CSU, Sacramento, or to other universities with a similar transfer requirement.

MUP 423 Composition Ensemble Workshop

Units: 2
Hours: 36 hours LEC; 18 hours LAB
Prerequisite: None.
Transferable: CSU; UC

This course provides students with an opportunity to create original works in a variety of genres and styles, while learning about important musical trends and composers in the 20th and 21st Century world of classical, jazz, film, commercial, and pop music worlds.

MUP 424 Commercial Music Ensemble

Units: 2
Hours: 18 hours LEC; 54 hours LAB
Prerequisite: None.
Enrollment Limitation: Students will be admitted to this course by audition only. Audition times and dates will be announced by the department.
Advisory: Ability to play at least one instrument or vocalize in a popular style.
Transferable: CSU
C-ID: C-ID MUS 185

This course involves the rehearsal and performance of contemporary pop and commercial styles, including rock, jazz, rhythm and blues, soul, folk, urban styles, country, and world beat.

MUP 495 Independent Studies in Music Performance

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

MUP 499 Experimental Offering in Music Performance

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU

This is the experimental courses description.

Music - Specializations in Music (MUSM) Courses

MUSM 110 The Business of Music

Units: 3
Hours: 54 hours LEC
Prerequisite: None.

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 320 Contemporary Songwriting

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: MUFHL 321 with a grade of "C" or better
Transferable: CSU (effective Fall 2026); UC (effective Fall 2026)

This course covers the process of writing popular songs, including writing lyrics, designing instrumental and vocal arrangements, studying melodic and harmonic skills, learning popular song forms, analyzing musical styles, and creating lead sheets.

MUSM 334 Introduction to Musical Instrument Digital Interface (MIDI)

Units: 2
Hours: 9 hours LEC; 81 hours LAB
Prerequisite: None.
Transferable: CSU

This course is an introduction to the rapidly evolving use of professional music software and MIDI electronic instruments. Various music hardware options, including keyboards, synthesizers, samplers, computers and drum machines, will be explored. Through a series of MIDI projects, students learn to use music sequencing, notation, and CAI (computer-assisted instruction) software.

MUSM 346 Audio and Music Production I

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Transferable: CSU
C-ID: C-ID CMUS 100X

This course covers introductory concepts and skill development in audio and music production. Students will work with consumer grade software applications designed to produce music digitally that are either free or come bundled with their laptops. Students will learn how to control this software with consumer grade hardware, such as control surfaces and digital audio interfaces. Students will develop skills in songwriting, music composition, and learn how to prepare written music for a recorded performance.

MUSM 347 Audio and Music Production II

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: MUSM 346 with a grade of "C" or better
Transferable: CSU
C-ID: C-ID CMUS 110X

This course covers intermediate and advanced concepts and skill development in digital audio/music production. In Audio and Music Production II, students will build on knowledge acquired Digital Music I, through their continual practice and work with key, industry-standard professional software environments, such digital audio workstation and music notation software. Students will continue to hone their skills in songwriting and music composition for other media such as film, gaming, and video. Students will complete original creative musical projects, promote their own work on web sites they create for themselves, place their music on social media platforms, and monetize their creativity on the internet.

MUSM 348 Audio and Music Production III (ProTools 101)

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: MUSM 347 with a grade of "C" or better
Transferable: CSU

This course trains students in the basic operation of ProTools, an industry standard Digital Audio Workstation. Students will learn how to record, edit, process, arrange and mix music comprised of various digital media, including audio and MIDI files. Through a series of creative projects and method-based training, students will be prepared to take the first exam in Avid's Certification Program at the end of the course. The passage of this exam will result in students' achieving the first of two steps that lead to 'User Certification' in ProTools with Avid Technologies.

MUSM 349 Audio and Music Production IV (ProTools 110)

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Transferable: CSU

This course continues to train students in the basic operation of ProTools, an industry standard Digital Audio Workstation. Students will learn how to operate large sessions in a project studio environment. Additional topics of study include managing large track and channel counts consisting of simultaneous inputs and outputs, and the instantiation of plug-ins specifically designed for music in both creative and post-production tasks. Students will continue to build on concepts and skills acquired in Audio and Music Production III (Pro Tools 101): recording, editing, processing, arranging and mixing music comprised of various digital media, including audio and MIDI files. Through a series of creative projects and method-based training, students will be prepared to take the second exam in Avid's Certification Program at the end of the course. The passage of this exam will result in students' achieving 'User Certification' in ProTools with Avid Technologies.

MUSM 370 Music for Children

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L3

Experiences and materials for integrating music into pre-school, elementary, and recreational programs. Recommended for elementary and early childhood credential candidates, recreation leaders, and others who use music with children.

MUSM 495 Independent Studies in Music Specializations

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

MUSM 498 Work Experience in Music Specializations

Units: 0.5 - 4
Hours: 27 - 216 hours LAB
Prerequisite: None.
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position or job related to career goals in Music.
Transferable: CSU

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in transfer level degree occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and complete 27 hours of related work experience for 0.5 unit. An additional 27 hours of related work experience is required for each additional 0.5 units. 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.

MUSM 499 Experimental Offering in Music Specializations in Music

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU

This is the experimental courses description.

Nutrition

CRC's Nutrition department offers an associate's degree program that is challenging, accessible, and rewarding. The program provides opportunities to master the knowledge and skills required for transfer to a didactic program in dietetics or a four-year degree in nutrition and foods.

Degrees and Certificates Offered

A.S.-T. in Nutrition and Dietetics

A.S. in Nutrition and Foods

Nutrition and Foods, Community Nutrition Certificate

Regenerative Foodways Certificate

Dean Kris Hubbard
Department Chair Cori Burns
Phone (916) 691-7390
Email hubbark@crc.losrios.edu

Associate Degrees for Transfer

A.S.-T. in Nutrition and Dietetics

The Associate in Science in Nutrition and Dietetics for Transfer degree provides students with a major that fulfills the general requirements of the California State University for transfer to baccalaureate degree programs in nutrition and dietetics. Students with this degree will receive priority admission with junior status to the California State University system. The Associate in Science in Nutrition and Dietetics for Transfer is comprised of lower division coursework typically required by CSU institutions.

Students must complete the following Associate Degree for Transfer (ADT) requirements:

(1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
(A) The California General Education Transfer Curriculum (Cal-GETC).
(B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

(2) Obtainment of a minimum grade point average of 2.0.

ADTs also require that students must earn a “C” or better in all courses required for the major or area of emphasis. A “P” (Pass) grade is also an acceptable grade for courses in the major if the course is taken on a Pass/No Pass basis.

Upon successful completion of the Associate in Science in Nutrition and Dietetics for Transfer degree requirements, students will be guaranteed admission to the CSU system with junior status and will not have to repeat lower division coursework.

Each California State University may have slightly different requirements for transfer so it is critical for students to work with their counselors to develop individual academic plans.

Degree Requirements

Course Code	Course Title	Units
Core:		
NUTRI 300	Nutrition	3
PSYC C1000	Introduction to Psychology	3
CHEM 400	General Chemistry I (5)	10
and CHEM 401	General Chemistry II (5)	
BIOL 440	General Microbiology	4
List A:		
A minimum of 3 units from the following:		3
CHEM 420	Organic Chemistry I (5)	
BIOL 430	Anatomy and Physiology (5)	
and BIOL 431	Anatomy and Physiology (5)	
STAT C1000E	Introduction to Statistics (4)	
or STAT C1000H	Introduction to Statistics - Honors (4)	
or ECON 310	Statistics for Business and Economics (3)	
or PSYC 330	Introductory Statistics for the Behavioral Sciences (3)	
List B:		
A minimum of 3 units from the following:		3
ACCT 341	Computerized Accounting (3)	
BUS 340	Business Law (3)	
CAM 301	Food Theory and Preparation (4)	
CAM 306	Culinary Sanitation & Safety (2)	
FCS 324	Human Development: A Life Span (3)	
NUTRI 310	Cultural Foods of the World (3)	
SOC 300	Introductory Sociology (3)	
Total Units:		**26**

The Associate in Science in Nutrition and Dietetics for Transfer (AS-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) the California General Education Transfer Curriculum (Cal-GETC) Requirement.

Enrollment Eligibility

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

- Have access to the Internet
- Be familiar with word processing, PowerPoint, retrieving and attaching electronic documents and using the world wide web
- Have self-discipline, motivation, and the ability to complete required assignments on schedule.

Enrollment Process

Eligible students are selected for the program according to the following steps:

- Admission to the college
- Contact CRC Nutrition and Foods Program Counselor regarding the specific transferrable requirements for the individual universities.

Student Learning Outcomes

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

- PSLO 1: Explain the principles of nutrition and its effect on health
- PSLO 2: Demonstrate a fundamental understanding of health behaviors on nutritional and health status

Career Information

Upon successful completion of a baccalaureate degree in nutrition or dietetics include positions as dieticians, nutritionists and dietetic technicians in hospitals/nursing homes, school food services, other health related facilities, college food service, industry food service, restaurants, public health agencies, nutrition programs, WIC programs, Meals on Wheels, health clubs, weight management clinics, community wellness centers, food companies, contract food management companies, and food distribution companies.

Associate Degrees

A.S. in Nutrition and Foods

CRC's Department of Nutrition and Foods offers an Associate's Degree Program that is challenging, accessible, and rewarding. The program provides opportunities to master the knowledge and skills required for transfer to a didactic program in dietetics or a four-year degree in nutrition and foods.

Highlights include:
* Online nutrition courses
* Sustainable nutrition course offerings
* Collaborations between CRC Culinary and Agriculture disciplines

Note to Transfer Students:
If you are interested in transferring to a four-year college or university to pursue a Bachelor's degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate's degree in this major may be different from the requirements needed for the Bachelor's degree.

Degree Requirements

Course Code	Course Title	Units
First Year (Fall):		
NUTRI 300	Nutrition	3
First Year (Spring):		
NUTRI 310	Cultural Foods of the World (3)	3
CAM 306	Culinary Sanitation & Safety	2
Second Year (Fall):		
NUTRI 350	Community Nutrition	3
First Year (Fall):		
PSYC C1000	Introduction to Psychology	3
First Year (Spring):		
CHEM 305	Introduction to Chemistry (5)	5[1]
or CHEM 400	General Chemistry I (5)	
First Year (Spring):		
NUTRI 370	Food Service Management (3)	3
First Year (Fall):		
NUTRI 322	Nutrition Issues Throughout Life	3
Second Year (Fall):		
BIOL 308	Contemporary Biology (3)	4
and BIOL 309	Contemporary Biology Laboratory (1)	
Second Year (Spring):		
BIOL 102	Essentials of Human Anatomy and Physiology (4)	4 - 5[2]
or BIOL 430	Anatomy and Physiology (5)	
First Year (Spring):		
NUTRI 331	Plant-Based Food Principles and Preparation	3
Second Year (Spring):		
NUTRI 340	Nutrition and Metabolism	3
Total Units:		**39 - 40**

[1]CHEM 305, 400 transferable to CSUS Didactic Program

[2]BIOL 430 transferable to CSUS Didactic Program

The Nutrition and Foods Associate in Science (A.S.) degree may be obtained by completion of the required program, plus the local CRC General Education Requirement, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

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

- PSLO 1: Demonstrate independent learning and effective communication skills
- PSLO 2: Explain the principles of nutrition and its effect on health
- PSLO 3: Demonstrate a fundamental understanding of health behaviors on nutritional and health status
- PSLO 4: Demonstrate a fundamental understanding of food service management function
- PSLO 5: Compare the effectiveness of various management styles
- PSLO 6: Interpret current nutrition research

Career Information

Hospitals/nursing homes, school food services, other health related facilities, college food service, industry, restaurant, public health agencies, nutrition program, WIC programs, Meals on Wheels, health clubs, weight management clinic, community wellness centers, food companies, contract food management companies, food distribution companies. Some career options may require more than two years of college study. Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.

Certificates of Achievement

Nutrition and Foods, Community Nutrition Certificate

This certificate advances student's understanding of the interaction between nutrition and health, keeping food safe in communities, and nutrition as a social justice issue. The focus is on community well-being through a nutrition and food lens. Students will gain knowledge in the nutrition needs of individuals throughout the lifecycle, cultural influences on food intake, community programs and policies that address nutrition-related issues, and the safe handling of food. After completing the classes for this certificate, students may apply credits toward CRC's Nutrition and Foods associate's degree program. Students earning this certificate are not qualified to practice medical nutrition therapy.

Certificate Requirements

Course Code	Course Title	Units
NUTRI 300	Nutrition	3
NUTRI 310	Cultural Foods of the World	3
NUTRI 322	Nutrition Issues Throughout Life	3
NUTRI 350	Community Nutrition	3
NUTRI 370	Food Service Management	3
CAM 306	Culinary Sanitation & Safety	2
Total Units:		**17**

Enrollment Eligibility

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

- Have consistent access to wifi to engage with online course management system and communication.
- Be familiar with retrieving and attaching electronic documents and using the Internet.
- Exhibit time management and self motivation in an online learning environment.

Student Learning Outcomes

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

- PSLO 1: Exhibit the specialized communication skills required for work in community nutrition settings
- PSLO 2: Explain the principles of nutrition and its effect on health
- PSLO 3: Demonstrate a fundamental understanding of health behaviors on nutritional and health status

Career Information

Upon further academic study, students would be qualified for positions in hospitals/nursing homes, school food services, other health related facilities, college food service, industry, restaurant, public health agencies, nutrition programs, WIC (Women, Infants & Children) programs, Elderly Nutrition programs, health clubs, weight management clinics, community wellness centers, food companies, contract food management companies, food distribution companies. These career options may require more than the certificate and two years of college study. Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.

Regenerative Foodways Certificate

The Regenerative Foodways Certificate brings the intersection of food, health, and environment into the classroom. The courses provide hands-on learning in the current fields of sustainable nutrition and regenerative agriculture. Students will explore the benefits of plant-focused eating patterns for both individuals and the planet, learn how to create nourishing meals centered around plants, and discover farming methods that promote fairness and sustainability in food production.

Contact the CRC Nutrition and Foods and/or Horticulture, and/or Ag Counselor regarding transferable courses.

Certificate Requirements

Course Code	Course Title	Units
NUTRI 303	Plant-Based Nutrition	3
NUTRI 331	Plant-Based Food Principles and Preparation	3
HORT 313	Sustainable Agriculture	3
Total Units:		**9**

Student Learning Outcomes

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

- PSLO 1: Demonstrate independent learning and effective communication skills.
- Demonstrate responsibility for personal action and choices.
- Communicate effectively both orally and in writing.
- PSLO 2: Explain the principles of nutrition and its effect on health.
- Relate the dietary causes of chronic diseases.
- Evaluate the role of plant-based foods on health and the environment.
- PSLO 3: Demonstrate a fundamental understanding of health behaviors on nutritional and health status.
- Schematize the effects of personal food choice on health, the environment and public policy.

- PSLO 4: Basic and advanced plant science/horticulture skills development and improvement.
- Demonstrate and apply the theories of sustainable and organic agriculture.
- Demonstrate a fundamental understanding of soils, soil development, soil building and preparation and sustainable soil management.
- Demonstrate a fundamental understanding of hydraulics and irrigation design, installation, and water management principles and practices.
- Create agriculture design concepts based on sound, sustainable soil management, water conservation, construction and maintenance, and integrated pest management best practices.
- PSLO 5: Effectively and accurately prepare and analyze raw ingredients and prepared foods.
- Evaluate food through sensory evaluation of texture, taste, color, presentation, smell and umami.
- Identify optimal cooking procedures/heat transfer to maximize nutrient content as well as the quality of the ingredients and dish as a whole.
- Analyze quality defects in cooked products and specify possible errors in techniques or ingredient selection.
- PSLO 6: Implement proper sanitary and safety techniques.
- Demonstrate appropriate food handling and sanitary techniques.
- Utilize kitchen tools/equipment appropriately.

Career Information

In restaurants, food service facilities, farms, urban farms, sustainable/organic farms, school garden, health education. Some of these career options may require more than the certificate and two years of college study. Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.

Nutrition (NUTRI) Courses

NUTRI 299 Experimental Offering in Nutrition and Foods

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

NUTRI 300 Nutrition

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L5; Local GE L7B
C-ID: C-ID NUTR 110

This course studies the basic science of human nutrition and its application to health and chronic diseases. It examines the sources and functions of micro- and macronutrients nutrients, including digestion, absorption, and transportation. Emphasis is placed on the health implications associated with dietary patterns, phytonutrient intake, consumption of whole foods, the impact of processing, and consequences of under and overconsumption. The course will also include topics such as nutrition as a world and consumer problem, weight loss, sports nutrition, food safety, and the diet-disease relationship, among others. An evaluation of personal dietary habits using current dietary guidelines and nutritional assessment methods will be completed to help students assess their own nutritional health.

NUTRI 303 Plant-Based Nutrition

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU
General Education: Local GE L7B

This course studies the science of plant-based nutrition and its application to health promotion, chronic disease reduction and the sustainability of the environment. It examines the sources and functions of micro- and macronutrients in plant foods and how the body digests, absorbs, transports and stores them. Emphasis is placed on the health implications associated with the standard American dietary intake, phytonutrient intake, whole foods/plant foods consumption, the impact of processing, and consequences of under and overconsumption. The course will also include topics on how plant-based nutrition significantly reduces the ecological footprint, how food choice can influence public policy, weight loss, food safety, and the diet-disease relationship, among others. An evaluation of personal dietary habits using current dietary guidelines and nutritional assessment methods will be completed to help students assess their own plant-based nutritional health.

NUTRI 310 Cultural Foods of the World

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: LIBR 318
Transferable: CSU; UC
General Education: Local GE L4; Cal-GETC Area 4

This course compares various western and non-western culture food customs and patterns including their social, religious, economic and aesthetic significance. The nutritional status of various cultures as it relates to geographic agricultural and socioeconomic factors will be explored. Ethnocentrism, gender-related stereotypes, and racism as they relate to the availability, distribution, and preparation of food throughout the world will also be compared.

NUTRI 322 Nutrition Issues Throughout Life

Units: 3
Hours: 54 hours LEC
Prerequisite: NUTRI 300 with a grade of "C" or better
Advisory: LIBR 318
Transferable: CSU
General Education: Local GE L7B

This course is a study of the nutritive needs of persons at various stages of the lifecycle with emphasis on special periods such as pregnancy, preschool, adolescence and aging. This course may be helpful for Kinesiology and Early Childhood Education students as well as those working with people in social agencies, such as nursing and gerontology, seeking an

understanding of the nutritional changes and requirements through the different stages of life.

NUTRI 331 Plant-Based Food Principles and Preparation

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: MATH 20 with a grade of "C" or better
Transferable: CSU

This course provides a comprehensive study of plant-based food ingredients and the basic principles and techniques involved in plant-based food preparation. Students will examine the factors that influence taste and the changes that occur in foods during preparation. In the laboratory, basic cooking skills and theoretical applications will be emphasized. Additionally, importance is placed on the reasons for recipe procedures and the prevention and correction of cooking failures.

NUTRI 340 Nutrition and Metabolism

Units: 3
Hours: 54 hours LEC
Prerequisite: NUTRI 300 with a grade of "C" or better
Advisory: BIOL 102, BIOL 310, and LIBR 318
Transferable: CSU

This course examines the chemical structure and metabolism of carbohydrates, lipids, and proteins. Emphasis is placed on the biological roles of vitamins and minerals, metabolic pathways and their relation to health and disease. In addition, this course will help the student integrate and apply metabolic knowledge and concepts to contemporary and controversial issues in nutrition.

NUTRI 350 Community Nutrition

Units: 3
Hours: 54 hours LEC
Prerequisite: NUTRI 300 with a grade of "C" or better
Advisory: NUTRI 340
Transferable: CSU

This course studies the theory, concepts, and philosophy affecting nutrition education and services in the community. Students will be introduced to programs, policies, and institutions that influence nutrition services at local, state and national levels throughout the lifespan, with special emphasis on infants and children as well as the elderly. Students will learn about epidemiology and its application in nutrition research and explore examples of how a variety of teaching methods can improve the nutritional status in a community and with various population groups.

NUTRI 370 Food Service Management

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU

The course will study the organization, planning, and control of production for a quantity food service operation. This course also examines the process and importance of food service functions such as leadership, human resource management and employee in-service training, menu planning and pricing, scheduling of staff and production, portion and temperature control, recipe standardization and scaling, basic tenants of food and equipment safety and sanitation, and elements of culinary layout and design.

NUTRI 495 Independent Studies in Nutrition and Foods

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

NUTRI 499 Experimental Offering in Nutrition and Foods

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU

This is the experimental courses description.

Pharmacy Technology

The CRC Pharmacy Technology program includes didactic, laboratory, and practicum components that are structured to facilitate the achievement of educational and career goals. Pharmacy technicians are skilled technical health workers who perform a wide variety of pharmacy related tasks under the direct supervision of a registered pharmacist. Successful completion of the program not only qualifies students for registration with the California State Board of Pharmacy but also prepares graduates for entry-level pharmacy technician positions.

- Pharmacy Technology Certification Exam Passing Rate 2022 (crc/main/doc/3-academics/department-pages/pharm-tech/ptcb-educator-pass-rate-2022.pdf)
- Pharmacy Technology Certification Exam Passing Rate 2023 (crc/main/doc/3-academics/department-pages/pharm-tech/ptcb-educator-pass-rate-2023.pdf)

The Pharmacy Technology program is accredited by the American Society of Health-System Pharmacists (ASHP).

ASHP
4500 East-West Highway, Suite 900
Bethesda, MD 20814
(866) 279-0681
ASHP Program Directory (https://accreditation.ashp.org/directory/#/program/technician)

Degrees and Certificates Offered

A.S. in Pharmacy Technology

Pharmacy Technician Certificate

Dean Kris Hubbard

Program Director Veneece Awad

Phone (916) 691-7390

Email hubbark@crc.losrios.edu

Associate Degree

A.S. in Pharmacy Technology

The CRC Pharmacy Technology Program includes didactic, laboratory, and practicum components that are structured to facilitate the achievement of educational and career goals. Pharmacy technicians are skilled technical health workers who perform a wide variety of pharmacy related tasks under the direct supervision of a registered pharmacist. Successful completion of the program not only prepares graduates to participate in taking the Pharmacy Technician Certification Exam (PTCE) but also qualifies students for licensure and registration with the California State Board of Pharmacy and be employed as an entry-level pharmacy technician. The program has obtained a 6 year Accreditation Status conferred by the American Society of Health System Pharmacists (ASHP) and the Accreditation Council of Pharmaceutical Education (ACPE).

Degree Requirements

Course Code	Course Title	Units
1st Semester (Spring):		
PHARM 300	Introduction to Pharmacy Practice	3[1]
PHARM 315	Pharmaceutical Calculations I	3
PHARM 320	Pharmacology of Therapeutic Agents	5
2nd Semester (Fall):		
PHARM 350	Pharmaceutical Information Management	4
PHARM 360	Retail Operation of Pharmaceutical Practice	3
PHARM 370	Pharmaceutical Calculations II	2
PHARM 380	Preparation of Sterile Products	3
3rd Semester (Spring):		
PHARM 400	Pharmacy Technician Profession	2
PHARM 410	Acute Care Practicum	2
PHARM 420	Retail Practicum	2
COMM C1000	Introduction to Public Speaking	3[2]
Total Units:		**32**

[1]Course can be taken prior to admission into the Pharmacy Technology Program.

[2]Course can be taken prior to admission into the Pharmacy Technology Program.

The Pharmacy Technology Associate in Science (A.S.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Enrollment Eligibility

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

- The American Society of Health System Pharmacists requires that all students in the program must have a high school diploma or G.E.D.
- In order to qualify for official acceptance into the Pharmacy Technology Program, and proceed forward to complete the hands-on laboratory training (PHARM 350, 360, 370, 380, 400) and externship training (PHARM 410, 420), students must complete the following courses with a grade of a C or higher: PHARM 300, PHARM 315 and PHARM 320.
- The American Society of Health System Pharmacists requires that all students must be successful in passing a Background Check prior to official acceptance into the Pharmacy Technology Training Program. Students must also be able to pass a drug screening.
- Must meet the minimum age requirements that are based on state requirements for employment of pharmacy technicians; (Must be 18 years old and over.)
- Have demonstrated math proficiency sufficient to fulfill the requirements of pharmacy technician job responsibilities - All applicants must score a minimum of 75% on a mathematics and English screening exam.

This requirement may be waived for applicants submitting official transcripts documenting completion of Elementary algebra or Math100 or equivalent; or submitting official transcripts documenting completion of an Associate degree or higher.

- Attend and complete Program Orientation that provides detailed information regarding application process and important information about ACPE/ASHP Accredited Pharmacy Technician Program and careers in Pharmacy. All applicants must be interviewed prior to acceptance.
- Special Requirements : Clinical sites may have unique requirements that students are required to comply with such as: complete physical examination including up-to-date immunizations,CPR certification, and liability insurance, and flexible scheduling including daytime/ Night-time/Weekend rotations.
- Site assignments are determined by the College. Externship and clinical sites are selected to meet the objectives of the program. Students are required to travel to the clinical site. In many cases, this may require travel that is a greater distance than the student's commute to the campus. Site locations within a specified distance from the campus or from a student's home cannot be guaranteed.

Enrollment Process

Eligible students are selected for the program according to the following steps:

- Students should complete all the prerequisite courses with a C grade or better to meet the minimum requirement for acceptance to the Pharmacy Technology Program.
- Qualified students should submit an Application Form electronically and a hard copy to the Pharmacy Technology Program Director after gaining instructor permission for enrollment in the Pharm 315 & 320 classes. Students will be formally notified by a Letter of Acceptance to the Pharmacy Technology Program. Applications will be made available in the Careers and Technology area office.

Student Learning Outcomes

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

- PSLO 1: Apply federal, state and local laws, regulations, and professional standards to pharmacy practice.
- PSLO 2: Analyze of the role of the Pharmacy Technician in distributive pharmacy.
- PSLO 3: Demonstrate the comprehension of knowledge pertaining to human anatomy, physiology, and pharmacology.
- PSLO 4: Perform math function, dosage calculation and compounding techniques.
- PSLO 5: Demonstrate ethical and professional conduct in all job-related activities.
- PSLO 6: Design and relate messages for effective and appropriate oral and written communication.

Career Information

Businesses that will make up the potential market for CRC's Pharmacy Technician graduates include hospitals, pharmacies/ drug stores, grocery stores, department stores, state government, local government, and other general merchandise stores in the region. Retail pharmacies are expected to experience significant growth in pharmacy technician jobs over the next ten years and will most likely benefit the most from a Pharmacy Technician degree program in the region.

Certificate of Achievement

Pharmacy Technician Certificate

The CRC Pharmacy Technology Certificate Program includes didactic, laboratory, and practicum components that are structured to facilitate the achievement of educational and career goals. Pharmacy technicians are skilled technical health workers who perform a wide variety of pharmacy related tasks under the direct supervision of a registered pharmacist. Successful completion of the program not only qualifies students for registration with the California State Board of Pharmacy but also prepares graduates for entry-level pharmacy technician positions. The program is accredited by the American Society of Health-System Pharmacist.

Students who complete the program in a satisfactory manner will be awarded a Certificate of Program Completion and are qualified to apply to the California State Board of Pharmacy for registration as a pharmacy technician.
Students will also be eligible to take the PTCE (Pharmacy Technician Certification Exam) and become a Certified Pharmacy Technician.

A two-year expanded Pharmacy Technician Program is also available, which includes general education.
This two-year course sequence leads to an Associate in Science Degree in Pharmacy Technician, and offers the student the ability to transfer to a four-year program or to enter the job market with additional technical and theoretical background.

Certificate Requirements

Course Code	Course Title	Units
PHARM 300	Introduction to Pharmacy Practice	3
PHARM 315	Pharmaceutical Calculations I	3
PHARM 320	Pharmacology of Therapeutic Agents	5
PHARM 350	Pharmaceutical Information Management	4
PHARM 360	Retail Operation of Pharmaceutical Practice	3
PHARM 370	Pharmaceutical Calculations II	2
PHARM 380	Preparation of Sterile Products	3
PHARM 400	Pharmacy Technician Profession	2
PHARM 410	Acute Care Practicum	2
PHARM 420	Retail Practicum	2
Total Units:		**29**

Student Learning Outcomes

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

- PSLO 1: Apply federal, state, and local laws; regulations and professional standards to pharmacy practice.
- PSLO 2: Understand the setting, duties and responsibilities of a pharmacy technician.
- PSLO 3: Demonstrate the comprehension of knowledge pertaining to human anatomy, physiology, and pharmacology.
- PSLO 4: Perform basic mathematical functions and dosage calculations utilizing metric, apothecary, household and avoirdupois systems.
- PSLO 5: Demonstrate ethical and professional conduct in all job-related activities.
- PSLO 6: Design and relate messages for effective and appropriate oral and written communication.

Career Information

As a registered pharmacy technician in California, you can — under the supervision of a registered pharmacist — perform routine tasks related to receiving, dispensing, distribution, control, maintenance, compounding, manufacturing, packaging, and labeling of pharmaceutical products. Typical tasks include: Transcribing physicians orders/prescriptions Preliminary review of new orders/prescriptions Filling prescriptions and medications orders Preparing unit dose and multi-dose forms Preparing and labeling sterile solutions using aseptic technique Data entry and label generation Maintenance of inventory and stock Maintenance of pharmacy work areas Main Area for Pharmacy Technician to work: Retail pharmacy. Closed-door pharmacy. Hospital pharmacy. Compounding Pharmacy Correctional Facility Insurance Company Pharmacy Software Company A sample of reported job titles: Pharmacy Technician; Clinical Pharmacy Technician, Billing and Quality Technician; Compounding Technician; Lead Pharmacy Technician, Inventory Specialist, Controlled Substances Technician, Chemo Technician, Pharmacy benefit manager and Pharmacy Analyst.

Pharmacy Technology (PHARM) Courses

PHARM 300 Introduction to Pharmacy Practice

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU

This course introduces the concepts of direct pharmaceutical patient care and the technicians' role in its delivery. Current direct patient care delivery system and medication distribution systems are emphasized. Topics include dosage calculations, the influence that medication laws, standards and regulations have on practice, and quality assurance in the pharmaceutical setting.

PHARM 315 Pharmaceutical Calculations I

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Corequisite: PHARM 300
Transferable: CSU

This course presents the mathematical concepts and practical experience required for students to prepare pharmaceutical dosages in both community and institutional pharmacy settings.
Through lecture demonstrations and practice problem sets, students will learn the skills necessary to pass the math portion of the Pharmacy Technician Certification Examination.

PHARM 320 Pharmacology of Therapeutic Agents

Units: 5
Hours: 81 hours LEC; 27 hours LAB
Prerequisite: None.
Corequisite: PHARM 300
Advisory: LIBR 318
Transferable: CSU

This course studies the anatomy and physiology of the various human body systems. Students will learn the use and side effects of prescription medications, nonprescription medications, and alternative therapies commonly used to treat diseases affecting the nervous, musculoskeletal, immune, dermatological, hematologic cardiovascular, respiratory, reproductive, gastrointestinal, renal system as well as the eye, ear, nose and throat. This course covers brand and generic names of the therapeutic agents studied, standard pronunciation, dosage forms, routes of administration, medical abbreviation and the role of the Food and Drug Administration in herbal and dietary supplements. The laboratory activities are designed to provide hands-on experiences in pharmacy calculation and compounding medications related to the various body systems.

PHARM 350 Pharmaceutical Information Management

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: PHARM 300 with a grade of "C" or better
Advisory: LIBR 318
Transferable: CSU

This course reviews how state laws and regulations determine the activities associated with collecting patient-specific information by the pharmacy technician. Students learn to secure information from the medical chart, record, patient profile, patient, caregiver, database, and health care professional. Technologies used for storing, accessing, and recording pharmacy data and proper methods for receiving and authenticating prescription orders are emphasized. Students will also learn about safety in medication use and monitoring program of medication therapy and the pharmacy technician's role in preventing and reporting medication misadventures. Students will be introduced to the advanced roles of Pharmacy Technicians in handling insurance. The lab provides hands-on experience with pharmacy distribution software, technology, prescription processing, and medication order preparation.

PHARM 360 Retail Operation of Pharmaceutical Practice

Units: 3
Hours: 27 hours LEC; 81 hours LAB
Prerequisite: PHARM 300 with a grade of "C" or better
Transferable: CSU

This course introduces the practical, technical, and legal aspects of drug management; distribution (dispensing); and storage in outpatient (retail) settings. Topics include the process of pharmaceutical purchasing; inventory control, including handling of receipts, storage, removal, and documentation. The course offers an overview of the technician's role in billing, payment collection, and third-party payment. Students will be introduced to small or large-scale non-sterile compounding, packaging, quality control, and practical aspects of recordkeeping. The lab will provide hands-on training in interpreting, processing, and filling prescriptions.

PHARM 370 Pharmaceutical Calculations II

Units: 2
Hours: 27 hours LEC; 27 hours LAB
Prerequisite: PHARM 300 and 315 with grades of "C" or better
Transferable: CSU

This course presents advanced mathematical concepts and practical experience required for students to pass the math portion of the Pharmacy Technician Certification Examination. Through lecture demonstrations and practice problem sets, students will learn the skills essential for calculating and preparing pharmaceutical dosages in both community and institutional pharmacy settings

PHARM 380 Preparation of Sterile Products

Units: 3
Hours: 27 hours LEC; 81 hours LAB
Prerequisite: PHARM 300 and 315 with grades of "C" or better
Transferable: CSU

This course presents a general study of the usual technician functions associated with an institutional drug distribution system. Students will learn the state laws and regulations pertaining to preparation and dispensing of pharmaceutical products. Hands-on training in medication order processing, pharmacy patient profile maintenance, medication preparation, and inpatient drug distribution using manual and automated systems. Extemporaneous preparations in an inpatient pharmacy with emphasis on aseptic techniques and use of the laminar flow hood in the preparation of sterile products. Includes history of sterile products and parenteral therapy, characteristics of sterile products and sterile products calculations. Also includes introduction to total parenteral nutrition, chemotherapy and hazardous drugs.

PHARM 400 Pharmacy Technician Profession

Units: 2
Hours: 36 hours LEC
Prerequisite: PHARM 350, 360, and 380 with grades of "C" or better
Transferable: CSU

This course prepares the student for employment as a pharmacy technician. Students learn the scope of practice of a pharmacy technician. Students will also learn professional ethics, attitudes, values, and beliefs of successful pharmacy technicians. Emphasis is placed on projecting an image appropriate to the profession and effective interpersonal relationships with other health care professionals and the appreciation for certification and active involvement in local, state, and national technician organizations.

PHARM 410 Acute Care Practicum

Units: 2
Hours: 120 hours LAB
Prerequisite: PHARM 350 and 400 with grades of "C" or better
Transferable: CSU

This course develops practical skills in the didactic and practicum phases of pharmacy technician training in the acute and home care environment. Acute care includes hospital and/or long-term care facilities. Home care includes exposure to infusion therapy. The clinical experience is performed under professional supervision. A preceptor (Licensed Pharmacist or Certified Pharmacy Technician) evaluates the student's performance at the site. Students will directly interact with clients and other health care professionals. Students must have a TB clearance and any other immunization required by the clinical facility. Students must have an established Agency Agreement on file with the faculty with a sponsoring site prior to the beginning of the first day of class. Contact the Careers and Technology Main Office for information about the Agency Agreement.

PHARM 420 Retail Practicum

Units: 2
Hours: 120 hours LAB
Prerequisite: PHARM 350, 360, and 400 with grades of "C" or better
Transferable: CSU

This course develops the practical skills for pharmacy technicians in a community/retail environment. The clinical experience is performed under professional supervision. A preceptor (Licensed Pharmacist or Certified Pharmacy Technician) evaluates the student's performance at the site. Students will directly interact with clients and other health care professionals. Students must have a TB clearance and any other immunization required by the clinical facility. Students must have an established Agency Agreement with a sponsoring site on file with the faculty prior to the beginning of the first day of class. Contact the Careers and Technology Main Office for information about the Agency Agreement.

Philosophy

Philosophy is the logical examination of fundamental issues regarding the nature and limits of human knowledge, ultimate reality, moral value and obligation, correct reasoning, beauty, and art. Students of philosophy learn to generate, understand, and evaluate arguments, express themselves clearly and carefully, and see things from multiple points of view.

Dean Emilie Mitchell

Department Chair Richard Schubert

Phone (916) 691-7656

Email mitchee@crc.losrios.edu

Philosophy (PHIL) Courses

PHIL 300 Introduction to Philosophy

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3B
C-ID: C-ID PHIL 100

In this course, students will apply the critical thinking techniques of analysis, evaluation, and synthesis to areas of philosophical inquiry including meta-philosophy, epistemology, metaphysics, ethics, political philosophy, philosophy of religion, history of philosophy, and existentialism. Students will practice distinguishing fact from opinion, employing inductive and deductive reasoning, identifying logical errors and fallacies, and developing oral and written arguments to support their own philosophical perspectives or challenge the perspectives of others. The quality and quantity of the course's required writing will reflect the standards of a second semester composition course.

PHIL 304 Introduction to Asian Philosophy

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3B

This course provides an introduction to the philosophical traditions of Hinduism, Buddhism, Taoism and Confucianism focusing on metaphysics, epistemology, and ethics.

PHIL 310 Introduction to Ethics

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3B
C-ID: C-ID PHIL 120

The application of theories developed by traditional and contemporary moral philosophy to the ethical problems, dilemmas, and issues of today.

PHIL 315 Contemporary Moral Issues

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligibility for ENGL C1000 (formerly known as ENGWR 300).
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3B

This course investigates 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

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L1B
C-ID: C-ID PHIL 110

This course provides an introduction to basic principles of good reasoning with an emphasis on deductive logic. It examines the functions of language, the nature of arguments, common fallacies committed in communication, definitions, the logic of categorical statements, sentential logic, and types of inductive reasoning. Emphasis is placed on developing analytical skills and applying principles of valid reasoning to the arguments encountered in everyday life.

PHIL 325 Symbolic Logic

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L1B

This course introduces sentential and predicate logic by introducing logical symbolism, truth tables, methods of formal analysis and methods of formal proof including natural deduction. It is recommended for students in the sciences, computer programming, mathematics, linguistics, law, and philosophy.

PHIL 330 History of Classical Philosophy

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3B
C-ID: C-ID PHIL 130

This course is a survey of the origin and development of Western (Anglo-European) Philosophy during the period of ancient Greece and Rome. This course may be required for the completion of a degree in philosophy and is especially recommended for all philosophy, history and humanities majors.

PHIL 331 History of Modern Philosophy

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3B
C-ID: C-ID PHIL 140

This course is a survey of the development of Western (Anglo-European) Philosophy from the period of the Renaissance through the period of modern Europe and America. This course is especially recommended for all Philosophy, History and Humanities majors.

PHIL 338 Contemporary Philosophy

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3B

A comprehensive study of the basic ideas of pragmatists, twentieth century metaphysicians, philosophy of language, and existentialists. Special attention will be given to relevance of their ideas to modern life

PHIL 350 Philosophy of Religion

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3B

This course is a historical and topical survey of the questions, problems, and theories philosophers have developed in attempts to understand religion as a fundamental impulse within human experience and as a major cultural force. Rather than survey the different religions, this course considers the basic philosophical beliefs and concepts that seem auxiliary to religion. Topics include the possibility of religious knowledge, faith versus reason, theistic arguments, conceptions of God, religious language, atheism, agnosticism, mysticism, the problem of evil, immortality, the challenge of science, and religion's influence on ethics and politics.

PHIL 352 Introduction to World Religions

Same As: RLST 301
Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3B

This course will introduce students to the major world religious traditions, including indigenous sacred ways, Hinduism, Buddhism, Taoism and Confucianism, Judaism, Christianity, and Islam. Students will study the practices and beliefs of each tradition and will read selected material from the sacred writings of each tradition. Also, the influence of these religions on contemporary issues in the United States including ethnicity, ethnocentrism, racism, ageism, class differences, and sexual orientation is considered. This course fulfills Cosumnes River College's Ethnic/Multicultural requirement for the Associates Degree. This course is the same as RLST 301. This course, under either name, may be taken only one time for credit.

PHIL 356 Introduction to the Bible

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3B

In this course, students survey the literary, historical, ethical, theological and philosophical themes of the Bible. Students will read extensive passages from the Hebrew and Christian scriptures with special focus on textual exegesis and analysis. Topics from the Hebrew scriptures include the Law, the development of monotheism, the social justice tradition of the Prophets, and the Writings. Topics from the New Testament scriptures include the investigation of the Gospels and the "Jesus Problem" and the examination of the early development of the Christian Church.

PHIL 360 Social/Political Philosophy

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L3; Local GE L4; Cal-GETC Area 3B

A historical, methodological, and topical survey of significant themes of social and political philosophy from Plato to our present times: authority, freedom, government, justice, law, rights, society and the state.

PHIL 485 Honors Seminar: Philosophy of the Martial Arts

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Enrollment Limitation: Enrollment is limited to Honors Program students. Details about the Honors Program can be found in the Cosumnes River College Catalog and on the CRC website.
Transferable: CSU; UC (Reaffirmed 08/01/2023)
General Education: Local GE L3; Cal-GETC Area 3B

This course provides an introduction to the philosophical views that have traditionally been associated with the practice of martial arts and explores the interplay between those views and that practice. It also provides an introduction to those contemporary philosophical issues that arise in the context of present day analytic philosophical reflection on the nature and practice of martial arts. The course thus provides both the opportunity to appreciate the eastern philosophical underpinnings of an activity that has become part of mainstream American Culture and the opportunity to experience the rigorous application of contemporary analytic academic philosophical methodology. As an honors course, this is a full hands-on course with advanced teaching methods focusing on extensive research of selected philosophical theory and its analytic application to the nature and practice of martial arts. This is a seminar course requiring students to create sophisticated academic products, complete major writing, reading, and research assignments, make presentations, and engage in extensive group discussions.

Distinguishing features include: deep focus on research, analysis, application, strong communication and complex critical thinking. Enrollment is limited to Honors Program students. Details about the Honors Program can be found in the front of the Catalog and on the CRC website. This course is the same as HONOR 364 and only one may be taken for credit.

PHIL 486 Honors Seminar in Critical Thinking and Composition: Philosophy of Happiness

Units: 3
Hours: 54 hours LEC
Prerequisite: ENGL C1000 (formerly known as ENGWR 300) or C1000H (formerly known as ENGWR 480) with a grade of "C" or better, or the equivalent.
Enrollment Limitation: Enrollment is limited to Honors Program students. Details about the Honors Program can be found in the CRC Catalog and on the CRC website. This course is the same as PHIL 486, and only one may be taken for credit.
Transferable: CSU; UC
General Education: Local GE L1B; Local GE L3; Cal-GETC Area 3B

This seminar-style course provides instruction in critical thinking and advanced composition while addressing philosophical issues concerning the existence, nature, and attainment of happiness from a diversity of cultural perspectives. This course is designed for students who have successfully completed ENGL C1000 (or its equivalent) and provides further instruction in the techniques of effective critical thinking as expressed in written argument and in the major principles of advanced composition. A sequence of essays totaling a minimum of 8,000 words is required. These essays shall be evaluated for their quality in both critical thinking and composition. This honors course offers rigorous preparation in analytic reading and writing skills for students intending to transfer to a four-year college or university. It provides opportunity to engage philosophical issues about the existence, nature, and attainment of happiness through a structured sequence of papers requiring higher-level thinking tasks and collaborative projects. As an honors course, this is a full hands-on course with advanced teaching methods focusing on extensive research of selected philosophical theory and its analytic application. This is a seminar course requiring students to create sophisticated academic products, complete major writing, reading, and research assignments, make presentations, and engage in extensive group discussions. Distinguishing features include: deep focus on research, analysis, application, strong communication and complex critical thinking. Enrollment is limited to Honors Program students. Details about the Honors Program can be found in the CRC Catalog and on the CRC website. This course is the same as HONOR 363, and only one may be taken for credit.

PHIL 495 Independent Studies in Philosophy

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

PHIL 499 Experimental Offering in Philosophy

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU

This is the experimental courses description.

Religious Studies (RLST) Courses

RLST 299 Experimental Offering in Religious Studies

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

RLST 301 Introduction to World Religions

Same As: PHIL 352
Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3B

This course will introduce students to the major world religious traditions, including indigenous sacred ways, Hinduism, Buddhism, Taoism and Confucianism, Judaism, Christianity, and Islam. Students will study the practices and beliefs of each tradition and will read selected material from the sacred writings of each tradition. Also, the influence of these religions on contemporary issues in the United States including ethnicity, ethnocentrism, racism, ageism, class differences, and sexual orientation is considered. This course fulfills Cosumnes River College's Ethnic/Multicultural requirement for the Associates Degree. This course is the same as PHIL 352. This course, under either name, may be taken only one time for credit.

RLST 499 Experimental Offering in Religious Studies

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

Photography

The photography program is designed to teach entry-level skills for careers in the photographic industry. Students interested in photography as visual expression or an adjunct to a vocation will also benefit. Flexibility of the advanced program allows a student to concentrate upon a specific photographic career area. Students planning to prepare for a four-year degree in Photography should consult the lower division requirements of the university to which they plan to transfer.

Degrees and Certificates Offered

A.A. in Art-Photo

A.A. in Photography

Commercial and Studio Photography Certificate

Fine Art Photography Certificate

Portraiture and Wedding Photography Certificate

Dean Brian Rickel

Department Chair Kathryn Mayo

Phone (916) 691-7171

Email mayok@crc.losrios.edu

Associate Degrees

A.A. in Art-Photo

The art-photography program is designed to teach students fine art photography with an emphasis in black and white film based processes. Critical analysis, history and current theories in photography are also requirements.

Students planning to prepare for a four-year degree in Photography should consult the lower division requirements of the university to which they plan to transfer.

Degree Requirements

Course Code	Course Title	Units
ART 300	Drawing and Composition I	3
PHOTO 301	Beginning Photography (3)	3
PHOTO 420	History of Photography (3)	3
PHOTO 310	Intermediate Photography (3)	3
ARTH 300	Art Appreciation (3)	3
ART 304	Figure Drawing I (3)	3
or ART 361	Printmaking: Survey (3)	
PHOTO 320	Color Photography (3)	3
PHOTO 360	Large Format Photography (3)	3
PHOTO 365	Alternative Process Photography (3)	3
or PHOTO 364	Advanced Black and White Photography (3)	
Total Units:		**27**

The Art-Photo Associate in Arts (A.A.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Student Learning Outcomes

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

- SLO #1 Produce a portfolio that conveys creative self expression.
- SLO #2 Work with silver based and alternative processes in black and white photography.
- SLO #3 Use a variety of film based cameras, including medium and large format.
- SLO #4 Describe the history of photography.
- SLO #5 Recount current trends in photographic theories and aesthetics.

Career Information

Fine art photographer, gallery worker, museum worker, curator or general photographer. Some career options may require more than two years of college study. Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.

A.A. in Photography

The photography program is designed to teach entry-level skills for careers in the photographic industry. Students interested in photography as visual expression or an adjunct to a vocation will also benefit.

Flexibility of the advanced program allows a student to concentrate upon a specific photographic career area.

Students planning to prepare for a four-year degree in Photography should consult the lower division requirements of the university to which they plan to transfer.

HIGHLIGHTS
*modern lab and studio facilities
*twenty four black & white enlargers
*digital media lab
*digital scanners and printers
*field trips to a variety of photographic businesses in Sacramento and the Bay Area
* field study course in Yosemite
*special seminars and internships

Degree Requirements

Course Code	Course Title	Units
PHOTO 302	Beginning Digital Photography (3)	3
PHOTO 312	Intermediate Digital Photography (3)	3
PHOTO 320	Color Photography (3)	3
PHOTO 340	Careers in Photography	3
PHOTO 400	Digital Imaging	3
PHOTO 410	Advanced Digital Imaging	3
PHOTO 420	History of Photography (3)	3
COMM C1000	Introduction to Public Speaking (3)	3

Course Code	Course Title	Units
or COMM 361	The Communication Experience (3)	
JOUR 310	Mass Media and Society	3
RTVF 302	Introduction to Digital Design & Storytelling (3)	3
or RTVF 304	Introduction to Multimedia (3)	
A minimum of 3 units from the following:		3
PHOTO 260	The Eastern Sierra Landscape, Yosemite Valley (2)	
PHOTO 271	Color Management and Printing (1.5)	
PHOTO 272	Lightroom (1.5)	
PHOTO 273	Video Capture with DSLRs (1.5)	
PHOTO 274	Digital Photography Basics (1.5)	
PHOTO 275	Digital Applications for Alternative Processes (1.5)	
PHOTO 277	Creating a Digital Portfolio (1.5)	
PHOTO 278	Flash Photography (1.5)	
PHOTO 279	Advanced Lightroom (1.5)	
PHOTO 350	Photojournalism (3)	
Total Units:		**33**

The Photography Associate in Arts (A.A.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Student Learning Outcomes

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

- PSLO #1 describe technical and aesthetic qualities of successful photographs
- PSLO #2 apply a variety of lighting techniques to the production of photographs
- PSLO #3 produce photographs using various cameras
- PSLO #4 produce photographs using various photographic papers and digital output
- PSLO #5 create a portfolio and related materials for job preparation
- PSLO #6 describe successful working relationships with clients and subjects
- PSLO #7 develop a personal visual style

Career Information

Studio Photography; Portrait & Wedding Photography; Photographic Lab Technician; Photojournalism; Industrial or Architectural Photography. Some career options may require more than two years of college study. Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.

Certificates of Achievement

Commercial and Studio Photography Certificate

The commercial and studio program is designed for students who want to enter a career path in studio photography. Students will use strobe equipment to learn lighting techniques, work with professionals in the field and design their own portfolio. Business strategies, self promotion, and workflow methods will also be covered.

Certificate Requirements

Course Code	Course Title	Units
PHOTO 302	Beginning Digital Photography (3)	3
PHOTO 312	Intermediate Digital Photography (3)	3
PHOTO 320	Color Photography (3)	3
PHOTO 340	Careers in Photography (3)	3
or PHOTO 400	Digital Imaging (3)	
PHOTO 360	Large Format Photography (3)	3
PHOTO 390	Studio Lighting Techniques I	3
PHOTO 392	Studio Lighting Techniques II	3
PHOTO 410	Advanced Digital Imaging (3)	3
PHOTO 420	History of Photography (3)	3
A minimum of 3 units from the following:		3
PHOTO 260	The Eastern Sierra Landscape, Yosemite Valley (2)	
PHOTO 271	Color Management and Printing (1.5)	
PHOTO 272	Lightroom (1.5)	
PHOTO 273	Video Capture with DSLRs (1.5)	
PHOTO 274	Digital Photography Basics (1.5)	
PHOTO 275	Digital Applications for Alternative Processes (1.5)	
PHOTO 277	Creating a Digital Portfolio (1.5)	
PHOTO 278	Flash Photography (1.5)	
PHOTO 279	Advanced Lightroom (1.5)	
PHOTO 350	Photojournalism (3)	
Total Units:		**30**

Student Learning Outcomes

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

- PSLO #1 use a variety of traditional and digital cameras
- PSLO #2 set up strobe lighting in the studio and on location for both product and people
- PSLO #3 create a personal portfolio of images that display expertise in commercial photography
- PSLO #4 define business goals and self promotion strategies
- PSLO #5 interact with photographers and designers to create compelling images

Career Information

studio assistant, studio photographer, freelance photographer, editorial photographer, lab manager

Fine Art Photography Certificate

The fine art photography program is designed for students who want to enter a career path in fine art photography. Students will use a variety of cameras and formats to produce images in both color and black and white. Personal expression and creativity, history and contemporary issues in photography and visual communication will also be emphasized.

Certificate Requirements

Course Code	Course Title	Units
PHOTO 301	Beginning Photography (3)	3
PHOTO 310	Intermediate Photography (3)	3
or PHOTO 364	Advanced Black and White Photography (3)	
PHOTO 320	Color Photography	3
PHOTO 360	Large Format Photography (3)	3
PHOTO 365	Alternative Process Photography (3)	3
or PHOTO 366	Advanced Alternative Process Photography (3)	
PHOTO 400	Digital Imaging (3)	3
PHOTO 420	History of Photography (3)	3
A minimum of 3 units from the following:		3
PHOTO 260	The Eastern Sierra Landscape, Yosemite Valley (2)	
PHOTO 272	Lightroom (1.5)	
PHOTO 273	Video Capture with DSLRs (1.5)	
PHOTO 275	Digital Applications for Alternative Processes (1.5)	
PHOTO 277	Creating a Digital Portfolio (1.5)	
PHOTO 350	Photojournalism (3)	
PHOTO 278	Flash Photography (1.5)	
Total Units:		**24**

Student Learning Outcomes

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

- PSLO #1 communicate visual ideas in a variety of formats
- PSLO #2 describe important historical and contemporary movements in photography
- PSLO #3 produce a portfolio of images emphasizing personal creativity and self expression

Career Information

freelance photographer, editorial photographer, photojournalist, gallery apprentice, museum apprentice, teacher

Portraiture and Wedding Photography Certificate

The portraiture and wedding program is designed for students who want to enter a career path in wedding photography. Students will learn techniques to pose and work with models and clients, use strobe equipment and available lighting techniques, work with professionals in the field and design their own portfolio. Business strategies, self promotion, and workflow methods will also be covered.

Certificate Requirements

Course Code	Course Title	Units
PHOTO 302	Beginning Digital Photography (3)	3
PHOTO 312	Intermediate Digital Photography (3)	3
PHOTO 320	Color Photography (3)	3
PHOTO 340	Careers in Photography (3)	3
or PHOTO 400	Digital Imaging (3)	
PHOTO 350	Photojournalism (3)	3
or PHOTO 410	Advanced Digital Imaging (3)	
PHOTO 370	Portraiture Techniques I	3
PHOTO 372	Portraiture Techniques II	3
PHOTO 420	History of Photography (3)	3
A minimum of 3 units from the following:		3
PHOTO 260	The Eastern Sierra Landscape, Yosemite Valley (2)	
PHOTO 271	Color Management and Printing (1.5)	
PHOTO 272	Lightroom (1.5)	
PHOTO 273	Video Capture with DSLRs (1.5)	
PHOTO 274	Digital Photography Basics (1.5)	
PHOTO 275	Digital Applications for Alternative Processes (1.5)	
PHOTO 277	Creating a Digital Portfolio (1.5)	
PHOTO 278	Flash Photography (1.5)	
PHOTO 279	Advanced Lightroom (1.5)	
PHOTO 350	Photojournalism (3)	
Total Units:		**27**

Student Learning Outcomes

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

- PSLO #1 use a variety of traditional and digital cameras
- PSLO #2 set up strobe lighting and available lighting to effectively photograph clients and models
- PSLO #3 create a personal portfolio of images that display expertise in wedding and portrait photography
- PSLO #4 define business goals and self promotion strategies
- PSLO #5 interact with clients, models and other professionals to attain a common visual goal

Career Information

photographer's assistant, wedding photographer, portrait photographer, studio assistant, editorial photographer, photojournalist

Photography (PHOTO) Courses

PHOTO 260 The Eastern Sierra Landscape, Yosemite Valley

Units: 2
Hours: 18 hours LEC; 54 hours LAB
Prerequisite: None.

This course is designed to give students an opportunity to photograph in the Eastern Sierra emphasizing the Yosemite Valley. The course will include a variety of topics including using film and digital cameras in the landscape, understanding different natural qualities of light and low light photography. This course includes meetings on campus and a field trip to Yosemite.

PHOTO 263 Cell Phone Photography

Units: 1.5
Hours: 18 hours LEC; 27 hours LAB
Prerequisite: None.

This course provides students instruction in photographing with cell phones. Topics include: advanced settings for image capture, exploring apps for post processing, lighting techniques, and posting to social media sites. Students will work with cell phones and accessory equipment. The class includes: lectures, image discussions, exams, and a final project. Students must have their own mobile device (cell phone or tablet) and access to an online app store.

PHOTO 271 Color Management and Printing

Units: 1.5
Hours: 18 hours LEC; 27 hours LAB
Prerequisite: PHOTO 302 or 400 with a grade of "C" or better
Advisory: PHOTO 320

This course covers the fundamental principles of color management and printing. Topics of instruction include: calibration, profile generation, color management in Photoshop, optimizing and preparing images for output. Students will print images using a variety of output options including labs, personal and professional printers. Students will work with digital cameras. The class includes: lectures, lab time, exams, a journal, and a final project. The class may also include a field trip at no additional cost to the student.

PHOTO 272 Lightroom

Units: 1.5
Hours: 18 hours LEC; 27 hours LAB
Prerequisite: PHOTO 302 or 400 with a grade of "C" or better
Transferable: CSU

This course is designed to provide students the opportunity to learn the most current photographic archiving software products. Topics of instruction include: importing images, editing imaging and placing images into collections and libraries. Students will work with digital cameras. The class includes: lectures, lab time, field trips, exams, a journal, and a final project. Students will need to have access to Lightroom softwrae for their projects.

PHOTO 273 Video Capture with DSLRs

Units: 1.5
Hours: 18 hours LEC; 27 hours LAB
Prerequisite: PHOTO 302 or 400 with a grade of "C" or better

This course is designed to provide students instruction in shooting video with DSLR or mirrorless cameras. Topics include: custom settings for shooting video, options for sound capture, lighting techniques, video editing and digital storytelling. Students will work with digital cameras and accessory equipment. The class includes: lectures, lab time, exams, a journal, and a final project.

PHOTO 274 Digital Photography Basics

Units: 1.5
Hours: 18 hours LEC; 27 hours LAB
Prerequisite: None.

This course is designed to provide students an introduction to digital photography. Topics include: composition and framing, exposure control, basic equipment, and simple software tools to catalog, manipulate, and print images Students may work with a variety of digital options including: cell phones, DSLs or mirrorless cameras. The class includes: lectures, lab time, exams, and a final portfolio.

PHOTO 275 Digital Applications for Alternative Processes

Units: 1.5
Hours: 18 hours LEC; 27 hours LAB
Prerequisite: PHOTO 302 or 400 with a grade of "C" or better

This course is designed to provide students instruction in digital applications for alternative processes. Topics include: creating custom curves for alternative process printing, using a variety of software products for creating unique imagery, and applying digital technology to older print processes. Students will work with digital cameras and accessory equipment. The class includes: lectures, lab time, field trips, exams, a journal, and a final project.

PHOTO 277 Creating a Digital Portfolio

Units: 1.5
Hours: 18 hours LEC; 27 hours LAB
Prerequisite: PHOTO 302 or 400 with a grade of "C" or better

This course is designed to provide students instruction in creating a website to promote their photography. Website hosting options, uploading and organizing images will be covered. Students will work with digital cameras and design software. The class includes: lectures, lab time, field trips, exams, a journal, and a final project.

PHOTO 278 Flash Photography

Units: 1.5
Hours: 18 hours LEC; 27 hours LAB
Prerequisite: PHOTO 301 or 302 with a grade of "C" or better

This course covers flash photography using digital cameras. Topics of instruction include: on camera flash, flash with cord, off camera flash and multiple strobe effects The class includes: lectures, lab time, field trips, a journal, and a final project.

PHOTO 279 Advanced Lightroom

Units: 1.5
Hours: 18 hours LEC; 27 hours LAB
Prerequisite: PHOTO 272 with a grade of "C" or better

This course is designed to provide students the opportunity to learn the most advanced current photographic archiving software products. Topics of instruction include: Advanced importing of images and advanced batch image editing. Students will work with Advanced DSLR digital cameras. The class includes lectures, labs, exams, creation of a journal and a final project. The class may include field trips.

PHOTO 295 Independent Studies in Photography

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

PHOTO 299 Experimental Offering in Photography

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

PHOTO 301 Beginning Photography

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L3

This course combines lectures with hands-on experience in traditional black and white photography. Students will work primarily with film cameras. Students will develop visual literacy through photographic exploration and image evaluation. Methods of visual communication and compositional development will be included in instruction. Students will examine the role of composition, light, and imagination in the production of photographic images. Historical and contemporary photographers will be introduced. Methods of image critique and evaluation will be emphasized. Instruction includes camera function, exposure control, composition, elements and principles of design, historical context of photography and its impact on historical events, film processing, enlarging prints, low light photography, and print finishing. The format of the class includes lectures, critiques, visual presentations, lab time, an optional field trip at no expense to the student, exams and a portfolio. Students may challenge the prerequisite on the basis of equivalent experience.

PHOTO 302 Beginning Digital Photography

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L3

This course combines lectures with hands-on experience in digital photography. Instruction topics include digital camera function, exposure control, technical and creative control, computer manipulation of images and digital output options. The format of the class includes lectures, visual presentations, lab time, exams and a portfolio.

PHOTO 310 Intermediate Photography

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: PHOTO 301 with a grade of "C" or better
Transferable: CSU

This course is designed to expand on the technical and creative concepts acquired in beginning film photography. Topics of instruction include: exposure and development control, archival printing, introduction to medium and large format photography, studio lighting techniques, and alternative processes. Students will work primarily with film cameras. The class includes lectures, visual presentations, lab time, written tests, and a portfolio.

PHOTO 312 Intermediate Digital Photography

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: PHOTO 302 with a grade of "C" or better
Transferable: CSU; UC

This course is designed to expand on the technical and creative concepts acquired in beginning digital photography. Topics of instruction include: advanced digital camera functions, exposure control, introduction to studio lighting, computer manipulation of images, digital archiving, digital output options and digital print finishing. The class includes lectures, visual presentations, lab time, written tests, a field trip, and a portfolio.

PHOTO 320 Color Photography

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: PHOTO 302 with a grade of "C" or better
Transferable: CSU; UC

This course covers the fundamental principles of color photography. Topics of instruction include: color theory, correct exposure, techniques to determine correct color balance, flash exposure for color and printing digital files. Students will work

with digital cameras. The class includes: lectures, visual presentations, lab time, written tests, and a portfolio.

PHOTO 340 Careers in Photography

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: PHOTO 320 with a grade of "C" or better
Transferable: CSU

This course offers an in-depth exploration of the photographic industry, designed to equip students with the skills and knowledge necessary for a successful career in the field of photography. Students will compare various photography professions by researching the required skills and training needed for working in various genres of photography. The course will guide students in producing a comprehensive portfolio, with a focus on identifying personal interests in the field of photography. In addition, students will create essential job-related materials, including an elevator pitch, mission statement, resume, price list, and business card. The course also covers the development of a business plan, encompassing an executive summary, product and service descriptions, market analysis and a financial plan tailored to their chosen field of interest. Students will explore branding and essential networking strategies. Students are encouraged to pursue their own area of interest by working with professionals in the field. Students may work with digital or traditional cameras. This class includes lectures and lab time and may include field trips to observe industry professionals.

PHOTO 350 Photojournalism

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: PHOTO 310 or 312 with a grade of "C" or better
Transferable: CSU
C-ID: C-ID JOUR 160

This course provides instruction in photojournalism and magazine techniques in photography. Students will study features, sports, spot news, and the photo essay styles of journalistic photography. Students will work with digital cameras. Students will also capture and use audio to complete multimedia projects. A documentary digital portfolio will be completed. The course includes lectures, visual presentations, speakers, exams, and image posts

PHOTO 360 Large Format Photography

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: PHOTO 310 with a grade of "C" or better
Transferable: CSU

This course is designed to give students a thorough knowledge of view camera operation in the studio and in the field. Topics of instruction include: view camera movements, exposure techniques, processing sheet film, adjustments necessary to print large format negatives, and presentation of the large format image. Students may work in black and white, color, or both. The class includes: lectures, visual presentations, lab time, studio time, and a portfolio. Students are urged to provide their own large format camera. This course is the same as ARTPH 314.

PHOTO 364 Advanced Black and White Photography

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: PHOTO 310 or 312 with a grade of "C" or better
Transferable: CSU

This course is designed to expand on the technical and creative concepts acquired in intermediate photography. Topics of instruction include advanced film capture techniques, DSLR and mirrorless digital capture, advanced darkroom techniques, large format view camera, zone system method of exposure and development, archival printing techniques, advanced methods of image manipulation, alternative printing methods including working with digital negatives and digital fine art printing. Students will work with digital and traditional film cameras, all available for checkout from the department. The class includes lectures, visual presentations, lab time, exams and a portfolio. There is a lab fee for this course, which covers some materials.

PHOTO 365 Alternative Process Photography

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: PHOTO 301 or 302 with a grade of "C" or better, or placement through the assessment process.
Transferable: CSU (Same as ARTPH 340); UC (Same as: ARTPH 340)
General Education: Local GE L3

This course introduces historical and alternative processes in photography. Topics of instruction include: pinhole photography, handmade and experimental cameras, experimental darkroom and digital techniques, hand-applied emulsions, historical photographic processes, digital negative creation and contact printing. The class includes lectures, visual presentations, labs, exams, class critiques and a final portfolio of work.

PHOTO 366 Advanced Alternative Process Photography

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: PHOTO 365 with a grade of "C" or better
Transferable: CSU

This course is an advanced study of historical and alternative processes in photography and is designed to expand on the technical and creative concepts acquired in Beginning Alternative Process Photography. Topics of instruction include a deeper investigation of pin hole photography, handmade cameras, historical photographic processes, creating digital negatives and contact printing. Students will also hang a class exhibition. The class includes research, lectures, visual presentations, lab time, exams, and a portfolio. This course is the same as ARTPH 341.

PHOTO 370 Portraiture Techniques I

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: PHOTO 312 with a grade of "C" or better
Transferable: CSU

This course is designed to provide students with an overview of the portraiture photography business. Topics include: techniques of lighting, use of appropriate cameras and media, professional practices and strategies for beginning business. Students work with digital cameras. The class includes: lectures, lab time, on-location field trips, exams, a journal, and a portfolio geared toward a professional presentation.

PHOTO 372 Portraiture Techniques II

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: PHOTO 370 with a grade of "C" or better
Transferable: CSU

This course is designed to give students an in-depth understanding of portraiture. Topics include: techniques of lighting and posing, working with groups and individuals, use of appropriate cameras and films, professional ethics and business strategies. Students may work with digital or traditional cameras. The class includes: lectures, lab time, on-location field trips, exams, a journal, and a portfolio geared toward a professional presentation.

PHOTO 390 Studio Lighting Techniques I

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: PHOTO 312 with a grade of "C" or better
Transferable: CSU

This course is a study in studio lighting techniques used in commercial photography. Topics of instruction include: correct exposure using strobe, lighting ratios, appropriate choice of camera formats, and studies in composition of commercial photographs. Students are encouraged to work in a variety of formats, using black and white and color. Students will primarily use digital cameras. The class includes: lectures, visual presentations and discussions, on-location field trips or video chats with industry professionals, lab time, exams, and a portfolio.

PHOTO 392 Studio Lighting Techniques II

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: PHOTO 390 with a grade of "C" or better
Transferable: CSU

This course covers advanced studio lighting techniques used to photograph difficult to light subjects. Topics of instruction include: advanced studio lighting set ups for products, correct exposure using strobe, appropriate choice of camera format, studies in composition and meaning of advertising photographs, and market research. Students are encouraged to work in a variety of formats. The class includes: lectures, visual presentations and discussions, virtual or in person field trips, lab time, exams, a journal, and a portfolio geared toward a professional presentation.

PHOTO 400 Digital Imaging

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Transferable: CSU

This is an introductory course in digital imaging, compositing and electronic file preparation for publishing. The class includes lectures, use of computers and scanners, slide presentations, preparation of a journal and a digital portfolio.

PHOTO 410 Advanced Digital Imaging

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: PHOTO 400 with a grade of "C" or better
Transferable: CSU

This course is an advanced study of digital imaging and related software programs. The class includes lectures, use of computers, scanners, and a variety of output devices and preparation of a digital portfolio. This course will introduce the student to the emerging field of multimedia.

PHOTO 420 History of Photography

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3A

This course provides an in-depth study of photography and photographically derived images. The course will focus on the development of the first photographic processes from the nineteenth century to current technologies. It explores the evolution of photographic imagery from its inception to current day. The course provides an in-depth study of photographic imagery made across diverse and underrepresented cultures and allows deep examination of imagery through the lens of impactful historical events. Students will develop visual literacy skills, learn how to analyze photographic imagery and be introduced to photographic theory. Students will have the opportunity to share images from their own photographic history and will have the opportunity to create images using historic processes. The format of the class includes lectures and discussions, visual presentations and a field trip to a gallery, museum, archive or a virtual photographic archive.

PHOTO 421 Photographic Theory, Concepts and Aesthetics

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGL C1000 with a grade of "C" or better
Transferable: CSU
General Education: Local GE L3

This course is an overview of photographic genres, methods of photographic expression and a deep exploration into visual literacy through the lens of photography with an emphasis on historical, marginalized and intersectional image makers. It explores theories of visual communication and methods of photographic image evaluation and examines the role of composition, light, and imagination in the production of photographic images.

Students are not required to have any prior photography experience but will need the ability to capture their own images with a digital camera, smartphone, or tablet. The format of the class includes lectures and discussions, visual presentations and creating personal imagery.

PHOTO 495 Independent Studies in Photography

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

PHOTO 498 Work Experience in Photography

Units: 0.5 - 4
Hours: 27 - 216 hours LAB
Prerequisite: None.
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position or job related to career goals in Photography.
Transferable: CSU

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in transfer level degree occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and complete 27 hours of related work experience for 0.5 unit. An additional 27 hours of related work experience is required for each additional 0.5 units. 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.

PHOTO 499 Experimental Offering in Photography

Units: 0.5 - 4
Prerequisite: None.

This course is designed to allow advanced students to pursue and research their photographic interests and receive credit. Students must provide a proposal outlining their area of interest and arrange meetings with an instructor. Students may wish to challenge the prerequisite on the basis of equivalent experience.

Physics

The CRC Physics department offers a full array of transferable courses that fulfill both major and general education requirements. Physics sequences include a three-semester calculus-based sequence for computer science and engineering students, a two-semester calculus-based sequence for life science and architecture students, and a two-semester trigonometry-based sequence for life science and architecture students.

Degrees Offered

A.S.-T. in Physics

A.S. in General Science

A.S. in Physics

Dean Banafsheh Amini

Department Chair Efrain Lopez

Phone (916) 691-7204

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Associate Degrees for Transfer

A.S.-T. in Physics

The Associate in Science in Physics for Transfer degree provides students with a thorough overview of the field of physics. Students will have demonstrated sufficient understanding in the fields of mechanics, electricity and magnetism, thermodynamics, mechanical and electromagnetic waves, modern physics, the scientific method and mathematics to successfully transfer to a four-year institution with a major in physics.

The Associate in Science in Physics for Transfer degree 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, although not necessarily to a particular campus or major.

Students must complete the following Associate Degree for Transfer (ADT) requirements:

(1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
(A) The California General Education Transfer Curriculum (Cal-GETC).
(B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

(2) Obtainment of a minimum grade point average of 2.0.

ADTs also require that students must earn a “C” or better in all courses required for the major or area of emphasis. A “P” (Pass) grade is also an acceptable grade for courses in the major if the course is taken on a Pass/No Pass basis.

Degree Requirements

Course Code	Course Title	Units
PHYS 411	Mechanics of Solids and Fluids	4
PHYS 421	Electricity and Magnetism	4
PHYS 431	Heat, Waves, Light and Modern Physics	4
MATH 400	Calculus I	5
MATH 401	Calculus II	5
MATH 402	Calculus III	5
Total Units:		**27**

The Associate in Science in Physics for Transfer (AS-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) the California General Education Transfer Curriculum (Cal-GETC) Requirement.

Student Learning Outcomes

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

- explain the scientific method and its application to the fundamental concepts of physics including mechanics, electricity and magnetism, thermodynamics, mechanical and electromagnetic waves, optics and modern physics.
- solve conceptual, numeric and symbolic problems in physics (specifically the fields of mechanics, electricity and magnetism, thermodynamics, mechanical and electromagnetic waves, optics and modern physics) using mathematics through calculus.
- demonstrate the proper use of basic laboratory devices including metersticks, balances, digital multimeters, and oscilloscopes.
- apply mathematical concepts including single and multivariable calculus, vector calculus, and basic differential equations in order to model physical systems and solve physical problems.
- create graphical representations of data and analyze those graphs to determine the results of laboratory activities.
- write a clear, coherent and thorough lab report.

Career Information

This degree is designed to facilitate successful transfer to four-year programs that prepare students for advanced study in physics and related fields including biophysics, physical chemistry, geophysics, and astrophysics. Physicists with undergraduate and graduate degrees have a wide range of employment opportunities including research, engineering, computer programming, and teaching. NOTE TO TRANSFER STUDENTS: The Associate Degree for Transfer program is designed for students who plan to transfer to a campus of the California State University (CSU). Other than the required core, the courses you choose to complete this degree will depend to some extent on the selected CSU for transfer. In addition, some California General Education Transfer Curriculum (Cal-GETC) requirements can also be completed using courses required for this associate degree for transfer major (known as “double-counting”). Meeting with a counselor to determine the most

appropriate course choices will facilitate efficient completion of your transfer requirements. For students wishing to transfer to other universities (UC System, private, or out-of-state), the Associate Degree for Transfer may not provide adequate preparation for upper-division transfer admissions, because many universities require more lower division courses than those in this degree. Even the CSU's that accept this transfer degree may likely require more lower division courses to achieve the Bachelor degree. Specifically, courses in general chemistry, differential equations, linear algebra, and computer programming may better prepare the transfer student for certain universities. It is critical that you meet with a CRC counselor to select and plan the courses for the major, as programs vary widely in terms of the required preparation.

Associate Degrees

A.S. in General Science

Areas of Study include:

- Biological Anthropology
- Astronomy
- Biology
- Chemistry
- Engineering
- Physical Geography
- Geology
- Physics

Eighteen (18) units of transfer-level course work in science are required. Two laboratory courses must be included: one in the physical sciences and one in the biological sciences. Courses may be selected from astronomy, biology, chemistry, geology, physical geography, biological anthropology, and physics. The student, in consultation with a counselor, should choose science courses to meet their program, transfer, or general education requirements.

Students interested in transferring to a four-year university with a science major are encouraged to complete a science AS or AS-T degree such as Anthropology, Biology, Chemistry, Engineering, Geography, Geology, or Physics. This General Science degree may not include the majors-level transfer courses needed for many science majors. Students are strongly recommended to see a counselor for guidance.

Degree Requirements

Course Code	Course Title	Units
Life Science with Lab :		
A minimum of 4 units from the following:		4
ANTH 300	Biological Anthropology (3)	
and ANTH 301	Biological Anthropology Laboratory (1)	
ANTH 480	Honors Biological Anthropology (3)	
and ANTH 482	Honors Biological Anthropology Laboratory (1)	
BIOL 308	Contemporary Biology (3)	
and BIOL 309	Contemporary Biology Laboratory (1)	
BIOL 400	Principles of Biology (5)	
BIOL 410	Principles of Botany (5)	
BIOL 420	Principles of Zoology (5)	
BIOL 430	Anatomy and Physiology (5)	
BIOL 431	Anatomy and Physiology (5)	
BIOL 440	General Microbiology (4)	
Physical Science with Lab:		
A minimum of 3 units from the following:		3
ASTR 300	Introduction to Astronomy (3)	
and ASTR 400	Astronomy Laboratory (1)	
CHEM 300	Beginning Chemistry (4)	
CHEM 305	Introduction to Chemistry (5)	
CHEM 306	Introduction to Organic and Biological Chemistry (5)	
CHEM 309	Integrated General, Organic, and Biological Chemistry (5)	
CHEM 400	General Chemistry I (5)	
CHEM 401	General Chemistry II (5)	
CHEM 420	Organic Chemistry I (5)	
CHEM 421	Organic Chemistry II (5)	
GEOG 300	Physical Geography: Exploring Earth's Environmental Systems (3)	
and GEOG 301	Physical Geography Laboratory (1)	
GEOL 300	Physical Geology (3)	
and GEOL 301	Physical Geology Laboratory (1)	
GEOL 305	Earth Science (3)	
and GEOL 306	Earth Science Laboratory (1)	
GEOL 310	Historical Geology (3)	
and GEOL 311	Historical Geology Laboratory (1)	
ENGR 304	How Things Work (3)	
PHYS 350	General Physics (4)	
PHYS 360	General Physics (4)	
PHYS 370	Introductory Physics - Mechanics and Thermodynamics (5)	
PHYS 380	Introductory Physics - Electricity and Magnetism, Light and Modern Physics (5)	
PHYS 411	Mechanics of Solids and Fluids (4)	
PHYS 421	Electricity and Magnetism (4)	
PHYS 431	Heat, Waves, Light and Modern Physics (4)	
Additional Science Courses :		
A minimum of 11 units from the following:		11[1]
ANTH 300	Biological Anthropology (3)	
ANTH 301	Biological Anthropology Laboratory (1)	
ANTH 480	Honors Biological Anthropology (3)	
ANTH 482	Honors Biological Anthropology Laboratory (1)	
ASTR 300	Introduction to Astronomy (3)	
ASTR 400	Astronomy Laboratory (1)	

Course Code	Course Title	Units
BIOL 308	Contemporary Biology (3)	
BIOL 309	Contemporary Biology Laboratory (1)	
BIOL 342	The New Plagues: New and Ancient Infectious Diseases Threatening World Health (3)	
BIOL 350	Environmental Biology (3)	
BIOL 352	Conservation Biology (3)	
BIOL 400	Principles of Biology (5)	
BIOL 410	Principles of Botany (5)	
BIOL 420	Principles of Zoology (5)	
BIOL 430	Anatomy and Physiology (5)	
BIOL 431	Anatomy and Physiology (5)	
BIOL 440	General Microbiology (4)	
CHEM 300	Beginning Chemistry (4)	
CHEM 305	Introduction to Chemistry (5)	
CHEM 306	Introduction to Organic and Biological Chemistry (5)	
CHEM 309	Integrated General, Organic, and Biological Chemistry (5)	
CHEM 400	General Chemistry I (5)	
CHEM 401	General Chemistry II (5)	
CHEM 420	Organic Chemistry I (5)	
CHEM 421	Organic Chemistry II (5)	
ENGR 304	How Things Work (3)	
GEOG 300	Physical Geography: Exploring Earth's Environmental Systems (3)	
GEOG 301	Physical Geography Laboratory (1)	
GEOG 305	Global Climate Change (3)	
GEOG 306	Weather and Climate (3)	
GEOL 300	Physical Geology (3)	
GEOL 301	Physical Geology Laboratory (1)	
GEOL 305	Earth Science (3)	
GEOL 306	Earth Science Laboratory (1)	
GEOL 310	Historical Geology (3)	
GEOL 311	Historical Geology Laboratory (1)	
GEOL 330	Introduction to Oceanography (3)	
GEOL 390	Field Studies in Geology (1 - 4)	
PHYS 310	Conceptual Physics (3)	
PHYS 350	General Physics (4)	
PHYS 360	General Physics (4)	
PHYS 370	Introductory Physics - Mechanics and Thermodynamics (5)	
PHYS 380	Introductory Physics - Electricity and Magnetism, Light and Modern Physics (5)	
PHYS 411	Mechanics of Solids and Fluids (4)	
PHYS 421	Electricity and Magnetism (4)	
PHYS 431	Heat, Waves, Light and Modern Physics (4)	
Total Units:		**18**

[1]Courses used in A or B above will not count towards C, except units exceeding the 4 or 3 unit minimum in A and B. For example, a student completing the 5 unit CHEM 309 under B could apply 2 of those units towards C. A total of 18 science units is required.

The General Science Associate in Science (A.S.) degree may be obtained by completion of the required program, plus the local CRC General Education Requirement, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

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

- explain the core perspectives of the scientific method and apply it to at least one scientific discipline. (PSLO 1)
- solve introductory problems of a conceptual and/or numerical nature of at least one scientific discipline. (PSLO 2)
- accurately apply the basic vocabulary and concepts of at least one scientific discipline verbally and in writing. (PSLO 3)
- recognize the use and misuse of scientific concepts in society including politics and the media. (PSLO 4)

A.S. in Physics

The Associate in Science in Physics degree provides students with a thorough overview of the field of physics. Students will have demonstrated sufficient understanding in the fields of mechanics, electricity and magnetism, thermodynamics, mechanical and electromagnetic waves, modern physics, the scientific method, mathematics and chemistry to successfully transfer to a four-year institution with a major in physics.

Degree Requirements

Course Code	Course Title	Units
CHEM 400	General Chemistry I	5
CHEM 401	General Chemistry II	5
MATH 400	Calculus I	5
MATH 401	Calculus II	5
MATH 402	Calculus III	5
MATH 420	Differential Equations	4
PHYS 411	Mechanics of Solids and Fluids	4
PHYS 421	Electricity and Magnetism	4
PHYS 431	Heat, Waves, Light and Modern Physics	4
Total Units:		**41**

The Physics Associate in Science (A.S.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Student Learning Outcomes

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

- explain the scientific method and its application to the fundamental concepts of physics including mechanics, electricity and magnetism, thermodynamics,

mechanical and electromagnetic waves, optics, modern physics and general chemistry.

- solve conceptual, numeric and symbolic problems in physics (mechanics, electricity and magnetism, thermodynamics, mechanical and electromagnetic waves, optics and modern physics) and general chemistry using mathematics through calculus.
- demonstrate the proper use of basic laboratory devices including metersticks, balances, digital multimeters, and oscilloscopes.
- apply mathematical concepts including algebra, single and multivariable calculus, vector calculus, and basic differential equations in order to model physical systems and solve physical problems.
- create graphical representations of data and analyze those graphs to determine the results of laboratory activities.
- write a clear, coherent and thorough lab report.

Career Information

This degree is designed to facilitate successful transfer to four-year programs that prepare students for advanced study in physics and related fields including biophysics, physical chemistry, geophysics, and astrophysics. Physicists with undergraduate and graduate degrees have a wide range of employment opportunities including research, engineering, computer programming, and teaching. NOTE TO TRANSFER STUDENTS: It is critical that you meet with a CRC counselor to select and plan the courses for the major, as university physics programs vary widely in terms of the required preparation. Specifically, some programs may require courses in linear algebra and computer programming as well as the courses included in this degree.

Astronomy (ASTR) Courses

ASTR 300 Introduction to Astronomy

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L5; Cal-GETC Area 5A

This course is a descriptive course in general astronomy treating the nature and evolution of the solar system, stars, galaxies, cosmology and life in the universe.

ASTR 400 Astronomy Laboratory

Units: 1
Hours: 54 hours LAB
Prerequisite: None.
Corequisite: ASTR 300
Transferable: CSU; UC
General Education: Cal-GETC Area 5C

This course covers topics including constellations, star charts, and motions of the Earth, Moon and other astronomical bodies. Students will apply the techniques that astronomers use to study the Earth, Moon, Sun, planets and stars. The course includes observations with the naked eye, binoculars and/or telescopes.

ASTR 495 Independent Studies in Astronomy

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

ASTR 499 Experimental Offering in Astronomy

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU; UC (Credit for variable topics courses is given only after a review of the scope and content of the course by the enrolling UC campus.)

This is the experimental courses description.

Physics (PHYS) Courses

PHYS 310 Conceptual Physics

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: MATH 100, or placement through the assessment process.
Transferable: CSU; UC (No credit for PHYS 310 if taken after PHYS 350, PHYS 360, PHYS 370, PHYS 380, PHYS 411, PHYS 421 or PHYS 431)
General Education: Local GE L5; Cal-GETC Area 5A

This course provides a conceptual overview of Newtonian and modern physics for non-science and science students alike. The conceptual approach to physics is tied to the student's personal experience in the everyday world, so that the student learns to see physics not as just a classroom or laboratory activity, but as a part of his or her surroundings. The class is open to students with no previous physics background.

PHYS 350 General Physics

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: MATH 335 with a grade of "C" or better, or placement through the assessment process.
Transferable: CSU; UC (PHYS 350, 360, 370, 380, 411, 421, 431 combined: maximum transfer credit of one series*; deduct credit for duplication of topics)
General Education: Local GE L5; Cal-GETC Area 5A; Cal-GETC Area 5C
C-ID: C-ID PHYS 105; Part of C-ID PHYS 100S

This course, the first semester of General Physics, is a transferable course required for many life science and other majors and may also be taken for general education credit. Materials covered will include classical mechanics (including kinematics, statics, dynamics, Newton's Laws, energy and momentum conservation, rigid body motion and oscillatory

motion), fluid mechanics, mechanical waves (including sound), and thermodynamics.

PHYS 360 General Physics

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: PHYS 350 with a grade of "C" or better
Transferable: CSU; UC (PHYS 350, 360, 370, 380, 411, 421, 431 combined: maximum transfer credit of one series*; deduct credit for duplication of topics)
General Education: Local GE L5; Cal-GETC Area 5A; Cal-GETC Area 5C
C-ID: C-ID PHYS 110; Part of C-ID PHYS 100S

This course, the second semester of General Physics, is a transferable course required for many life science and other students. Material covered will include classical electricity and magnetism (electrostatics, electric fields and potentials, magnetic fields, electromagnetic induction and electromagnetic radiation), DC and AC circuits, light, geometric and wave optics, special relativity, atomic structure, quantum physics and nuclear physics.

PHYS 370 Introductory Physics - Mechanics and Thermodynamics

Units: 5
Hours: 72 hours LEC; 54 hours LAB
Prerequisite: MATH 355 or 400 with a grade of "C" or better
Transferable: CSU; UC (PHYS 350, 360, 370, 380, 411, 421, 431 combined: maximum transfer credit of one series*; deduct credit for duplication of topics)
General Education: Local GE L5; Cal-GETC Area 5A; Cal-GETC Area 5C
C-ID: C-ID PHYS 105; Part of C-ID PHYS 100S

This course, the first semester of the Introductory Physics sequence, is designed for students transferring to programs which require two semesters of calculus-based physics such as some life science and architecture programs. Material covered will include classical mechanics (kinematics, statics, dynamics, Newton's Laws, work, conservation of mechanical energy and momentum, rotations and oscillations), fluid mechanics, mechanical waves including sound, and thermodynamics. Basic calculus skills will be assumed in the derivation and application of physical principles.

PHYS 380 Introductory Physics - Electricity and Magnetism, Light and Modern Physics

Units: 5
Hours: 72 hours LEC; 54 hours LAB
Prerequisite: PHYS 370 with a grade of "C" or better
Transferable: CSU; UC (PHYS 350, 360, 370, 380, 411, 421, 431 combined: maximum transfer credit of one series*; deduct credit for duplication of topics)
General Education: Local GE L5; Cal-GETC Area 5A; Cal-GETC Area 5C
C-ID: C-ID PHYS 110; Part of C-ID PHYS 100S

This course, the second semester of the Introductory Physics sequence, is designed for students transferring to programs which require two semesters of calculus-based physics such as some life science and architecture programs. Material covered will include electrostatics, electrical circuits and devices, magnetism, light, and modern physics (including special relativity, quantum, atomic and nuclear physics). Basic calculus skills will be assumed in the derivation and application of physical principles.

PHYS 411 Mechanics of Solids and Fluids

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: MATH 400 with a grade of "C" or better
Transferable: CSU; UC (PHYS 350, 360, 370, 380, 411, 421, 431 combined: maximum transfer credit of one series*; deduct credit for duplication of topics)
General Education: Local GE L5; Cal-GETC Area 5A; Cal-GETC Area 5C
C-ID: C-ID PHYS 205; Part of C-ID PHYS 200S

The course examines the fundamentals of mechanics: vectors, kinematics, Newton's laws of motion, work, energy, momentum, conservation principles, oscillations, fluids, and gravitation. This course is recommended for students studying the Physical Sciences, Engineering, and Computer Information Science, as well as some students studying Architecture or Mathematics.

PHYS 421 Electricity and Magnetism

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: MATH 401 and PHYS 411 with grades of "C" or better
Transferable: CSU; UC (PHYS 350, 360, 370, 380, 411, 421, 431 combined: maximum transfer credit of one series*; deduct credit for duplication of topics)
General Education: Local GE L5; Cal-GETC Area 5A; Cal-GETC Area 5C
C-ID: C-ID PHYS 210; Part of C-ID PHYS 200S

This course examines the fundamentals of electricity and magnetism: electric and magnetic fields and forces, electric potentials, capacitors and dielectrics, DC and AC circuits, inductance, magnetic materials, Maxwell's equations, electromagnetic waves, and the operation of general electrical circuit measuring devices including multimeters and oscilloscopes. This is the second course (although Physics 421 and 431 may be taken in either order) of the calculus-based physics sequence for physical science, engineering, computer science and other majors.

PHYS 431 Heat, Waves, Light and Modern Physics

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: MATH 401 and PHYS 411 with grades of "C" or better
Transferable: CSU; UC (PHYS 350, 360, 370, 380, 411, 421, 431 combined: maximum transfer credit of one series*; deduct credit for duplication of topics)
General Education: Local GE L5; Cal-GETC Area 5A; Cal-GETC Area 5C
C-ID: C-ID PHYS 215; Part of C-ID PHYS 200S

This course examines the fundamentals of thermodynamics, waves and modern physics. Topics include temperature, heat, kinetic theory of gases, thermodynamics, mechanical waves, sound, light reflection and refraction, interference and diffraction, optics, lasers, special relativity, quantum physics, atomic physics, nuclear physics, and particle physics.

PHYS 495 Independent Studies in Physics

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

PHYS 499 Experimental Offering in Physics

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU

This is the experimental courses description.

Plant Science

This CRC program offers courses designed for students in the Agriculture, Agriculture Business, and Horticulture programs.

Dean Kris Hubbard

Department Chair Dave Andrews

Phone (916) 691-7551

Email hubbark@crc.losrios.edu

Plant Science (PLTS) Courses

PLTS 299 Experimental Offering in Plant Science

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

PLTS 300 Introduction to Plant Science

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L5

This course is designed to provide the students with a working knowledge of the fundamental structures and processes of plants. Principles to be applied cover plant structures, physiology, heredity, environmental relationship to growth, adaptation, and management of crops. Techniques of research, exploration of plant growth, and identification of economical crops will be included. Fields trips may be required.

PLTS 310 Soils, Soil Management, and Plant Nutrition

Same As: HORT 302
Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: HORT 300 and PLTS 300
Transferable: CSU; UC
General Education: Local GE L5; Cal-GETC Area 5A; Cal-GETC Area 5C
C-ID: C-ID AG - PS 128L

This course provides a basic knowledge of the physical, chemical, and biological properties of soils. Course content includes fundamental soil properties, soil and plant relationships, principles of soil formation, soil biology, fertilizers and soil management, salinity, pH, erosion management, and non-agricultural uses. Field trips may be required and may require a fee. This course is the same as Hort 302, and only one may be taken for credit.

PLTS 332 Integrated Pest Management

Same As: HORT 303
Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: HORT 300 and PLTS 300
Transferable: CSU

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 the integrated pest management strategies and best management practices to achieve control. Field trips may be required and may require a fee. This course is the same as HORT 303, and only one may be taken for credit.

PLTS 495 Independent Studies in Plant Science

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

PLTS 498 Work Experience in Plant Science

Units: 0.5 - 4
Hours: 27 - 216 hours LAB
Prerequisite: None.
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position or job related to career goals in Plant Science.
Transferable: CSU

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in transfer level degree occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and complete 27 hours of related work experience for 0.5 unit. An additional 27 hours of related work experience is required for each additional 0.5 units. 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.

PLTS 499 Experimental Offering in Plant Science

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU

This is the experimental courses description.

Political Science

The study of political science and international relations involves not only the examination of the structure of government and political systems but the examination of the interaction of individuals and institutions within those systems. These courses offer valuable insight into events on the local, state, national and international levels and they also encourage involvement of the citizenry.

Degrees Offered

A.A.-T. in Political Science

Dean Emilie Mitchell
Department Chair Martin Morales
Phone (916) 691-7656
Email mitchee@crc.losrios.edu

Associate Degree for Transfer

A.A.-T. in Political Science

The Associate in Arts for Transfer degree in Political Science provides a clearly articulated curricular track for students who wish to transfer to a UC or 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.

Note: It is highly recommended that students consider an internship offered by a participating agency or department.

The Associate in Arts degree in Political Science for Transfer provides students with a major that fulfills the general requirements of the California State University for transfer. Students with this degree will receive priority admission with junior status to the California State University system. The Associate in Arts degree in Political Science for Transfer (AA-T) may be obtained by the completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program outlined below (earning a C or better in these courses, or a P if taken pass/no pass) and (b) the California General Education Transfer Curriculum (Cal-GETC) requirements.

Degree Requirements

Course Code	Course Title	Units
POLS C1000	American Government and Politics (3)	3
or POLS C1000H	American Government and Politics - Honors (3)	
POLS 302	Comparative Politics	3
POLS 310	Introduction to International Relations	3
POLS 320	Introduction to Political Theory	3
POLS 382	Statistics for Social Science	3
A minimum of 3 units from the following:		3
POLS 312	Politics of the Middle East (3)	
POLS 313	Latin America (3)	
POLS 314	Modern Europe and the Unification Process (3)	
POLS 315	Pacific Rim (3)	
POLS 317	Global Studies: Africa (3)	
POLS 318	Global Studies: Central Asia (3)	
POLS 319	Global Studies: Southeast Asia (3)	
POLS 324	Revolutions & Ideologies (3)	
Total Units:		**18**

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) the California General Education Transfer Curriculum (Cal-GETC) Requirement.

Student Learning Outcomes

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

- Describe the fundamentals of political science and governance. (PSLO 1)
- Compare and contrast contemporary comparative systems and governance. (PSLO 2)
- Evaluate the relationship between the governing process and public policy. (PSLO 3)
- Examine how citizen and interest group participation influence political systems. (PSLO 4)
- Analyze the role of culture and its influence on politics. (PSLO 5)
- Assess how the design of political institutions and processes affect policy and stability. (PSLO 6)
- Analyze politics and diplomacy in the international system. (PSLO 7)
- Apply basic research methods to political science. (PSLO 8)
- 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. (PSLO 9)
- Compare and contrast various theories of justice and the just state. (PSLO 10)
- Evaluate various theories of the purpose of government and apply to a critical analysis of current political events. (PSLO 11)

Career Information

Career opportunities in political science include, but are not limited to, advocate/organizer, campaign worker, diplomat, educator/teacher, events planner, foreign affairs specialist, lawyer, legislative aide (state and federal), lobbyist, political consultant, and public relations specialist.

Political Science (POLS) Courses

POLS C1000 American Government and Politics

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGL C1000 or C1000H (formerly ENGWR 300 and 480) with a grade of "C" or better.
Transferable: CSU; UC
General Education: Local GE L4; Cal-GETC Area 4
C-ID: C-ID POLS 110

This course was formerly known as POLS 301 Introduction to Government: United States.

This course is an introduction to government and politics in the United States and California.
Students examine the constitutions, structure, and operation of governing institutions, civil liberties
and civil rights, political behaviors, political issues, and public policy using political science theory
and methodology. This course was formerly known as POLS 301 and is not open to students who have completed POLS 301 or C1000H.

POLS 302 Comparative Politics

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGL C1000
Transferable: CSU; UC
General Education: Local GE L4; Cal-GETC Area 4
C-ID: C-ID POLS 130

This 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

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGL C1000
Transferable: CSU; UC
General Education: Local GE L4; Cal-GETC Area 4

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

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGL C1000
Transferable: CSU; UC
General Education: Local GE L4; Cal-GETC Area 4
C-ID: C-ID POLS 140

This is an introduction to international relations and a survey of the nation-state system, techniques of interaction, the issue of war, nationalism, power alignments, international actors, transnational movements, diplomacy, political economy, and perceptions in world politics. Particular emphasis is placed on an analysis of the world outlook of Central and Eastern Europe, Russia, the United States, the major western allies, China, and the lesser developed world.

POLS 312 Politics of the Middle East

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGL C1000
Transferable: CSU; UC
General Education: Local GE L4; Cal-GETC Area 4

Global Studies courses study the history, economics and governments of selected nations within a distinct region of the world.

POLS 313 Latin America

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGL C1000
Transferable: CSU; UC
General Education: Local GE L4; Cal-GETC Area 4

Global Studies courses study the history, economics and governments of selected nations within a distinct region of the world.

POLS 314 Modern Europe and the Unification Process

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGL C1000
Transferable: CSU; UC
General Education: Local GE L4; Cal-GETC Area 4

Global Studies courses study the history, economics and governments of selected nations within a distinct region of the world.

POLS 315 Pacific Rim

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGL C1000
Transferable: CSU; UC
General Education: Local GE L4; Cal-GETC Area 4

Global Studies courses study the history, economics and governments of selected nations within a distinct region of the world.

POLS 317 Global Studies: Africa

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGL C1000
Transferable: CSU; UC
General Education: Local GE L4; Cal-GETC Area 4

Global Studies courses study the history, economics and governments of selected nations within a distinct region of the world.

POLS 318 Global Studies: Central Asia

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGL C1000
Transferable: CSU; UC
General Education: Local GE L4; Cal-GETC Area 4

Global Studies courses study the history, economics and governments of selected nations within a distinct region of the world.

POLS 319 Global Studies: Southeast Asia

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGL C1000
Transferable: CSU; UC
General Education: Local GE L4; Cal-GETC Area 4

Global Studies courses study the history, economics and governments of selected nations within a distinct region of the world.

POLS 320 Introduction to Political Theory

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L4; Cal-GETC Area 4
C-ID: C-ID POLS 120

In this course, students will examine theoretical approaches to politics and ways of thinking about politics, covering important thinkers and topics during the ancient, medieval, and modern periods.

POLS 324 Revolutions & Ideologies

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGL C1000
Transferable: CSU; UC
General Education: Local GE L4; Cal-GETC Area 4

This course seeks to study ideologies and revolutions. Revolutions herald change in political systems. They can be based on ideologies or economic, religious or other differences.

POLS 382 Statistics for Social Science

Units: 3
Hours: 54 hours LEC
Prerequisite: Intermediate Algebra (or equivalent in high school) or higher with a C or better or eligibility for transfer-level mathematics.
Transferable: CSU; UC (UC transfer credit limitation: STAT 300, STAT 480, STAT C1000E, STAT C1000H, ECON 310 and POLS 382, PSYC 330 combined: maximum credit, 1 course)
General Education: Local GE L2; Cal-GETC Area 2; Cal-GETC Area 4
C-ID: C-ID MATH 110

This course focuses upon the concepts and applications of descriptive and inferential statistics in political science and other social sciences. Topics include data collection, descriptive statistics, probability and sampling distributions, hypothesis testing, statistical inference, correlation and regression, chi-square, t-tests, and analysis of variance procedures. This course will analyze and interpret social data sets from at least two of the following disciplines: business, economics, social science, psychology, political science, administration of justice, and education. The course will utilize both hand computation and statistical software.

POLS C1000H American Government and Politics - Honors

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Enrollment Limitation: Enrollment is limited to Honors Program students. Details about the Honors Program can be found in the front of the Catalog and on the CRC website.
Transferable: CSU; UC
General Education: Local GE L4; Cal-GETC Area 4
C-ID: C-ID POLS 110

This course was formerly known as POLS 481 Introduction to Government: United States - Honors.

This course is an introduction to government and politics in the United States and California.
Students examine the constitutions, structure, and operation of governing institutions, civil liberties
and civil rights, political behaviors, political issues, and public policy using political science theory
and methodology. This is an honors course. The honors course offers rigorous preparation in critical thinking, and analytic reading and writing skills for students intending to transfer to a four-year college or university. It provides an opportunity to engage contemporary political, constitutional, and social issues through small group discussion, a structured sequence of papers requiring higher-level thinking tasks, and collaborative projects. Research projects require extensive analysis of topics such as American institutions, political processes, elections and political behavior. Paper requirements are designed to challenge and motivate. This course is not open to students who have completed POLS C1000 (formerly known as POLS 301). Enrollment is limited to Honors Program students. Details about the Honors Program can be found in the front of the Catalog and on the CRC website. This course is the same as HONOR 367. This course, under either name, may be taken only one time for credit.

POLS 482 International Political Economy - Honors

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Enrollment Limitation: Enrollment is limited to Honors Program students. Details about the Honors Program can be found in the front of the Catalog and on the CRC website.
Transferable: CSU; UC
General Education: Local GE L4

This course is designed to introduce students to the major theories, institutions, and issues in international political economy. International political economy examines the interaction between politics and economics on a global scale; in particular, how political forces influence markets, and how market forces influence politics. In this course of study, students will examine the major theoretical perspectives on political economy, such as mercantilism, liberalism, structuralism, and statism. Students are then introduced to the major components of the international economy: multilateral trade, domestic trade policy, international finance, and currency policy. Last, this course focuses on several major issues in international political economy. Examples might include the gap between the developed and developing world, the globalized economy, the role of transnational corporations, and the political economies of oil, migration, food, or the environment.
The honors course offers rigorous preparation in critical thinking, and analytic reading and writing skills for students intending to transfer to a four-year college or university. It provides an opportunity to engage contemporary political, economic, and social issues through small group discussion, a structured sequence of papers requiring higher-level thinking tasks, and collaborative projects. Research projects require extensive analysis of topics such as economic institutions, economic policy processes, market behavior, and state responses. Paper requirements are designed to challenge and motivate.
This course is not open to students who have completed POLS 311. Enrollment is limited to Honors Program students. Details about the Honors Program can be found in the front of the Catalog and on the CRC website. This course is the same as Honor 368. This course, under either name, may be taken only one time for credit.

POLS 495 Independent Studies in Political Science

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

POLS 499 Experimental Offering in Political Science

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

Psychology

Psychology concerns itself with the study of behavior of humans and other animals. Part of its appeal and fascination is the fact that it involves both pure science and the practical application of science to matters of everyday life. Those pursuing psychology as a field of study will find many Career Opportunities centering around helping others understand, predict and control their own behavior and the behavior of others. Training in psychology also provides a valuable foundation for other professions that deal with people.

Degrees Offered

A.A.-T. in Psychology

Dean Emilie Mitchell
Department Chair Naomi Bahm
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Associate Degree for Transfer

A.A.-T. in Psychology

The Associate in Arts in Psychology for Transfer (AA-T) degree is designed to facilitate successful transfer to baccalaureate psychology degree programs. This degree provides a clearly articulated curricular track for students who wish to transfer to a CSU campus, while also serving the diverse needs of students interested in the breadth and depth of the field of psychology.

Additionally, this program will expose students to the core principles and practices of the field in order to build a foundation for their future personal, academic, or vocational paths. In addition to transfer, this foundation would be appropriate for entry into a variety of paraprofessional careers and careers in related fields.

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. Students should work closely with their Cosumnes River College counselor to ensure that they are taking the appropriate coursework to prepare for majoring in psychology at the institution they wish to transfer to because major and general education requirements may vary for each CSU and the degree may only transfer to specific institutions.

Students must complete the following Associate Degree for Transfer (ADT) requirements (pursuant to SB1440, §66746):

(1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
(A) The California General Education Transfer Curriculum (Cal-GETC).
(B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

(2) Obtainment of a minimum grade point average of 2.0.

ADTs also require that students must earn a “C” or better in all courses required for the major or area of emphasis. A “P” (Pass) grade is also an acceptable grade for courses in the major if the course is taken on a Pass/No Pass basis.

Degree Requirements

Course Code	Course Title	Units
PSYC C1000	Introduction to Psychology	3
PSYC 330	Introductory Statistics for the Behavioral Sciences	3
PSYC 335	Research Methods in Psychology	3
PSYC 312	Biological Psychology (4)	4[1]
PSYC 320	Social Psychology (3)	3
or PSYC 371	Life Span Developmental Psychology (3)	
PSYC 371	Life Span Developmental Psychology (3)	3
or PSYC 340	Abnormal Behavior (3)	
or PSYC 356	Human Sexuality (3)	
Total Units:		**19**

[1] PSYC 312 includes both lecture and lab components. If taking Biological Psychology at another college, both the lecture and lab components must be completed. See a counselor for more information.

The Associate in Arts in Psychology for Transfer (AA-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) the California General Education Transfer Curriculum (Cal-GETC) Requirement.

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 and demonstrate understanding of the scientific method.
- Demonstrate familiarity with the major concepts and theoretical perspectives in psychology.
- Define and apply 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, predict likely outcomes, interpret basic statistical measures, draw reasonable conclusions, recognize the ethical implications of these conclusions, and apply these conclusions to personal, community, and scientific problems.
- Employ and integrate psychological principles that lay the foundation for life-long personal growth and development of interpersonal, occupational and social skills.
- Recognize the complexity of social, cultural, and international diversity and demonstrate appropriate

interpersonal and social skills in interactions with a diverse population using principles of equity, justice, and inclusion.

Career Information

This AA-T degree facilitates students' successful transfer to four-year Psychology programs which prepare students for advanced study in a variety of graduate programs and for entry level positions in a variety of careers such as sales, 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.

Psychology (PSYC) Courses

PSYC C1000 Introduction to Psychology

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGL C1000 (formerly known as ENGWR 300), ENGL C1000H (formerly known as ENGWR 480), or ESLW 340; and LIBR 318 with grades of "C" or better
Transferable: CSU; UC
General Education: Local GE L4; Cal-GETC Area 4
C-ID: C-ID PSY 110

This course was formerly known as PSYC 300 General Principles.

This course is an introduction to psychology, which is the study of the mind and behavior. Students
focus on theories and concepts of biological, cognitive, developmental, environmental, social, and
cultural influences; their applications; and their research foundations. PSYC C1000 was formerly known as PSYC 300. Students may not receive credit for both PSYC 300 and PSYC C1000.

PSYC 312 Biological Psychology

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: PSYC C1000 with a grade of "C" or better
Transferable: CSU; UC
General Education: Local GE L5; Cal-GETC Area 5B; Cal-GETC Area 5C
C-ID: C-ID PSY 150

This course examines the biochemical, cellular, and organismal physiological substrates of normal and abnormal behavior. The course content focuses on interactions of the central nervous system, peripheral nervous system, endocrine and immune systems to produce consciousness, sensation, perception, thinking, motivation and emotion. These areas will be addressed within an evolutionary context that emphasizes developmental plasticity of the individual and the species. Current methods of obtaining data (e.g. neuroimaging techniques) will be examined and evaluated. Students will be required to perform anatomical identification of brain structures using a mammalian brain (e.g. sheep brain).

PSYC 320 Social Psychology

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L4; Cal-GETC Area 4
C-ID: C-ID PSY 170

This course focuses on the scientific study of human interaction, with an emphasis on the individual within a social context. Study includes: social perception, social cognition, attitudes and attitude change, the self and social identity, prejudice and discrimination, interpersonal attraction, close relationships, social influence, prosocial behavior, aggression, and group behavior.

PSYC 330 Introductory Statistics for the Behavioral Sciences

Units: 3
Hours: 54 hours LEC
Prerequisite: Intermediate Algebra (or equivalent in high school) or higher with a C or better or eligibility for transfer-level mathematics.
Transferable: CSU; UC (UC transfer credit limitation: STAT 300, STAT 480, STAT C1000E, STAT C1000H, ECON 310 and POLS 382, PSYC 330 combined: maximum credit, 1 course)
General Education: Local GE L2; Cal-GETC Area 2
C-ID: C-ID MATH 110

This course focuses on the concepts and applications of descriptive and inferential statistics in psychology and other behavioral sciences. Topics include: descriptive statistics; sample spaces and probability; random variables and expected value; discrete and continuous distributions -- binomial, t-tests for two populations; and applications using data from disciplines including business, social sciences, life science, health science, and education; parametric and nonparametric statistical methods, hypothesis testing, statistical inference and p-values, effect size and power; correlation and regression regarding prediction; chi-square; t-tests; and analysis of variance procedures. Application of both hand computation and statistical software (e.g. SPSS) to data in a behavioral and social science contexts will be emphasized to include the interpretation of the relevance of the statistical findings.

PSYC 335 Research Methods in Psychology

Units: 3
Hours: 54 hours LEC
Prerequisite: PSYC C1000 and 330 with grades of "C" or better
Transferable: CSU; UC
General Education: Local GE L1B; Local GE L4; Cal-GETC Area 4
C-ID: C-ID PSY 200

This course provides an overview of the methodologies used in experimental, quasi-experimental and non-experimental research in psychology. Students will learn how to design and conduct research, including formulating hypotheses, reviewing the literature, evaluating ethical issues, selecting methodologies, organizing data, applying statistics and writing reports.

PSYC 340 Abnormal Behavior

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L4; Local GE L7B; Cal-GETC Area 4
C-ID: C-ID PSY 120

This course is an exploration of the broad questions of normality and abnormality. It offers the investigation of specific mental, emotional, and behavioral difficulties and current approaches to psychological intervention including present community mental health practice. This course considers the contribution of biological, psychological and social factors to the development and persistence of behavior disorders. PSYC 340 is a useful course for students majoring in Social Work and Human Services and/or preparing for a career in psychology or the helping professions.

PSYC 356 Human Sexuality

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L4; Local GE L7B; Cal-GETC Area 4
C-ID: C-ID PSY 130

This course provides a balanced scientific understanding of human sexual thoughts, feelings, and behavior grounded in both female and male perspectives and experiences. Course topics include an examination of the methodology of sexology, gender issues, sexual anatomy and physiology, sexual arousal and response, love and communication, sexual behavior patterns, sexual orientations, contraception, conception and childbirth, sexual development across the lifespan, adult living patterns, sexual difficulties and solutions, sexually transmitted diseases, atypical sexual behavior, sexual coercion, and pornography and prostitution.

PSYC 371 Life Span Developmental Psychology

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L4; Local GE L7B; Cal-GETC Area 4
C-ID: C-ID PSY 180

This course examines psychological development across the lifespan, from conception to death. The course will focus on neurological, cognitive, cultural, and socio-emotional domains of developmental psychology, as well as the interaction among these domains. The course will provide a theoretical background based on empirical studies in the area of developmental psychology and other related disciplines. This course is designed to provide a foundation for careers in educational, social, psychological, and medical fields as well as provide students with a better understanding of one's own developmental process.

PSYC 495 Independent Studies in Psychology

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

PSYC 499 Experimental Offering in Psychology

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU

This is the experimental courses description.

Radio Production

This Program concentrates on the audio portion of broadcasting, with emphasis on performing, editing, production and knowledge of radio programming. Students will learn to prepare both professional live and pre-recorded radio programs for the campus internet radio station. This option can lead to an entry-level position with a commercial radio station.

Degrees and Certificates Offered

A.A. in Radio Production

Radio Production Certificate

Dean Brian Rickel

Department Chair Mun Kang

Phone (916) 691-7171

Email kangm@crc.losrios.edu

Associate Degree

A.A. in Radio Production

This Program concentrates on the audio portion of broadcasting, with emphasis on performing, editing, production and knowledge of radio programming. Students will learn to prepare both professional live and pre-recorded radio programs for the campus internet radio station. This option can lead to an entry-level position with a commercial radio station.

Highlights include:
* Internship opportunities at local radio stations
* Practical experience at the campus radio station, internet broadcasting and podcasting on the campus radio station.

Note to Transfer Students:
If you are interested in transferring to a four-year college or university to pursue a bachelor's degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate's degree in this major may be different from the requirements needed for the Bachelor's degree.

Degree Requirements

Course Code	Course Title	Units
RTVF 300	Mass Media and Society	3
RTVF 306	Introduction to Media Aesthetics and Cinematic Arts	3
RTVF 312	Beginning Radio and Podcasting	3
RTVF 315	Voice and Diction for Broadcasting	3
RTVF 316	Introduction to Radio Workshop	3
RTVF 319	Beginning Audio Production	3
RTVF 370	Broadcast Writing & Announcing (3)	3
COMM C1000	Introduction to Public Speaking	3
A minimum of 6 units from the following:		6
COMM 311	Argumentation and Debate (3)	
RTVF 302	Introduction to Digital Design & Storytelling (3)	
RTVF 330	Beginning Single Camera Production (3)	
RTVF 354	Audio Editing for Film & Video Post Production (3)	
RTVF 368	Scriptwriting for Film, Video & Multimedia (3)	
RTVF 376	Advertising (3)	
RTVF 498	Work Experience in Radio, Television and Film (0.5 - 4)	
Total Units:		**30**

The Radio Production Associate in Arts (A.A.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Student Learning Outcomes

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

- Write in clear, concise English in the production of radio copy. (PSLO-1)
- Demonstrate knowledge of the history, processes and current structure of the electronic media. (PSLO-2)
- Use radio, communication information and entertainment to serve diverse audiences in culturally responsive ways (PSLO-3)
- Demonstrate sensitivity to variations and processes of media and the attitudes held by races, religions, political and social groups. (PSLO-4)
- Understand how to plan, produce, write and direct radio projects using analog and digital technology. (PSLO-5)
- Demonstrate an achievement of professional-level skills in radio production.(PSLO-6)

Career Information

Disc Jockey; Announcer; Sportscaster; Studio Technician; Newscaster; Audio Technician; Radio Producer; Promotions Coordinator Some career options may require more than two years of college study. Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.

Certificate of Achievement

Radio Production Certificate

This program is designed to provide skills in radio production through the preparation of programming for the campus radio station and through podcasting. This option can lead to entry level jobs in radio stations, audio production companies and Cable TV business or serve as preparation for transfer to a four-year institution.

Certificate Requirements

Course Code	Course Title	Units
RTVF 300	Mass Media and Society	3
RTVF 312	Beginning Radio and Podcasting	3
RTVF 315	Voice and Diction for Broadcasting	3
RTVF 316	Introduction to Radio Workshop	3
RTVF 319	Beginning Audio Production	3
A minimum of 3 units from the following:		3
JOUR 300	Newswriting and Reporting (3)	
RTVF 302	Introduction to Digital Design & Storytelling (3)	
RTVF 306	Introduction to Media Aesthetics and Cinematic Arts (3)	
RTVF 330	Beginning Single Camera Production (3)	
RTVF 354	Audio Editing for Film & Video Post Production (3)	
RTVF 368	Scriptwriting for Film, Video & Multimedia (3)	
RTVF 370	Broadcast Writing & Announcing (3)	
Total Units:		**18**

Student Learning Outcomes

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

- Demonstrate an advanced understanding of the fundamentals of radio production. (PSLO #1)
- Articulate, critique, recognize and demonstrate commercial radio station operations.
- Demonstrate proper microphone placement for public address or recording.
- Perform basic studio and non-studio audio recording tasks. (PSLO #2)
- Demonstrate analog and digital techniques used in audio production.

Career Information

Disc Jockey; Announcer; Sportscaster; Studio Technician; Newscaster; Audio Technician; Radio Producer; Promotions Coordinator.

Radio, Television and Film Production

This instructional program is designed to train students for skills needed in jobs requiring basic knowledge in Radio, Television or Film Production. Training includes classes in radio, television, film, broadcasting, broadcast and print journalism, editing, and design. Students will be prepared for entry-level jobs in education, government, broadcasting, advertising and public relations, as well as having a base for transfer to a four-year institution.

Degrees Offered

A.S.-T. in Film, Television and Electronic Media

A.A. in Film / Digital Cinema Production

Dean Brian Rickel

Department Chair Mun Kang

Phone (916) 691-7171

Email kangm@crc.losrios.edu

Associate Degrees for Transfer

A.S.-T. in Film, Television and Electronic Media

The Associate in Science in Film, Television and Electronic Media for Transfer degree provides students with a major that fulfills the general requirements of the California State University for transfer to baccalaureate degree programs in film, television and electronic media. Students with this degree will receive priority admission with junior status to the California State University system. The Associate in Science Degree in Film, Television and Electronic Media for Transfer is comprised of lower division coursework typically required by CSU institutions.

Students must complete the following Associate Degree for Transfer (ADT) requirements:

(1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
(A) The California General Education Transfer Curriculum (Cal-GETC).
(B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

(2) Obtainment of a minimum grade point average of 2.0.

ADTs also require that students must earn a “C” or better in all courses required for the major or area of emphasis. A “P” (Pass) grade is also an acceptable grade for courses in the major if the course is taken on a Pass/No Pass basis.

Upon successful completion of the Associate in Science Degree in Film, Television and Electronic Media for Transfer degree requirements, students will be guaranteed admission to the CSU system with junior status and will not have to repeat lower division coursework. Each California State University may have slightly different requirements for transfer so it is critical for students to work with their counselors to develop individual academic plans.

Degree Requirements

Course Code	Course Title	Units
CORE:		
RTVF 300	Mass Media and Society	3
RTVF 306	Introduction to Media Aesthetics and Cinematic Arts	3
List A, Area 1: Select one audio course (3 units):		
RTVF 312	Beginning Radio and Podcasting (3)	3
or RTVF 319	Beginning Audio Production (3)	
List A, Area 2: Select one video or film production course (3 units):		
RTVF 330	Beginning Single Camera Production (3)	3
or RTVF 331	Beginning Television Studio Production (3)	
List B: Select one (3 units):		
A minimum of 3 units from the following:		3[1]
RTVF 350	Intermediate Film / Digital Cinema Production (3)	
List C: Select one course (3 units):		
A minimum of 3 units from the following:		3[2]
RTVF 315	Voice and Diction for Broadcasting (3)	
or RTVF 360	Introduction to Motion Graphics: Adobe After Effects (3)	
or RTVF 362	Digital Non-Linear Video Editing (3)	
Total Units:		**18**

[1]Or any course not used above. RTVF 330 is a prerequisite to this course and must be taken first.

[2]Or any course not used above

The Associate in Science in Film, Television and Electronic Media 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 California General Education Transfer Curriculum (Cal-GETC) Requirement.

Student Learning Outcomes

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

- Write in clear, concise English. (SLO-1)
- Research critically, filter the results and present them in a cogent manner. (SLO-2)
- Resolve and execute standard pre-production skills including planning, script, script breakdown, budgeting, storyboard creation, and crew and equipment selection. (SLO-3)

- utilize basic field production equipment correctly, safely and creatively, including cameras, lights and audio.
- operate essential post production equipment for audio and film/video editing and distribution in a variety of contemporary and emerging methods.
- Demonstrate a hands-on ability to perform the professional level critical thinking needed for successful teamwork in media. (SLO-4)
- Using audio, communicate information and entertainment to serve diverse audiences in culturally responsive ways (SLO-5)
- analyze, interpret, and exercise critical judgment in the evaluation of media productions.

Career Information

Career Opportunities upon successful completion of a baccalaureate degree in film, television or electronic media include but are not limited to positions as: Radio Personality; Camera Operator; Cinematographer; Director of Photography; Lighting Director; Computer Graphic Artist; Non-Linear Video Editor; Audio Engineer; Radio Producer; Broadcast Technician; Gaffer; Production Coordinator; Production Assistant; TV, Film, DVD, or Internet Producer/Director; and Personal or Corporate Video.

Associate Degrees

A.A. in Film / Digital Cinema Production

This Associate of Arts degree program is designed to provide skills in film production, digital cinema, and television through the preparation of projects for viewing on campus, cable TV, the Internet and new technologies. Given the expansion of new media distribution opportunities and the production convergence of High-Definition video and film, students will gain a broad exposure to visual storytelling in a professional environment, including dramatic narrative, documentary and experimental styles. This option can lead to entry-level jobs in the film industry, post-production, television, new media, business and industry. Some of the courses in this major also transfer to a four year university program. Please see a counselor for more information.

Highlights include:
* Practical experience working with school equipment on productions for viewing on campus, on cable TV and the Internet.
* Working in teams to build projects using a professional approach.
* State-of-the-art digital computer lab for graphics and non-linear editing, including Apple's Final Cut Pro, DVD production, Adobe Photoshop, Adobe Illustrator, and Adobe After Effects.
* Internship opportunities working in local independent film-makers, post-production facilities and at local television stations.
* Industry guest speakers provide real world examples of how to be successful in the film industry.

Note to Transfer Students:
If you are interested in transferring to a four-year college or university to pursue a bachelor's degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate's degree in this major may be different from the requirements needed for the Bachelor's degree.

Degree Requirements

Course Code	Course Title	Units
RTVF 305	Film History I (1895-1949) (3)	3[1]
or FMS 305	Film History I (1895-1949) (3)	
or RTVF 307	Film History II (1950-present) (3)	
or FMS 307	Film History II (1950-present) (3)	
RTVF 306	Introduction to Media Aesthetics and Cinematic Arts	3
RTVF 319	Beginning Audio Production	3
RTVF 330	Beginning Single Camera Production	3
RTVF 330 must be completed with a "C" or better before enrolling in RTVF 350:		
RTVF 350	Intermediate Film / Digital Cinema Production	3
RTVF 360	Introduction to Motion Graphics: Adobe After Effects	3
RTVF 362	Digital Non-Linear Video Editing	3
PHOTO 301	Beginning Photography (3)	3
or PHOTO 302	Beginning Digital Photography (3)	
A minimum of 6 units from the following:		6
RTVF 304	Introduction to Multimedia (3)	
RTVF 354	Audio Editing for Film & Video Post Production (3)	
RTVF 365	Intermediate Film & Video Editing (3)	
RTVF 368	Scriptwriting for Film, Video & Multimedia (3)	
RTVF 371	Hollywood TV and Film Studios: A Behind the Scenes Experience (1)	
RTVF 378	Acting for the Camera (3)	
RTVF 498	Work Experience in Radio, Television and Film (0.5 - 4)	
FMS 300	Introduction to Film Studies (3)	
FMS 310	Introduction to Screenwriting (3)	
FMS 320	Film Genre (3)	
RTVF 305	Film History I (1895-1949) (3)	3[2]
or FMS 305	Film History I (1895-1949) (3)	
or RTVF 307	Film History II (1950-present) (3)	
or FMS 307	Film History II (1950-present) (3)	
Total Units:		**33**

[1]Students must take one of the Film History options RTVF/FMS 305 or RTVF/FMS 307.

[2]If not used above.

The Film / Digital Cinema Production Associate in Arts (A.A.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-

GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Student Learning Outcomes

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

- Write in clear, concise English. (PSLO-1)
- Research critically, filter the results and present them in a cogent manner. (PSLO-2)
- Resolve and execute standard pre-production skills including planning, script, script breakdown, budgeting, storyboard creation, and crew and equipment selection. (PSLO-3)
- Utilize basic field production equipment correctly, safely and creatively, including cameras, lights and audio. (PSLO-4)
- Operate essential post-production equipment for audio and film/video editing and distribution in a variety of contemporary and emerging methods. (PSLO-5)
- Analyze, interpret, and exercise critical judgment in the evaluation of media productions. (PSLO-6)
- Demonstrate through projects that with the power of a communicator, comes moral and ethical responsibility. (PSLO-7)
- Demonstrate a hands-on ability to perform the professional level critical thinking needed for successful teamwork in media employment. (PSLO-8)

Career Information

Camera Operator; Cinematographer; Director of Photography; Lighting Director; Computer Graphic Artist; Non-Linear Video Editor; Audio Engineer; Broadcast Technician; Gaffer; Production Coordinator; Production Assistant; TV, Film, DVD, or Internet Producer/Director; Personal or Corporate Video. Some career options may require more than two years of college study. Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.

Radio, Television, and Film (RTVF) Courses

RTVF 295 Independent Studies in Radio, Television, and Film

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

RTVF 299 Experimental Offering in Radio, Television, and Film

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

RTVF 300 Mass Media and Society

Same As: JOUR 310
Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L4; Cal-GETC Area 4
C-ID: C-ID JOUR 100

Survey of the mass media: history, philosophy, structure and trends, as well as theories which help to explain effects and the importance as a social institution. Exploration of economics, technology, law, ethics, and
social issues, including cultural and ethnic diversity. This course is the same as JOUR 310, and only one may be taken for credit. (C-ID JOUR 100)

RTVF 302 Introduction to Digital Design & Storytelling

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU
General Education: Local GE L3

The course explores computer-based images, text, graphics, narration, video and music in today's visual and social media. Students will analyze media literacy, audience, narrative elements, themes and the review of visual media through the lens of story structure.

RTVF 303 Introduction to Writing for Digital Media

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGL C1000 with a grade of "C" or better

This course introduces students to writing scripts and other types of content for a variety of digital media platforms. An emphasis is placed on proper formatting, technical, conceptual, and stylistic issues related to writing fiction and non-fiction scripts. A significant part of the course will be focused on evaluating and improving writing for the media.

RTVF 304 Introduction to Multimedia

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: CISC 302 or JOUR 330
Transferable: CSU

This course is designed to familiarize students with designing and producing multimedia presentations. Emphasis will be given to developing skills in producing photographic, graphic, video and audio materials used for the World Wide Web and multimedia presentations. The course presents a description and history of computer-interactive multimedia. Students explore current uses of these technologies and receive instruction in practical application. Each student conceives,

writes, and designs a high-level multimedia program, using a user-friendly system. Some applications for multimedia include: professional presentations, specialized instruction research, Internet web pages, job training, interactive newsletters, computer games and point-of-purchase marketing.

RTVF 305 Film History I (1895-1949)

Same As: FMS 305
Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3A

This course is an introduction to the early history of motion pictures (1890s to 1949), with an emphasis on examining how film functions as a telling historical document. We will explore the evolution of cinema around the world, investigating the emergence of various styles and movements, the contributions of seminal directors and performers, the effects of developing technologies, and the evolution of cinematic storytelling techniques. **Please Note: RTVF/FMS 305 is not a prerequisite of RTVF/FMS 307 and the courses can be taken in any order, or concurrently**. This course is the same as FMS 305 and only one may be taken for credit.

RTVF 306 Introduction to Media Aesthetics and Cinematic Arts

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU

This course introduces the close analysis of film and television texts to students. It examines the broad questions of form and content, aesthetics and meaning, and history and culture. Students explore the diverse possibilities presented by the cinematic art form through an examination of a wide variety of productions, national cinemas, and film movements. Topics include modes of production, narrative and non-narrative forms, visual design, editing, sound, genre, ideology and critical analysis.

RTVF 307 Film History II (1950-present)

Same As: FMS 307
Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3A

This course is an introduction to the modern history of motion pictures (1950s to the present), with an emphasis on examining how film functions as a telling historical document. We will explore the evolution of cinema around the world, investigating the emergence of various styles and movements, the contributions of seminal directors and performers, the effects of developing technologies, and the evolution of cinematic storytelling techniques. **Please Note: RTVF/FMS 305 is not a prerequisite of RTVF/FMS 307 and the courses can be taken in any order, or concurrently**. This course is the same as FMS 307 and only one may be taken for credit.

RTVF 312 Beginning Radio and Podcasting

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Transferable: CSU

This is an introductory course in the theory and application of audio production techniques for radio and podcasting. Students will gain a basic understanding of audio equipment in both live and pre-recorded broadcasting (podcasting). This includes recording equipment, mixers, digital audio production, radio program formats, broadcast writing and announcing skills.

RTVF 315 Voice and Diction for Broadcasting

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC

This course is intended for all majors relating to broadcasting including radio production, communications media and television production. This course focuses on individual speech improvement through the study and practice of voice control and manipulation, proper breathing, and diction. Emphasis is placed on achieving correct pronunciation, enunciation, and voice production. Students will build on basic theories and practice of the interpretation of various oral selections chosen by the instructor and by the student.

RTVF 316 Introduction to Radio Workshop

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: RTVF 312 or 319
Transferable: CSU

Through lectures and supervised labs, this intermediate radio production course explores current radio industry trends and practices. Students in the course will take part in the planning and producing of original radio programs for pod-casting and internet streaming.

RTVF 319 Beginning Audio Production

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Transferable: CSU

This course serves as an introduction to the theory and practice of audio production for radio, television, film and digital recording applications. Students will learn the fundamentals of sound design and aesthetics, microphone use, and digital recording equipment. Students gain hands-on experience recording, editing, mixing and mastering audio. Upon completion, students will have basic knowledge of applied audio concepts, production workflow, equipment functions, and audio editing software.

RTVF 330 Beginning Single Camera Production

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Transferable: CSU
C-ID: C-ID FTVE 130

This course provides an introduction to the theory, terminology, and operation of single camera video production, including composition and editing techniques, camera operation, portable lighting, video recorder operation, audio control and basic editing. This course focuses on the aesthetics and fundamentals of scripting, producing, directing on location, post production, and exhibition/distribution.

RTVF 331 Beginning Television Studio Production

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Transferable: CSU

This course introduces theory, terminology and operation of a multi-camera television studio and control room. Topics include studio signal flow, directing, theory and operation of camera and audio equipment, switcher operation, fundamentals of lighting, graphics, video control and video recording and real-time video production.

RTVF 340 Television Production Workshop I

Units: 2
Hours: 108 hours LAB
Prerequisite: RTVF 331 with a grade of "C" or better
Transferable: CSU

Within this course, students plan the total operational process for actual television programs and videos (on air, closed-circuit, streaming or recorded content), as well as participate in and take responsibility for various aspects of the finished program, such as writing, camera operation, audio, switching, lighting, sets, graphics, editing and directing.

RTVF 341 Television Production Workshop II

Units: 2
Hours: 108 hours LAB
Prerequisite: RTVF 340 with a grade of "C" or better
Transferable: CSU

Within this course, students gain additional experience in creating television programming for on air, closed-circuit, streaming, or recorded content. Besides additional production experience, they may take more active roles as producers, directors and production managers. Participation as production crew positions and with field remotes are required.

RTVF 342 Television Production Workshop III

Units: 2
Hours: 108 hours LAB
Prerequisite: RTVF 341 with a grade of "C" or better
Transferable: CSU

This course is designed for the creation and production of new types of video programming for cable, business, industry and special groups. Students in this class will take leadership roles on productions produced by the class.

RTVF 349 Preparing the Cinematic Production

Units: 3
Hours: 54 hours LEC
Prerequisite: RTVF 330 with a grade of "C" or better
Transferable: CSU

This course provides students with an overview of the process of preparing to make a short film. Students will expand knowledge about crew position responsibilities, production paperwork, and all the processes that take place during pre-production to prepare to make a short film. Topics of beginning a career in film, script selection, casting, location scouting, expectations on set, and ethical issues in media will be discussed.

RTVF 350 Intermediate Film / Digital Cinema Production

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: RTVF 330 with a grade of "C" or better
Transferable: CSU

This course provides a hands-on project-based opportunity for students to create single-camera projects using a Hollywood-style field production. Students focus on producing and directing skills as well as understanding the roles of small film production crews. Development of narrative and documentary ideas for field production using both guerrilla and conventional set techniques are emphasized. Topics include producing, cinematography, directing, and non-linear editing. Off-campus field trips or production opportunities outside of class time may be required.

RTVF 354 Audio Editing for Film & Video Post Production

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: RTVF 362 and 362; For best success, students taking Audio Editing for Film and Video using the Soundtrack Pro software, should complete RTVF 362 before taking this course.
Transferable: CSU

This hands-on course provides understanding of how to edit audio and video files, repair field recordings, perform multi-track arranging and mixing, synchronize audio and video, analyze and fix common audio problems, and perform other creative sound design techniques. This course focuses on practical, professional techniques used to add music and sound effects to video and multimedia projects. This course is particularly designed for students who want to learn more about the basics of audio content creation, editing, and mixing in Soundtrack Pro as part of the Apple Final Cut Pro Studio.

Students may choose to pay an additional fee and take an Apple Certified End User exam at the conclusion of this course.

RTVF 360 Introduction to Motion Graphics: Adobe After Effects

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Transferable: CSU

This is an introductory motion graphics course for students interested in digital video, multimedia, 3-D computer animation, and emerging broadcast technologies. Students will gain hands-on experience with picture and video manipulation, 3-D compositing, paint and draw applications for film, broadcast, multimedia and the Internet.

RTVF 361 Intermediate Motion Graphics: Adobe After Effects

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: RTVF 360 with a grade of "C" or better
Transferable: CSU

The course presents an intermediate level exploration of the theory and practice of animation for video, film and the Internet. Students study the contemporary uses of the techniques of computer animation. Intermediate level skills are developed in Adobe After Effects including advanced techniques of graphic motion over time. Techniques for creating 3-D graphics are explored in depth. Exposure to additional computer applications may include Apple's Motion, Animation Master or others.

RTVF 362 Digital Non-Linear Video Editing

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Transferable: CSU

This course will provide an overview of the theory and practice of nonlinear editing for video and film utilizing nonlinear digital editing software. Students will examine the technical and aesthetic requirements of editing through the use of professional film and video dailies. Projects will explore computer graphics, audio/visual applications and digital video.

RTVF 365 Intermediate Film & Video Editing

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: RTVF 362 and 362 with grades of "C" or better
Transferable: CSU

This course is designed for previous users of non-linear editing software or for those wishing to increase their overall effectiveness with film and video editing software. This course helps students with improved project workflow, trimming shortcuts, advanced compositing, special effects and distribution for broadcast and film or in emerging technologies. Instruction also covers tips and tricks when using filters, nesting sequences and using variable speed controls to get movie quality effects.

RTVF 368 Scriptwriting for Film, Video & Multimedia

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGL C1000
Transferable: CSU
General Education: Local GE L3

Students will learn the mechanics of scriptwriting and formating used for film and television as well as the writer's role in pre-production and production. Additionally, students are introduced to non-linear writing for new interactive multimedia technologies.

RTVF 370 Broadcast Writing & Announcing

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Transferable: CSU

Students learn fundamental techniques of broadcasting with an emphasis upon speaking and writing. Students practice with specified formats in the television studio and radio workshop. Lab experiences and review of microphone use and performance in-front of the camera are included. A variety of non-news writing styles are explored.

RTVF 371 Hollywood TV and Film Studios: A Behind the Scenes Experience

Units: 1
Hours: 18 hours LEC
Prerequisite: RTVF 330, 330, 331, or 331 with a grade of "C" or better
Transferable: CSU

This course provides an overview and introduction to video and film production techniques utilized by professionals in and around Hollywood, CA. Students will learn about the operation of motion picture and television studios from behind the scenes. A variety of topics including preproduction, production and post-production techniques, set design and lighting, and the history of Hollywood-style
production will be included. Guest speakers will provide a professional perspective on entry-level job skills and analysis of current workforce development.

RTVF 376 Advertising

Same As: MKT 314
Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU

This course is an introduction to the field of advertising, its history, purpose, institutions, and functions. Studies are made of the various media used in general advertising, as well as the effective use of these media. Students will produce ads and

advertising campaigns. This course is the same as MKT 314, and only one may be taken for credit.

RTVF 378 Acting for the Camera

Same As: TA 356
Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: RTVF 370 or TA 350 with a grade of "C" or better
Transferable: CSU; UC

This is an introductory course in the theory and techniques of acting for film and video, comparing the differences between stage acting and acting for the camera. Scenes and commercials are enacted and played back on videotape for class critiquing. Students experience single camera and multiple-camera studio production and performance techniques. This course is the same as TA 356, and only one may be taken for credit.

RTVF 380 Broadcast Journalism

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: JOUR 300, RTVF 362, and RTVF 370; and the ability to type.
Transferable: CSU

The student will gain a general knowledge of the field of radio/television news writing and production. Through theoretical and practical application, the student will understand and practice writing, filming, editing, and preparing stories for broadcast radio and television news.

RTVF 495 Independent Studies in Radio, Television, and Film

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

RTVF 498 Work Experience in Radio, Television and Film

Units: 0.5 - 4
Hours: 27 - 216 hours LAB
Prerequisite: None.
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position or job related to career goals in Radio, Television and Film.
Transferable: CSU

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in transfer level degree occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and complete 27 hours of related work experience for 0.5 unit. An additional 27 hours of related work experience is required for each additional 0.5 units. 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.

RTVF 499 Experimental Offering in Radio, Television, and Film

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU

This is the experimental courses description.

Real Estate

CRC offers, in addition to a Real Estate A.A. Degree, a variety of courses available which satisfy State of California prerequisites for Real Estate Salesperson and Real Estate Broker examinations.

Degrees and Certificates Offered

A.A. in Real Estate

Real Estate Broker Certificate

Real Estate Salesperson Certificate

Dean Tyler Rollins

Department Chair Eric Granquist

Phone (916) 691-7226

Email rollint@crc.losrios.edu

Associate Degree

A.A. in Real Estate

CRC offers, in addition to a Real Estate AA Degree, a variety of courses available which satisfy State of California prerequisites for Real Estate Salesperson and Real Estate Broker examinations.

Highlights include:
* Instruction by trained, working real estate professionals
* Preparation for State of California real estate license examinations
* Training in one of the most lucrative careers in today's world
* A lab with tutorial assistance

APPLICANTS FOR THE REAL ESTATE SALESPERSON EXAM:
To qualify to take an examination for a Real Estate Salesperson License, an applicant must submit evidence (transcripts) of having completed a college-level course in Real Estate Principles.

In addition to Real Estate Principles the applicant must also (either when qualifying for the examination, when applying for the original license or within eighteen months after license issuance) submit evidence of having completed TWO additional basic real estate courses from the following CRC course offerings. (It is recommended that Real Estate Practice be one of the courses selected.)
- Accounting 301 (1A)
- Business Law 340 (18A)
- Introduction to Escrow Procedures
- Legal Aspects of Real Estate
- Real Property Management
- Real Estate Appraisal
- Real Estate Economics
- Real Estate Finance
- Real Estate Practice

APPLICANTS FOR THE REAL ESTATE BROKER EXAMINATION
An applicant for the Broker examination must have completed eight college-level courses, in addition to the experience/ educational requirements. These eight courses should include the following CRC course offerings:
- Real Estate Principles
- Real Estate Practice
- Legal Aspects of Real Estate
- Real Estate Finance
- Real Estate Appraisal
- Real Estate Economics or Accounting 301 (1A)
- and two courses from the following group: *
- Business Law 340 (18A)
- Real Property Management
- Introduction to Escrow Procedures
- Advanced Appraisal

* If applicant completes both Accounting and Real Estate Economics, only one additional course is required.

Note to Transfer Students:
If you are interested in transferring to a four-year college or university to pursue a bachelor's degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate's degree in this major may be different from the requirements needed for the Bachelor's degree.

Degree Requirements

Course Code	Course Title	Units
BUSINESS CORE:		
ACCT 301	Financial Accounting	4
BUS 310	Business Communications	3
BUS 330	Managing Diversity in the Workplace	3
BUS 340	Business Law	3
BUS 300	Introduction to Business	3
BUSTEC 302	Computer-Keyboarding	2
MKT 300	Principles of Marketing	3
ECON 302	Principles of Macroeconomics (3)	3
or BUS 320	Concepts in Personal Finance (3)	
or ECON 320	Concepts in Personal Finance (3)	
or ECON 100	Introduction to Economics (3)	
Computer science courses wthin Business Core: [CISC 310] or [CISC 302/JOUR 333 + 2 units from the listed CISC/CISA courses]:		
CISC 310	Introduction to Computer Information Science (3)	2 - 4
or [[CISC 302	Computer Familiarization (2)	
or JOUR 330]	Computer Familiarization (2)	
and [[[[[[[CISA 340	Presentation Graphics (2)	
or CISA 320]	Introduction to Database Management (1)	
or CISA 315]	Introduction to Electronic Spreadsheets (2)	
or CISA 305]]	Beginning Word Processing (2)	
REAL ESTATE FOCUS:		
RE 300	California Real Estate Principles	3
RE 110	Legal Aspects of Real Estate	3
RE 120	Real Estate Practice	3

Course Code	Course Title	Units
RE 130	Real Estate Finance	3
RE 342	Real Estate Appraisal	3
RE 190	Real Property Management	3
Total Units:		**44 - 46**

The Real Estate Associate in Arts (A.A.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Career Information

Real Estate Agent; Real Estate Broker; Real Estate Appraiser
Some career options may require more than two years of college study.

Certificates of Achievement

Real Estate Broker Certificate

CRC offers, in addition to a Real Estate AA degree, a variety of courses which satisfy State of California prerequisites for Real Estate Salesperson and Real Estate Broker examinations.

Highlights include:
* Instruction by experienced real estate professionals.
* Exposure to and understanding of the wide variety of organizations and professions within the real estate industry.
* Establishing a foundation to enter a rewarding career in the field of real estate.
* Preparation for State of California real estate salesperson and/or broker license examinations.

Applicants for the California Real Estate Examinations must complete education and experience requirements in order to apply for the licensing exam. To fulfill the education requirement to take an examination for a California Real Estate Brokers License, an applicant must submit evidence (transcripts) of successful completion of eight (8) college level courses. As offered at CRC, the following list will meet California's education requirement:

1) Real Estate Practice (RE 120) or Internship in Real Estate (RE 296)*
2) Legal Aspects of Real Estate (RE 110)
3) Real Estate Finance (RE 130)
4) Real Estate Appraisal (RE 140)
5) Real Estate Economics (RE 150) or Accounting (ACCT 301)*
6) Three (3) courses from the following list**:
• Real Estate Principles (RE 300)
• Real Property Management (RE 190)
• Business Law (BUS 340)

*Only two (2) additional courses from Item #6 are required if:
a) both Real Estate Practice and CRC's Internship in Real Estate are successfully completed, or
b) both Real Estate Economics and Accounting are successfully completed.
**Only one (1) additional course from Item #6 is required if Real Estate Practice, Internship in Real Estate, Real Estate Economics and Accounting are completed successfully.

It is recommended that students consult with Real Estate department faculty in order to ensure their coursework meets both local college requirements as well as those for the California Real Estate Brokers License Examination.

Certificate Requirements

Course Code	Course Title	Units
RE 120	Real Estate Practice (3)	3
or RE 296	Internship in Real Estate (3)	
RE 110	Legal Aspects of Real Estate	3
RE 130	Real Estate Finance	3
RE 342	Real Estate Appraisal	3
RE 150	Real Estate Economics (3)	3 - 4
or ACCT 301	Financial Accounting (4)	
A minimum of 9 units from the following:		9
RE 120	Real Estate Practice (3)	
or RE 296	Internship in Real Estate (3)	
RE 150	Real Estate Economics (3)	
or ACCT 301	Financial Accounting (4)	
RE 190	Real Property Management (3)	
RE 300	California Real Estate Principles (3)	
BUS 340	Business Law (3)	
Total Units:		**24 - 25**

[1]If both RE 120 and RE 296 are successfully completed, one may be used to satisfy a course in the 9-unit requirement. If both RE 150 and ACCT 301 are successfully completed, one may be used to satisfy a course in the 9-unit requirement.

Student Learning Outcomes

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

- PSLO #1: Demonstrate the ability to understand real estate principles and concepts and how they impact the business of real estate.
- Apply a basic knowledge of the fundamental real estate concepts to real estate transactions.
- Define technical terminology involved in the real estate field.
- Demonstrate a general understanding of the duties and expectations of a real estate salesperson and a real estate broker.
- Describe the roles and responsibilities of entities and professionals within the real estate industry.
- Satisfy the education requirements to apply for the California Real Estate Broker Licensing Examination.
- PSLO #2: Demonstrate the ability to think critically and analyze problems so as to be able to apply real estate principles and concepts to diagnose and resolve real and hypothetical real estate issues.
- Understand legal and ethical standards and apply them to fact patterns to reach defensible conclusions.
- Demonstrate the ability to find and use resource materials to conduct research and obtain information

needed to facilitate the completion of an educational or a career task.

Career Information

Career opportunities in the real estate industry are found in public agencies and private enterprises that are involved in residential, commercial, industrial and agricultural land uses. The real estate field offers careers in sales, leasing, property management, lending, appraisal, title insurance, escrow services, development and investment. Upon acquiring a California Real Estate Broker's License, an individual may own a company that is involved with real estate sales, leasing, and/or property management.

Real Estate Salesperson Certificate

CRC offers, in addition to a Real Estate AA Degree, a variety of courses which satisfy State of California prerequisites for Real Estate Salesperson and Real Estate Broker examinations.

Highlights include:
* Instruction by experienced real estate professionals
* Exposure to and understanding of the wide variety of organizations and professions within the real estate industry
* Establish a foundation to enter a rewarding career in the field of real estate
* Preparation for State of California real estate salesperson license examination

Applicants for the California Real Estate Examination:
To qualify to take an examination for a California Real Estate Salesperson License, an applicant must submit evidence (transcripts) of successful completion of three (3) college-level courses in:

1. Real Estate Principles (RE 300), and
2. Real Estate Practice (RE 120) or Internship in Real Estate (RE 296), and
3. One (1) course from the following list of CRC offerings:
• General Accounting (ACCT 301)
• Business Law (BUS 340)
• Legal Aspects of Real Estate (RE 110)
• Real Estate (RE 120) - if Item #2 satisfied with RE 296
• Real Estate Finance (RE 130)
• Real Estate Appraisal (RE 140)
• Real Estate Economics (RE 150)
• Real Property Management (RE 190)
• Internship in Real Estate (RE 296) - if Item #2 satisfied with RE 120

It is recommended that students consult with Real Estate department faculty in order to ensure their coursework meets both local college requirements as well as those for the California Real Estate Salesperson License Examination.

Certificate Requirements

Course Code	Course Title	Units
RE 300	California Real Estate Principles	3
RE 120	Real Estate Practice (3)	3
or RE 296	Internship in Real Estate (3)	
A minimum of 3 units from the following:		3[1]
ACCT 301	Financial Accounting (4)	
BUS 340	Business Law (3)	
RE 110	Legal Aspects of Real Estate (3)	
RE 120	Real Estate Practice (3)	
or RE 296	Internship in Real Estate (3)	
RE 130	Real Estate Finance (3)	
RE 342	Real Estate Appraisal (3)	
RE 150	Real Estate Economics (3)	
RE 190	Real Property Management (3)	
Total Units:		**9**

[1]If both RE 120 and RE 296 have been successfully completed, no additional courses are required to satisfy this 3-unit requirement.

Student Learning Outcomes

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

- PSLO #1: Demonstrate the ability to understand real estate principles and concepts and how they impact the business of real estate.
- Apply a basic knowledge of the fundamental real estate concepts to real estate transactions.
- Define technical terminology involved in the real estate field.
- Demonstrate a general understanding of the duties and expectations of a real estate salesperson.
- Describe the roles and responsibilities of entities and professionals in the real estate industry.
- Satisfy the education requirements to apply for the California Real Estate Salesperson Licensing Examination.
- PSLO #2: Demonstrate the ability to think critically and analyze problems so as to be able to apply real estate principles and concepts to diagnose and resolve real and hypothetical real estate issues.
- Understand legal and ethical standards and apply them to fact patterns to reach defensible conclusions.
- Demonstrate the ability to find and use resource materials to conduct research and obtain information needed to facilitate the completion of an educational or a career task.

Career Information

Career opportunities in the real estate industry may be found in public agencies and private enterprises that are involved in residential, commercial, industrial, and agricultural land uses. The real estate field offers careers in sales, leasing, property management, lending, appraisal, title insurance, escrow services, development and investment.

Real Estate (RE) Courses

RE 110 Legal Aspects of Real Estate

Units: 3
Hours: 54 hours LEC
Prerequisite: None.

This course is an introduction to federal and California real estate laws. Topics include: sources of law and the judicial system; agency; duties and responsibilities of licensees; contracts and their application to real estate; property ownership and management; real estate security devices; property rights, liens and homesteads; fair housing laws; landlord-tenant law, land use controls, and title insurance and escrow. Completion of the course applies toward the California Department of Real Estate education requirements for the Salesperson and Broker examinations.

RE 120 Real Estate Practice

Units: 3
Hours: 54 hours LEC
Prerequisite: None.

This course covers practices and techniques of residential real estate brokerage and sales, including ethics, fair housing, implicit bias, agency, goal setting, prospecting, listing, advertising, escrow procedures, financing, taxation, marketing, property management, leasing and business opportunities. Course applies toward California Department of Real Estate education requirements for the Salesperson and Broker examinations.

RE 130 Real Estate Finance

Units: 3
Hours: 54 hours LEC
Prerequisite: None.

This course is an analysis of real estate financing, including lending policies and issues in financing transactions for residential, commercial, and special purpose properties. Methods of financing properties are emphasized. The course applies toward the State of California's educational requirements for the Salesperson and Broker examinations.

RE 141 Advanced Appraisal

Units: 3
Hours: 54 hours LEC
Prerequisite: RE 342 with a grade of "C" or better

This course discusses advanced appraisal concepts with an emphasis on market and income analysis, capitalization techniques, rate derivation, compound interest tables, cost and sales comparison approaches; and the appraisal of specific income properties such as apartments, office buildings, shopping centers and industrial properties.

RE 150 Real Estate Economics

Units: 3
Hours: 54 hours LEC
Prerequisite: None.

This course covers the nature and classification of real estate and real estate investments, economic development of real property, real estate cycles and market trends. Governmental and private sector influence on the economics of real estate is covered. It is recommended that this course be taken last in the real estate course series.

RE 160 Introduction to Escrow Procedures

Units: 3
Hours: 54 hours LEC
Prerequisite: None.

This course covers the functions and responsibilities of the escrow holder, including actual preparation of escrow instructions and documents in a typical real estate transaction. Audit, disbursement, the issuance of closing statements and analysis of title insurance policies are covered.

RE 161 Advanced Escrow Procedures

Units: 3
Hours: 54 hours LEC
Prerequisite: RE 160 with a grade of "C" or better

This course covers unusual and difficult types of escrow, including the evaluation of possible solutions with emphasis on real estate loans, financing instruments and exchanges.

RE 190 Real Property Management

Units: 3
Hours: 54 hours LEC
Prerequisite: None.

This course covers the day-to-day operation and management of real property including: marketing procedures, leases, maintenance, accounting and economics, record keeping, management forms, legal requirements, laws, human relations, employer responsibilities and management.

RE 295 Independent Studies in Real Estate

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

RE 296 Internship in Real Estate

Units: 3
Hours: 18 hours LEC; 108 hours LAB
Prerequisite: RE 300 with a grade of "C" or better

This course provides students with a supervised, structured, hands-on experience in real estate sales and introduces/ develops the skills necessary to assist them in obtaining employment in the real estate industry. Course content will include understanding the benefits and responsibilities of an internship, developing workplace skills identified by local real estate professionals, applying student learning outcomes to work-related activities, and acquiring/enhancing knowledge of the real estate industry through lecture, textbook readings, and guest speakers. In addition to 18 hours of lecture, the student is required to complete 108 hours of work-related internship over the semester.

RE 299 Experimental Offering in Real Estate

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

RE 300 California Real Estate Principles

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU

This fundamental real estate course covers the basic laws and principles of California real estate, giving understanding, 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 342 Real Estate Appraisal

Units: 3
Hours: 62 hours LEC
Prerequisite: None.
Transferable: CSU

This course covers entry-level education in the real estate appraisal field, concentrating on the appraisal of single-family residences (real property). Course content includes the legal characteristics of real estate, the economic principles of appraisals, the appraisal process, the approaches to valuation, and the methods used to determine real estate value. The course covers Basic Appraisal Principles (30 hours) and Basic Appraisal Procedures (30 hours) pursuant to the Appraiser Qualifications Board's (AQB) Real Property Appraiser Qualifications Criteria (effective January 1, 2022) and meets the California Bureau of Real Estate Appraisers (BREA) licensing requirements for Basic Education in appraisal. The course also meets the California Department of Real Estate (DRE) college-level educational requirements (3 semester units) for the Salesperson and Broker licensing examinations.

RE 495 Independent Studies in Real Estate

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

RE 499 Experimental Offering in Real Estate

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU

This is the experimental courses description.

Recreation

Recreation courses provide an overview of responsibilities within the field of sport and recreation management, and new and emerging issues.

Dean Collin Pregliasco

Department Chair Minet Gunther

Phone (916) 691-7261

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Recreation (RECR) Courses

RECR 299 Experimental Offering in Recreation

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

RECR 320 Recreation Activity Leadership

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position, or job related to recreation with a cooperating site supervisor. Students are advised to consult with the Kinesiology, Health and Athletics Department faculty to review specific certificate and degree work experience requirements.
Transferable: CSU

This course will expose students to practical application and responsibilities within the field of sport and recreation management. They will have the opportunity to assist within the Cosumnes River College Kinesiology, Athletic's and Dance Department on a variety of projects including marketing, game day management, sports information, fundraising and/or scheduling. Internship required and must be approved by instructor. This is a required course for obtaining a degree in Sports Management and Recreation.

RECR 499 Experimental Offering in Recreation

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

Science

CRC students may choose courses in the various disciplines of science to meet any of several objectives. Courses are designed to: Prepare students for transfer and continuation of studies at other colleges or universities (chemistry, biology, medicine, etc.); meet general education requirements for non-science majors; prepare students for immediate entry into a science-based technology career; and provide for career advancement and continuing education.

Many courses include hands-on practical experience and/or opportunities for work experience in local industry and business.

The student, in consultation with a counselor, should choose science courses to meet his or her program, transfer, or general education requirements. The Counseling Center also has information regarding science requirements for transfer to other four-year institutions.

Degrees and Certificates Offered

A.S. in Environmental Studies & Sustainability

A.S. in General Science

A.S. in Geography

Sustainability Certificate

Dean Banafsheh Amini

Phone (916) 691-7204

Email aminib2@crc.losrios.edu

Associate Degrees

A.S. in Environmental Studies & Sustainability

The Environmental Studies & Sustainability Associate of Science degree is an interdisciplinary and multidisciplinary program of study that presents a broad overview of ecological issues from a variety of perspectives in the natural, physical, and social sciences. The coursework examines the interplay between natural and social systems, and the ideological foundations of humankind's attitudes and behaviors with respect to their ever-changing environment. This program is designed to prepare students to research, analyze, and propose solutions to the myriad environmental challenges facing the world today.

This degree is designed to correlate with the lower division courses required to transfer into an Environmental Studies program at many four-year institutions as well as provide broad-based environmental education for transfer in related disciplines.

The disciplines of environmental studies and geography are complementary fields, both focused on aspects of human-environment interaction. This complementarity is reflected in the many 4-year institutions that house combined Geography and Environmental Study programs. Students interested in double-majoring in these two closely-related disciplines, and/or simultaneously earning a Certificate in Geographic Information Systems, are encouraged to examine the required coursework and plan their program of study accordingly.

Students should use PROJECT ASSIST (http://www.assist.org) to research lower division major requirements at the transfer institution of their choice and should also work with the program adviser and a counselor to determine the appropriate transfer coursework.

Students interested in pursuing an Environmental Science major should consult with science faculty and counselors to tailor the specific coursework necessary to transfer to the 4-year institution of their choice.

Degree Requirements

Course Code	Course Title	Units
Core Courses:		
GEOG 302	Environmental Studies & Sustainability	3
BIOL 350	Environmental Biology (3)	3
or BIOL 352	Conservation Biology (3)	
ECON 306	Environmental Economics	3
Field/Applied Courses:		
ECON 304	Principles of Microeconomics	3
Natural Science/Ecology Courses:		
GEOG 310	Human Geography: Exploring Earth's Cultural Landscapes	3
Chemistry Courses:		
A minimum of 3 units from the following:		3
GEOG 391	Field Studies in Geography: Mountain Landscapes (1 - 4)	
GEOG 392	Field Studies in Geography: Coastal Landscapes (1 - 4)	
GEOG 393	Field Studies in Geography: Arid Landscapes (1 - 4)	
GEOG 394	Field Studies in Geography: Volcanic Landscapes (1 - 4)	
GEOL 390	Field Studies in Geology (1 - 4)	
GEOG 331	Exploring Maps and Geographic Technologies (3)	
GEOG 335	Introduction to Geographic Information Systems Applications (3)	
Earth Science Courses:		
A minimum of 3 units from the following:		3
BIOL 308	Contemporary Biology (3)	
BIOL 309	Contemporary Biology Laboratory (1)	
BIOL 400	Principles of Biology (5)	
Quantitative Courses:		
A minimum of 4 units from the following:		4
CHEM 305	Introduction to Chemistry (5)	
CHEM 400	General Chemistry I (5)	
Social Science Courses:		
A minimum of 3 units from the following:		3
GEOG 300	Physical Geography: Exploring Earth's Environmental Systems (3)	
GEOG 301	Physical Geography Laboratory (1)	
GEOG 305	Global Climate Change (3)	

Course Code	Course Title	Units
GEOL 300	Physical Geology (3)	
GEOL 301	Physical Geology Laboratory (1)	
A minimum of 3 units from the following:		3
ECON 310	Statistics for Business and Economics (3)	
PSYC 330	Introductory Statistics for the Behavioral Sciences (3)	
STAT C1000E	Introduction to Statistics (4)	
MATH 400	Calculus I (5)	
STAT C1000H	Introduction to Statistics - Honors (4)	
Total Units:		**31**

The Environmental Studies & Sustainability Associate in Science (A.S.) degree may be obtained by completion of the required program, plus the local CRC General Education Requirement, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

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

- PSLO-1: Articulate an understanding of the natural environment and human societies' relationship to it. This includes the ability to:
- 1. Communicate effectively about environmental issues and sustainability, correctly utilizing vocabulary while indicating a complex understanding of disciplines in the program.
- 2. Articulate an awareness of the relevance of environmental studies to the student's life and wider community at both local and global scales.
- 3. Recognize the importance of interdisciplinary and multidisciplinary approaches to solving environmental problems.<P ...>
- PSLO-2: Evaluate and analyze environmental processes and human impacts on the natural environment. This includes the ability to:
- 1. Use logical and quantitative reasoning to solve environmental problems.
- 2. Analyze critical environmental problems facing the world today.
- 3. Evaluate data and draw reasonable conclusions.
- 4. Utilize the scientific method.
- 5. Employ information-gathering tools to investigate environmental ideas.<P ...>
- PSLO-3: Recognize the ethical dimensions of decisions and actions and engage in the ethical reasoning necessary to be a responsible local and global citizen. This includes the ability to:
- 1. Recognize the ethical implications of research and the responsibility to use knowledge wisely.
- 2. Articulate the value of understanding environmental systems.<P ...>
- PSLO-4: Transfer to a 4-year program and further prepare for employment in an environmental career.

Career Information

Natural Resource Management; Forestry; Range Management; Park Ranger; Wildlife Biology; Agriculture; Soil and Water Conservation; Land Use Planning; Waste Management; Environmental Education; Environmental Policy And Planning; Environmental Law; Environmental Consulting; Environmental Lobbying; Environmental Planning; Environmental Protection; Environmental Compliance; Environmental Engineering; Air Quality Control; Landscape Architecture; Urban and Regional Planning; Alternative Energy Development; Risk Analysis; Contaminated Lands Reclamation; Research; Consulting

A.S. in General Science

Areas of Study include:

- Biological Anthropology
- Astronomy
- Biology
- Chemistry
- Engineering
- Physical Geography
- Geology
- Physics

Eighteen (18) units of transfer-level course work in science are required. Two laboratory courses must be included: one in the physical sciences and one in the biological sciences. Courses may be selected from astronomy, biology, chemistry, geology, physical geography, biological anthropology, and physics. The student, in consultation with a counselor, should choose science courses to meet their program, transfer, or general education requirements.

Students interested in transferring to a four-year university with a science major are encouraged to complete a science AS or AS-T degree such as Anthropology, Biology, Chemistry, Engineering, Geography, Geology, or Physics. This General Science degree may not include the majors-level transfer courses needed for many science majors. Students are strongly recommended to see a counselor for guidance.

Degree Requirements

Course Code	Course Title	Units
Life Science with Lab :		
A minimum of 4 units from the following:		4
ANTH 300	Biological Anthropology (3)	
and ANTH 301	Biological Anthropology Laboratory (1)	
ANTH 480	Honors Biological Anthropology (3)	
and ANTH 482	Honors Biological Anthropology Laboratory (1)	
BIOL 308	Contemporary Biology (3)	
and BIOL 309	Contemporary Biology Laboratory (1)	
BIOL 400	Principles of Biology (5)	
BIOL 410	Principles of Botany (5)	

Course Code	Course Title	Units
BIOL 420	Principles of Zoology (5)	
BIOL 430	Anatomy and Physiology (5)	
BIOL 431	Anatomy and Physiology (5)	
BIOL 440	General Microbiology (4)	
Physical Science with Lab:		
A minimum of 3 units from the following:		3
ASTR 300	Introduction to Astronomy (3)	
and ASTR 400	Astronomy Laboratory (1)	
CHEM 300	Beginning Chemistry (4)	
CHEM 305	Introduction to Chemistry (5)	
CHEM 306	Introduction to Organic and Biological Chemistry (5)	
CHEM 309	Integrated General, Organic, and Biological Chemistry (5)	
CHEM 400	General Chemistry I (5)	
CHEM 401	General Chemistry II (5)	
CHEM 420	Organic Chemistry I (5)	
CHEM 421	Organic Chemistry II (5)	
GEOG 300	Physical Geography: Exploring Earth's Environmental Systems (3)	
and GEOG 301	Physical Geography Laboratory (1)	
GEOL 300	Physical Geology (3)	
and GEOL 301	Physical Geology Laboratory (1)	
GEOL 305	Earth Science (3)	
and GEOL 306	Earth Science Laboratory (1)	
GEOL 310	Historical Geology (3)	
and GEOL 311	Historical Geology Laboratory (1)	
ENGR 304	How Things Work (3)	
PHYS 350	General Physics (4)	
PHYS 360	General Physics (4)	
PHYS 370	Introductory Physics - Mechanics and Thermodynamics (5)	
PHYS 380	Introductory Physics - Electricity and Magnetism, Light and Modern Physics (5)	
PHYS 411	Mechanics of Solids and Fluids (4)	
PHYS 421	Electricity and Magnetism (4)	
PHYS 431	Heat, Waves, Light and Modern Physics (4)	
Additional Science Courses :		
A minimum of 11 units from the following:		11[1]
ANTH 300	Biological Anthropology (3)	
ANTH 301	Biological Anthropology Laboratory (1)	
ANTH 480	Honors Biological Anthropology (3)	
ANTH 482	Honors Biological Anthropology Laboratory (1)	
ASTR 300	Introduction to Astronomy (3)	
ASTR 400	Astronomy Laboratory (1)	
BIOL 308	Contemporary Biology (3)	
BIOL 309	Contemporary Biology Laboratory (1)	
BIOL 342	The New Plagues: New and Ancient Infectious Diseases Threatening World Health (3)	
BIOL 350	Environmental Biology (3)	
BIOL 352	Conservation Biology (3)	
BIOL 400	Principles of Biology (5)	
BIOL 410	Principles of Botany (5)	
BIOL 420	Principles of Zoology (5)	
BIOL 430	Anatomy and Physiology (5)	
BIOL 431	Anatomy and Physiology (5)	
BIOL 440	General Microbiology (4)	
CHEM 300	Beginning Chemistry (4)	
CHEM 305	Introduction to Chemistry (5)	
CHEM 306	Introduction to Organic and Biological Chemistry (5)	
CHEM 309	Integrated General, Organic, and Biological Chemistry (5)	
CHEM 400	General Chemistry I (5)	
CHEM 401	General Chemistry II (5)	
CHEM 420	Organic Chemistry I (5)	
CHEM 421	Organic Chemistry II (5)	
ENGR 304	How Things Work (3)	
GEOG 300	Physical Geography: Exploring Earth's Environmental Systems (3)	
GEOG 301	Physical Geography Laboratory (1)	
GEOG 305	Global Climate Change (3)	
GEOG 306	Weather and Climate (3)	
GEOL 300	Physical Geology (3)	
GEOL 301	Physical Geology Laboratory (1)	
GEOL 305	Earth Science (3)	
GEOL 306	Earth Science Laboratory (1)	
GEOL 310	Historical Geology (3)	
GEOL 311	Historical Geology Laboratory (1)	
GEOL 330	Introduction to Oceanography (3)	
GEOL 390	Field Studies in Geology (1 - 4)	
PHYS 310	Conceptual Physics (3)	
PHYS 350	General Physics (4)	
PHYS 360	General Physics (4)	
PHYS 370	Introductory Physics - Mechanics and Thermodynamics (5)	
PHYS 380	Introductory Physics - Electricity and Magnetism, Light and Modern Physics (5)	
PHYS 411	Mechanics of Solids and Fluids (4)	
PHYS 421	Electricity and Magnetism (4)	
PHYS 431	Heat, Waves, Light and Modern Physics (4)	
Total Units:		**18**

[1]Courses used in A or B above will not count towards C, except units exceeding the 4 or 3 unit minimum in A and B. For example, a student completing the 5 unit CHEM 309 under B

could apply 2 of those units towards C. A total of 18 science units is required.

The General Science Associate in Science (A.S.) degree may be obtained by completion of the required program, plus the local CRC General Education Requirement, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

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

- explain the core perspectives of the scientific method and apply it to at least one scientific discipline. (PSLO 1)
- solve introductory problems of a conceptual and/or numerical nature of at least one scientific discipline. (PSLO 2)
- accurately apply the basic vocabulary and concepts of at least one scientific discipline verbally and in writing. (PSLO 3)
- recognize the use and misuse of scientific concepts in society including politics and the media. (PSLO 4)

A.S. in Geography

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, plants, etc. Many human and physical geographers 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 CRC Geography program offers courses that satisfy lower division General Education requirements in both the physical and social sciences. In addition, the program offers an Associate Degree in Geography that provides students with a solid foundation in geography as well as the standard prerequisites for upper-division coursework leading to the baccalaureate degree. Students may also earn a certificate in Geographic Information Systems (GIS). Students planning to transfer to a four-year school with a major in Geography should consult the lower division requirements at the university they plan to attend.

Note to Transfer Students:
If you are interested in transferring to a four-year college or university to pursue a bachelor's degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate's degree in this major may be different from the requirements needed for the Bachelor's degree.

Highlights include:
* Comprehensive course offerings including a Physical Laboratory as well as specialized training in Geographic Information Systems (GIS)
* Program's students have won top awards at state-level competitions annually since 1999
* Field study courses to Yosemite, Pt. Reyes, Monterey/Big Sur, Tahoe, and the Eastern Sierra
* Internships available with State of California, County of Sacramento, and Federal Land Management Agencies
* Three courses fulfill the CRC and CSU multicultural requirement
* Day, evening, and online sections

Degree Requirements

Course Code	Course Title	Units
Fall or Spring semester:		
GEOG 300	Physical Geography: Exploring Earth's Environmental Systems	3[1]
Fall or Spring semester (best if concurrent with GEOG 300):		
GEOG 301	Physical Geography Laboratory	1
Fall or Spring semester:		
GEOG 310	Human Geography: Exploring Earth's Cultural Landscapes	3
Fall Semester:		
GEOG 331	Exploring Maps and Geographic Technologies (3)	3
Check with departments for scheduled offering:		
PSYC 330	Introductory Statistics for the Behavioral Sciences (3)	3 - 4
or STAT C1000E	Introduction to Statistics (4)	
or STAT C1000H	Introduction to Statistics - Honors (4)	
or ECON 310	Statistics for Business and Economics (3)	
Check with departments for scheduled offering:		
A minimum of 6 units from the following:		6
ANTH 310	Cultural Anthropology (3)	
BIOL 308	Contemporary Biology (3)	
or BIOL 309	Contemporary Biology Laboratory (1)	
or BIOL 350	Environmental Biology (3)	
ECON 302	Principles of Macroeconomics (3)	
or ECON 304	Principles of Microeconomics (3)	
GEOG 302	Environmental Studies & Sustainability (3)	
GEOG 305	Global Climate Change (3)	
GEOG 306	Weather and Climate (3)	
GEOG 320	World Regional Geography (3)	
GEOG 322	Geography of California (3)	
GEOG 335	Introduction to Geographic Information Systems Applications (3)	

Course Code	Course Title	Units
GEOG 391	Field Studies in Geography: Mountain Landscapes (1 - 4)	
GEOG 392	Field Studies in Geography: Coastal Landscapes (1 - 4)	
GEOG 393	Field Studies in Geography: Arid Landscapes (1 - 4)	
GEOG 394	Field Studies in Geography: Volcanic Landscapes (1 - 4)	
GEOL 300	Physical Geology (3)	
GEOL 301	Physical Geology Laboratory (1)	
GEOL 330	Introduction to Oceanography (3)	
HIST 307	History of World Civilizations to 1500 (3)	
or HIST 308	History of World Civilizations, 1500 to Present (3)	
or HIST 360	History of African Civilizations (3)	
or HIST 370	History of the Americas through the 19th Century Wars of Independence (3)	
or HIST 371	History of the Americas from the 19th Century Wars of Independence to the Present (3)	
HUM 320	Asian Humanities (3)	
or HUM 324	Global Islam: Culture and Civilization (3)	
or HUM 332	American Humanities (3)	
PHIL 352	Introduction to World Religions (3)	
POLS 310	Introduction to International Relations (3)	
SOC 300	Introductory Sociology (3)	
Total Units:		**19 - 20**

[1]A minimum of 60 units is required for the A.S. degree which includes core courses, electives, and general education (GE) graduation requirements. Geography majors are encouraged to complete additional GE requirements from a list of suggested courses on file in the Geography Department and at the Counseling Center. Students should use PROJECT ASSIST (http://www.assist.org) to research lower division major requirements at the transfer institution of their choice and also work with a counselor to determine the most appropriate transfer coursework.

The Geography Associate in Science (A.S.) degree may be obtained by completion of the required program, plus the local CRC General Education Requirement, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

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

- SLO#1: demonstrate understanding of the global natural and cultural environments and the geographic methods by which they are studied.
- SLO#2: compare and contrast the general biophysical and socio-cultural differences and similarities among world regions that operate through time and over space.
- SLO#3: evaluate and analyze critical geographic issues facing the world today.
- SLO#4: recognize the diversity of peoples, places, and events globally as well as within specific geographic regions.
- SLO#5: interpret maps and mapped data utilizing basic map elements, including scales, common coordinate systems, and map symbols.
- SLO#6: use a computer effectively to research, map and analyze geographic information.
- SLO#7: compare and contrast common geographic technologies such as geographic information systems (GIS) and the global positioning system (GPS).
- SLO#8: communicate geographic information effectively in oral, written, and graphic form.

Career Information

Natural Resource Management; Environmental Conservation; International Development; Urban and Regional Planning; Education (K-12 through University); Tourism; Cartographer; Climatologist; Park Ranger; Transportation Specialist; Real Estate Analyst; International Business; Marketing Analyst; Land Surveyor; Research Scientist; Remote Sensing Specialist; Demographer; GIS Analyst; and many more (please contact the program for additional information). Some career options may require more than two years of college study.

Certificate of Achievement

Sustainability Certificate

This certificate advances student's understanding of the principles of sustainability and sustainable practices with respect to ecosystems, green buildings, business, agriculture, nutrition, natural resource management and conservation, waste management, energy, transportation systems, urban planning and design, and more. Theoretical and practical aspects of sustainability are explored including social, economic, and environmental dimensions.

Certificate Requirements

Course Code	Course Title	Units
GEOG 302	Environmental Studies & Sustainability	3
A minimum of 9 units from the following:		9
ARCH 332	Design Awareness (3)	
ARCH 342	Introduction to Green Buildings (3)	
BIOL 350	Environmental Biology (3)	
BIOL 352	Conservation Biology (3)	
CONST 143	Solar Photovoltaic Systems (3)	
ECON 306	Environmental Economics (3)	
GEOG 300	Physical Geography: Exploring Earth's Environmental Systems (3)	
GEOG 305	Global Climate Change (3)	
HORT 300	Introduction to Horticulture (3)	
HORT 302	Soils, Soil Management, and Plant Nutrition (3)	

Course Code	Course Title	Units
or PLTS 310	Soils, Soil Management, and Plant Nutrition (3)	
HORT 313	Sustainable Agriculture (3)	
NUTRI 303	Plant-Based Nutrition (3)	
NUTRI 331	Plant-Based Food Principles and Preparation (3)	
Total Units:		**12**

Student Learning Outcomes

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

- PSLO#1: Communicate effectively about environmental issues and sustainability, utilizing correct vocabulary.
- PSLO#2: Articulate an awareness of the relevance of sustainability to the student's life and wider community at both local and global scales.
- PSLO#3: Evaluate and analyze environmental problems facing the world today and propose sustainable solutions.
- PSLO#4: Employ information-gathering tools to investigate theoretical and practical aspects of sustainability in the context of energy consumption, transportation systems, food production, water resources, industry, the built environment, and socio-cultural institutions and practices.

Career Information

This certificate 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 those pursuing additional coursework include positions in environmental economics, sustainable business practices, green building, natural resource management, food systems, energy, environmental justice, transportation, and urban planning.

Social Justice Studies

The Social Justice Studies program will afford students the opportunity to develop a professional and scholarly approach from which to understand and continue to celebrate the professional, academic, and scholarly contributions of historically and contemporary marginalized human groups. Consequently, students will develop and expand their appreciation for the contributions of marginalized populations in the US and globally.

This Social Justice Studies program is designed to indelibly foster a diverse student body that is culturally competent with diverse insight, skills, and training to work effectively and compassionately alongside both diverse and marginalized human groups, increasing inclusion and equity in an increasingly diverse society.

Degrees Offered

A.A.-T. in Social Justice Studies: Race and Ethnicity

A.A.-T. in Social Justice Studies: Women, Gender and LGBTQ Studies

Dean Emilie Mitchell

Dept Chair Anastasia Panagakos

Phone (916) 691-7656

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Associate Degrees for Transfer

A.A.-T. in Social Justice Studies: Race and Ethnicity

Social Justice Studies is an interdisciplinary and diverse field that gives voice to historically marginalized peoples and their perspectives by challenging systems of injustice and valuing diversity. Social justice exists when people are not discriminated against, or denied access to opportunities, economic resources, or privileges based on their gender, sexuality, religion, age, race, belief, disability, location, social class, economic circumstances, political affiliation, or other characteristics of background or group membership. Social Justice Studies explores the connections between the ideals of justice and the realities of injustice while finding practical solutions to bridge the two. This program seeks to educate students on progressive social change, reflect on the dynamics of power and knowledge, and promote multiple approaches to social justice issues while encouraging students to be informed and active citizens.

The Associate in Arts in Social Justice Studies: Race and Ethnicity for Transfer (AA-T) degree provides a path for students wishing to transfer into various CSU majors related to race and ethnicity, such as Ethnic Studies, Chicano Studies, or African American Studies. This Transfer Model Curriculum is an “Area of Emphasis” (AOE), which allows students to transfer into more than one CSU major related to Race and Ethnicity. Students interested in transferring to a CSU campus to pursue a bachelor’s degree in an Area of Emphasis should meet with a counselor to confirm the courses required for lower division preparation in the major. This degree exposes students to the core principles and practices of the Social Justice Studies field in order to build a foundation for their future personal, academic, activist, or vocational paths.

The degree may be obtained by the completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program outlined below (earning a C or better, or "P" if taken Pass/No Pass, in these courses) and (b) the California General Education Transfer Curriculum (Cal-GETC) requirements.

Degree Requirements

Course Code	Course Title	Units
SJS 300	Introduction to Social Justice Studies	3
SJS 310	Introduction to LGBTQ Studies	3
SOC 341	Sex and Gender in the U.S.	3
A minimum of 9 units from the following:		9
Select three courses from at least two of the following areas		
Area 1: History and Government		
HIST 320	History of the United States: African-American Emphasis (3)	
HIST 321	History of the United States: African-American Emphasis (3)	
HIST 344	Survey of California History: A Multicultural Perspective (3)	
HIST 360	History of African Civilizations (3)	
HIST 364	Asian Civilization (3)	
HIST 365	Asian Civilization (3)	
HIST 373	History of Mexico (3)	
HIST 380	History of the Middle East (3)	
POLS 312	Politics of the Middle East (3)	
POLS 313	Latin America (3)	
POLS 315	Pacific Rim (3)	
POLS 317	Global Studies: Africa (3)	
POLS 318	Global Studies: Central Asia (3)	
POLS 319	Global Studies: Southeast Asia (3)	
Area 2: Arts and Humanities		
ARTH 324	Art of the Americas (3)	
ARTH 325	Native American Art History (3)	
ARTH 328	Survey of African Art (3)	
ARTH 332	Asian Art (3)	
ENGLT 330	African American Literature (3)	
ENGLT 335	Latino, Mexican-American, and Chicano Literature (3)	
ENGLT 336	Race and Ethnicity in Contemporary American Literature (3)	
ENGLT 343	Contemporary Regional World Literature (3)	
HUM 320	Asian Humanities (3)	
HUM 331	Latin American Humanities (3)	
HUM 332	American Humanities (3)	
HUM 339	African American Humanities (3)	
Area 3: Social Science		

Course Code	Course Title	Units
ANTH 332	Native Peoples of California (3)	
ANTH 334	Native Peoples of North America (3)	
ETHNS 320	Introduction to African American Studies (3)	
ETHNS 330	Introduction to Asian American Studies (3)	
ETHNS 360	Introduction to Chicana/o/x Studies (3)	
ETHNS 344	The Latino Experience in America (3)	
JOUR 320	Race and Gender in the Media (3)	
Area 4: Quantitative Reasoning and Research Methods		
PSYC 330	Introductory Statistics for the Behavioral Sciences (3)	
or STAT C1000E	Introduction to Statistics (4)	
or STAT C1000H	Introduction to Statistics - Honors (4)	
or ECON 310	Statistics for Business and Economics (3)	
or SOC 302	Introduction to Social Research Methods (3)	
Area 5: Major Preparation		
HIST 308	History of World Civilizations, 1500 to Present (3)	
PSYC C1000	Introduction to Psychology (3)	
SOC 300	Introductory Sociology (3)	
Total Units:		**18**

The Associate in Arts in Social Justice Studies: Race and Ethnicity for Transfer (AA-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) the California General Education Transfer Curriculum (Cal-GETC) Requirement.

Student Learning Outcomes

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

- PSLO #1: Research how theoretical perspectives and critical theories on social justice inform the social, political, economic, historical, and cultural circumstances surrounding justice as they relate to race and ethnicity as well as other intersectional aspects of life in society.
- PSLO #2: Define and analyze power and oppression and their interrelationship to privilege to better understand how they operate at the individual, cultural, and institutional levels.
- PSLO #3: Explain how intersectional formations of social identity reflect social conditions and various levels of power and privilege impact social justice at the individual, cultural, and institutional levels.
- PSLO #4: Recognize the historical origins, similarities, and differences in struggles for social justice among different ethnic and racial groups in the United States and globally.
- PSLO #5: Assess artistic works that examine oppression, power, and justice as they relate to race and ethnicity.
- PSLO #6: Investigate social justice advocacy and activism to learn how to become equitably accountable to one's individual and group sense of positionality and place in the world in pursuit of social justice.

Career Information

The AA-T degree provides students with a solid foundation in Social Justice Studies as well as prerequisites for upper division coursework leading to the baccalaureate degree in a variety of Areas of Emphasis. The degree gives students a pathway to possibilities, options, and baccalaureate degrees focusing on social justice. In addition, a student can use the AA-T in Social Justice Studies to get into a CSU and then complete a graduate degree in a related field. Students with degrees in this field often assume careers as (or in) the following: activists, community organizers, political campaigners, human rights groups, religious organizations, international agencies, lobbyists, and mediators. This program is also an excellent starting point for students interested in a career in law, law enforcement, social work, clinical psychology, or any social science, politics, business, education, or public policy.

A.A.-T. in Social Justice Studies: Women, Gender and LGBTQ Studies

Social Justice Studies is an interdisciplinary and diverse field that gives voice to historically marginalized peoples and their perspectives by challenging systems of injustice and valuing diversity. Social justice exists when people are not discriminated against, or denied access to opportunities, economic resources, or privileges based on their gender, sexuality, religion, age, race, belief, disability, location, social class, economic circumstances, political affiliation, or other characteristics of background or group membership. Social Justice Studies explores the connections between the ideals of justice and the realities of injustice while finding practical solutions to bridge the two. This program seeks to educate students on progressive social change, reflect on the dynamics of power and knowledge, and promote multiple approaches to social justice issues while encouraging students to be informed and active citizens.

The Associate in Arts in Social Justice Studies: Women, Gender, and LGBTQ Studies for Transfer (AA-T) degree provides a path for students wishing to transfer into various CSU majors related to Women, Gender, and LGBTQ Studies, such as Women’s Studies, Gender Studies, or Queer Studies. This Transfer Model Curriculum is an “Area of Emphasis” (AOE), which allows students to transfer into more than one CSU major related to Women, Gender, and LGBTQ Studies. Students interested in transferring to a CSU campus to pursue a bachelor’s degree in an Area of Emphasis should meet with a counselor to confirm the courses required for lower division preparation in the major. This degree exposes students to the core principles and practices of the Social Justice Studies field in order to build a foundation for their future personal, academic, activist, or vocational paths.

The degree may be obtained by the completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program outlined below (earning a C or better, or "P" if taken Pass/No Pass, in these courses) and (b) the California General Education Transfer Curriculum (Cal-GETC) requirements.

Degree Requirements

Course Code	Course Title	Units
SJS 300	Introduction to Social Justice Studies	3
SJS 310	Introduction to LGBTQ Studies	3
SOC 341	Sex and Gender in the U.S.	3
A minimum of 9 units from the following:		9
Please select three courses from at least two areas below.		
Area 1: History and Government		
HIST 331	Women in American History (3)	
Area 2: Arts and Humanities		
ARTH 312	Women in Art (3)	
ENGLT 360	Women in Literature (3)	
ENGLT 365	Introduction to Gay, Lesbian, Bisexual and Transgender Literature (3)	
HUM 370	Women and the Creative Imagination (3)	
Area 3: Social Science		
ANTH 336	Anthropology of Sex, Sexuality and Gender (3)	
PSYC 356	Human Sexuality (3)	
Area 4: Quantitative Reasoning and Research Methods		
PSYC 330	Introductory Statistics for the Behavioral Sciences (3)	
or STAT C1000E	Introduction to Statistics (4)	
or STAT C1000H	Introduction to Statistics - Honors (4)	
or ECON 310	Statistics for Business and Economics (3)	
or SOC 302	Introduction to Social Research Methods (3)	
Area 5: Major Preparation		
HIST 308	History of World Civilizations, 1500 to Present (3)	
PSYC C1000	Introduction to Psychology (3)	
SOC 300	Introductory Sociology (3)	
Total Units:		**18**

The Associate in Arts in Social Justice Studies: Women, Gender and LGBTQ Studies for Transfer (AA-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) the California General Education Transfer Curriculum (Cal-GETC) Requirement.

Student Learning Outcomes

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

- PSLO #1: Research how theoretical perspectives and critical theories on social justice inform the social, political, economic, historical, and cultural circumstances surrounding justice as they relate to gender and sexuality, as well as other intersectional aspects of life in society.
- PSLO #2: Define and analyze power and oppression and their interrelationship to privilege to better understand how they operate at the individual, cultural, and institutional levels.
- PSLO #3: Explain how intersectional formations of social identity reflect social conditions and various levels of power and privilege impact social justice at the individual, cultural, and institutional levels.
- PSLO #4: Recognize the historical origins, similarities, and differences in struggles for social justice among different groups in the United States and globally.
- PSLO #5: Assess artistic works and political achievements that expose oppression and injustice as they relate to women, gender, or the LGBTQ community.
- PSLO #6: Investigate social justice advocacy and activism to learn how to become equitably accountable to one's individual and group sense of positionality and place in the world in pursuit of social justice.

Career Information

The AA-T degree provides students with a solid foundation in Social Justice Studies as well as prerequisites for upper division coursework leading to the baccalaureate degree in a variety of Areas of Emphasis. The degree gives students a pathway to possibilities, options, and baccalaureate degrees focusing on social justice. In addition, a student can use the AA-T in Social Justice Studies to get into a CSU and then complete a graduate degree in a related field. Students with degrees in this field often assume careers as (or in) the following: activists, community organizers, political campaigners, human rights groups, religious organizations, international agencies, lobbyists, and mediators. This program is also an excellent starting point for students interested in a career in law, law enforcement, social work, clinical psychology, or any social science, politics, business, education, or public policy.

Social Justice Studies (SJS) Courses

SJS 299 Experimental Offering in Social Justice Studies

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

SJS 300 Introduction to Social Justice Studies

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGL C1000
Transferable: CSU; UC
General Education: Local GE L4; Cal-GETC Area 4
C-ID: C-ID SJS 110

This interdisciplinary course introduces students to the theoretical and practical foundations of social justice and the social processes that create and resist oppression. It covers the sociology, history, and psychology of oppressions based upon race, ethnicity, class, gender, sexuality, and other group identities in the United States and abroad and the corresponding social justice movements for liberation. It investigates how creating and undoing asymmetrical power

relations are linked to social structures, institutional processes, and culture. Additionally, it provides a basis for a better understanding of socioeconomic, political, and cultural conditions of key social groups in the United States and globally. Topics include theoretical foundations of social justice and oppression, history and politics of group identity, culture and ideologies, forms of oppression, privilege, and forms of resistance. Field trips may be required.

SJS 310 Introduction to LGBTQ Studies

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L4; Cal-GETC Area 4
C-ID: C-ID SJS 130

This interdisciplinary course introduces students to Lesbian, Gay, Bisexual, Transgender, and Queer (LGBTQ+) studies. It explores how LGBTQ+ communities in the U.S. and abroad are impacted by various social, cultural, historical, and political factors that create and resist oppression. It investigates the politics of sexuality and sexual identities as they intersect with race, ethnicity, class, and gender. It evaluates how sexual and gender prejudices function alongside racism, sexism, and classicism. Additionally, it provides a historical understanding of how queer activism and resistance movements in the U.S. and globally have responded to oppression and violence against LGBTQ communities. This course also includes contemporary LGBTQ+ issues in family, education, religion, and the law.

SJS 320 Introduction to Disability Studies

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGL C1000
Transferable: CSU; UC
General Education: Local GE L4

This course introduces the diverse legal, institutional, ethical, and cultural issues relating to persons with disabilities in historic and modern contexts. Students will be introduced to the definitions and language of disability and the portrayal of disability in current American society, including an appreciation of the concepts of ableism, oppression, privilege, normalcy, disability culture, and accessibility. This course addresses the longstanding social oppression of the disability community and the intersection of disability with social factors including race, ethnicity, class, gender, and sexual orientation. Activism and resistance movements, as well as ways to initiate social change, are integral to the course. This course is designed for all students, with or without disabilities, and is of interest to students in health care, law and social justice, design and accessibility, education, and social work.

SJS 499 Experimental Offering in Social Justice Studies

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

Social Science

The Social Science department offers classes in law and society and special studies in the areas of Mexican-American, Asian, and Native American experiences.

Degrees Offered

A.A. in Social Science

Dean Emilie Mitchell
Phone (916) 691-7656
Email mitchee@crc.losrios.edu

Associate Degree

A.A. in Social Science

The Social Science department offers classes in law and society and special studies in the areas of Mexican-American, Asian, and Native American experiences. These classes provide an excellent background for further study.

The program includes 21 units of coursework in the following areas: anthropology, economics, geography, history, philosophy, political science, psychology, social science, or sociology.

This degree enables the student to experience a wide range of diverse social science disciplines. To verify the transferability of specific courses and their university application, please consult your CRC counselor. Students who wish to transfer to a four-year college or university should plan their programs to meet general education and lower division major requirements. All students are encouraged to consult with a counselor.

Highlights include:
* Opportunities to build a foundation for interdisciplinary studies
* Overview of theoretical, methodological, analytical, and cultural principles

Note to Transfer Students:
If you are interested in transferring to a four-year college or university to pursue a bachelor's degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate's degree in this major may be different from the requirements needed for the Bachelor's degree.

Degree Requirements

Course Code	Course Title	Units
A minimum of 21 units from the following:		21
Twenty-one (21) units must be completed in at least three different subject areas from those listed: Anthropology, Economics, Geography 310, History, Political Science, Philosophy 360, Psychology, Social Science, Sociology.		
Total Units:		**21**

The Social Science Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus the local CRC General Education Requirement, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

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

- Identify and comprehend an individual's relationship to structures in the larger society.
- Apply effective critical thinking skills to interpret sociological phenomena.
- Assess the significance of important social movements in American society.
- Define and identify various theoretical perspectives across the discipline of Sociology.
- Comprehend how social practices facilitate the functioning of social structures as they are responsible for maintaining the society as a whole.
- Analyze, interpret, and critically think about sociological ascriptions to race, gender, ethnicity, class, sexual orientation, political affiliation, and other sociological concepts.

Career Information

Instructor; Social Worker; Researcher;Criminal Justice; Social Services; Business and Corporate employment. Some career options may require more than two years of college study.

Social Science (SOCSC) Courses

SOCSC 495 Independent Studies in Social Science

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

SOCSC 499 Experimental Offering in Social Science

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU

This is the experimental courses description.

Social Work/Human Services

Note: *CRC's Human Services (HSER) program will be changing its name in fall 2025 to* ***Social Work/Human Services*** *(SWHS).*

The CRC Social Work/Human Services program prepares students for employment as para-professionals with agencies such as youth group homes, youth and family services agencies, schools, probation, welfare, and mental health departments.

Degrees and Certificates Offered

A.A. in Chemical Dependency Studies Degree

A.A. in Social Work and Human Services

Chemical Dependency Studies Certificate Certificate

Social Work and Human Services Certificate

Dean Kris Hubbard

Department Chair Brandy Jones-Thomas

Phone (916) 691-7390

Email hubbark@crc.losrios.edu

Associate Degrees

A.A. in Chemical Dependency Studies Degree

The program in Chemical Dependency Studies centers around the specific skills and abilities necessary to provide comprehensive drug and alcohol counseling. Course work include the twelve counselor core function applications in addiction screening, intake, assessment, orientation, counseling, crisis intervention, consultation, client education, client rights, confidentiality, professional ethics and reports and record keeping.

Degree Requirements

Course Code	Course Title	Units
HSER 300	Introduction to Human Services	3
HSER 302	Introduction to Psychology of Human Relations	3
HSER 340	Introduction to Chemical Dependency	3
HSER 341	Physiology and Pharmacology: Alcohol & Other Drugs	3
HSER 342	Alcoholism: Intervention, Treatment & Recovery	3
HSER 350	Employment Skills in Human Services	3
HSER 360	Techniques of Interviewing and Counseling	3
HSER 362	Practices in Human Services	3
HSER 364	Techniques of Group Counseling	4
PSYC C1000	Introduction to Psychology	3
HSER 498	Work Experience in Human Services	0.5 -4[1]
SOC 321	Race, Ethnicity and Inequality in the United States (3)	3
PSYC 340	Abnormal Behavior	3
Total Units:		**37.5 - 41**

[1]Students must complete a minimum of 255 internship hours for HSER 498.

The Chemical Dependency Studies Degree Associate in Arts (A.A.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Student Learning Outcomes

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

- Evaluate the components of a quality chemical dependency counseling program
- Demonstrate the twelve essential counseling skills as they apply to chemical dependency and recovery processes
- Utilize counseling strategies based on examination of scientific theories of addiction
- Identify the community resources used in assisting clients with addiction issues
- Appraise and apply the knowledge of California Professional Codes of Ethics for Drug and Alcohol counselors
- Evaluate one's own values and attitudes as they apply to ethical decision making
- Demonstrate appropriate interpersonal and social skills in interactions with a diverse population using principles of equity, justice, and inclusion

Career Information

Substance Abuse Counselor; Mental Health Social Worker; Social Worker; Child and Family Counselor; Child Protective Worker; Adult Protective Worker; Employee Assistance Counselor

A.A. in Social Work and Human Services

This CRC program prepares students for employment as paraprofessionals with agencies such as youth group homes, youth and family services agencies, schools, probation, welfare, community based non-profits and county mental health departments.

Program Highlights include:
Techniques for Interviewing and Case Management
Group Facilitation Skills
Theory and Application of Social Services
Employment training, including resumes, cover letters, and interview skills
Training in Ethical and Legal Considerations for Paraprofessionals

Coursework includes performance-based training in client screening, intake, assessment, orientation, individual counseling, group counseling, consultation, client's rights, confidentiality, crisis intervention, client education, professional ethics, reports and record keeping.

Degree Requirements

Course Code	Course Title	Units
SWHS 300	Introduction to Social Work & Human Services	3
SWHS 302	Introduction to Psychology of Human Relations	3
SWHS 350	Ethical Issues in Social Work/Human Services	3
SWHS 360	Techniques for Interviewing and Case Management Services	3
SWHS 364	Advanced Techniques for Working with Groups	4
SWHS 367	Advanced Practices in Human Services	3
SWHS 498	Work Experience in Human Services	0.5 -4[1]
PSYC C1000	Introduction to Psychology	3
PSYC 340	Abnormal Behavior	3
SOC 321	Race, Ethnicity and Inequality in the United States (3)	3
Total Units:		**28.5 - 32**

[1]Students must complete a minimum of 120 internship hours for SWHS 498.

The Social Work and Human Services Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus the local CRC General Education Requirement, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Enrollment Eligibility

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

- Complete the application process for enrollment in the Social Work Human Services Program.
- Completion of SWHS 300 & 302 with a C or better.
- Completion of PSYC C1000 (formerly PSYC 300) with a C or better.
- Completion of SOC 321 with a C or better.
- Eligibility for ENGL C1000 (formerly ENGWR 300).
- Completion of SWHS Associate Degree/Certificate Orientation offered through the course management system.

Enrollment Process

Eligible students are selected for the program according to the following steps:

- Students must complete the application for the SWHS Program.
- Students must complete all prerequisites in the program.
- Students must complete the online Orientation offered through the course management system.

Student Learning Outcomes

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

- PLO 1: Define the functions of social service delivery systems.
- PLO 2: Analyze public policy issues, complexities and controversies affecting social service agencies and their clients.
- PLO 3: Integrate different theoretical approaches in working with clients.
- PLO 4: Identify the community resources used in assisting clients.
- PLO 5: Appraise and apply the knowledge of existing California professional codes of ethics for the helping professions.
- PLO 6: Describe the application of clients' rights in the social service delivery system.
- PLO 7: Evaluate one's own values and attitudes as they apply to ethical decision making.
- PLO 8: Demonstrate effective individual and group setting interpersonal and social skills in interactions with a demographically diverse population.

Career Information

Peer Support Group Facilitator; Youth Group Home Worker; Family, Welfare, and Health Agencies Worker; Consumer Consultant; County or State Eligibility Worker; and Conflict Containment Workers

Certificates of Achievement

Chemical Dependency Studies Certificate Certificate

The program in Chemical Dependency Studies centers around the specific skills and abilities necessary to provide comprehensive drug and alcohol counseling. Course work include the twelve counselor core function applications in addiction screening, intake, assessment, orientation, counseling, crisis intervention, consultation, client education, client rights, confidentiality, professional ethics and reports and record keeping.

Certificate Requirements

Course Code	Course Title	Units
HSER 300	Introduction to Human Services	3
HSER 302	Introduction to Psychology of Human Relations	3
HSER 340	Introduction to Chemical Dependency	3
HSER 341	Physiology and Pharmacology: Alcohol & Other Drugs	3
HSER 342	Alcoholism: Intervention, Treatment & Recovery	3

Course Code	Course Title	Units
HSER 350	Employment Skills in Human Services	3
HSER 360	Techniques of Interviewing and Counseling	3
HSER 362	Practices in Human Services	3
HSER 364	Techniques of Group Counseling	4
HSER 498	Work Experience in Human Services	0.5 -4[1]
PSYC C1000	Introduction to Psychology	3
PSYC 340	Abnormal Behavior	3
SOC 321	Race, Ethnicity and Inequality in the United States (3)	3
Total Units:		**37.5 - 41**

[1]Students must complete a minimum of 255 internship hours for HSER 498.

Student Learning Outcomes

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

- Evaluate the components of a quality chemical dependency counseling program
- Demonstrate the twelve essential counseling skills as they apply to chemical dependency and recovery processes
- Utilize counseling strategies based on examination of scientific theories of addiction
- Identify the community resources used in assisting clients with addiction issues
- Appraise and apply the knowledge of California Professional Codes of Ethics for Drug and Alcohol counselors
- Evaluate one's own values and attitudes as they apply to ethical decision making
- Demonstrate appropriate interpersonal and social skills in interactions with a diverse population using principles of equity, justice, and inclusion

Career Information

Substance Abuse Counselor; Mental Health Social Worker; Social Worker; Child and Family Counselor; Child Protective Worker; Adult Protective Worker; Employee Assistance Counselor

Social Work and Human Services Certificate

The A.A. degree program in Social Work and Human Services provides performance-based training for both associate level employment and transfer preparation. This degree provides training for employment as para-professionals with agencies such as youth group homes, youth and family services agencies, schools, probation, welfare, and mental health departments. Coursework includes performance-based training in client screening, intake, assessment, orientation, individual counseling, group facilitation, consultation, client's rights, relevant social justice issues, confidentiality, crisis intervention, client education, professional ethics, reports, record keeping and the ability to work with diverse populations and community members.

Certificate Requirements

Course Code	Course Title	Units
SWHS 300	Introduction to Social Work & Human Services	3
SWHS 302	Introduction to Psychology of Human Relations	3
SWHS 350	Ethical Issues in Social Work/Human Services	3
SWHS 360	Techniques for Interviewing and Case Management Services	3
SWHS 364	Advanced Techniques for Working with Groups	4
SWHS 367	Advanced Practices in Human Services	3
SWHS 498	Work Experience in Human Services	0.5 -4
A minimum of 6 units from the following:		6
SOC 300	Introductory Sociology (3)	
PSYC 320	Social Psychology (3)	
SOC 321	Race, Ethnicity and Inequality in the United States (3)	
PSYC C1000	Introduction to Psychology	3
Total Units:		**28.5 - 32**

Enrollment Eligibility

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

- Completion of application for Social Work and Human Services.
- Completion of SWHS 300 and SWHS 302 with a C or better.
- Completion of Psychology 300 with a C or better.
- Eligible for ENGWR 300
- Completion SOC 321 with a C or better.
- Completion of SWHS Program Orientation offered through the course management system.

Enrollment Process

Eligible students are selected for the program according to the following steps:

- Completion of Orientation.
- Completion of Application
- Successful completion of all prerequisites courses with a C or better.

Student Learning Outcomes

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

- PLO 1:Define the functions of social service delivery systems.
- PLO 2: Analyze public policy issues, complexities and controversies affecting social service agencies and their clients.

- PLO 3: Integrate different theoretical approaches in working with clients.
- PLO 4:Identify the community resources used in assisting clients.
- PLO 5:Appraise and apply the knowledge of existing California professional codes of ethics for the helping professions.
- PLO 6: Describe the application of clients' rights in the social service delivery system.
- PLO 7: Evaluate one's own values and attitudes as they apply to ethical decision making and the field of social work and human services.
- PLO 8:Demonstrate effective individual and group setting interpersonal and social skills in interactions with a demographically diverse population.

Career Information

Substance Abuse Counselor; Mental Health Social Worker; Social Worker; Child and Family Counselor; Child Protective Worker; Adult Protective Worker; Employee Assistance Counselor, Peer Support Group Facilitator; Youth Group Home Worker; Alcoholism Program Worker; Family, Welfare, and Health Agencies Worker; Ombudsman Program Workers; Work with Correctional Agencies; Consumer Consultant; County or State Eligibility Worker; and Conflict Containment Workers.

Human Services (HSER) Courses

HSER 300 Introduction to Human Services

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligibility for for ENGL C1000 (formerly known as ENGWR 300).
Transferable: CSU
General Education: Local GE L4

This course is a comprehensive overview of the field of Human Services in private and public agencies. This course includes learning of agency functions and worker activities through reading, class discussion, and class speakers. The emphasis of this course is understanding the roles and skills of associate professionals such as health workers, activity directors for the elderly, and adolescent and child welfare assistants.

HSER 302 Introduction to Psychology of Human Relations

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU
General Education: Local GE L7B

This course is an introduction to attitudes, values, and methods that enhance communication skills in human relations. It is required for all students in the Human Services major and open to all students.

HSER 304 Introduction to Counseling Children

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU

A study of the tools children use daily to cope with feelings, adjust to changes, overcome disappointment and trauma, make sense out of the world around them and grow in their various relationships. Children's play medium will be experienced, with special emphasis on the importance of imagination and the use of fantasy. Assignments will require association with children.

HSER 340 Introduction to Chemical Dependency

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU
General Education: Local GE L7B

A survey course that examines the psychological and physiological effects of chemical dependency on the individual. Also included is an analysis of the effects of substance abuse on the family; the sociological and economic conditions contributing to substance abuse, and a description of communication efforts at prevention and treatment.

HSER 341 Physiology and Pharmacology: Alcohol & Other Drugs

Units: 3
Hours: 54 hours LEC
Prerequisite: HSER 340 with a grade of "C" or better
Transferable: CSU

This course is a study of the chemical composition of alcohol, and the mechanism of action of alcohol and other psychoactive drugs in the human body including opiates, stimulants, depressants, psychotherapeutics, and psychedelics. The physiological and psychological mechanisms associated with tolerance, habituation, and withdrawal that occur during the addiction phase of drug use will be studied.

HSER 342 Alcoholism: Intervention, Treatment & Recovery

Units: 3
Hours: 54 hours LEC
Prerequisite: HSER 341 with a grade of "C" or better
Transferable: CSU

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 programs, therapeutic communities, and aftercare programs.

HSER 350 Employment Skills in Human Services

Units: 3
Hours: 54 hours LEC

Prerequisite: None.
Advisory: HSER 300 and 302
Transferable: CSU

This course introduces students to the legal and ethical issues of interviewing and counseling individuals, families, and groups. Course topics include family system dynamics, family and drug intervention, crisis intervention, court mandated reporting, legislative mandates required of counselors, and laws pertaining to counseling minors and other client populations within Human Services Agencies. This is a required course for the Human Services degree and certificate.

HSER 360 Techniques of Interviewing and Counseling

Units: 3
Hours: 54 hours LEC
Prerequisite: HSER 300, 302, and 350 with grades of "C" or better
Transferable: CSU

This course introduces students to effective counseling and interviewing techniques as applied to associate para professional experiences as counselors, group counselor aides, mental health workers, social service technicians and other new careers in human services. This is a required course for the Social Work/Human Services degree and certificate. This course is not open to students who have completed HSER 360.

HSER 362 Practices in Human Services

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Corequisite: HSER 360 and 498
Transferable: CSU

This course provides advanced study and lecture of the helping profession in settings that include: public and/or private agencies that provide mental health services; corrections and rehabilitation; alcohol and other drugs; and child/adolescent treatment services. This is a lecture-based course that integrates both the theory and concepts of the helping profession, as well as discussion of the practical application of experiences in the field. Student evaluation is competency-based.

HSER 364 Techniques of Group Counseling

Same As: SWHS 364
Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: HSER 350 with a grade of "C" or better; SWHS 360 (Techniques of Interviewing and Counseling), or HSER 360 (Techniques of Interviewing and Counseling) with a grade of “C” or better
Transferable: CSU

This course introduces the basic elements and techniques of group counseling. Students will learn the knowledge and skills needed for effective group facilitation through class activities such as role-plays, and class discussion. The course emphasizes different types of groups, stages of group process, and techniques for counseling specific populations including individuals with substance use disorders and those from diverse backgrounds. This course is the same as SWHS 364 and only one may be taken for credit.

HSER 494 Topics in Human Services

Units: 0.5 - 4
Hours: 9 - 72 hours LEC
Prerequisite: None.
Transferable: CSU

This course is an exploration of those topics and issues which are most relevant for future and present workers in human services. Emphasis will be on those issues which are not consistently covered by other required human services courses. These issues may include: chemical dependency, interventions in poverty, stress management, child neglect and abuse, patient rights, and organization for advocacy.

HSER 495 Independent Studies in Human Services

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

HSER 498 Work Experience in Human Services

Units: 0.5 - 4
Hours: 27 - 216 hours LAB
Prerequisite: SWHS 350 and 360 with grades of "C" or better
Corequisite: SWHS 366
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position or job related to career goals in Human Services. Students must attend a mandatory orientation for SWHS 366 as the co-requisite for this course.
Advisory: Students must obtain an internship when enrolling in this course and must have an approved internship site at the start date of the course. Students must meet co-requisites and pre-requisites to enroll. Student also must attend a mandatory orientation session with the SWHS Department Chair that can be scheduled the semester prior to enrollment in the course.
Transferable: CSU

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in transfer level degree occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and complete 27 hours of related work experience for 0.5 unit. An additional 27 hours of related work experience is required for each additional 0.5 units. 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 499 Experimental Offering in Human Services

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

Social Work/Human Services (SWHS) Courses

SWHS 299 Experimental Offering in Social Work/Human Services

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

SWHS 300 Introduction to Social Work & Human Services

Same As: HSER 300
Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligibility for ENGL C1000 (formerly known as ENGWR 300).
Transferable: CSU
General Education: Local GE L4

This course is a comprehensive overview of the field of Social Work and Human Services in private and public agencies. This course includes learning of agency functions and worker activities through reading, class discussion, and class speakers. The emphasis of this course is understanding the roles and skills of associate professionals such as health workers, activity directors for the elderly, and adolescent and child welfare assistants. This course is not open to students who have completed HSER 300.

SWHS 302 Introduction to Psychology of Human Relations

Same As: HSER 302
Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU
General Education: Local GE L7B

This course is an introduction to attitudes, values, and methods that enhance communication skills in human relations. It is required for all students in the Human Services major and open to all students. This course is not open to students who have completed HSER 302.

SWHS 306 Introduction to Counseling Youth in Diverse Settings

Units: 3
Hours: 54 hours LEC
Prerequisite: SWHS 300 and 302 with grades of "C" or better
Transferable: CSU

A study of the various ways to engage safely with youth ages 6 -17. Students will learn to support youth with expression of feelings/emotions, adjusting to issues commonly experienced in childhood and adolescence and manage developmentally appropriate feelings and thoughts in these stages of development.

SWHS 340 Introduction to Chemical Dependency

Same As: HSER 340
Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU
General Education: Local GE L7B

This course introduces and examines the psychological and physiological effects of chemical dependency on the individual. Also included is an analysis of the effects of substance abuse on the family: the sociological and economic conditions contributing to substance abuse, and a description of communication efforts at prevention and treatment. Field trips may be required. This course is not open to students who have completed HSER 340.

SWHS 341 Physiology and Pharmacology: Alcohol & Other Drugs

Same As: HSER 341
Units: 3
Hours: 54 hours LEC
Prerequisite: SWHS 300 and 340 with grades of "C" or better
Transferable: CSU

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.

SWHS 342 Alcoholism: Intervention, Treatment & Recovery

Same As: HSER 342
Units: 3
Hours: 54 hours LEC
Prerequisite: SWHS 340 or 341 with a grade of "C" or better
Transferable: CSU

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 programs, therapeutic communities, and aftercare programs.

SWHS 350 Ethical Issues in Social Work/ Human Services

Same As: HSER 350
Units: 3
Hours: 54 hours LEC

Prerequisite: SWHS 300 with a grade of "C" or better
Advisory: SWHS 302
Transferable: CSU

This course introduces students to the legal and ethical issues of interviewing and counseling individuals, families, and groups. Course topics include family system dynamics, family and drug intervention, crisis intervention, court-mandated reporting, legislative mandates required of counselors, and laws about counseling minors and other client populations within Human Services Agencies. This is a required course for the Social Work Human Services/Chemical Dependency degree and certificate.

This course is the same as HSER 350 and only one may be taken for credit.

SWHS 360 Techniques for Interviewing and Case Management Services

Units: 3
Hours: 54 hours LEC
Prerequisite: SWHS 300 (Introductions to Social Work & Human Services), SWHS 302 (Introduction to Psychology of Human Relations), and SWHS 350 (Ethical Issues in Social Work/Human Services) with grades of "C" or better, or the three courses of HSER 300 (Introduction to Human Services), HSER 302 (Introduction to Psychology of Human Relations), and HSER 350 (Employment Skills) with grades of "C" or better.
Transferable: CSU

This course introduces students to effective counseling and interviewing techniques as applied to associate para professional experiences as counselors, group counselor aides, mental health workers, social service technicians and other new careers in human services. This is a required course for the Social Work/Human Services degree and certificate. This course is not open to students who have completed HSER 360.

SWHS 364 Advanced Techniques for Working with Groups

Same As: HSER 364
Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: SWHS 360 (Techniques of Interviewing and Counseling), or HSER 360 (Techniques of Interviewing and Counseling) with a grade of “C” or better
Transferable: CSU

This course introduces the basic elements and techniques of group counseling. Through class discussions, in-class practice, and role plays students will learn the knowledge and skills needed for effective group facilitation. The course emphasizes different types of groups, stages of group process, and techniques for counseling specific populations including individuals with substance use disorders and those from diverse backgrounds. This course is not open to students who have completed HSER 364. This course is the same as HSER 364.

SWHS 366 Practices in Human Services

Units: 3
Hours: 18 hours LEC; 108 hours LAB
Prerequisite: SWHS 300 with a grade of "C" or better
Enrollment Limitation: Students enrolling in this course are required complete externship hours at approved Community Based Organizations. Students may incur travel costs, and have other requirements to complete such as background checks. Student should complete the SWHS/HSER Program application prior to enrolling in this course.
Advisory: HSER 302 or SWHS 302 with a grade of "C" or better
Transferable: CSU

This advanced practicum course provides research and supervised field experience in public and/or private agencies providing mental health, corrections, chemical dependency, and child/adolescent treatment services. Students integrate concepts, values, and skills acquired from previous courses and apply their knowledge to the process of helping others via internships. Field trips are required and students provide their own transportation. This course is not open to students who have completed HSER 362 or SWHS 367.

SWHS 367 Advanced Practices in Human Services

Units: 3
Hours: 18 hours LEC; 108 hours LAB
Prerequisite: SWHS 366 with a grade of "C" or better
Transferable: CSU

This advanced practicum course provides research and supervised field experience in public and/or private agencies providing mental health, corrections, chemical dependency, and child/adolescent treatment services. Students integrate concepts, values, and skills acquired from previous courses and apply their knowledge to the process of helping others via internships. Field trips are required and students provide their own transportation. This course is not open to students who have previously taken HSER 499: Experimental Offering in Human Services (Advanced Practices in Human Services). This course is not open to students who have completed HSER 367.

SWHS 495 Independent Studies in Human Services

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: SWHS 300 with a grade of "C" or better
Enrollment Limitation: None
Advisory: SWHS 350
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

SWHS 498 Work Experience in Human Services

Same As: HSER 498
Units: 0.5 - 4
Hours: 27 - 216 hours LAB
Prerequisite: SWHS 360 with a grade of "C" or better
Corequisite: SWHS 367
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position or job related to career goals in Human Services. Students must attend a mandatory orientation for SWHS 366 as the co-requisite for this course.

Advisory: Students must obtain an internship when enrolling in this course and must have an approved internship site at the start date of the course. Students must meet co-requisites and pre-requisites to enroll. Students also must attend a mandatory orientation session with the SWHS Department Chair that can be scheduled the semester prior to enrollment in the course.
Transferable: CSU
General Education: Local GE L7B

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in transfer level degree occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and complete 27 hours of related work experience for 0.5 unit. An additional 27 hours of related work experience is required for each additional 0.5 units. 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.

SWHS 499 Experimental Offering in Social Work/Human Services

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

Sociology

Cosumnes River College offers courses and a degree in the study of human behavior in society. The discipline is concerned with the study of systems and how individuals work and interact within them.

Degrees Offered

A.A.-T. in Sociology

Dean Emilie Mitchell
Department Chair Nyenbeku George
Phone (916) 691-7656
Email mitchee@crc.losrios.edu

Associate Degree for Transfer

A.A.-T. in Sociology

Cosumnes River College Sociology Associate in Arts for Transfer Program is designed to facilitate successful transfer to baccalaureate sociology degree programs. This degree provides students with the lower division breadth and depth of the field of sociology. Additionally, this degree exposes students to the core principles and practices in the field. Students will learn to: identify and comprehend their individual relationship to structures in the larger society; apply effective critical thinking skills to interpret sociological phenomena; assess the significance of important social movements in American society; define and identify various theoretical perspectives across the discipline of sociology; and analyze, interpret, and critically think about sociological ascriptions to race, gender, ethnicity, class, sexual orientation, political affiliation, and other sociological concepts.

Students must complete the following Associate Degree for Transfer (ADT) requirements:

(1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
(A) The California General Education Transfer Curriculum (Cal-GETC).
(B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

(2) Obtainment of a minimum grade point average of 2.0.

ADTs also require that students must earn a “C” or better in all courses required for the major or area of emphasis. A “P” (Pass) grade is also an acceptable grade for courses in the major if the course is taken on a Pass/No Pass basis.

Degree Requirements

Course Code	Course Title	Units
SOC 300	Introductory Sociology	3
SOC 301	Social Problems	3
SOC 302	Introduction to Social Research Methods	3
PSYC 330	Introductory Statistics for the Behavioral Sciences (3)	3 - 4
or STAT C1000E	Introduction to Statistics (4)	
or STAT C1000H	Introduction to Statistics - Honors (4)	
A minimum of 6 units from the following:		6
SOC 305	Critical Thinking in the Social Sciences (3)	
SOC 310	Marriage and the Family (3)	
SOC 321	Race, Ethnicity and Inequality in the United States (3)	
SOC 341	Sex and Gender in the U.S. (3)	
Total Units:		**18 - 19**

The Associate in Arts in Sociology for Transfer (AA-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) the California General Education Transfer Curriculum (Cal-GETC) Requirement.

Student Learning Outcomes

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

- (PSLO1) Identify and comprehend their individual relationship to structures in the larger society.
- Individuals will comprehend the magnitude of their influence on social structures in society, and the social structures that influence them.
- Demonstrate an awareness of the sociological resources available within the structures of society.
- Effectively utilize social structures as resources in society to facilitate their own movement and/or progress in society.
- (PSLO2) Apply effective critical thinking skills to interpret sociological phenomena.
- Apply sociological approaches to assess a social context.
- Distinguish between macro-level and micro-level orientations of assessment of given social contexts.
- Investigate and determine which social contexts require objective or subjective analysis.
- (PSLO3) Assess the significance of important social movements in American society.
- Demonstrate an awareness of the consistent goals, perspectives, and factors leading to social movements.
- Assess the significance of social movements of marginalized people in society.
- Explain the outcomes of social movements in American society.
- (PSLO4) Define and identify various theoretical perspectives across the discipline of Sociology.
- Discuss and Explain Social Conflict Approach.
- Discuss and Explain Symbolic Interactionist Approach.
- Discuss and Explain Structural Functionalist Approach.

- (PSLO5) Comprehend how social practices facilitate the functioning of social structures as they are responsible for maintaining the society as a whole.
- Examine and assess the effects of sociocultural customs and traditions on social structures and institutions.
- Analyze and evaluate values and norms present in the behavior of individuals and groups occupying society's social structures and institutions.
- Investigate the relationship between religion, language, customs and traditions, and how they facilitate comprehension of values and influence social practices.
- (PSLO6) Analyze, interpret, and critically think about sociological ascriptions to race, gender, ethnicity, class, sexual orientation, political affiliation, and other sociological concepts.
- Discuss and explain how ascriptions to sociological concepts affect and shape individuals and groups' life chances and opportunities.
- Demonstrate content knowledge of how and why particular ideas are ascribed to sociological concepts.
- Explain and assess the socialization that individuals and groups undergo due to ideas ascribed to sociological concepts.

Career Information

Sociologists with advanced degrees and professional certificates have a broad range of employment opportunities including, but not limited to, teacher, social worker, probation officer, employment counselor, urban planner, and data analyst. NOTE TO TRANSFER STUDENTS: The Associate Degree for Transfer program is designed for students who plan to transfer to a campus of the California State University (CSU). Other than the required core, the courses you choose to complete this degree will depend to some extent on the selected CSU for transfer. In addition, some California General Education Transfer Curriculum (Cal-GETC) requirements can also be completed using courses required for this associate degree for transfer major (known as "double-counting"). The Associate Degree for Transfer may not provide adequate preparation for upper-division transfer admissions; it is critical that you meet with a CRC counselor to select and plan the courses for the major, as programs vary widely in terms of the required preparation.

Sociology (SOC) Courses

SOC 300 Introductory Sociology

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L4; Cal-GETC Area 4
C-ID: C-ID SOCI 110

This course is a study of human behavior in society, including social groups, culture, personality, social stratification, social change, collective behavior and social institutions. A field trip may also be included at the discretion of the instructor. Field trips may require a nominal fee. Additionally, virtual field trips may be listed as an alternative to meet the same objectives as a face to face (on ground) course.

SOC 301 Social Problems

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L4; Cal-GETC Area 4
C-ID: C-ID SOCI 115

This course is a survey of social problems in American society. It will examine their causes and evaluate proposed solutions. A special emphasis will be placed on local issues. A field trip may also be included at the discretion of the instructor. Field trips may require a nominal fee. Additionally, virtual field trips may be listed as an alternative to meet the same objectives as a face to face (on ground) course.

SOC 302 Introduction to Social Research Methods

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: SOC 300 with a grade of "C" or better
Advisory: Eligibility for ENGL C1000 (formerly known as ENGWR 300), and completion of STAT C1000E (formerly known as STAT 300), PSYC 330, ECON 310 or POLS 382 with grades of "C" or better.
Transferable: CSU; UC
General Education: Local GE L1B; Local GE L4; Cal-GETC Area 4
C-ID: C-ID SOCI 120

This course examines theoretical and ethical principles in social science research with an applied emphasis on research design, utilization of qualitative and quantitative techniques, data coding, data cleaning and organization, descriptive and inferential analysis, and the writing of research reports. Students will be introduced to the application of statistical software for quantitative areas of course work. A field trip may also be included at the discretion of the instructor. Field trips may require a nominal fee. Additionally, virtual field trips may be listed as an alternative to meet the same objectives as a face to face (on ground) course.

SOC 305 Critical Thinking in the Social Sciences

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGL C1000 (formerly known as ENGWR 300) or the equivalent.
Transferable: CSU; UC
General Education: Local GE L1B; Local GE L4

This course examines the definitional and contextual nature of social issues. It develops a critical thinking approach that integrates interdisciplinary principles and utilizes literary criticism, logic, argumentation, and persuasion to analyze and compare the content and validity of social problems. This course specifically explores how the media and scientific community collect, interpret, and report social data. Combining critical thinking tools with the sociological perspective will help students to question the assumptions that surround social phenomena and influence human behavior. A field trip may also be included at the discretion of the instructor. Field trips may require a nominal fee. Additionally, virtual field trips may

be listed as an alternative to meet the same objectives as a face-to-face (on-ground) course.

SOC 310 Marriage and the Family

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L4; Local GE L7B; Cal-GETC Area 4
C-ID: C-ID SOCI 130

This course examines the social, historical, cultural, and structural factors that impact families and influence societal definitions and expectations of the concepts of marriage and family. The intersection of race, ethnicity, class, age, gender, and sexuality will be explored. A field trip may also be included at the discretion of the instructor. Field trips may require a nominal fee. Additionally, virtual field trips may be listed as an alternative to meet the same objectives as a face-to-face (on-ground) course.

SOC 321 Race, Ethnicity and Inequality in the United States

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L4; Cal-GETC Area 4
C-ID: C-ID SOCI 150

This course examines the inequities experienced by racial and ethnic groups in the United States. Emphasis is placed on assimilation models to illustrate conventional thinking centering on the processes of becoming part of American society. In order to expand conventional thinking of these processes of becoming part of American society, emphasis is also placed on systems that perpetuate racial oppression, racial hierarchy (stratification), and theories of race that ascribe to both the histories and contemporary inequalities that shape life chances and opportunities for racial and ethnic groups in the US. A field trip may also be included at the discretion of the instructor. Field trips may require a nominal fee. Additionally, virtual field trips may be listed as an alternative to meet the same objectives as a face-to-face (on-ground) course.

SOC 341 Sex and Gender in the U.S.

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L4; Cal-GETC Area 4
C-ID: C-ID SOCI 140

This course provides a study of the changing roles of women and men in the US. Theories of women's and men's gender role socialization, gender-related inequalities, health and body issues, and a current examination of the women's and men's movements will be explored. A field trip may also be included at the discretion of the instructor. Field trips may require a nominal fee. Additionally, virtual field trips may be listed as an alternative to meet the same objectives as a face-to-face (on-ground) course.

SOC 495 Independent Studies in Sociology

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies. A field trip may also be included at the discretion of the instructor. Field trips may require a nominal fee. Additionally, virtual field trips may be listed as an alternative to meet the same objectives as a face-to-face (on-ground) course.

SOC 499 Experimental Offering in Sociology

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU

This is the experimental courses description.

Spanish

CRC offers the basic grammar and conversation courses in Spanish. Students will be able to understand the spoken language, to speak with reasonable fluency, and to write at their speaking level.

Degrees Offered

A.A.-T. in Spanish

A.A. in Spanish

Dean Emmanuel Sigauke

Department Chair Blanca Gill

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Associate Degrees for Transfer

A.A.-T. in Spanish

The Associate in Arts in Spanish for Transfer Degree (AA-T) is designed to provide a seamless transfer pathway for students interested in pursuing at least one Spanish degree option in the California State University (CSU) system. Students must complete the core curriculum and electives to meet a total of 60 transferable units with a minimum 2.0 GPA, which includes the California General Education Transfer Curriculum (Cal-GETC) pattern. Students must also earn a grade of C or better (or "P" if taken Pass/No Pass) in all the courses for the major as described in the Required Program. Upon successful completion of the degree requirements, students will be guaranteed admission to the CSU system with junior status and will not have to repeat lower division coursework. Students are encouraged to meet with a counselor to develop their educational plans as degree options and general education requirements vary for each university.

Degree Requirements

Course Code	Course Title	Units
A minimum of 3 units from the following:		3[1]
SPAN 426	Introduction to Mexican American Literature (3)	
SPAN 427	Introduction to Spanish American Literature (3)	
HIST 373	History of Mexico (3)	
Subtotal Units:		**3**

OPTION I - Non-Native Spanish Speaker

Course Code	Course Title	Units
SPAN 401	Elementary Spanish I	4
SPAN 402	Elementary Spanish II	4
SPAN 411	Intermediate Spanish	4
SPAN 412	Intermediate Spanish	4
OPTION I - Non-Native Spanish Speaker Units:		16
Total Units:		**19**

OPTION II - Native Spanish Speaker

Course Code	Course Title	Units
SPAN 413	Spanish for Native Speakers I	4
SPAN 415	Spanish for Native Speakers II	4
A minimum of 8 units from the following:		8
SPAN 426, 427, and/or HIST 373, if not already used.		
SPAN 425	Advanced Reading and Conversation (3)	
HUM 331	Latin American Humanities (3)	
ENGLT 336	Race and Ethnicity in Contemporary American Literature (3)	
HIST 371	History of the Americas from the 19th Century Wars of Independence to the Present (3)	
OPTION II - Native Spanish Speaker Units:		16
Total Units:		**19**

[1]SPAN 426 and 427 have a prerequisite of SPAN 412 or 415, so many of the "Option" courses will need to be completed before these courses.

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) the California General Education Transfer Curriculum (Cal-GETC) Requirement.

Student Learning Outcomes

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

- 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 using Spanish.
- discuss and critique Spanish-American literature in a historical context.
- demonstrate proficiency in these areas: comprehension, speaking, reading, writing, and understanding the peoples and cultures of Spanish-speaking countries.

Career Information

The AA-T in Spanish can provide students with the foundational knowledge necessary for transfer to a 4-year Bachelor of Arts

(BA) degree program. Career opportunities for students who have earned BS or BA degrees in Spanish include but are not limited to: Airlines/Travel, Banking, Bilingual Education, Bilingual Telecommunications, Emergency Services, Foreign Service, Foreign Language Teacher, Import & Export, Intelligence/Military Service, International Business, IRS/State Franchise Tax Board, Business & Commerce, Law Enforcement/ Correctional Officer, Social Security Officer, Social Service, Translating & Interpreting, and Tourism. Some careers may require additional training. NOTE TO TRANSFER STUDENTS: The Associate Degree for Transfer program is designed for students who plan to transfer to a campus of the California State University (CSU). Other than the required core, the courses you choose to complete this degree will depend to some extent on the selected CSU for transfer. In addition, some Cal-GETC requirements can also be completed using courses required for this associate degree for transfer major (known as “double-counting”). Meeting with a counselor to determine the most appropriate course choices will facilitate efficient completion of your transfer requirements. For students wishing to transfer to other universities (UC System, private, or out-of-state), the Associate Degree for Transfer may not provide adequate preparation for upper-division transfer admissions; it is critical that you meet with a CRC counselor to select and plan the courses for the major, as programs vary widely in terms of the required preparation.

Associate Degrees

A.A. in Spanish

CRC offers the basic grammar and conversation courses in Spanish. Students will be able to under-stand the spoken language, to speak with reasonable fluency, and to write at their speaking level.
Highlights include:
* Courses in Spanish
* Multimedia, interactive language lab with Internet capabilities
* Internationally trained faculty and staff
* Oral Proficiency Certification in Spanish

This degree is designed to meet common lower division requirements for a major in Spanish in a four-year university. This will include the fundamentals of language learning, listening, speaking, reading, writing, and culture.

Note to Transfer Students:
If you are interested in transferring to a four-year college or university to pursue a bachelor’s degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate’s degree in this major may be different from the requirements needed for the Bachelor’s degree.

Native speakers of the language who have high school - equivalent reading and writing skills in their native language should enroll in the 413 level course (or above) in their native language.

Degree Requirements

Course Code	Course Title	Units
CORE SEQUENCE = (401 + 402 + 411 + 412) or (413 + 415):		
[[[SPAN 401	Elementary Spanish I (4)	8 - 16
and SPAN 402]	Elementary Spanish II (4)	
and SPAN 411]	Intermediate Spanish (4)	
and SPAN 412]	Intermediate Spanish (4)	
or [SPAN 413	Spanish for Native Speakers I (4)	
and SPAN 415]	Spanish for Native Speakers II (4)	
RESTRICTED ELECTIVES:		
A minimum of 10 units from the following:		10
SPAN 311	Conversational Spanish, Intermediate (2)	
SPAN 312	Conversational Spanish, Intermediate (2)	
SPAN 425	Advanced Reading and Conversation (3)	
SPAN 426	Introduction to Mexican American Literature (3)	
SPAN 427	Introduction to Spanish American Literature (3)	
SPAN 434	Spanish for the Professions - Intermediate (3)	
Total Units:		**18 - 26**

The Spanish Associate in Arts (A.A.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Career Information

Airlines/Travel; Banking; Bilingual Education/Teacher's Aide; Bilingual Telecommunications; Emergency Services; Foreign Service;Foreign Language Teacher; Import & Export; Intelligence/Military Service; International Business; IRS/State Franchise Tax Board; Overseas Employment: Business & Commerce; Law Enforcement/Correctional Officer; Social Security Officer; Social Service; Translating & Interpreting; Tourism Some career options may require more than two years of college study.

Spanish (SPAN) Courses

SPAN 101 Conversational Spanish, Elementary

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.

This is a first semester introduction to the Spanish language. It is designed for beginning students with little or no previous exposure to the language. It is characterized by an emerging ability to understand and produce appropriate responses in high frequency situations utilizing learned materials. Speaking and writing will be comprehensible to a sympathetic listener. Verbal and written expression is limited to short, culturally appropriate communication. Students will acquire a knowledge of the geography, culture and people of regions where Spanish is spoken and of Spanish-speakers' contributions to North American and world cultures. This class consists of two hours

lecture and one hour of laboratory work conducted in the classroom each week and two hours of laboratory work conducted in the Language Laboratory each week.

SPAN 102 Conversational Spanish, Elementary

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: SPAN 101 with a grade of "C" or better

This is second semester Elementary Spanish. It is designed for students who have completed SPAN 101 or two years of high school Spanish. It provides refinement of skills begun in SPAN 101. Students will gain increased accuracy and ability to understand and produce appropriate responses in high frequency situations utilizing learned materials. Speaking and writing will be comprehensible to a sympathetic listener. Verbal and written expression will be limited to short, culturally appropriate communication on a broader scale than at the SPAN 101 level. Students will acquire a knowledge of the geography, culture and people of regions where Spanish is spoken and of Spanish-speakers' contribution to North American and world cultures. This class consists of two hours lecture and one hour of laboratory work conducted in the classroom each week and two hours of laboratory work conducted in the Language Laboratory each week.

SPAN 299 Experimental Offering in Spanish

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

SPAN 311 Conversational Spanish, Intermediate

Units: 2
Hours: 18 hours LEC; 54 hours LAB
Prerequisite: SPAN 102 or 401 with a grade of "C" or better; or two years of high school Spanish
Transferable: CSU

This is a conversational course designed for students who have completed SPAN 102 or two years of high school Spanish. Refining skills obtained in previous coursework, students will continue to build their communication skills including listening, reading and speech. Students will develop the ability to respond in an unrehearsed manner on concrete topics in known situations. Students will be exposed to the geography, culture and people of regions where Spanish is spoken and to Spanish-speakers' contributions to North American and world cultures. This course will consist of one hour of lecture and two hours of laboratory work conducted in the classroom each week and one hour of laboratory work conducted in the Language Laboratory each week.

SPAN 312 Conversational Spanish, Intermediate

Units: 2
Hours: 18 hours LEC; 54 hours LAB
Prerequisite: SPAN 311 or 402 with a grade of "C" or better; or three years of high school Spanish
Transferable: CSU

This is second semester Intermediate Spanish. This is a conversation course designed for students who have completed SPAN 311 or SPAN 402 or three years of high school Spanish.
Continuing to refine skills obtained in previous coursework, students will continue to build their communication skills including listening, reading and speech. Students will develop the ability to respond in an unrehearsed manner on concrete topics in known situations.
Students will be exposed to the geography, culture and people of regions where Spanish is spoken and to Spanish-speakers' contributions to North American and world cultures.
This course will consist of one hour of lecture and three hours of laboratory work conducted in the classroom and one hour of laboratory work conducted in the Language Laboratory each week.

SPAN 401 Elementary Spanish I

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: None.
Transferable: CSU; UC (Corresponds to two years of high school study)
General Education: Local GE L3
C-ID: C-ID SPAN 100

This is the first semester introduction to the Spanish language. It is designed for beginning students with little or no previous exposure to the language. It is characterized by an emerging ability to understand and produce appropriate responses in high frequency situations utilizing learned materials. Speaking and writing will be comprehensible to a sympathetic listener. Verbal and written expression is limited to short, culturally appropriate communication. Students will acquire a knowledge of the geography, culture and people of regions where Spanish is spoken and of Spanish-speakers' contributions to North American and world cultures.

SPAN 402 Elementary Spanish II

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: SPAN 401 with a grade of "C" or better
Transferable: CSU; UC (SPAN 402 and 413 combined: maximum transfer credit is one course)
General Education: Local GE L3
C-ID: C-ID SPAN 110

This is second semester Elementary Spanish. It is designed for students who have completed SPAN 401 or two years of high school Spanish. It provides refinement of skills begun in SPAN 401. Students will gain increased accuracy and ability to understand and produce appropriate responses in high-frequency situations utilizing learned materials. Speaking and writing will be comprehensible to a sympathetic listener. Verbal and written expression will be limited to short, culturally appropriate communication on a broader scale than at the SPAN 401 level. Students will acquire a knowledge of the geography, culture and people of regions where Spanish is spoken and of Spanish-speakers' contribution to North American and world cultures.

SPAN 411 Intermediate Spanish

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: SPAN 402 with a grade of "C" or better
Transferable: CSU; UC

General Education: Local GE L3; Cal-GETC Area 3B
C-ID: C-ID SPAN 200

This is first semester Intermediate Spanish. It is designed for students who have completed SPAN 402 or three years of high school Spanish. It provides refinement of skills attained in SPAN 402. Students will work toward the ability to create with the language without relying on learned responses, to understand main ideas in routine speech and to understand main ideas in written texts. Listening and reading comprehension continue to develop; speaking and writing will be comprehensible to a somewhat sympathetic native speaker. Students will develop the ability to respond in an unrehearsed manner on concrete topics in known situations. Written expression will meet limited personal needs and culturally appropriate language at a higher level of accuracy than found in SPAN 402. The student will continue acquisition of knowledge of geography, culture and people of regions where Spanish is spoken and of Spanish-speakers' contributions to North American and world cultures.

SPAN 412 Intermediate Spanish

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: SPAN 411 with a grade of "C" or better
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3B
C-ID: C-ID SPAN 210

This is second semester Intermediate Spanish. It is designed for students who have completed SPAN 411 or four years of high school Spanish. It provides continued development of skills attained in SPAN 411. The focus will be the development of written narratives and expository prose combined with increased cultural awareness. Emphasis will be on culturally authentic reading and writing through the introduction of basic literary analysis. Students will develop the ability to handle complicated situations using past and future time frames. Students will continue acquisition of knowledge of geography, culture and people of regions where Spanish is spoken and of Spanish-speakers' contributions to North American and world cultures.

SPAN 413 Spanish for Native Speakers I

Units: 4
Hours: 72 hours LEC
Prerequisite: Spanish native speaker proficiency or the equivalent intermediate level as assessed by the instructor.
Transferable: CSU; UC (SPAN 402 and 413 combined: maximum transfer credit is one course)
General Education: Local GE L3; Cal-GETC Area 3B
C-ID: C-ID SPAN 220

This course offers the fundamentals of spoken and written Spanish for the native speaker of Spanish. It covers the structure of the language, oral communication, fundamentals of grammar and composition. Focus is placed primarily in the indicative tenses. The course also covers diacritical marks, like the accent mark, and their uses. In addition, the course introduces the student to the geography and culture of the Spanish speaking world. This course is conducted in Spanish.

SPAN 415 Spanish for Native Speakers II

Units: 4
Hours: 72 hours LEC
Prerequisite: SPAN 413 with a grade of "C" or better
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3B
C-ID: C-ID SPAN 230

This course is a continuation of Spanish 413. It offers the fundamentals of spoken and written Spanish for the native speaker of Spanish. It covers the structure of the language, oral communication, fundamentals of grammar and composition. Focus is placed primarily on the conditional and subjunctive forms, the future tense, and the compound tenses. The course also covers diacritical marks, like the accent mark, and their uses. In addition, the course introduces the student to the geography and culture of the Spanish speaking world. This course is conducted in Spanish.

SPAN 423 Contrastive Grammar of English-Spanish I

Units: 1.5
Hours: 27 hours LEC
Prerequisite: SPAN 412 or 413 with a grade of "C" or better; or Spanish native speaker proficiency or equivalent advanced intermediate level as assessed by the instructor.
Transferable: CSU

This course presents part one of the essential elements of Spanish grammar side by side with their grammatical equivalent in English. It allows native Spanish-speakers and advanced Spanish learners to compare and contrast the grammars of both languages at a glance. It focuses upon the development of analytical abilities by presenting the interlingual differences between Spanish and English in a simple and direct way. Students will be provided with numerous exercises, through which the nature of such differences can be readily perceived and acted upon. This course will begin with an overview of grammatical terminology and sentence structure in both languages.

SPAN 424 Contrastive Grammar of English-Spanish II

Units: 1.5
Hours: 27 hours LEC
Prerequisite: SPAN 423 with a grade of "C" or better; or Spanish native speaker proficiency or equivalent advanced intermediate level as assessed by the instructor.
Transferable: CSU

This course presents part two of the essential elements of Spanish grammar side by side with their grammatical equivalent in English. It allows native Spanish-speakers and advanced Spanish learners to compare and contrast the grammars of both languages at a glance. It focuses upon the development of analytical abilities by presenting the interlingual differences between Spanish and English in a simple and direct way. Students will be provided with numerous exercises, through which the nature of such differences can be readily perceived and acted upon.

SPAN 425 Advanced Reading and Conversation

Units: 3
Hours: 54 hours LEC
Prerequisite: SPAN 412 or 415 with a grade of "C" or better
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3B

This class focuses on building advanced reading and conversational skills in Spanish. The emphasis is on developing critical thinking skills and academic writing proficiency through a functional grammar approach. Readings and activities provide the appropriate vocabulary, linguistic structures, and writing strategies to allow for building on vocabulary, grammar review, and meaningful dialogue.

SPAN 426 Introduction to Mexican American Literature

Units: 3
Hours: 54 hours LEC
Prerequisite: SPAN 412 or 415 with a grade of "C" or better, or placement through the assessment process.
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3B

This course is an introductory survey to the four genres of Mexican-American literature: Poetry, Narrative, Theatre, and the Essay, and the culture which produced it. Emphasis will be given to 20th century writers and works. This course is conducted in English and Spanish.

SPAN 427 Introduction to Spanish American Literature

Units: 3
Hours: 54 hours LEC
Prerequisite: SPAN 412 or 415 with a grade of "C" or better, or placement through the assessment process.
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3B

This course is an introductory survey to the four genres of Spanish-American literature: Poetry, Narrative, Theatre, and the Essay, and the culture which produced it. Post-independence writers and their works will be emphasized. This course is conducted in Spanish.

SPAN 434 Spanish for the Professions - Intermediate

Units: 3
Hours: 54 hours LEC
Prerequisite: SPAN 102 or 402 with a grade of "C" or better
Transferable: CSU

This is an intermediate course designed for persons in law enforcement, business and finance, social services and the medical professions. The emphasis of the course is on acquiring verbal facility in interviewing, collecting data, giving instructions and general courtesies. The course will help students acquire language proficiency while reviewing and broadening the grammar foundation attained in elementary Spanish. It will introduce specific vocabulary necessary for professionals to communicate successfully in a professional situation. Cultural and behavioral attitudes appropriate for relating to persons of Hispanic heritage will be suggested.

SPAN 495 Independent Studies in Spanish

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

SPAN 499 Experimental Offering in Spanish

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU

This is the experimental courses description.

Student Government

The Student Life and Leadership Center classes are designed to help students develop their skills, knowledge, and abilities to successfully perform in current and future leadership roles. Under the auspices of the student association, those enrolled in this program have a variety of opportunities to serve on the Clubs and Events Board, Student Senate, and/or college committees. Participation in the program does not require the student to hold an elected position in student government.

Student Government (SGVT) Courses

SGVT 300 Introduction to Student Government

Units: 2
Hours: 18 hours LEC; 54 hours LAB
Prerequisite: None.
Transferable: CSU
General Education: Local GE L7B

This course provides a study of the legal, educational and philosophical basis of student government. The course may include travel to other campuses, local, regional and state conferences and provide the opportunity to participate on faculty and administrative committees. Topics are designed to teach leadership skills and to give practical experience in the social and civic responsibilities of student government.

SGVT 315 Dynamics of Leadership

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU
General Education: Local GE L7B

This course is designed to introduce students to the fundamental elements of leadership as it pertains to student governmental processes, team and community building. Students will examine contemporary leadership models as well as their own values and beliefs to develop a personal philosophy of leadership. Through activities and projects facilitated by student government, students will learn how to apply theory and experience leadership in the college and community settings. Students interested in broadening their understanding of diverse topics related to self-knowledge, group dynamics and leadership are encouraged to enroll.

SGVT 495 Independent Studies in Student Government

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

SGVT 499 Experimental Offering in Student Government

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU

This is the experimental courses description.

Surgical Technology

The Surgical Technology program teaches students the skills necessary to become a Surgical Technologist. Surgical Technologists are employed in hospitals, surgery centers, and physician's offices to deliver patient care before, during, and after surgery. Cosumnes River College's program combines academic and clinical instruction, including preparing surgical instruments, passing them to the surgeon, and handling specialized equipment.

Dean Kris Hubbard

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Surgical Technology (SURG) Courses

SURG 100 Introduction to Surgical Technology

Units: 2
Hours: 36 hours LEC
Prerequisite: None.

This course provides an introduction to the field of Surgical Technology. Students will learn the typical duties of a surgical technologist, the roles and functions of the surgical team, the legal regulations and ethical implications of surgical technology, and the various facilities where surgical technologists are employed. Students will also be introduced to the desired qualities and characteristics of a successful surgical technologist. Additionally, the CRC Surgical Technology Program specifics will be discussed, including the application process and entrance requirements.

SURG 105 Basic Sciences for Surgical Technologists

Units: 5
Hours: 90 hours LEC
Prerequisite: None.
Enrollment Limitation: Formal acceptance to the CRC Surgical Technology program through the established application process.

This course will review the basic sciences of human anatomy and physiology related to surgical procedures, common disease states that require surgical intervention, and the concepts of microbiology involved in surgical procedures. The course will also cover typical medications used during and after surgery, as well as basic physics as it applies to operating room procedures and practices. This course is designed for students who have been officially accepted to the CRC Surgical Technology program through the formal application process.

SURG 110 Surgical Patient Care Concepts

Units: 5
Hours: 90 hours LEC
Prerequisite: None.
Enrollment Limitation: Acceptance to the CRC Surgical Technology program through the formal application process.

This course provides the student with a theoretical and practical understanding of the technology and practices used in caring for a patient undergoing a surgical procedure. Additional material covers the structure and function of various surgical facilities. This course is designed for students who have been officially accepted to the CRC Surgical Technology program through the formal application process.

SURG 112 Surgical Skills Lab

Units: 5
Hours: 270 hours LAB
Prerequisite: None.
Corequisite: SURG 110
Enrollment Limitation: Acceptance to the CRC Surgical Technology program through the formal application process.

This laboratory course is the hands-on portion of the program where students will learn the clinical skills required to demonstrate competency in the operating room as a surgical technologist. This course is designed for students who have been officially accepted to the CRC Surgical Technology program through the formal application process.

SURG 115 Surgical Specialties

Units: 4
Hours: 72 hours LEC
Prerequisite: None.
Enrollment Limitation: Formal acceptance to the CRC Surgical Technology program through the program application process.

This course covers the most common procedures and equipment utilized by the surgical technologist during specialty surgery. These specialties include neurosurgery, vascular surgery, orthopedic surgery and others. This course will also help prepare the student for the national certification exam. This course is designed for students who have been officially accepted to the CRC Surgical Technology program through the formal application process.

SURG 120 Surgical Technology Practicum I

Units: 5
Hours: 9 hours LEC; 240 hours LAB
Prerequisite: None.
Enrollment Limitation: Formal acceptance to the CRC Surgical Technology program through the program application process.

This course provides the student with hands-on experience in the surgical suite caring for patients under the supervision of a surgical technologist or a registered nurse. They will also gain experience in patient and staff interaction and communication. This course is designed for students who have been officially accepted to the CRC Surgical Technology program through the formal application process.

SURG 122 Surgical Technology Practicum II

Units: 4.5
Hours: 240 hours LAB

Prerequisite: None.
Enrollment Limitation: Formal acceptance to the CRC Surgical Technology program through the program application process.

This course provides the student with additional hands-on experience in the operating room under the supervision of a surgical technologist or other licensed surgical practitioner. They will gain experience in patient care and the role of the surgical technologist within the surgical field. This course will also help prepare the student for the national certification examination. This course is designed for students who have been officially accepted to the CRC Surgical Technology program through the formal application process.

SURG 299 Experimental Offering in Surgical Technology

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

SURG 499 Experimental Offering in Surgical Technology

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

Theatre and Dance Arts

The two-year programs in Theatre Arts are designed to provide students with a broad spectrum of activities in all phases of play production.

Degrees and Certificates Offered

A.A.-T. in Theatre Arts

A.A. in Theatre Arts

Theatre for Young Audiences Certificate

Dean Brian Rickel

Department Chair Martin Flynn

Phone (916) 691-7171

Email rickelb@crc.losrios.edu

Associate Degrees for Transfer

A.A.-T. in Theatre Arts

The Cosumnes River Theatre Department Associate of Arts Degree for Transfer Program 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. Additionally, this degree exposes students to the core principles and practices in the field. Students will learn: the basics of acting, the basics of theatre technology and production, and where theatre fits in to both the historical and modern world of entertainment.

Students must complete the following Associate Degree for Transfer (ADT) requirements:

(1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
(A) The California General Education Transfer Curriculum (Cal-GETC).
(B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

(2) Obtainment of a minimum grade point average of 2.0.

ADTs also require that students must earn a “C” or better in all courses required for the major or area of emphasis. A “P” (Pass) grade is also an acceptable grade for courses in the major if the course is taken on a Pass/No Pass basis.

Degree Requirements

Course Code	Course Title	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
A minimum of 3 units from the following:		3
TAP 300	Modern Rehearsal and Performance I (1 - 3)	
or TAP 320	Classical Rehearsal and Performance I (1 - 3)	
or TAP 340	Musical Rehearsal and Performance I (1 - 3)	
or TAP 360	Children's Theatre Rehearsal and Performance I (1 - 3)	
TAP 310	Modern Technical Production I (1 - 3)	
or TAP 330	Classical Technical Production I (1 - 3)	
or TAP 350	Musical Technical Production I (1 - 3)	
or TAP 370	Children's Theatre Technical Production I (1 - 3)	
A minimum of 9 units from the following:		9
TA 305	Script Analysis (3)	
TA 351	Theory and Techniques of Acting II (3)	
TA 420	Stagecraft (3)	
TA 422	Stage Lighting (3)	
TA 430	Costume Construction (3)	
TAP 300	Modern Rehearsal and Performance I (1 - 3)	
or TAP 320	Classical Rehearsal and Performance I (1 - 3)	
or TAP 340	Musical Rehearsal and Performance I (1 - 3)	
TAP 310	Modern Technical Production I (1 - 3)	
or TAP 330	Classical Technical Production I (1 - 3)	
or TAP 350	Musical Technical Production I (1 - 3)	
Total Units:		**18**

[1]If students utilized three units of Rehearsal and Performance courses in the core of the degree they may use three units of Technical Production courses here. If they used Technical Production courses in the core they may use three units of Rehearsal and Performance courses here.

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) the California General Education Transfer Curriculum (Cal-GETC) Requirement.

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 Information

People with advanced degrees in Theatre have a broad range of employment opportunities including, but not limited to, acting, design/technology for the theatre, publicity and public relations, teaching, theatre technician, stage management, and box Office management. Some of these careers may need additional degrees beyond the Associates level. NOTE TO TRANSFER STUDENTS: The Associate Degree for Transfer program is designed for students who plan to transfer to a campus of the California State University (CSU). Other than the required core, the courses you choose to complete this degree will depend to some extent on the selected CSU for transfer. In addition, some California General Education Transfer Curriculum (Cal-GETC) requirements can also be completed using courses required for this associate degree for transfer major (known as “double-counting”). Meeting with a counselor to determine the most appropriate course choices will facilitate efficient completion of your transfer requirements. For students wishing to transfer to other universities (UC System, private, or out-of-state), the Associate Degree for Transfer may not provide adequate preparation for upper-division transfer admissions; it is critical that you meet with a CRC counselor to select and plan the courses for the major, as programs vary widely in terms of the required preparation.

Associate Degrees

A.A. in Theatre Arts

The two-year degree in Theatre Arts is a comprehensive program in theater that combines a critical study of theatre with experiential practice in one or more of its component parts. Students explore the various areas of theater to build a foundation for future creative work. The theatre arts degree will provide training in theatre arts production for students who intend to pursue study beyond the AA degree, who are preparing for careers in teaching or in the professional theatre. The basic program also provides an opportunity for specialization in Performance or Design/Technology. A Certificate of Achievement in Theatre for Young Audiences is also available for students whose interest is in doing theatre with or for children.

Highlights include:
* Distinguished faculty with nationally renowned professional experience in directing and design, as well as considerable teaching experience on both the graduate and undergraduate levels.
* A Visual and Performing Arts Complex, which includes a 320-seat proscenium theatre, a 100-seat Black Box theatre, and an outdoor stage.
* Opportunity for advanced students to gain access to the finest four-year college and university theatre programs as well as internships in major regional theatres throughout the country.
* Partnerships with local professional theatre companies for internships.

This degree is designed to provide hands-on experience in the production of plays as well as prepare students for transfer to four-year institutions, and for a baccalaureate major in Theatre or related majors.

Note to Transfer Students:
If you are interested in transferring to a four-year college or university to pursue a bachelor’s degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate’s degree in this major may be different from the requirements needed for the Bachelor’s degree.

Degree Requirements

Course Code	Course Title	Units
TA 300	Introduction to the Theatre (3)	3
or TA 302	History and Theory of the Theatre I (3)	
TA 305	Script Analysis (3)	3
TA 350	Theory and Techniques of Acting I	3
TA 420	Stagecraft	3
A minimum of 3 units from the following:		3
TAP 300	Modern Rehearsal and Performance I (1 - 3)	
TAP 301	Modern Rehearsal and Performance II (1 - 3)	
TAP 302	Modern Rehearsal and Performance III (1 - 3)	
TAP 303	Modern Rehearsal and Performance IV (1 - 3)	
TAP 320	Classical Rehearsal and Performance I (1 - 3)	
TAP 321	Classical Rehearsal and Performance II (1 - 3)	
TAP 322	Classical Rehearsal and Performance III (1 - 3)	
TAP 323	Classical Rehearsal and Performance IV (1 - 3)	
TAP 340	Musical Rehearsal and Performance I (1 - 3)	
TAP 341	Musical Rehearsal and Performance II (1 - 3)	
TAP 342	Musical Rehearsal and Performance III (1 - 3)	
TAP 343	Musical Rehearsal and Performance IV (1 - 3)	
TAP 360	Children's Theatre Rehearsal and Performance I (1 - 3)	
TAP 361	Children's Theatre Rehearsal and Performance II (1 - 3)	
TAP 362	Children's Theatre Rehearsal and Performance III (1 - 3)	
TAP 363	Children's Theatre Rehearsal and Performance IV (1 - 3)	
A minimum of 3 units from the following:		3
TAP 310	Modern Technical Production I (1 - 3)	
TAP 311	Modern Technical Production II (1 - 3)	
TAP 312	Modern Technical Production III (1 - 3)	
TAP 313	Modern Technical Production IV (1 - 3)	
TAP 330	Classical Technical Production I (1 - 3)	
TAP 331	Classical Technical Production II (1 - 3)	
TAP 332	Classical Technical Production III (1 - 3)	
TAP 333	Classical Technical Production IV (1 - 3)	
TAP 350	Musical Technical Production I (1 - 3)	
TAP 351	Musical Technical Production II (1 - 3)	
TAP 352	Musical Technical Production III (1 - 3)	
TAP 353	Musical Technical Production IV (1 - 3)	
TAP 370	Children's Theatre Technical Production I (1 - 3)	

Course Code	Course Title	Units
TAP 371	Children's Theatre Technical Production II (1 - 3)	
TAP 372	Children's Theatre Technical Production III (1 - 3)	
TAP 373	Children's Theatre Technical Production IV (1 - 3)	
Subtotal Units:		**18**

Acting/Performance Track

Course Code	Course Title	Units
A minimum of 6 units from the following:		6
TA 351	Theory and Techniques of Acting II (3)	
TA 356	Acting for the Camera I (3)	
TA 360	Styles of Acting (3)	
TA 401	Children's Literature and Creative Drama (3)	
TA 498	Work Experience in Theatre Arts (0.5 - 4)	
Acting/Performance Track Units:		6
Total Units:		**24**

Technical Theater Track

Course Code	Course Title	Units
A minimum of 6 units from the following:		6
TA 422	Stage Lighting (3)	
TA 424	Advanced Technical Theatre (3)	
TA 430	Costume Construction (3)	
TA 404	Techniques of Puppetry (3)	
TA 498	Work Experience in Theatre Arts (0.5 - 4)	
Technical Theater Track Units:		6
Total Units:		**24**

The Theatre Arts Associate in Arts (A.A.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Student Learning Outcomes

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

- Critique and evaluate the role of the theatre arts and its relationship to other parts of society.
- Evaluate the historical, artistic, social, and philosophical environments in which theatre exists.
- Analyze and critique dramatic literature and performance.
- Develop both a conceptual understanding and a practical application of skills related to the theatre discipline in performance, technical theatre, theatre production and performance studies.
- Synthesize the roles and responsibilities of working as a member of an ensemble and production team and perform dependably, competently, collaboratively and resourcefully as part of the ensemble and production team.
- Apply the necessary skills for entry-level work in educational, community and professional theatrical endeavors and for entry into undergraduate bachelorette study in theatre arts.

Career Information

Theater arts majors will develop attributes that are highly valued by employers. These include: interpersonal soft skills, critical thinking, research, analysis, oral/written communication, presentation, and problem solving skills. The A.A. degree helps prepare students for many career opportunities. Program career opportunities include jobs with theater production and performing arts organizations as well as many related industries such as advertising, television, film, recreation, and academia. Potential Job Titles: Costume Designer, Drama Therapist, Casting Director,Set Designer, Stage Manager,Talent Manager, Playwright.Teacher Stage Actor, Director, Literary Manager, Arts Manager, Box office manager, Producer, Arts advocate, Lobbyist, Giving and Fundraising Specialist, Lighting Designer, Sound Designer, Designer, Lighting Engineer, Dramaturge, Shop Supervisor, Wardrobe Crew, Dresser, Booking Agent, Public Relations Specialist,Special Effects Technician, Theater Critic, Voice acting, Announcer, Event Planner, Arts Administrator, PR and Advertising Specialist Additionally, many employers in other disciplines actively recruit theatre majors. Students may find employment in government agencies, nonprofits, educational institutions, and businesses depending on their skills and experience. Internships or relevant part-time jobs may be a prerequisite to finding employment. This list does not reflect all potential places of employment or kinds of jobs for theater arts majors. Some career choices may require courses beyond the Associate Degree.

Certificate of Achievement

Theatre for Young Audiences Certificate

The Certificate in Children's Theatre focuses on building skills in puppetry, storytelling, Story Dramatization, creative drama in the classroom and other skills pertaining to children's theatre. This certificate allows the student to further their education with transferable theatre classes.

Certificate Requirements

Course Code	Course Title	Units
TA 401	Children's Literature and Creative Drama	3
TA 404	Techniques of Puppetry	3
TA 344	Improvisation and Theatre Games	2
A minimum of 3 units from the following:		3
TAP 360	Children's Theatre Rehearsal and Performance I (1 - 3)	

Course Code	Course Title	Units
TAP 361	Children's Theatre Rehearsal and Performance II (1 - 3)	
TAP 362	Children's Theatre Rehearsal and Performance III (1 - 3)	
TAP 363	Children's Theatre Rehearsal and Performance IV (1 - 3)	
Total Units:		**11**

Student Learning Outcomes

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

- Critique and evaluate the role of the theatre for youth and its relationship to other parts of society. SLO #1
- Evaluate the historical, artistic, social, and philosophical environments in which theatre for youth exists. SLO #2
- Analyze and critique dramatic literature and performance for young audiences. SLO #3
- Collaborate effectively as an ensemble member of a theatre group or company. SLO #4

Career Information

Recreation leaders, teaching-artists, youth group director, after-school drama specialist.

Dance (DANCE) Courses

DANCE 310 Jazz Dance I

Units: 1
Hours: 54 hours LAB
Course Family: Jazz Dance Technique
Prerequisite: None.
Transferable: CSU; UC

This physical education course covers barre and center floor warm-ups, exercises, jazz techniques, isolations, walks and turns. This course explores variation of styles in ethnic, lyrical and modern jazz dance given in combinations and offers students the opportunity for exploration and improvisation using jazz steps learned in class. This class is for students with no or very little dance training.

DANCE 312 Jazz Dance II

Units: 1
Hours: 54 hours LAB
Course Family: Jazz Dance Technique
Prerequisite: DANCE 310 and 310 with grades of "C" or better; or one year of beginning training determined by the professor per an evaluation for the level of proficiency.
Transferable: CSU; UC

This beginning/intermediate dance class continues the fundamental jazz skills learned in the previous level with further focus on proper technique including alignment, balance, multiple turns, leaps, and more complex combinations. This course is for students with some previous dance training.

DANCE 313 Jazz Dance III

Units: 1
Hours: 54 hours LAB
Course Family: Jazz Dance Technique
Prerequisite: DANCE 312 with a grade of "C" or better; or two years of beginning toward intermediate skills of jazz dance, determined by the professor per an evaluation for the level of proficiency.
Transferable: CSU; UC

This intermediate dance class continues with the fundamental jazz skills learned in the previous level with a further focus on proper technique while performing more complex combinations and exploring different rhythms and styles. This course is for students with previous dance training.

DANCE 314 Jazz Dance IV

Units: 1
Hours: 54 hours LAB
Course Family: Jazz Dance Technique
Prerequisite: DANCE 313 with a grade of "C" or better; or training at a level of intermediate skills of jazz dance, determined by the professor per an evaluation for the level of proficiency.
Transferable: CSU; UC

This intermediate/advanced dance class offers the opportunity for students to create a personal jazz style using the techniques learned in the previous levels. This course explores variation of styles in ethnic, lyrical and modern given in combinations and offers students the opportunity for exploration and improvisation using jazz steps learned in class. This class is for high intermediate to advanced dance students only.

DANCE 320 Ballet I

Units: 1
Hours: 54 hours LAB
Course Family: Ballet Technique
Prerequisite: None.
Transferable: CSU; UC (* All PE Activity courses: combined maximum transfer credit, 4 units)

This course covers the fundamentals of beginning ballet technique. Basic terminology, coordination, alignment and execution of beginning ballet technique will be addressed. Students will experience a typical ballet class beginning with exercises at the barre, developed exercises in the center and across the floor exercises. Students will gain strength, agility, flexibility, coordination and balance. Students will also acquire knowledge of ballet history and repertory. Students will present their semester-long study of beginning ballet in a final showcase performance. This course is for students with no to very little dance experience.

DANCE 321 Ballet II

Units: 1
Hours: 54 hours LAB
Course Family: Ballet Technique

Prerequisite: DANCE 320 with a grade of "C" or better; or one year of beginning training determined by the professor per an evaluation for the level of proficiency.
Transferable: CSU; UC

This course is a continuation of beginning ballet technique with a progression in barre, center, and across the floor exercises. Fundamentals of beginning ballet are addressed with greater emphasis on strength and coordination. Students will further develop their ballet skills, movement vocabulary, and sequence construction while advancing their knowledge of ballet history and repertory. Students will present their semester-long study of Level II ballet in a final performance. This course is recommended for students who have successfully completed Ballet I and are at a high beginner or intermediate level.

DANCE 322 Ballet III

Units: 1
Hours: 54 hours LAB
Course Family: Ballet Technique
Prerequisite: DANCE 321 (Ballet II) with a grade of "C" or better; or one year of beginning training with skills that properly execute Level II barre, center, and across the floor exercises, determined by the professor per an evaluation for the level of proficiency.
Transferable: CSU; UC

This course is a progression of ballet from Dance 321 with an emphasis on technique in barre exercises to improve extensions, center exercises to improve balance and across the floor combinations to challenge the dancer with more complex steps and difficult combinations. This course is recommended for students who have successfully completed Ballet II with a grade of "C" or better or are at an intermediate level to be determined by the instructor.

DANCE 330 Modern Dance I

Units: 1
Hours: 54 hours LAB
Course Family: Modern Dance Technique
Prerequisite: None.
Transferable: CSU; UC (* All PE Activity courses: combined maximum transfer credit, 4 units)

This beginning class offers an introduction to basic dance movement and the basic elements of music and rhythm. This course includes rhythmic, isolated and expressive movement as well as elemental concepts of space, time and force. This course is for students with little or no previous dance training.

DANCE 332 Modern Dance II

Units: 1
Hours: 54 hours LAB
Course Family: Modern Dance Technique
Prerequisite: DANCE 330 and 330 with grades of "C" or better; or one year of beginning training determined by the professor per an evaluation for the level of proficiency.
Transferable: CSU; UC

This beginning/intermediate modern dance class continues with the fundamental modern dance skills learned in the previous level. This course includes rhythmic, isolated and expressive movement. Concepts of space, time and force as related to dance will be discussed. Various cultural and contemporary dances will be explored. This course is for students who have successfully completed Modern Dance I or have previous dance training.

DANCE 333 Modern Dance III

Units: 1
Hours: 54 hours LAB
Course Family: Modern Dance Technique
Prerequisite: DANCE 332 with a grade of "C" or better; or have training at a beginning-intermediate level in modern dance, as determined by the professor per an evaluation for the level of proficiency.
Transferable: CSU; UC

This intermediate modern dance class continues to develop fundamental modern dance skills learned in the previous level. The class focuses on proper technique with more complex combinations. The students will perform various types of styles including cultural and contemporary dance. This course is for students who have successfully completed Modern Dance II or have previous dance training.

DANCE 334 Modern Dance IV

Units: 1
Hours: 54 hours LAB
Course Family: Modern Dance Technique
Prerequisite: DANCE 333 with a grade of "C" or better; or have training at an intermediate level in modern dance, as determined by the professor per an evaluation for the level of proficiency.
Enrollment Limitation: The student's level of ability must be appropriate for the class. Students who are inexperienced or at too high of a level will be asked to take another course. The instructor will make this determination.
Transferable: CSU; UC

This intermediate/advanced modern dance class continues to develop fundamental modern dance skills learned in the previous level. The class focus is on proper technique while performing complex combinations and developing a personal style. This course creates an opportunity for self-discovery, self-discipline and self-expression in the art form of modern dance. Creative assignments will be given in improvisation and movement communication and expression utilizing problem-solving techniques. This course is for students who have successfully completed Modern Dance III or have previous dance training.

DANCE 351 Hip Hop I

Units: 1
Hours: 54 hours LAB
Course Family: Hip Hop Technique and Competition
Prerequisite: None.
Transferable: CSU; UC (* Any PE Activity courses combined: maximum credit, 4 units)

This course includes basic Hip Hop moves and rapid level changes for floor work. Choreography is provided on a bare bones theme and developed according to individual style, ability and personal interpretation. The history of this genre and the traditional competitive elements of Hip Hop dance are examined, as well as the role of dance in Hip Hop culture. An opportunity for Freestyle, Old Style, Poppin', Lockin', and Dance Poetry exploration is offered.

DANCE 352 Hip Hop II

Units: 1
Hours: 54 hours LAB
Course Family: Hip Hop Technique and Competition
Prerequisite: DANCE 351 with a grade of "C" or better; or one year of beginning training determined by the professor per an evaluation for the level of proficiency.
Transferable: CSU; UC

This course builds on the skills introduced with Hip Hop I. Skills, steps, and hip hop dance combinations will progress in difficulty. Students will have more opportunity to explore freestyle movement and participate in session work. The emphasis of this class will cover the progression of hip hop dance beginning with break dance through the current trends of today.

DANCE 353 Hip Hop III

Units: 1
Hours: 54 hours LAB
Course Family: Hip Hop Technique and Competition
Prerequisite: DANCE 352 with a grade of "C" or better; or an intermediate level of training in Hip Hop dance, as determined by the professor per an evaluation for the level of proficiency.
Transferable: CSU; UC

This course builds on the skills and steps learned in Hip Hop I and II. Level III dance combinations will be taught covering various styles within hip hop dance. Students will work in groups to create a final presentation that expands a teacher-choreographed dance into a full length performance piece that utilizes choreographic elements and adds student choreography. The emphasis of this class will be on choreographic styles.

DANCE 354 Hip Hop IV

Units: 1
Hours: 54 hours LAB
Course Family: Hip Hop Technique and Competition
Prerequisite: DANCE 353 with a grade of "C" or better; or an intermediate to advanced level of training in Hip Hop dance, as determined by the professor per an evaluation for the level of proficiency.
Transferable: CSU; UC

This is an intermediate level course that builds on the skills learned in Hip Hop levels I-III. Students will be introduced to freestyle movement and the elements of cyphering and battling. Musicality, emotion, and storytelling are explored as students develop their own artistry within freestyle movement. The emphasis of this class will be on utilizing intermediate level skills with freestyle movement.

DANCE 360 Tap Dance I

Units: 1
Hours: 54 hours LAB
Course Family: Tap Dance Technique
Prerequisite: None.
Transferable: CSU; UC

This course introduces the basic rhythms, steps, 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 names along with their origins and meaning. This course is for students with little or no tap dance training.

DANCE 386 Dance History

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3A

This comprehensive study of the history, evolution and culture of dance as an art form encompasses ballet, modern, African and social dance. The analysis of various styles of dance commences with social order, expression and the power of dance in a culture.

DANCE 410 Dance Composition and Production I

Units: 2
Hours: 18 hours LEC; 54 hours LAB
Course Family: Dance Composition and Production
Prerequisite: None.
Transferable: CSU; UC (* Any PE Activity courses combined: maximum credit, 4 units)

This course introduces students to the elements of choreography and the creative processes of composing dances. Students assume the roles of dancer and choreographer in developing improvisation, directing, and performance skills to produce and perform original group compositions. This course culminates in a final showcase performance designed to give students an opportunity to experience a college level dance production.

DANCE 411 Dance Composition and Production II

Units: 2
Hours: 18 hours LEC; 54 hours LAB
Course Family: Dance Composition and Production
Prerequisite: None.
Advisory: DANCE 372, 410, and 410; Student should have completed DANCE 410, or beginning level training, or satisfy the professor with a level of proficiency."
Transferable: CSU; UC

This course provides an opportunity to explore the processes of composing and producing beginning to intermediate level choreography. Students will work in small groups to develop original compositions that demonstrate an understanding of choreographic forms and creative processes. This course culminates in a final showcase performance.

DANCE 412 Dance Composition and Production III

Units: 2
Hours: 18 hours LEC; 54 hours LAB
Course Family: Dance Composition and Production
Prerequisite: DANCE 411 and 411 with grades of "C" or better; or have beginning to intermediate knowledge of composing dances, determined by the professor per an evaluation for the level of proficiency.
Transferable: CSU; UC

This course provides an opportunity to explore the processes of composing and producing intermediate level choreography. Students will identify and integrate the contributions of modern and contemporary choreographers for the purpose of expanding their choreography skills. An emphasis on smaller compositions, for example, solos, duos, and trios will be included along with the roles of lighting and costume design. This course culminates in a final showcase performance.

DANCE 413 Dance Composition and Production IV

Units: 2
Hours: 18 hours LEC; 54 hours LAB
Course Family: Dance Composition and Production
Prerequisite: DANCE 412 and 412 with grades of "C" or better; or have intermediate knowledge of composing dances, determined by the professor per an evaluation for the level of proficiency.
Transferable: CSU; UC

This course provides an opportunity to explore the processes of composing and producing advanced level choreography. Students will continue their study of modern and contemporary choreographers' contributions for the purpose of expanding their choreography skills. An emphasis on cross-disciplinary studies including multimedia, drama, art, and music will provide an integrated approach for exploring the significance of dance and other art forms in contemporary society. This course culminates in a final showcase performance.

DANCE 495 Independent Studies in Dance

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

DANCE 499 Experimental Offering in Dance

Units: 0.5 - 4
Prerequisite: None.
Transferable: CSU

This is the experimental courses description.

Theatre Arts (TA) Courses

TA 300 Introduction to the Theatre

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3A
C-ID: C-ID THTR 111

This course will increase students' understanding, appreciation, and critical perceptions of theatre arts. Students will be introduced to elements of the production process including play writing, acting, directing, design, and criticism. Students will also survey different periods, styles and genres of theatre through play reading, discussion, films and viewing and critiquing live theatre, including required attendance of theatre productions. Students will examine the relationship of theatre to various cultures throughout history, and the contributions of significant individual theatre artists. It is an audience-oriented, non-performance theatre arts course open to all students.

TA 302 History and Theory of the Theatre I

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3A
C-ID: C-ID THTR 113

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. This course is recommended for students planning to major in Theatre, Humanities, English or Communication.

TA 303 History and Theory of the Theatre II

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3A

This course is a survey of the history of theater from the 17th Century through modern times. This history and development of theater and drama are studied in relationship to cultural, political and social conditions of the time. Plays are read or viewed for analysis of structure, plot, character and historical relevance. This course is recommended for students planning to major in Theater, Humanities, English, or Communication.

TA 305 Script Analysis

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3A
C-ID: C-ID THTR 114

This course will explore an in-depth methodology of reading, analyzing, and understanding play scripts in a variety of genres and styles intended for live theatrical production. Students will investigate techniques used to determine the playwright's methods of creating the plot, themes, characters, and imagery within theatrical scripts and how theatre scripts are distinct from other forms of literature.

TA 306 Diversity in American Drama (1960 to Present)

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3A; Cal-GETC Area 4

This multicultural course surveys the theatrical expression of Native-American, African-American, Chicana/Chicano, and Asian-American theatre from 1960 to the present, including the social, political, cultural, and economic climate in which the theatre was created.

TA 340 Beginning Acting

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC

This course introduces the student to the basic art and craft of acting. Basic exercises in voice and diction, movement, and character will be utilized.

TA 344 Improvisation and Theatre Games

Units: 2
Hours: 36 hours LEC
Prerequisite: None.
Transferable: CSU

This class will include theatre games and improvisational exercises designed to develop trust and cooperation, mental acuity, and physical and vocal range as an actor. Improvisation technique will be developed, providing a strong foundation for more advanced work in scripted and non-scripted performance and also in modern rehearsal technique that involves extensive use of improvisation. Students may be required to attend live theatrical performances.

TA 350 Theory and Techniques of Acting I

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: Local GE L3
C-ID: C-ID THTR 151

This course explores the theories and techniques used in the preparation of a role for the stage. American realistic scenes and monologues are staged and performed in the classroom. The emphasis will be placed on broadening the understanding of the acting process.

TA 351 Theory and Techniques of Acting II

Units: 3
Hours: 54 hours LEC
Prerequisite: TA 350 with a grade of "C" or better
Advisory: ENGL C1000
Transferable: CSU; UC
C-ID: C-ID THTR 152

This course follows TA 350 and continues the exploration of the theories and techniques used in the preparation of a role for the stage. A variety of scenes and monologues are staged and performed in the classroom. An emphasis will be placed on deepening the understanding of the acting process. The student actor is encouraged to explore and expand the range and flexibility of their individual acting process. Student actors are required to participate in a student showcase performance at the end of each semester.

TA 356 Acting for the Camera I

Same As: RTVF 378
Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: RTVF 370 or TA 350 with a grade of "C" or better
Transferable: CSU; UC

This is an introductory course in the theory and techniques of acting for film and video, comparing the differences between stage acting and acting for the camera. Scenes and commercials are enacted and played back on videotape for class critiquing. Students experience single camera and multiple-camera studio production and performance techniques. This course is the same as RTVF 378, and only one may be taken for credit.

TA 360 Styles of Acting

Units: 3
Hours: 54 hours LEC
Prerequisite: TA 350 with a grade of "C" or better
Transferable: CSU; UC

Students will study and practice radically different styles of acting (historical, literary, fantastical) and characterizations; scene work is presented in a variety of historical periods (Greek, Commedia, Elizabethan, Molière, Restoration, Belle Epoque), as well as modern hyper-realistic theatrical forms such as the theatres of alienation and the absurd, and exemplary recent dramas by Tony Kushner, Margaret Edson, August Wilson and Doug Wright. The instructor may concentrate on selected periods. Students may wish to challenge the prerequisite on the basis of equivalent experience.

TA 395 Playwriting

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGL C1000, or placement through the assessment process.
Transferable: CSU

This course includes the writing, reading, performance, critique and continuous revision of original work. Students will write continually throughout the semester, and their work will be read, performed, and discussed in class. Students will complete a full-length play by the end of the semester.

TA 401 Children's Literature and Creative Drama

Units: 3

Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU
General Education: Local GE L3

This course examines teaching strategies and techniques for introducing children to drama and theatre. This course will introduce the students to children's dramatic literature and creative drama in the classroom. Encouraging both teacher and student imagination and expression, the course helps future teachers, service providers and/or recreational leaders integrate drama into their programs and classrooms. Students will be introduced to a variety of genres and strategies for incorporating drama into their programs, including mime, dramatic play, improvisation, and dramatic literature. The course focuses on drama as an art form as well as a teaching tool.

TA 404 Techniques of Puppetry

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Transferable: CSU

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 420 Stagecraft

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Transferable: CSU; UC
C-ID: C-ID THTR 171

This course is an introduction to technical theatre and the creation of scenic elements. Includes basic concepts of design, painting techniques, set construction, set movement, prop construction, backstage organization, and career possibilities. Also included in this class is an introduction to theatrical construction and painting techniques; types of theatrical scenery and backstage organization. These topics are explored through a combination of lecture and practical experience gained by working on department productions.

TA 422 Stage Lighting

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Transferable: CSU; UC
C-ID: C-ID THTR 173

This course is an introduction to basic concepts of stage lighting, including planning, rigging and operations of lighting systems; optics, equipment, electricity, control and color; basic lighting design.

TA 424 Advanced Technical Theatre

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: TA 420 and 422 with grades of "C" or better
Transferable: CSU

This course will explore advanced technical theatre production techniques and design in the areas of scenery, props, lighting, sound, scenic painting, rigging or stage management, costumes through individual projects and participation in major productions.

TA 430 Costume Construction

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Transferable: CSU; UC
C-ID: C-ID THTR 174

This course explores the basic areas of costume construction. Topics include fabrics, color, patterns, sewing techniques, costume pieces, and accessories. Period styles, costume analysis, and basic design are also covered. This course offers experience in constructing costumes for theatrical productions. Through the construction of costumes for the Theatre Arts productions students will learn techniques of pattern drafting and sewing for stage use.

TA 495 Independent Studies in Theatre Arts

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

TA 498 Work Experience in Theatre Arts

Units: 0.5 - 4
Hours: 27 - 216 hours LAB
Prerequisite: None.
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position or job related to career goals in Theatre Arts.
Transferable: CSU

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in transfer level degree occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and complete 27 hours of related work experience for 0.5 unit. An additional 27 hours of related work experience is required for each additional 0.5 units. 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.

TA 499 Experimental Offering in Theatre Arts

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

Theatre Arts Performance (TAP) Courses

TAP 300 Modern Rehearsal and Performance I

Units: 1 - 3
Hours: 54 - 162 hours LAB
Course Family: Modern Theatre Performance
Prerequisite: None.
Enrollment Limitation: Audition
Transferable: CSU; UC
C-ID: C-ID THTR 191

This course is the first level of four courses which provide for a workshop training experience for students performing in their first role in a modern theatre production. Students interested in acting audition with the director for acting, singing or dancing roles. All students performing in productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

TAP 301 Modern Rehearsal and Performance II

Units: 1 - 3
Hours: 54 - 162 hours LAB
Course Family: Modern Theatre Performance
Prerequisite: TAP 300 with a grade of "C" or better
Enrollment Limitation: Audition
Transferable: CSU; UC
C-ID: C-ID THTR 191

This course is the second level of four courses which provide for a workshop training experience for students performing in their second role in a modern theatre production. Students interested in acting audition with the director for acting, singing or dancing roles. All students performing in productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

TAP 302 Modern Rehearsal and Performance III

Units: 1 - 3
Hours: 54 - 162 hours LAB
Course Family: Modern Theatre Performance
Prerequisite: TAP 301 with a grade of "C" or better
Enrollment Limitation: Audition
Transferable: CSU; UC
C-ID: C-ID THTR 191

This course is the third level of four courses which provide for a workshop training experience for students performing in their third role in a modern theatre production. Students interested in acting audition with the director for acting, singing or dancing roles. All students performing in productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

TAP 303 Modern Rehearsal and Performance IV

Units: 1 - 3
Hours: 54 - 162 hours LAB
Course Family: Modern Theatre Performance
Prerequisite: TAP 302 with a grade of "C" or better
Enrollment Limitation: Audition
Transferable: CSU; UC
C-ID: C-ID THTR 191

This course is the fourth level of four courses which provide for a workshop training experience for students performing in their fourth role in a modern theatre production. Students interested in acting audition with the director for acting, singing or dancing roles. All students performing in productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

TAP 310 Modern Technical Production I

Units: 1 - 3
Hours: 54 - 162 hours LAB
Course Family: Modern Theatre Technical Production
Prerequisite: None.
Enrollment Limitation: Interview
Transferable: CSU; UC
C-ID: C-ID THTR 192

This course is the first level of four courses which provide for a workshop training experience for students working in their first position on the production crew of a modern theatre production. Students interested in technical work interview for positions in stage management, crewing, set construction, costumes and makeup, lighting and sound, box office and publicity. Students will gain practical experience in the application of production responsibilities in any of the following: stage management, house management, construction, scenery, properties, costume, lighting, sound, and running crews. All students performing in productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

TAP 311 Modern Technical Production II

Units: 1 - 3
Hours: 54 - 162 hours LAB
Course Family: Modern Theatre Technical Production
Prerequisite: TAP 310 with a grade of "C" or better
Enrollment Limitation: Enrollment is limited to students with the ability to perform specific technical crew positions as determined by an interview and the requirements of the play.
Transferable: CSU; UC
C-ID: C-ID THTR 192

This course is the second level of four courses which provide for a workshop training experience for students working in their second position on the production crew of a modern theatre production. Students interested in technical work interview for positions in stage management, crewing, set construction,

costumes and makeup, lighting and sound, box office and publicity. Students will gain practical experience in the application of production responsibilities in any of the following: stage management, house management, construction, scenery, properties, costume, lighting, sound, and running crews. All students performing in productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

TAP 312 Modern Technical Production III

Units: 1 - 3
Hours: 54 - 162 hours LAB
Course Family: Modern Theatre Technical Production
Prerequisite: TAP 311 with a grade of "C" or better
Enrollment Limitation: Interview
Transferable: CSU; UC
C-ID: C-ID THTR 192

This course is the third level of four courses which provide for a workshop training experience for students working in their third position on the production crew of a modern theatre production. Students interested in technical work interview for positions in stage management, crewing, set construction, costumes and makeup, lighting and sound, box office and publicity. Students will gain practical experience in the application of production responsibilities in any of the following: stage management, house management, construction, scenery, properties, costume, lighting, sound, and running crews. All students performing in productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

TAP 313 Modern Technical Production IV

Units: 1 - 3
Hours: 54 - 162 hours LAB
Course Family: Modern Theatre Technical Production
Prerequisite: TAP 312 with a grade of "C" or better
Enrollment Limitation: Interview
Transferable: CSU; UC
C-ID: C-ID THTR 192

This course is the fourth level of four courses which provide for a workshop training experience for students working in their fourth position on the production crew of a modern theatre production. Students interested in technical work interview for positions in stage management, crewing, set construction, costumes and makeup, lighting and sound, box office and publicity. Students will gain practical experience in the application of production responsibilities in any of the following: stage management, house management, construction, scenery, properties, costume, lighting, sound, and running crews. All students performing in productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

TAP 320 Classical Rehearsal and Performance I

Units: 1 - 3
Hours: 54 - 162 hours LAB
Course Family: Classical Theatre and Performance
Prerequisite: None.
Enrollment Limitation: Audition
Transferable: CSU; UC
C-ID: C-ID THTR 191

This course is the first level of four courses which provide for a workshop training experience for students performing in their first role in a classical theatre production. Students interested in acting audition with the director for acting, singing or dancing roles. All students performing in productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

TAP 321 Classical Rehearsal and Performance II

Units: 1 - 3
Hours: 54 - 162 hours LAB
Course Family: Classical Theatre and Performance
Prerequisite: TAP 320 with a grade of "C" or better
Enrollment Limitation: Audition
Transferable: CSU; UC
C-ID: C-ID THTR 191

This course is the second level of four courses which provide for a workshop training experience for students performing in their second role in a classical theatre production. Students interested in acting audition with the director for acting, singing or dancing roles. All students performing in productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

TAP 322 Classical Rehearsal and Performance III

Units: 1 - 3
Hours: 54 - 162 hours LAB
Course Family: Classical Theatre and Performance
Prerequisite: TAP 321 with a grade of "C" or better
Enrollment Limitation: Audition
Transferable: CSU; UC
C-ID: C-ID THTR 191

This course is the third level of four courses which provide for a workshop training experience for students performing in their third role in a classical theatre production. Students interested in acting audition with the director for acting, singing or dancing roles. All students performing in productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

TAP 323 Classical Rehearsal and Performance IV

Units: 1 - 3
Hours: 54 - 162 hours LAB
Course Family: Classical Theatre and Performance
Prerequisite: TAP 322 with a grade of "C" or better
Enrollment Limitation: Audition
Transferable: CSU; UC
C-ID: C-ID THTR 191

This course is the fourth level of four courses which provide for a workshop training experience for students performing in their fourth role in a classical theatre production. Students interested in acting audition with the director for acting, singing or dancing roles. All students performing in productions

may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

TAP 330 Classical Technical Production I

Units: 1 - 3
Hours: 54 - 162 hours LAB
Course Family: Classical Theatre Technical Production
Prerequisite: None.
Enrollment Limitation: Interview
Transferable: CSU; UC
C-ID: C-ID THTR 192

This course is the first level of four courses which provide for a workshop training experience for students working in their first position on the production crew of a classical theatre production. Students interested in technical work interview for positions in stage management, crewing, set construction, costumes and makeup, lighting and sound, box office and publicity. Students will gain practical experience in the application of production responsibilities in any of the following: stage management, house management, construction, scenery, properties, costume, lighting, sound, and running crews. All students performing in productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor

TAP 331 Classical Technical Production II

Units: 1 - 3
Hours: 54 - 162 hours LAB
Course Family: Classical Theatre Technical Production
Prerequisite: TAP 330 with a grade of "C" or better
Enrollment Limitation: Interview
Transferable: CSU; UC
C-ID: C-ID THTR 192

This course is the second level of four courses which provide for a workshop training experience for students working in their second position on the production crew of a classical theatre production. Students interested in technical work interview for positions in stage management, crewing, set construction, costumes and makeup, lighting and sound, box office and publicity. Students will gain practical experience in the application of production responsibilities in any of the following: stage management, house management, construction, scenery, properties, costume, lighting, sound, and running crews. All students performing in productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

TAP 332 Classical Technical Production III

Units: 1 - 3
Hours: 54 - 162 hours LAB
Course Family: Classical Theatre Technical Production
Prerequisite: TAP 331 with a grade of "C" or better
Enrollment Limitation: Interview
Transferable: CSU; UC
C-ID: C-ID THTR 192

This course is the third level of four courses which provide for a workshop training experience for students working in their third position on the production crew of a classical theatre production. Students interested in technical work interview for positions in stage management, crewing, set construction, costumes and makeup, lighting and sound, box office and publicity. Students will gain practical experience in the application of production responsibilities in any of the following: stage management, house management, construction, scenery, properties, costume, lighting, sound, and running crews. All students performing in productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

TAP 333 Classical Technical Production IV

Units: 1 - 3
Hours: 54 - 162 hours LAB
Course Family: Classical Theatre Technical Production
Prerequisite: TAP 332 with a grade of "C" or better
Enrollment Limitation: Interview
Transferable: CSU; UC
C-ID: C-ID THTR 192

This course is the fourth of four courses which provide for a workshop training experience for students working in their fourth position on the production crew of a classical theatre production. Students interested in technical work interview for positions in stage management, crewing, set construction, costumes and makeup, lighting and sound, box office and publicity. Students will gain practical experience in the application of production responsibilities in any of the following: stage management, house management, construction, scenery, properties, costume, lighting, sound, and running crews. All students performing in productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

TAP 340 Musical Rehearsal and Performance I

Units: 1 - 3
Hours: 54 - 162 hours LAB
Course Family: Musical Performance
Prerequisite: None.
Enrollment Limitation: Audition
Transferable: CSU; UC
C-ID: C-ID THTR 191

This course is the first level of four courses which provide for a workshop training experience for students performing in their first role in a musical theatre production. Students interested in acting audition with the director for acting, singing or dancing roles. All students performing in productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

TAP 341 Musical Rehearsal and Performance II

Units: 1 - 3
Hours: 54 - 162 hours LAB
Course Family: Musical Performance
Prerequisite: TAP 340 with a grade of "C" or better
Enrollment Limitation: Audition
Transferable: CSU; UC
C-ID: C-ID THTR 191

This course is the second level of four courses which provide for a workshop training experience for students performing in their second role in a musical theatre production. Students interested in acting audition with the director for acting, singing or dancing roles. All students performing in productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

TAP 342 Musical Rehearsal and Performance III

Units: 1 - 3
Hours: 54 - 162 hours LAB
Course Family: Musical Performance
Prerequisite: TAP 341 with a grade of "C" or better
Enrollment Limitation: Audition
Transferable: CSU; UC
C-ID: C-ID THTR 191

This course is the third level of four courses which provide for a workshop training experience for students performing in their third role in a musical theatre production. Students interested in acting audition with the director for acting, singing or dancing roles. All students performing in productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

TAP 343 Musical Rehearsal and Performance IV

Units: 1 - 3
Hours: 54 - 162 hours LAB
Course Family: Musical Performance
Prerequisite: TAP 342 with a grade of "C" or better
Enrollment Limitation: Audition
Transferable: CSU; UC
C-ID: C-ID THTR 191

This course is the fourth level of four courses which provide for a workshop training experience for students performing in their fourth role in a musical theatre production. Students interested in acting audition with the director for acting, singing or dancing roles. All students performing in productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

TAP 350 Musical Technical Production I

Units: 1 - 3
Hours: 54 - 162 hours LAB
Course Family: Musical Technical Production
Prerequisite: None.
Enrollment Limitation: Interview
Transferable: CSU; UC
C-ID: C-ID THTR 192

This course is the first of four courses which provide for a workshop training experience for students working in their first position on the production crew of a musical theatre production. Students interested in technical work interview for positions in stage management, crewing, set construction, costumes and makeup, lighting and sound, box office and publicity. Students will gain practical experience in the application of production responsibilities in any of the following: stage management, house management, construction, scenery, properties, costume, lighting, sound, and running crews. All students performing in productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

TAP 351 Musical Technical Production II

Units: 1 - 3
Hours: 54 - 162 hours LAB
Course Family: Musical Technical Production
Prerequisite: TAP 350 with a grade of "C" or better
Enrollment Limitation: Interview
Transferable: CSU; UC
C-ID: C-ID THTR 192

This course is the second of four courses which provide for a workshop training experience for students working in their second position on the production crew of a musical theatre production. Students interested in technical work interview for positions in stage management, crewing, set construction, costumes and makeup, lighting and sound, box office and publicity. Students will gain practical experience in the application of production responsibilities in any of the following: stage management, house management, construction, scenery, properties, costume, lighting, sound, and running crews. All students performing in productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

TAP 352 Musical Technical Production III

Units: 1 - 3
Hours: 54 - 162 hours LAB
Course Family: Musical Technical Production
Prerequisite: TAP 351 with a grade of "C" or better
Enrollment Limitation: Interview
Transferable: CSU; UC
C-ID: C-ID THTR 192

This course is the third of four courses which provide for a workshop training experience for students working in their third position on the production crew of a musical theatre production. Students interested in technical work interview for positions in stage management, crewing, set construction, costumes and makeup, lighting and sound, box office and publicity. Students will gain practical experience in the application of production responsibilities in any of the following: stage management, house management, construction, scenery, properties, costume, lighting, sound, and running crews. All students performing in productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

TAP 353 Musical Technical Production IV

Units: 1 - 3
Hours: 54 - 162 hours LAB
Course Family: Musical Technical Production
Prerequisite: TAP 352 with a grade of "C" or better
Enrollment Limitation: Interview
Transferable: CSU; UC
C-ID: C-ID THTR 192

This course is the fourth of four courses which provide for a workshop training experience for students working in their fourth position on the production crew of a musical theatre

production. Students interested in technical work interview for positions in stage management, crewing, set construction, costumes and makeup, lighting and sound, box office and publicity. Students will gain practical experience in the application of production responsibilities in any of the following: stage management, house management, construction, scenery, properties, costume, lighting, sound, and running crews. All students performing in productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

TAP 360 Children's Theatre Rehearsal and Performance I

Units: 1 - 3
Hours: 54 - 162 hours LAB
Course Family: Children's Theatre Performance
Prerequisite: None.
Enrollment Limitation: Audition
Transferable: CSU; UC
C-ID: C-ID THTR 191

This course is the first level of four courses which provide a workshop training experience for students performing in their first role in a children’s theatre production. Students interested in acting audition with the director for acting, singing or dancing roles. All students performing in productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

TAP 361 Children's Theatre Rehearsal and Performance II

Units: 1 - 3
Hours: 54 - 162 hours LAB
Course Family: Children's Theatre Performance
Prerequisite: TAP 360 with a grade of "C" or better
Enrollment Limitation: Audition
Transferable: CSU; UC
C-ID: C-ID THTR 191

This course is the second level of four courses which provide a workshop training experience for students performing in their second role in a children’s theatre production. Students interested in acting audition with the director for acting, singing or dancing roles. All students performing in productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

TAP 362 Children's Theatre Rehearsal and Performance III

Units: 1 - 3
Hours: 54 - 162 hours LAB
Course Family: Children's Theatre Performance
Prerequisite: TAP 361 with a grade of "C" or better
Enrollment Limitation: Audition
Transferable: CSU; UC
C-ID: C-ID THTR 191

This course is the third level of four courses which provide for a workshop training experience for students performing in their third role in a children’s theatre production. Students interested in acting audition with the director for acting, singing or dancing roles. All students performing in productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

TAP 363 Children's Theatre Rehearsal and Performance IV

Units: 1 - 3
Hours: 54 - 162 hours LAB
Course Family: Children's Theatre Performance
Prerequisite: TAP 362 with a grade of "C" or better
Enrollment Limitation: Audition
Transferable: CSU; UC
C-ID: C-ID THTR 191

This course is the fourth level of four courses which provide a workshop training experience for students performing in their fourth role in a children’s theatre production. Students interested in acting audition with the director for acting, singing or dancing roles. All students performing in productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

TAP 370 Children's Theatre Technical Production I

Units: 1 - 3
Hours: 54 - 162 hours LAB
Course Family: Children's Theatre Technical Production
Prerequisite: None.
Enrollment Limitation: Interview
Transferable: CSU; UC
C-ID: C-ID THTR 192

This course is the first level of four courses which provide a workshop training experience for students working in their first position on the production crew of a children’s theatre production. Students interested in technical work interview for positions in stage management, crewing, set construction, costumes and makeup, lighting and sound, box office and publicity. Students will gain practical experience in the application of production responsibilities in any of the following: stage management, house management, construction, scenery, properties, costume, lighting, sound, and running crews. All students working on productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

TAP 371 Children's Theatre Technical Production II

Units: 1 - 3
Hours: 54 - 162 hours LAB
Course Family: Children's Theatre Technical Production
Prerequisite: TAP 370 with a grade of "C" or better
Enrollment Limitation: Interview
Transferable: CSU; UC
C-ID: C-ID THTR 192

This course is the second level of four courses which provide a workshop training experience for students working in their second position on the production crew of a children’s theatre production. Students interested in technical work interview for positions in stage management, crewing, set construction, costumes and makeup, lighting and sound, box office and

publicity. Students will gain practical experience in the application of production responsibilities in any of the following: stage management, house management, construction, scenery, properties, costume, lighting, sound, and running crews. All students working on productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

TAP 372 Children's Theatre Technical Production III

Units: 1 - 3
Hours: 54 - 162 hours LAB
Course Family: Children's Theatre Technical Production
Prerequisite: TAP 371 with a grade of "C" or better
Enrollment Limitation: Interview
Transferable: CSU; UC
C-ID: C-ID THTR 192

This course is the third level of four courses which provide a workshop training experience for students working in their third position on the production crew of a children’s theatre production. Students interested in technical work interview for positions in stage management, crewing, set construction, costumes and makeup, lighting and sound, box office and publicity. Students will gain practical experience in the application of production responsibilities in any of the following: stage management, house management, construction, scenery, properties, costume, lighting, sound, and running crews. All students working on productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

TAP 373 Children's Theatre Technical Production IV

Units: 1 - 3
Hours: 54 - 162 hours LAB
Course Family: Children's Theatre Technical Production
Prerequisite: TAP 372 with a grade of "C" or better
Enrollment Limitation: Interview
Transferable: CSU; UC
C-ID: C-ID THTR 192

This course is the fourth level of four courses which provide a workshop training experience for students working in their fourth position on the production crew of a children’s theatre production. Students interested in technical work interview for positions in stage management, crewing, set construction, costumes and makeup, lighting and sound, box office and publicity. Students will gain practical experience in the application of production responsibilities in any of the following: stage management, house management, construction, scenery, properties, costume, lighting, sound, and running crews. All students working on productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

TAP 499 Experimental Offering in Theatre Arts Performance

Units: 0.5 - 4
Prerequisite: None.

The course description will be written when an actual instance of the course is created.

Television Production

This program is designed to provide skills in television and film production through the preparation of projects for campus, Cable TV and Internet viewing. This option can lead to entry-level jobs in television, film, Cable TV, business and industry or for preparation for transfer to a four-year institution.

Degrees and Certificates Offered

A.A. in Television Production

Television Production Certificate

Dean Brian Rickel
Department Chair Mun Kang
Phone (916) 691-7171
Email kangm@crc.losrios.edu

Associate Degree

A.A. in Television Production

This program is designed to provide skills in television and video production through the preparation of projects for campus, Cable TV and Internet viewing. This option can lead to entry-level jobs in television, film, Cable TV, business and industry or for preparation for transfer to a four-year institution.

Highlights include:
* Practical experience working in the campus television studio
* Internship opportunities working in local television stations, post-production facilities, and with independent film-makers
* Complete digital TV studio with multiple cameras, switcher, character generator and teleprompter
* State-of-the-art digital computer lab for graphics and non-linear editing

Note to Transfer Students:
If you are interested in transferring to a four-year college or university to pursue a bachelor's degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate's degree in this major may be different from the requirements needed for the Bachelor's degree.

Degree Requirements

Course Code	Course Title	Units
RTVF 300	Mass Media and Society	3
RTVF 306	Introduction to Media Aesthetics and Cinematic Arts	3
RTVF 330	Beginning Single Camera Production	3
RTVF 331	Beginning Television Studio Production	3
RTVF 340	Television Production Workshop I	2
RTVF 360	Introduction to Motion Graphics: Adobe After Effects	3
RTVF 362	Digital Non-Linear Video Editing	3
RTVF 370	Broadcast Writing & Announcing (3)	3
or RTVF 380	Broadcast Journalism (3)	
A minimum of 6 units from the following:		6
RTVF 304	Introduction to Multimedia (3)	
RTVF 312	Beginning Radio and Podcasting (3)	
RTVF 315	Voice and Diction for Broadcasting (3)	
RTVF 319	Beginning Audio Production (3)	
RTVF 341	Television Production Workshop II (2)	
RTVF 342	Television Production Workshop III (2)	
RTVF 354	Audio Editing for Film & Video Post Production (3)	
RTVF 361	Intermediate Motion Graphics: Adobe After Effects (3)	
RTVF 365	Intermediate Film & Video Editing (3)	
RTVF 371	Hollywood TV and Film Studios: A Behind the Scenes Experience (1)	
RTVF 376	Advertising (3)	
RTVF 498	Work Experience in Radio, Television and Film (0.5 - 4)	
MKT 310	Selling Professionally (3)	
Total Units:		**29**

The Television Production Associate in Arts (A.A.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Student Learning Outcomes

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

- Write in clear, concise English. (PSLO-1)
- Research critically, filter the results and present them in a cogent manner. (PSLO-2)
- Resolve and execute standard pre-production skills including planning, scripting, budgeting, and crew and equipment selection. (PSLO-3)
- Utilize basic video production equipment correctly, safely and creatively, including cameras, lights and audio, and control room equipment such as audio mixers, switchers, video recording, character generation and TelePrompter. (PSLO-4)
- Operate essential post production equipment for audio and video editing and distribution in a variety of contemporary and emerging methods. (PSLO-5)
- Analyze, interpret, and exercise critical judgment in the evaluation of media productions. (PSLO-6)
- Demonstrate through projects that with the power of a communicator, comes moral and ethical responsibility. (PSLO-7)
- Demonstrate a hands-on ability to perform the professional level critical thinking needed for successful teamwork in television, film or other media employment. (PSLO-8)

Career Information

Camera Operator; Computer Graphic Artist; Non-Linear Video Editor; Technical Director; Audio Engineer; Broadcast Technician; Production Assistant; TV, Film, DVD, or Internet Producer/Director; Personal or Corporate Video Some career options may require more than two years of college study. Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.

Certificate of Achievement

Television Production Certificate

Designed to provide skills in television production through the preparation of video projects for campus viewing, Cable TV, Internet or DVD. This option can lead to entry level jobs in television, Cable TV, business and industry or as preparation for transfer to a four-year institution.

Certificate Requirements

Course Code	Course Title	Units
RTVF 330	Beginning Single Camera Production	3
RTVF 331	Beginning Television Studio Production	3
RTVF 340	Television Production Workshop I	2
RTVF 360	Introduction to Motion Graphics: Adobe After Effects	3
A minimum of 6 units from the following:		6
RTVF 341	Television Production Workshop II (2)	
RTVF 354	Audio Editing for Film & Video Post Production (3)	
RTVF 361	Intermediate Motion Graphics: Adobe After Effects (3)	
RTVF 362	Digital Non-Linear Video Editing (3)	
RTVF 365	Intermediate Film & Video Editing (3)	
RTVF 376	Advertising (3)	
RTVF 498	Work Experience in Radio, Television and Film (0.5 - 4)	
Total Units:		**17**

Student Learning Outcomes

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

- Resolve and execute standard pre-production skills including planning, scripting, budgeting, and crew and equipment selection. (PSLO-1)
- Utilize basic video production equipment correctly, safely and creatively, including cameras, lights and audio, and control room equipment such as audio mixers, switchers, video recording, character generation and TelePrompter. (PSLO-2)
- Operate essential post production equipment for audio and video editing and distribution in a variety of contemporary and emerging methods. (PSLO-3)
- Demonstrate a hands-on ability to perform the professional level critical thinking needed for successful teamwork in television, film or other media employment. (PSLO-4)

Career Information

Camera Operator; Non-Linear Video Editors; Technical Director; Audio Engineer; Broadcast Technician; Production Assistant; TV, Film, DVD, or Internet Producer/Director; Personal or Corporate Video Some career options may require more than two years of college study. Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.

Veterinary Technology

The Cosumnes River College Veterinary Technology program does not provide veterinary medical services to the public.

CRC's Veterinary Technology Associate of Science Degree program provides students with the skills and knowledge necessary to pursue a career as a Registered Veterinary Technician (RVT). The program offers a rigorous and rewarding academic curriculum along with ample hands-on experience.

Veterinary Technicians work under the supervision of a licensed veterinarian assisting in a variety of tasks including collection of laboratory specimens and performing laboratory procedures; providing specialized nursing care; preparing animals, instruments, and equipment for surgery; assisting in diagnostic, medical, and surgical procedures; exposing and developing radiographs (X-rays); advising and educating animal owners; supervising and training practice personnel; and performing dental prophylaxes. Most veterinary technicians work in private veterinary practices, but they may also work in biomedical research, military service, food safety inspection, teaching, zoo animal and wildlife care, diagnostic laboratory support, veterinary supply sales, animal control and humane society animal care, and drug and feed company technical service and sales. (source: AVMA.org) RVTs are trained professionals who have passed the Veterinary Technician National Examination (VTNE) and who have subsequently obtained licensure. The CRC Veterinary Technology program is not intended to be a pre-veterinary program for students who want to pursue a doctorate degree to become a veterinarian. CRC counselors are available to help students navigate their choice of program.

CRC's Veterinary Technology program is accredited by the American Veterinary Medical Association and upon earning an A.S. degree in Veterinary Technology, graduates are eligible to take the Veterinary Technician National Examination (VTNE).

Most states, including California, require official licensing or certification of veterinary technicians. To become a licensed RVT in California, graduates earning the A.S. degree must:

- Pass the Veterinary Technician National Examination
- Obtain fingerprint clearance (Live scan) and pass a background check
- Pay licensing fees to the California Veterinary Medical Board. (More information can be found at vmb.ca.gov (https://vmb.ca.gov/))

AVMA
1931 North Meacham Road, Suite 100
Schaumburg, IL 60173-4360
(800) 248-2862
AVMA Accredited Programs (https://www.avma.org/education/accreditation/programs/veterinary-technology-programs-accredited-avma-cvtea#california)

Degrees and Certificates Offered

A.S. in Veterinary Technology

Veterinary Technology Certificate

Dean Kris Hubbard

Department Liaisons Dave Andrews, Department Chair

Phone (916) 691-7551

Email andrewd@crc.losrios.edu

Associate Degree

A.S. in Veterinary Technology

CRC's Veterinary Technology Associate of Science Degree program provides students with the skills and knowledge necessary to pursue a career as a Registered Veterinary Technician (RVT). The program offers a rigorous and rewarding academic curriculum along with ample hands-on experience.

Veterinary Technicians work under the supervision of a licensed veterinarian assisting in a variety of tasks including collection of laboratory specimens and performing laboratory procedures; providing specialized nursing care; preparing animals, instruments, and equipment for surgery; assisting in diagnostic, medical, and surgical procedures; exposing and developing radiographs (X-rays); advising and educating animal owners; supervising and training practice personnel; and performing dental prophylaxes. Most veterinary technicians work in private veterinary practices, but they may also work in biomedical research, military service, food safety inspection, teaching, zoo animal and wildlife care, diagnostic laboratory support, veterinary supply sales, animal control and humane society animal care, and drug and feed company technical service and sales. (source: AVMA.org) RVTs are trained professionals who have passed the Veterinary Technician National Examination (VTNE) and who have subsequently obtained licensure. The CRC Veterinary Technology program is not intended to be a pre-veterinary program for students who want to pursue a doctorate degree to become a veterinarian. CRC counselors are available to help students navigate their choice of program.

CRC's Veterinary Technology program is accredited by the American Veterinary Medical Association and upon earning an A.S. degree in Veterinary Technology, graduates are eligible to take the Veterinary Technician National Examination (VTNE).

Most states, including California, require official licensing or certification of veterinary technicians. To become a licensed RVT in California, graduates earning the A.S. degree must:

• Pass the Veterinary Technician National Examination
• Obtain fingerprint clearance (Live scan) and pass a background check
• Pay licensing fees to the California Veterinary Medical Board. (More information can be found at vmb.ca.gov)

Program highlights include:

• Accredited by the American Veterinary Medical Association for over 50 years.
• Long-tenured, approachable, and knowledgeable faculty and staff
• Affordable community college program
• Well-equipped facilities
• Diversity of animal species available for instruction
• Collaboration with UC Davis for large animal instruction
• Outdoor exercise and enrichment area for dogs
• Enthusiastic and supportive student body
• Excellent pass rates on the VTNE

PROGRAM SCHEDULE (A.S. Degree):

Students must follow the program schedule in order and must pass all courses in each semester with a "C" or better to advance to the next semester. Each VT course is offered once per year in either the spring or fall semester. A student's progress will be delayed by one year if a course is missed or must be repeated.

* SEMESTER 1 (Fall): VT 100, VT 111
* SEMESTER 2 (Spring): VT 110, VT 113, VT 152
* SEMESTER 3 (Summer): VT 298**
* SEMESTER 4 (Fall): VT 120, VT 122, VT 126, VT 298**
* SEMESTER 5 (Spring): VT123, VT 130, VT 131, VT 134

**VT 298 Work Experience: All students must complete 300 hours of work experience at a program-approved veterinary facility. VT 298 is only offered in the summer and fall semesters and is open to students progressing into their second year of the program.

All students are required to spend a minimum of 6 hours per week during assigned shifts to care for the colony animals on campus. Shifts are scheduled outside of regular class time. Animal care shifts will be scheduled on weekends and holidays as well as semester breaks.

Degree Requirements

Course Code	Course Title	Units
First Year (Fall):		
VT 100	Introduction to Veterinary Technology	3[1]
VT 111	Anatomy-Physiology of Animals	4[2]
First Year (Spring):		
VT 152	Introduction to Laboratory Animals and Caged Birds	2[3]
VT 110	Veterinary Office Practice	3[4]
VT 113	Clinical Laboratory Techniques for Veterinary Technicians	4[5]
Second Year (Fall):		
VT 120	Pharmacology and Anesthesiology for the Veterinary Technician	4[6]
VT 122	Animal Disease: Pathology	3[7]
VT 126	Dentistry for the Veterinary Technician	1.5[8]
Second Year (Spring):		
VT 123	Large Animal Disease: Pathology	3[9]
VT 130	Advanced Veterinary Technology	4[10]
VT 131	Introduction to Diagnostic Imaging	3[11]
VT 134	Large Animal Nursing	1.5[12]
Summer Between First and Second Year; and Second Year (Fall):		
VT 298	Work Experience in Veterinary Technology	0.5 -4[13]
Total Units:		**36.5 - 40**

[1]Students will also be required to spend a minimum of 6 hours per week during assigned shifts to care for the colony animals on campus. Shifts are scheduled outside of regular class time. Animal care shifts may be scheduled on weekends and holidays as well as semester breaks.

[2]Students will also be required to spend a minimum of 6 hours per week during assigned shifts to care for the colony animals on campus. Shifts are scheduled outside of regular class time. Animal care shifts may be scheduled on weekends and holidays as well as semester breaks.

[3]Students will also be required to spend a minimum of 6 hours per week during assigned shifts to care for the colony animals on campus. Shifts are scheduled outside of regular class time. Animal care shifts may be scheduled on weekends and holidays as well as semester breaks.

[4]Students will also be required to spend a minimum of 6 hours per week during assigned shifts to care for the colony animals on campus. Shifts are scheduled outside of regular class time. Animal care shifts may be scheduled on weekends and holidays as well as semester breaks.

[5]Students will also be required to spend a minimum of 6 hours per week during assigned shifts to care for the colony animals on campus. Shifts are scheduled outside of regular class time. Animal care shifts may be scheduled on weekends and holidays as well as semester breaks.

[6]Students will also be required to spend a minimum of 6 hours per week during assigned shifts to care for the colony animals on campus. Shifts are scheduled outside of regular class time. Animal care shifts may be scheduled on weekends and holidays as well as semester breaks.

[7]Students will also be required to spend a minimum of 6 hours per week during assigned shifts to care for the colony animals on campus. Shifts are scheduled outside of regular class time. Animal care shifts may be scheduled on weekends and holidays as well as semester breaks.

[8]Students will also be required to spend a minimum of 6 hours per week during assigned shifts to care for the colony animals on campus. Shifts are scheduled outside of regular class time. Animal care shifts may be scheduled on weekends and holidays as well as semester breaks.

[9]Students will also be required to spend a minimum of 6 hours per week during assigned shifts to care for the colony animals on campus. Shifts are scheduled outside of regular class time. Animal care shifts may be scheduled on weekends and holidays as well as semester breaks.

[10]Students will also be required to spend a minimum of 6 hours per week during assigned shifts to care for the colony animals on campus. Shifts are scheduled outside of regular class time. Animal care shifts may be scheduled on weekends and holidays as well as semester breaks.

[11]Students will also be required to spend a minimum of 6 hours per week during assigned shifts to care for the colony animals on campus. Shifts are scheduled outside of regular class time. Animal care shifts may be scheduled on weekends and holidays as well as semester breaks.

[12]Students will also be required to spend a minimum of 6 hours per week during assigned shifts to care for the colony animals on campus. Shifts are scheduled outside of regular class time. Animal care shifts may be scheduled on weekends and holidays as well as semester breaks.

[13]All students must complete a minimum of 300 hours (4-5 total units) of work experience. Students in a paid work experience earn one unit per 75 hours worked. Students in an unpaid work experience earn one unit per 60 hours worked. VT 298 may be repeated when there is new or expanded learning on the job.

The Veterinary Technology Associate in Science (A.S.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Enrollment Eligibility

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

- Completion of BIOL 400 with a grade of "C" or better.
- Completion of CHEM 400 or CHEM 305 with a grade of "C" or better.
- Completion of BIOL 440 with a grade of "C" or better.
- Completion of the online application.
- Submission of a copy of high school diploma or equivalent.
- Submission of official transcripts reflecting pre-requisite completion.
- Submission of proof of pre-exposure rabies vaccination prior to the first day of the first semester.

Enrollment Process

Eligible students are selected for the program according to the following steps:

- Up to 30 eligible students are randomly drawn and admitted to the program only once a year in the fall semester. Final selection is made after the application deadline, and applicants will be notified by email of acceptance or non-acceptance by mid-July.

Student Learning Outcomes

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

- PSLO 1: Use the principles of pharmacology to assist the veterinarian in a clinical setting.
- PSLO 2: Provide veterinary nursing care and surgical assistance in a clinical setting.
- PSLO 3: Use the principles of radiology to assist the veterinarian in a clinical setting.
- PSLO 4: Perform clinical laboratory duties within a veterinary hospital.
- PSLO 5: Use the principles of veterinary dentistry to assist the veterinarian in a clinical setting.
- PSLO 6: Perform clerical duties within a veterinary hospital.
- PSLO 7: Provide safe, humane, and effective care for common laboratory animals used in animal research.
- PSLO 8: Provide safe, humane, and effective care for birds, reptiles, amphibians, rabbits, and guinea pigs.

Career Information

Most veterinary technicians are employed in private practice, but the demand for technicians is rapidly expanding and includes new employment opportunities in human and animal health-related areas and specialties such as biomedical research, military service, food safety inspection, teaching, zoo animal and wildlife care, diagnostic laboratory support, veterinary supply sales, animal control and humane society animal care, and drug and feed company technical service and sales. (source: AVMA.org)

Certificate of Achievement

Veterinary Technology Certificate

CRC's Veterinary Technology Certificate program provides students with the skills and knowledge necessary to pursue employment as an unlicensed veterinary assistant or to pursue the California Veterinary Medical Board's (VMB) alternate route to licensure as a Registered Veterinary Technician (RVT). The program offers a rigorous and rewarding academic curriculum along with ample hands-on experience.

Unlicensed veterinary assistants support veterinarians and RVTs in their daily tasks. Veterinary assistants' duties include performing kennel work, assisting in the restraint and handling of animals, and performing clerical duties. There is no required credentialing exam for unlicensed veterinary assistants. RVTs are trained professionals who have passed the Veterinary Technician National Examination (VTNE) and who have subsequently obtained licensure. The CRC Veterinary Technology program is not intended to be a pre-veterinary program for students who want to pursue a doctorate degree to become a veterinarian. CRC counselors are available to help students navigate their choice of program.

Students who wish to pursue an RVT license through the California VMB's alternate route are encouraged to research the requirements on the VMB's applicant website: https://vmb.ca.gov/applicants/rvt_forms.shtml

In summary, the alternate route to California licensure includes:

• Extensive practical experience as an unlicensed veterinary assistant and submission of a comprehensive task list and proof of experience form.
•Proof of required educational coursework including official transcripts, certificates of completion, course descriptions or outlines, and hours completed.
•Verification of passing the Veterinary Technician National Examination (VTNE).
Fingerprint clearance (Live scan) and background check.
Payment of licensing fees to the California Veterinary Medical Board.
•Most students who are seeking a career as a licensed RVT find it easiest to complete the CRC Veterinary Technology A.S.

degree.

Veterinary Technology Program highlights include:

• Accredited by the American Veterinary Medical Association for over 50 years.
• Long-tenured, approachable, and knowledgeable faculty and staff
• Affordable community college program
• Well-equipped facilities
• Diversity of animal species available for instruction
• Collaboration with UC Davis for large animal instruction
• Outdoor exercise and enrichment area for dogs
• Enthusiastic and supportive student body
• Excellent pass rates on the VTNE

PROGRAM SCHEDULE (Certificate):

Students must follow the program schedule in order and must pass all courses in each semester with a "C" or better to advance to the next semester. Each VT course is offered once per year in either the spring or fall semester. A student's progress will be delayed by one year if a course is missed or must be repeated.

* SEMESTER 1 (Fall): VT 100, VT 111
* SEMESTER 2 (Spring): VT 110, VT 113, VT 152
* SEMESTER 4 (Fall): VT 120, VT 122, VT 126
* SEMESTER 5 (Spring): VT123, VT 130, VT 131, VT 134

All students are required to spend a minimum of 6 hours per week during assigned shifts to care for the colony animals on campus. Shifts are scheduled outside of regular class time. Animal care shifts will be scheduled on weekends and holidays as well as semester breaks.

Certificate Requirements

Course Code	Course Title	Units
VT 100	Introduction to Veterinary Technology	3[1]
VT 111	Anatomy-Physiology of Animals	4[2]
VT 110	Veterinary Office Practice	3[3]
VT 113	Clinical Laboratory Techniques for Veterinary Technicians	4[4]
VT 152	Introduction to Laboratory Animals and Caged Birds	2[5]
VT 120	Pharmacology and Anesthesiology for the Veterinary Technician	4[6]
VT 122	Animal Disease: Pathology	3[7]
VT 126	Dentistry for the Veterinary Technician	1.5[8]
VT 123	Large Animal Disease: Pathology	3[9]
VT 130	Advanced Veterinary Technology	4[10]
VT 131	Introduction to Diagnostic Imaging	3[11]
VT 134	Large Animal Nursing	1.5[12]
Total Units:		**36**

[1]Students will also be required to spend a minimum of 6 hours per week during assigned shifts to care for the colony animals on campus. Shifts are scheduled outside of regular class time. Animal care shifts may be scheduled on weekends and holidays as well as semester breaks.

[2]Students will also be required to spend a minimum of 6 hours per week during assigned shifts to care for the colony animals on campus. Shifts are scheduled outside of regular class time. Animal care shifts may be scheduled on weekends and holidays as well as semester breaks.

[3]Students will also be required to spend a minimum of 6 hours per week during assigned shifts to care for the colony animals on campus. Shifts are scheduled outside of regular class time. Animal care shifts may be scheduled on weekends and holidays as well as semester breaks.

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[12]Students will also be required to spend a minimum of 6 hours per week during assigned shifts to care for the colony animals on campus. Shifts are scheduled outside of regular class time.

Animal care shifts may be scheduled on weekends and holidays as well as semester breaks.

Enrollment Eligibility

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

- Completion of BIOL 400 with a grade of "C" or better.
- Completion of CHEM 400 or CHEM 305 with a grade of "C" or better.
- Completion of BIOL 440 with a grade of "C" or better.
- Completion of the online application.
- Submission of a copy of high school diploma or equivalent.
- Submission of official transcripts reflecting pre-requisite completion.
- Submission of proof of pre-exposure rabies vaccination prior to the first day of the first semester.

Enrollment Process

Eligible students are selected for the program according to the following steps:

- Up to 30 eligible students are randomly drawn and admitted to the program only once a year in the fall semester. Final selection is made after the application deadline, and applicants will be notified by email of acceptance or non-acceptance by mid-July.

Student Learning Outcomes

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

- PSLO 1: Use the principles of pharmacology to assist the veterinarian in a clinical setting.
- PSLO 2: Provide veterinary nursing care and surgical assistance in a clinical setting.
- PSLO 3: Use the principles of radiology to assist the veterinarian in a clinical setting.
- PSLO 4: Perform clinical laboratory duties within a veterinary hospital.
- PSLO 5: Use the principles of veterinary dentistry to assist the veterinarian in a clinical setting.
- PSLO 6: Perform clerical duties within a veterinary hospital.
- PSLO 7: Provide safe, humane, and effective care for common laboratory animals used in animal research.
- PSLO 8: Provide safe, humane, and effective care for birds, reptiles, amphibians, rabbits, and guinea pigs.

Career Information

Most veterinary assistants and technicians are employed in private practice, but the demand for technicians is rapidly expanding and includes new employment opportunities in human and animal health-related areas and specialties such as biomedical research, military service, food safety inspection, teaching, zoo animal and wildlife care, diagnostic laboratory support, veterinary supply sales, animal control and humane society animal care, and drug and feed company technical service and sales. (source: AVMA.org)

Veterinary Technology (VT) Courses

VT 100 Introduction to Veterinary Technology

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Enrollment Limitation: Enrollment in this course is limited to students admitted to the Veterinary Technology program via the pre-enrollment process. To be considered for admission, a student must be a high school graduate or equivalent, and have completed CHEM 400 or CHEM 305, BIOL 400, and BIOL 440 with grades of "C" or better. See the course catalog or a counselor for more information.

This orientation course reviews the history, training and career opportunities pertaining to Registered Veterinary Technicians. Animal behavior, handling, training and restraint will be presented and discussed in the lecture periods. Laboratories will provide opportunities for students to gain hands-on experience with domestic, farm, laboratory and non-domestic animal species (when they are available). Students will be introduced to the medical terminology common to the animal health care field. Students will also be required to spend a minimum of 6 hours per week during assigned shifts to care for the colony animals. Shifts are scheduled outside of regular class time. Animal care shifts may be scheduled on weekends and holidays as well as semester breaks. Enrollment in this course is limited to students admitted to the Veterinary Technology program via the pre-enrollment process. See the course catalog or a counselor for more information.

VT 110 Veterinary Office Practice

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Enrollment Limitation: Enrollment in this course is limited to students admitted to the Veterinary Technology program via the pre-enrollment process. To be considered for admission, a student must have a high school diploma or equivalent, and have completed CHEM 400 or CHEM 305, BIOL 400, and BIOL 440 with grades of "C" or better. See the course catalog or a counselor for more information.
Advisory: Completion of or concurrent enrollment in CISC 302.

A veterinary practice-oriented course that explores hospital and clinic management procedures, business and professional aspects of practice, ethical and legal considerations for the Registered Veterinary Technician and their employer, and veterinary medical terminology. Students will be introduced to OSHA requirements and regulations as they pertain to veterinary medical settings.

Students will also be required to spend a minimum of 6 hours per week during assigned shifts to care for the colony animals on campus. Shifts are scheduled outside of regular class time. Animal care shifts may be scheduled on weekends and holidays as well as semester breaks.

Enrollment in this course is limited to students admitted to the

Veterinary Technology program via the pre-enrollment process. See the course catalog or a counselor for more information.

VT 111 Anatomy-Physiology of Animals

Units: 4
Hours: 54 hours LEC; 72 hours LAB
Prerequisite: None.
Corequisite: Concurrent enrollment in VT 100 (may be taken previously)
Enrollment Limitation: Enrollment in this course is limited to students admitted to the Veterinary Technology program via the pre-enrollment process. To be considered for admission, a student must have a high school diploma or equivalent, and have completed CHEM 400 or CHEM 305, BIOL 400, and BIOL 440 with grades of "C" or better. See the course catalog or a counselor for more information.

This course is a study of the basic anatomy and physiology of common domestic animals, including dogs, cats, horses, swine and ruminants. The information will be organized according to body systems. Within each system, the variation between species will be explored. Whenever possible, topics will be related to pertinent veterinary situations. Laboratory sessions will include dissection of animal cadavers.

Students will also be required to spend a minimum of 6 hours per week during assigned shifts in the care of the colony animals. Shifts are scheduled outside of regular class time. Animal care shifts may be scheduled on weekends and holidays as well as semester breaks.

Enrollment in this course is limited to students admitted to the Veterinary Technology program via the pre-enrollment process. See the course catalog or a counselor for more information.

VT 113 Clinical Laboratory Techniques for Veterinary Technicians

Units: 4
Hours: 54 hours LEC; 72 hours LAB
Prerequisite: VT 100 and 111 with grades of "C" or better
Enrollment Limitation: Enrollment in this course is limited to students admitted to the Veterinary Technology program via the pre-enrollment process. To be considered for admission, a student must have a high school diploma or equivalent and have completed CHEM 400 or CHEM 305 and BIOL 400, and BIOL 440, with grades of "C" or better. See the course catalog or a counselor for more information.

In this course, students will develop knowledge and skills related to clinical laboratory concepts including specimen collection, parasitology, cytology, urinalysis, microbiology, hematology, serology and record keeping. Selection, use and maintenance of laboratory equipment will be discussed. Students will perform a variety of diagnostic sampling techniques. Laboratory safety will be discussed. Laboratories will include using live animals and equipment for student learning and demonstration of hands-on skills.

Students will also be required to spend a minimum of 6 hours per week during assigned shifts to care for the colony animals on campus. Shifts are scheduled outside of regular class time. Animal care shifts may be scheduled on weekends and holidays as well as semester breaks.
Enrollment in this course is limited to students admitted to the Veterinary Technology program via the pre-enrollment process. See the course catalog or a counselor for more information.

VT 120 Pharmacology and Anesthesiology for the Veterinary Technician

Units: 4
Hours: 54 hours LEC; 72 hours LAB
Prerequisite: VT 110, 113, and 152 with grades of "C" or better
Enrollment Limitation: Enrollment in this course is limited to students admitted to the Veterinary Technology program via the pre-enrollment process. To be considered for admission, a student must have a high school diploma or equivalent, and have completed CHEM 400 or CHEM 305, BIOL 400, and BIOL 440 with grades of "C" or better. See the course catalog or a counselor for more information.

In this course, students will develop knowledge and skills related to pharmacology, veterinary anesthesiology and surgical assisting. Veterinary pharmacology concepts including drug classification, mechanisms of action, methods of administration, prescribing and dispensing will be introduced. Prescription, over-the-counter and scheduled drugs will be discussed. Students will learn how to perform and monitor veterinary anesthesia and practice related skills in the laboratory setting. Students will learn about veterinary surgical instrumentation, aseptic technique, surgical assisting and patient care. Application of knowledge will take place in surgical assisting labs where students demonstrate hands-on skills under the direct supervision of a licensed program veterinarian and Registered Veterinary Technician. Laboratories will include using live animals and equipment for student learning and demonstration of hands-on skills.

Students will also be required to spend a minimum of 6 hours per week during assigned shifts in the care of the colony animals. Shifts are scheduled outside of regular class time. Animal care shifts may be scheduled on weekends and holidays as well as semester breaks.
Enrollment in this is course limited to students admitted to the Veterinary Technology program via the pre-enrollment process. See the course catalog or a counselor for more information.

VT 122 Animal Disease: Pathology

Units: 3
Hours: 54 hours LEC
Prerequisite: VT 110, 113, 152, and 298 with grades of "C" or better; A minimum of 1 unit of VT 298 (Work Experience in Veterinary Technology) with a grade of "C" or better is required. Prior to taking VT 122, students should have experience in a clinical setting, animal handling, client communication, collecting samples and basic diagnostic modalities including auscultation, radiology, sample preparation, etc.
Enrollment Limitation: Enrollment in this course is limited to students admitted to the Veterinary Technology program via the pre-enrollment process. To be considered for admission, a student must have a high school diploma or equivalent, and have completed CHEM 400 or CHEM 305, BIOL 400, and BIOL 440 with grades of "C" or better. See the course catalog or a counselor for more information. If the course is offered online, all colony animal care will occur in person.

A course of study designed to acquaint students with common animal diseases of companion animals. Students will be introduced to body defense systems and how the body

responds to disease. Each disease is presented according to the body system(s) affected and topics covered include clinical signs, diagnostic laboratory work-up, treatment options, and client information. This course focuses on diseases of dogs and cats but will include some discussion of diseases in rabbits, rodents, ferrets, birds and reptiles. Necropsy demonstrations may be provided as visual aids to the textbook study.

Students will also be required to spend a minimum of 6 hours per week during assigned shifts in the care of the colony animals. Shifts are scheduled outside of regular class time. Animal care shifts may be scheduled on weekends and holidays as well as semester breaks.
Enrollment in this course is limited to students admitted to the Veterinary Technology program via the pre-enrollment process. See the course catalog or a counselor for more information.

VT 123 Large Animal Disease: Pathology

Units: 3
Hours: 54 hours LEC
Prerequisite: VT 113 with a grade of "C" or better
Enrollment Limitation: Enrollment in this course is limited to students admitted to the Veterinary Technology program via the pre-enrollment process. To be considered for admission, a student must have a high school diploma or equivalent and have completed CHEM 400 or CHEM 305 and BIOL 400, and BIOL 440, with grades of "C" or better. See the course catalog or a counselor for more information. If the course is offered online, all colony animal care will occur in person.

This course is designed to acquaint students with various diseases and conditions affecting large animal species including cattle, horses, sheep, goats and pigs. An overview of health and disease including the relationships between the disease agent, host and environment will be discussed. Students will learn about proper animal husbandry and management of large animal facilities including disease prevention strategies. Herd health concepts will be a focus of this course. Public health issues including emerging diseases, foreign animal diseases, zoonotic diseases and food safety will be discussed.

Students will also be required to spend a minimum of 6 hours per week during assigned shifts to care for the colony animals on campus. Shifts are scheduled outside of regular class time. Animal care shifts may be scheduled on weekends and holidays as well as semester breaks.
Enrollment in this course is limited to students admitted to the Veterinary Technology program via the pre-enrollment process. See the course catalog or a counselor for more information.

VT 126 Dentistry for the Veterinary Technician

Units: 1.5
Hours: 18 hours LEC; 27 hours LAB
Prerequisite: VT 110 and 113 with grades of "C" or better
Corequisite: VT 120; VT 120 (May have been taken previously)
Enrollment Limitation: Enrollment in this course is limited to students admitted to the Veterinary Technology program via the pre-enrollment process. To be considered for admission, a student must have a high school diploma or equivalent, and have completed CHEM 400 or CHEM 305, BIOL 400, and BIOL 440 with grades of "C" or better. See the course catalog or a counselor for more information.

This course will prepare the student for all aspects of veterinary dental care in dogs and cats appropriate to the veterinary technician. It will include instruction in oral examination, periodontal disease, dental radiology, dental scaling and polishing, and extractions techniques. Laboratories will include using live animals and equipment for student learning and demonstration of hands-on skills. Students will perform dental radiography and prophylaxis on anesthetized animals under the direct supervision of licensed program faculty and staff.

Students will also be required to spend a minimum of 6 hours per week during assigned shifts in the care of the colony animals. Shifts are scheduled outside of regular class time. Animal care shifts may be scheduled on weekends and holidays as well as semester breaks.
Enrollment in this course is limited to students admitted to the Veterinary Technology program via the pre-enrollment process. See the course catalog or a counselor for more information.

VT 130 Advanced Veterinary Technology

Units: 4
Hours: 54 hours LEC; 72 hours LAB
Prerequisite: VT 120 with a grade of "C" or better
Enrollment Limitation: Enrollment in this course is limited to students admitted to the Veterinary Technology program via the pre-enrollment process. To be considered for admission, a student must have a high school diploma or equivalent and have completed CHEM 400 or CHEM 305 and BIOL 400, and BIOL 440, with grades of "C" or better. See the course catalog or a counselor for more information.

This course includes instruction in advanced veterinary technology concepts including abnormal hematology, erythropoiesis, bone marrow analysis, coagulation testing, clinical chemistry and serology, emergency/critical care, toxicology and nutrition. Emergency topics will include triage, cardiopulmonary arrest, ECG, shock, IV fluids and transfusion medicine, neonatal care, wound management, bandaging, splinting and casting techniques. Laboratory activities will allow students to develop skills such as fluid therapy and blood transfusion, cardiopulmonary resuscitation on dogs and cats, blood and urine collection techniques, performing ophthalmic tests and skin scraping, orogastric intubation, medication administration, and therapeutic grooming techniques.

Students will also be required to spend a minimum of 6 hours per week during assigned shifts to care for the colony animals on campus. Shifts are scheduled outside of regular class time. Animal care shifts may be scheduled on weekends and holidays as well as semester breaks.
Enrollment in this course is limited to students admitted to the Veterinary Technology program via the pre-enrollment process. See the course catalog or a counselor for more information.

VT 131 Introduction to Diagnostic Imaging

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: VT 120 and 122 with grades of "C" or better
Enrollment Limitation: Enrollment in this course is limited to students admitted to the Veterinary Technology program via the pre-enrollment process. To be considered for admission, a student must have a high school diploma or equivalent and

have completed CHEM 400 or CHEM 305 and BIOL 400, and BIOL 440, with grades of "C" or better. See the course catalog or a counselor for more information.

This course is designed to meet the needs of the veterinary technician who will be working for veterinarians in private practice, animal research laboratories, and/or private and state industrial or educational institutions. The course covers radiology safety procedures, laws, and regulations. Students learn how to use radiographic equipment to produce diagnostic radiographs. The course includes positioning techniques for various animal species as well as radiograph developing techniques and basic x-ray theory. Alternate imaging modalities, including diagnostic ultrasound, are introduced and their use in veterinary medicine is described. A local field trip to a facility that offers the opportunity to perform large animal radiographic techniques may be required. Students will also be required to spend a minimum of 6 hours per week during assigned shifts to care for the colony animals on campus. Shifts are scheduled outside of regular class time. Animal care shifts may be scheduled on weekends and holidays as well as semester breaks.
Enrollment in this course is limited to students admitted to the Veterinary Technology program via the pre-enrollment process. See the course catalog or a counselor for more information.

VT 134 Large Animal Nursing

Units: 1.5
Hours: 18 hours LEC; 27 hours LAB
Prerequisite: VT 113 with a grade of "C" or better
Enrollment Limitation: Enrollment in this course is limited to students admitted to the Veterinary Technology program via the pre-enrollment process. To be considered for admission, a student must have a high school diploma or equivalent and have completed CHEM 400 or CHEM 305 and BIOL 400, and BIOL 440, with grades of "C" or better. See the course catalog or a counselor for more information.

A course in restraint, behavior, anesthesia and nursing care of domestic large animal species. Species covered will include horses, cattle, sheep, goats, and swine. Students will learn and have hands-on practice in basic restraint, physical examination, oral and injectable medication administration, and blood and urine collection techniques. In this course students will receive instruction through in-person lectures and/or online modules and discussions followed by hands-on practice and skills demonstrations at off-campus facilities. Students will also receive instruction in the use of restraint equipment and techniques for obstetrical examination and dystocia, administration of and complications associated with large animal anesthesia, tail and leg wrapping, intravenous catheterization, and common husbandry practices including disbudding, tail docking, and castration.

Laboratories will provide opportunities for students to gain hands-on experience with horses, cattle, small ruminants and swine.

Students will also be required to spend a minimum of 6 hours per week during assigned shifts to care for the colony animals on campus. Shifts are scheduled outside of regular class time. Animal care shifts may be scheduled on weekends and holidays as well as semester breaks.
Enrollment in this course is limited to students admitted to the Veterinary Technology program via the pre-enrollment process. See the course catalog or a counselor for more information.

VT 152 Introduction to Laboratory Animals and Caged Birds

Units: 2
Hours: 27 hours LEC; 27 hours LAB
Prerequisite: VT 100 and 111 with grades of "C" or better
Enrollment Limitation: Enrollment in this course is limited to students admitted to the Veterinary Technology program via the pre-enrollment process. To be considered for admission, a student must have a high school diploma or equivalent and have completed CHEM 400 or CHEM 305 and BIOL 400, and BIOL 440, with grades of "C" or better. See the course catalog or a counselor for more information.

This course expands upon introductory concepts pertaining to birds and laboratory animals that students learned in previous veterinary technology courses. Laws and regulations governing the use of animals in research will be discussed. Course topics also include handling, medical procedures, anesthesia, and euthanasia in laboratory animals and caged birds. Students will gain knowledge and handling skills that can help them prepare for American Association for Laboratory Animal Science (AALAS) certification.

Laboratories will provide opportunities for students to gain hands-on experience with rats, mice, hamsters, rabbits, guinea pigs, companion birds and reptiles. A field trip to a research facility may be required.

Students will also be required to spend a minimum of 6 hours per week during assigned shifts to care for the colony animals on campus. Shifts are scheduled outside of regular class time. Animal care shifts may be scheduled on weekends and holidays as well as semester breaks.

Enrollment in this course is limited to students admitted to the Veterinary Technology program via the pre-enrollment process. See the course catalog or a counselor for more information.

VT 295 Independent Studies in Veterinary Technology

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

VT 298 Work Experience in Veterinary Technology

Units: 0.5 - 4
Hours: 27 - 216 hours LAB
Prerequisite: VT 111 with a grade of "C" or better
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position or job related to career goals in Veterinary Technology.

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in associate degree level or certificate occupational programs. Course content includes understanding the application of

education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and complete 27 hours of related work experience for 0.5 unit. An additional 27 hours of related work experience is required for each additional 0.5 units. 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.

VT 299 Experimental Offering in Veterinary Technology

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

Vietnamese

CRC offers the basic grammar and conversation courses in Vietnamese. Students will be able to understand the spoken language, to speak with reasonable fluency, and to write at their speaking level.

Dean Emmanuel Sigauke

Department Chair Blanca Gill

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Vietnamese (VIET) Courses

VIET 299 Experimental Offering in Vietnamese

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

VIET 401 Elementary Vietnamese

Units: 4
Hours: 72 hours LEC
Prerequisite: None.
Transferable: CSU; UC (Corresponds to two years of high school study)
General Education: Local GE L3

This course will provide an introduction to the Vietnamese language at the Novice Low Level, which is characterized by an emerging ability to understand and produce appropriate responses in high-frequency situations utilizing learned materials, standardized messages, phrases and expressions including terms for addressing, numbers, time, dates, days, weather, and kinship terms. Speaking and writing will be comprehensible to a sympathetic listener, including a native speaker used to interacting with non-native speakers. Verbal and written expression is limited to short, culturally appropriate communication. Students will also acquire knowledge of the geography, culture and people of regions where Vietnamese is spoken as well as Vietnamese-speakers’ contributions to North American and world-wide cultures.

VIET 402 Elementary Vietnamese

Units: 4
Hours: 72 hours LEC
Prerequisite: VIET 401 with a grade of "C" or better
Transferable: CSU; UC
General Education: Local GE L3

This is the second course in the Elementary Vietnamese sequence. It is designed for students who have completed VIET 401 or two years of high school Vietnamese. It provides refinement of skills learned in 401. Students will gain increased accuracy and ability to understand and produce appropriate responses in high frequency situations utilizing learned materials. Speaking and writing will be comprehensible to a sympathetic listener. Verbal and written expression will be limited to short, culturally appropriate communication on a broader scale than at the 401 level. Students will acquire a knowledge of the geography, culture and people of regions where Vietnamese is spoken and of Vietnamese-speakers' contributions to North American and world cultures.

VIET 411 Intermediate Vietnamese

Units: 4
Hours: 72 hours LEC
Prerequisite: VIET 402 with a grade of "C" or better
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3B

This is first semester of Intermediate Vietnamese. It is designed for students who have completed Vietnamese 402 or three years of high school Vietnamese. It provides refinement of skills attained in 402. Students will work toward the ability to create with the language without relying on learned responses, to understand main ideas in routine speech and to understand main ideas in written texts. Listening and reading comprehension continue to develop; speaking and writing will be comprehensible to a somewhat sympathetic native speaker. Students will develop the ability to respond in an unrehearsed manner on concrete topics in known situations. Written expression will meet limited personal needs in culturally-appropriate language at a higher level of accuracy than found in 402. Students will continue acquiring knowledge of geography, culture and people of regions where Vietnamese is spoken and of Vietnamese speakers' contributions to North American and world cultures.

VIET 412 Intermediate Vietnamese

Units: 4
Hours: 72 hours LEC
Prerequisite: VIET 411 with a grade of "C" or better
Transferable: CSU; UC
General Education: Local GE L3; Cal-GETC Area 3B

This is second semester Intermediate Vietnamese. It is designed for students who have completed Vietnamese 411 or four years of high school Vietnamese. It provides continued development of skills attained in 411. The focus will be the development of written narratives and expository prose combined with increased cultural awareness. Emphasis will be placed on culturally authentic reading and writing through the introduction of basic literary analysis. Students will develop the ability to handle complicated situations using past and future time frames. Students will continue acquisition of knowledge of geography, culture and people of regions where Vietnamese is spoken and of Vietnamese-speakers' contributions to North American and world cultures.

VIET 495 Independent Studies in Vietnamese

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

VIET 499 Experimental Offering in Vietnamese

Units: 0.5 - 4

Prerequisite: None.
Transferable: CSU

This is the experimental courses description.

Welding

The CRC welding program is designed for students interested in seeking employment or advancing employment in welding fabrication and industrial repairs. Current job statistics show a long-term and growing industry demand for skilled welders with very good pay for those with experience. Welding encompasses study in electrical, metallurgy, chemistry, physics, design, and mechanical engineering.

Degrees and Certificates Offered

A.S. in General Agriculture

A.S. in Welding Technology

Welding Code Certificate

Welding Fabricator Certificate

Welding Technology Certificate

Dean Ashu Mishra

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Associate Degrees

A.S. in General Agriculture

Agriculture is a vital component of our local, state, and national economies and offers many exciting employment opportunities. In addition to the production of a wide range of valuable agricultural commodities, the Sacramento region is home to numerous multi-national agricultural corporations and statewide governmental agencies. It is also a center for international agricultural trade and commerce. This program is designed for students majoring in Agriculture while also allowing the student to select courses that fit his/her individual needs and desires.

As a General Agriculture major, you will:

*Study a general agriculture curriculum representing all of the departments of the Cosumnes River College agriculture program including: agriculture business, horticulture, welding, veterinary technology and plant science.

*Develop your leadership and communication skills.

*Identify the agricultural career you are most interested in and build a course of study to better qualify you for a profession.

HIGHLIGHTS

*As the only community college agriculture program in the Sacramento region, the CRC General Agriculture program provides an excellent opportunity for individuals who wish to pursue a career in agriculture and receive a General Agriculture Associate of Science degree.

*The faculty in this program works closely with the five California agricultural degree offering universities to provide a quality program for students interested in agriculture business, management and economics.

*The Sacramento region is fortunate to have some of the best high school agriculture programs in California. The faculty in the CRC Ag program works closely with these feeder schools to articulate coursework and facilitate the successful transition of agriculture students from high school to the university.

*Internships in agriculture are available for students interested in work experience opportunities.

NOTE TO TRANSFER STUDENTS: If you are interested in transferring to a four-year college or university to pursue a bachelor's degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate's degree in this major may be different from the requirements needed for the Bachelor's degree.

Degree Requirements

Course Code	Course Title	Units
AGB 310	Agriculture Computer Applications	3[1]
AGB 320	Agriculture Accounting	3
AGB 321	Agriculture Economics	3
AMT 306	Small Engine Repair	3
HORT 300	Introduction to Horticulture	3
PLTS 310	Soils, Soil Management, and Plant Nutrition (3)	3
or HORT 302	Soils, Soil Management, and Plant Nutrition (3)	
ANSC 300	Introduction to Animal Science	3
PLTS 300	Introduction to Plant Science	3
WELD 100	Introduction to Welding & Safety	1.5
A minimum of 2 units from the following:		2
WEXP 498	Work Experience in (Subject) (0.5 - 4)	
Subtotal Units:		**27.5**

Agriculture Business

Course Code	Course Title	Units
AGB 300	Introduction to Agriculture Business	3
AGB 330	Agriculture Sales and Communication	3
AGB 331	Agriculture Marketing	3
Agriculture Business Units:		9
Total Units:		**36.5**

Horticulture

Course Code	Course Title	Units
HORT 305	Plant Identification-Fall Selections	3
HORT 312	Plant Propagation	3
Horticulture Units:		6
Total Units:		**33.5**

Landscape

Course Code	Course Title	Units
HORT 320	Sustainable Landscape Construction	3
HORT 324	Sustainable Landscape Maintenance	3
Landscape Units:		6
Total Units:		**33.5**

Welding

Course Code	Course Title	Units
WELD 110	Shielded Metal Arc Welding Procedures	4
Welding Units:		4
Total Units:		**31.5**

[1]This major requires that you complete all courses in the required program plus one area of concentration.

The General Agriculture Associate in Science (A.S.) degree may be obtained by completion of the required program, plus the local CRC General Education Requirement, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

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

- PSLO 1: Demonstrate knowledge and hands-on experience in the basic concepts of all aspects of agriculture.
- PSLO 2: Demonstrate the ability to logically breakdown aspects of a project/problem and be able to resolve an issue in the agriculture industry.
- PSLO 3: Demonstrate independent & group learning expressing effective communication skills, both orally & written.
- PSLO 4: Participate in leadership opportunities to develop life-long learning traits.

Career Information

Management; Supervision; Finance; Insurance; Government; Marketing; Distribution; International Trade; Sales and Service Nursery Management and Operations; Park Maintenance; Landscape Design, Teaching, Communication; Contracting & Maintenance; Fertilizer & Insecticide Application; Research; Retail/Wholesale; Estimator; Consultant; Government Agency employee; Welding Technician; Inspection; Welding Engineering; Sculpting; Home/Handicraft & Hobby; Construction; Trucking & Automotive Some positions, however, require a four-year degree for which CRC's program is a good base for transfer.

A.S. in Welding Technology

The Welding Program at Cosumnes River College specializes in welding training to meet current needs for the Welding Industry. In addition to learning technical welding skills of Shielded Metal Arc, Gas Metal Arc, Gas Tungsten Arc and Flux Core Arc Welding processes, students will be introduced to safety standards, common metal working machinery and welding practices common with the welding industry.

Degree Requirements

Course Code	Course Title	Units
WELD 151	Welding Industry Training	4
WELD 153	Introduction to Welding Codes	2.5
A minimum of 18.5 units from the following:		18.5
WELD 100	Introduction to Welding & Safety (1.5)	
WELD 126	Gas Metal Arc Welding of Plate & Pipe (3)	
WELD 127	Gas Metal Arc Welding Process of Sheet Metal (3)	
WELD 128	Gas Tungsten Arc Welding of Aluminum Alloys (3)	
WELD 129	Gas Tungsten Arc Welding of Stainless Steel (3)	
WELD 110	Shielded Metal Arc Welding Procedures (4)	
WELD 111	Pipe Welding Procedures (4)	
WELD 113	Flux Core Arc Welding Process (4)	
WELD 145	Design, Layout & Fabrication (3)	
Total Units:		**25**

The Welding Technology Associate in Science (A.S.) degree may be obtained by completion of the required program, and either (a) the Local General Education Pattern or (b) the California General Education Transfer Curriculum (Cal-GETC), plus sufficient electives for a total of at least 60 units. See CRC graduation requirements.

Student Learning Outcomes

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

- Demonstrate welding skills to meet or exceed Industry Standards. PSLO #1
- Understand and implement Welding Procedures and Welding Specifications to meet or exceed the Welding Code Standards. PSLO #2
- Understand and implement Cal-OSHA and FED-OSHA Safety Regulations and Procedures that pertain to the Welding Industry. PSLO #3
- Apply academic skills in reading, mathematics, chemistry, physics, business, communication, engineering design and concepts to welding fabrication. PSLO #4
- Demonstrate work attributes that contribute to personal success and contribute to the goals of the company or organization for which one is employed. PSLO #5

Career Information

Production Shop Welder Production Field Welder Welding Fabricator Welding Safety Trainer Welding Inspector Welding Quality Control Supervisor Welding Supervisor Welding Teacher (High-School) Welding Instructor (Trade or College) Welding Sales Welding Safety Owner or Operator of a welding business Manager of a welding business

Certificates of Achievement

Welding Code Certificate

The Welding Code Certificate specializes in the American Welding Society Structural Steel Welding Code (D1.1) and Seismic Welding Code (D1.8). Students have the option to select one of the three courses; Flux Core Arc Welding, Shielded Metal Arc Welding and Pipe Welding procedures as a focus course to prepare to take the Certified Welding Inspector (CWI) exam at an AWS testing site. Students may take all of the focus courses to assist with preparing for the CWI exam, but only one of the optional courses is needed to earn the certificate.

Certificate Requirements

Course Code	Course Title	Units
A minimum of 4 units from the following:		4
WELD 110	Shielded Metal Arc Welding Procedures (4)	
WELD 111	Pipe Welding Procedures (4)	
WELD 113	Flux Core Arc Welding Process (4)	
WELD 151	Welding Industry Training	4
WELD 153	Introduction to Welding Codes	2.5
Total Units:		**10.5**

Student Learning Outcomes

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

- PSLO 1: Demonstrate welding skills sufficient to meet industry standards.
- PSLO 2: Identify and recall American Welding Society Structural Steel regulations pertaining to construction and or fabrication of weldments.

Career Information

Job advancement in the welding industry as a welder, quality control inspector or welding supervisor. Certified Welding Inspector Certified Welding Supervisor Certified Welding Educator

Welding Fabricator Certificate

The Welding Fabricator Certificate specializes in up-to-date welding code and safety regulations, modern power sources and techniques, fabrication procedures with the Gas Metal Arc Welding Process and the Gas Tungsten Arc Welding Process. Students will have the opportunity to meet or exceed industry standards to become employed in the welding industry.

Certificate Requirements

Course Code	Course Title	Units
WELD 145	Design, Layout & Fabrication	3
WELD 153	Introduction to Welding Codes	2.5
A minimum of 5.5 units from the following:		5.5
WELD 100	Introduction to Welding & Safety (1.5)	
WELD 126	Gas Metal Arc Welding of Plate & Pipe (3)	
WELD 127	Gas Metal Arc Welding Process of Sheet Metal (3)	
WELD 128	Gas Tungsten Arc Welding of Aluminum Alloys (3)	
WELD 129	Gas Tungsten Arc Welding of Stainless Steel (3)	
WELD 110	Shielded Metal Arc Welding Procedures (4)	
WELD 111	Pipe Welding Procedures (4)	
WELD 113	Flux Core Arc Welding Process (4)	
Total Units:		**11**

Student Learning Outcomes

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

- PSLO #1: Fabrication and Certification: Use proper hand, measuring and layout tools.
- PSLO #2: Professionalism: Demonstrate work attributes that contribute to personal success and the goals of the company or organization for which one is employed.

Career Information

Job advancement and or employment in the welding industry.

Welding Technology Certificate

The CRC welding program is designed for students interested in seeking employment or advancing employment in welding fabrication and industrial repairs.

Current job statistics show a long-term and growing industry demand for skilled welders with very good pay for those with experience in Gas Metal Arc Welding, Shielded Metal Arc Welding and Flux Core Arc Welding talents.

Welding encompasses study in Electrical, Metallurgy, Chemistry, Physics, Design, and Mechanical Engineering.

This welding certificate can be used in conjunction with other technology areas such as:
* Automotive Mechanics Technology
* Building Inspection Technology
* Construction Management Technology

Highlights include:
* Classes for beginning and advanced welders
* Welder Operator Qualification Records
* Hands-on experience and opportunities for participation in student projects

Certificate Requirements

Course Code	Course Title	Units
WELD 151	Welding Industry Training	4
WELD 153	Introduction to Welding Codes	2.5
A minimum of 9.5 units from the following:		9.5
WELD 100	Introduction to Welding & Safety (1.5)	
WELD 126	Gas Metal Arc Welding of Plate & Pipe (3)	
WELD 127	Gas Metal Arc Welding Process of Sheet Metal (3)	
WELD 128	Gas Tungsten Arc Welding of Aluminum Alloys (3)	

Course Code	Course Title	Units
WELD 129	Gas Tungsten Arc Welding of Stainless Steel (3)	
WELD 110	Shielded Metal Arc Welding Procedures (4)	
WELD 111	Pipe Welding Procedures (4)	
WELD 113	Flux Core Arc Welding Process (4)	
Total Units:		**16**

Student Learning Outcomes

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

- PSLO #1: Demonstrate welding skills sufficient to meet industry standards.
- PSLO #2: Apply integrated knowledge with incremental skill improvement resulting in functional application of welding techniques.
- PSLO #3: Interpret safety codes and regulations that pertain to the welding industry.
- PSLO #4: Use proper hand, measuring and layout tools to fabricate welding projects or certification coupons.
- PSLO #5: Demonstrate work attributes that contribute to personal success and contribute to the goals of the company or organization for which one is employed.

Career Information

Welding Technician; Sales; Inspection; Supervision & Management; Welding Engineering; Welding Teacher; Welding Safety Trainer; Sculpting; Home/Handicraft & Hobby; Construction; Trucking & Automotive

Welding (WELD) Courses

WELD 100 Introduction to Welding & Safety

Units: 1.5
Hours: 18 hours LEC; 27 hours LAB
Prerequisite: None.

Welding 100 is an introductory course that covers the safety procedures of operating an electric arc welding machine, oxygen-acetylene cutting apparatus, oxygen-propane cutting apparatus, plasma arc cutting machine, shielded metal arc welding, gas metal arc welding and the gas tungsten arc welding process. The lecture portion of the course includes safety and the scientific theory of welding, cutting and modern power sources. The laboratory portion of the course allows for hands-on practice to learn the proper procedures and techniques for welding and cutting.

WELD 110 Shielded Metal Arc Welding Procedures

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: None.

The WELD 110 course specializes in the welding procedures of the shielded metal arc welding (SMAW) process for the construction of structural steel beams and connections. The lecture portion includes safety procedures, machinery and tool operation, welding fundamentals, air carbon arc gouging, electrode classification system, distortion, welding inspection technology and welding symbols. Laboratory portion of the course will provide hands on welding and cutting assignments to prepare the student to be successful in the WELD 151 Industry Training course.

WELD 111 Pipe Welding Procedures

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: WELD 100 with a grade of "C" or better; The student should have a basic understanding of welding.

The WELD 111 course specialized in pipe welding procedures with various welding processes. The lecture portion covers safety procedures, machinery and tool operation, welding fundamentals and welding inspection procedures common to ASME and API welding codes. The laboratory portion will cover proper procedures of cutting and welding pipe in various positions and joints to meet or exceed industry standards. The hands-on welding and cutting assignments will prepare the student to be successful in the WELD 151 Industry Training course.

WELD 113 Flux Core Arc Welding Process

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: WELD 100 with a grade of "C" or better; Students without any prior welding training or experience should complete WELD 100 (Introduction to Welding & Safety).

The WELD 113 welding course specializes in the welding procedures of the flux core arc welding (FCAW) process for the construction of structural steel beams and connections. The lecture portion includes safety procedures, machinery and tool operation, welding fundamentals, air carbon arc gouging, electrode classification system, welding inspection technology and welding symbols. Laboratory portion of the course will provide hands on welding and cutting assignments to prepare the student to be successful in the WELD 151 Industry Training course.

WELD 126 Gas Metal Arc Welding of Plate & Pipe

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.

The WELD 126 Gas Metal Arc Welding process of Plate and Pipe course focuses on safety, hand and power tools, machinery operation procedures and welding parameters common to wire feed welding machines. The laboratory assignments will focus on proper cutting methods and welding techniques to perform correct plat to plate and pipe to pipe connections to prepare the student to be successful in the WELD 151 welding course.

WELD 127 Gas Metal Arc Welding Process of Sheet Metal

Units: 3
Hours: 36 hours LEC; 54 hours LAB

Prerequisite: None.

The WELD 127 Gas Metal Arc Welding Process of sheet metal is a welding course that specializes in the safety, shop hand and power tools, machinery operation procedures, power supplies, welding codes and welding techniques of the Gas Metal Arc Welding process. Laboratory assignments will be completed on medium carbon steel, aluminum alloy or stainless steel sheet-metal to prepare students for the WELD 151 course.

WELD 128 Gas Tungsten Arc Welding of Aluminum Alloys

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: WELD 100

The WELD 128 Gas Tungsten Arc Welding of Aluminum Alloy focuses on welding safety, shop tools and machinery, welding codes, welding inspection, power supplies, welding technique and welding parameters common to aluminum alloy. Laboratory assignments will focus on aluminum alloy welding and cutting procedures to prepare the student to be successful in the WELD 151 course.

WELD 129 Gas Tungsten Arc Welding of Stainless Steel

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: WELD 100

The WELD 129 Gas Tungsten Arc Welding of stainless steel focuses on welding safety, shop tools and machinery operational procedures, welding codes, welding inspection, power supplies, welding parameters and welding and cutting techniques. Laboratory assignments will focus on cutting and welding procedures of carbon and stainless steel materials needed to be successful in the WELD 151 welding course.

WELD 145 Design, Layout & Fabrication

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.

The WELD 145 Design, Layout & Fabrication course provides the student the opportunity to design a project by sketch or computer-assisted drawing software. The student will learn how to estimate material and labor costs for the fabrication of such a project. Topics such as proper welding and cutting of material with various hand and power tools, industrial machinery and construction techniques will be covered in the lecture and laboratory sections of the course.

WELD 151 Welding Industry Training

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: WELD 110, 111, 113, 126, 127, 128, or 129 with a grade of "C" or better

The WELD 151 Welding Industry Training course is an advanced welding class that prepares students for employment in the welding industry. The student will focus on specific welder qualification procedures of the Shielded Metal Arc Welding process (SMAW), Flux Core Arc Welding process (FCAW), Gas Metal Arc Welding process (GMAW) or Gas Tungsten Arc Welding process (GTAW). The welding process selection is determined by the welding courses completed prior to registering into WELD 151 and must be authorized by the instructor. The cost of coupon materials and welding consumables will also be a consideration of the students welding assignments. The purpose of the WELD 151 course is to prepare the student to be successful for a pre-employment qualification welding test that is specific to a welding fabrication business or manufacturing company.

WELD 153 Introduction to Welding Codes

Units: 2.5
Hours: 45 hours LEC
Prerequisite: None.
Advisory: WELD 100 with a grade of "C" or better

Introduction to Welding Codes covers the welding requirements for any type of welded structure made from commonly used carbon and low-alloy steel construction, boiler and pressure vessels and pipe welding. Topics include the welding construction industry, rules, regulations, and the principles, requirements, and methods of inspection. It covers weld measurements and discontinuities for evaluation acceptance using a variety of tools. It also emphasizes the lines of communication between the plant managers, welders, welding engineers, design/project engineers, welding foreman/ supervisors, shop or field superintendents, and reporting supervisors. This course offers preparation for the Certified Welding Inspector Examination given by the American Welding Society. Welding codes covered are AWS, ASME Section IX and API 1104.

WELD 294 Topics in Welding

Units: 0.5 - 5
Hours: 5 - 54 hours LEC; 12 - 108 hours LAB
Prerequisite: None.

WELD 294 is a course developed in cooperation with the industry to meet specialized training needs of the Sacramento area or specifically high demand welding processes for the welding industry.

WELD 295 Independent Studies in Welding

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: WELD 151 with a grade of "C" or better

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

WELD 298 Work Experience in Welding

Units: 0.5 - 4
Hours: 27 - 216 hours LAB
Prerequisite: None.
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position or job related to career goals in Welding.

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in associate degree level or certificate occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and complete 27 hours of related work experience for 0.5 unit. An additional 27 hours of related work experience is required for each additional 0.5 units. 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.

WELD 299 Experimental Offering in Welding

Units: 0.5 - 4
Prerequisite: None.

This is the experimental courses description.

Work Experience

Work Experience Education is a unique, experiential, academic program that allows individuals to apply what they've learned in the classroom to a work environment. Upon completion of their Work Experience, students may earn one (1) to four (4) units of transferable credit with a letter grade.

Work Experience serves: College interns, volunteers, and employees. It also satisfies the Living Skills graduation requirement for an associate degree.

Dean Hong Pham

Department Chair Amy Avalos

Phone (916) 691-7793

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Work Experience (WEXP) Courses

WEXP 198 Work Experience - General

Units: 0.5 - 3
Hours: 27 - 162 hours LAB
Prerequisite: None.
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position or job.
General Education: Local GE L7B

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 exploring various career options. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and complete 27 hours of related work experience for 0.5 unit. An additional 27 hours of related work experience is required for each additional 0.5 units. This course may be repeated for a maximum of 6 units when there are new or expanded learning objectives. Students may take up to 16 units total across all Work Experience course offerings. Only one Work Experience course may be taken per semester.

WEXP 298 Work Experience in (Subject)

Units: 0.5 - 4
Hours: 27 - 216 hours LAB
Prerequisite: None.
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position or job related to career goals.
General Education: Local GE L7B

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in associate degree level or certificate occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and complete 27 hours of related work experience for 0.5 unit. An additional 27 hours of related work experience is required for each additional 0.5 units. 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)

Units: 0.5 - 4
Hours: 27 - 216 hours LAB
Prerequisite: None.
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position or job related to career goals.
Transferable: CSU
General Education: Local GE L7B

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in transfer level degree occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and complete 27 hours of related work experience for 0.5 unit. An additional 27 hours of related work experience is required for each additional 0.5 units. 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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M.A., CSU San Bernardino
Ph.D., Claremont Graduate University

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English
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Public Services
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B.A., University of New Mexico
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English
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Alino, Vera R. (2019)
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Baca, Jorge (2009)
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Mathematics
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M.A., CSU Sacramento

Nguyen, Loi (2008)
Mathematics
B.A., UC Davis
M.A., CSU Sacramento

Ninh,Thien-Huong (2016)
Sociology
B.A., UC Los Angeles
Ph.D., University of Southern CA

Noel, Brian (2011)
Automotive Mechanics Technology
A.A., Cosumnes River College

O'Brien, Teresa (2015)
DSPS Counseling
B.A., Mills College
M.S., CSU Sacramento

Oliver, Julie A. (2001)
Biology
B.A., UC Davis
M.S., CSU Sacramento

Osman, Mohammed (2002)
Computer Information Science
B.E., Osmania University
M.S., Virginia Tech
M.B.A., UC Davis

Panagakos, H. Anastasia (2007)
Anthropology
B.A., UC Davis
M.A., Ph.D., UC Santa Barbara

Pandey, Rajeev R. (2019)
Chemistry
Ph.D., University of North Dakota

Parilo, Margaret S. (2008)
Accounting
B.S., CSU Sacramento
M.S., Golden Gate University

Parks, Lance M. (2001)
Computer Information Science
B.S., CSU Bakersfield
M.S., Golden Gate University

Patterson, Jason A. (2017)
Biology
D.C., Southern California University of Health Sciences
B.S., California Polytechnic University, San Luis Obispo

Paskey, Amanda M. (2006)
Anthropology
B.A., M.A., UC Davis

Paul, Manuel (2023)
Physics/Astronomy
B.S., CSU San Bernardino
M.S., Ph.D., UC Irvine

Pennino, Eric (2024)
Biology
M.S. Equivalency

Perez, Anthony (2024)
Chemistry
M.S., CSU Sacramento

Perez, Rochelle A. (2009)
Librarian
B.S., University of the East
M.L.S., Emporia State University

Peshkoff, Alexander (2015)
History
B.A., UC Davis
M.A., SF State University, San Francisco

Phan, Man (2012)
Business
M.B.A., UC San Diego

Phillips, Eugene (2022)
Automotive Technology
A.A., Cosumnes River College
B.A., CSU Sacramento

Pierce, Tyler (2024)
Mathematics/Statistics
M.S., UC Riverside

Plasencia, Cesar (2005)
Head Women's Soccer Coach /Physical Education
B.A., CSU Sacramento
M.S., United States Sports Academy, Alabama

Pollock, Sarah (2015)
Biology
B.S., CA Polytechnic State University
M.S., UC Davis

Preble, Ronald E. (2000)
Head Men's Soccer Coach/Physical Education
B.S., CSU Sacramento
M.S., United States Sports Academy

Procsal, Amanda (2016)
Psychology
B.A., CSU Sacramento
M.A., Northern Arizona University

Reed, Diana (2014)
History
B.A., UC Berkeley
M.A., CSU Sacramento

Reese, Shawn (2014)
Chemistry
Ph.D., Brigham Young University

Reeves, Erica (2014)
English
B.A., UC Berkeley
M.A., CSU Sacramento

Reichelt Weathers, Andilene (2022)
English as a Second Language
B.A., Universidade Estacio de Sa
Post-Secondary Reading and Learning Certificate, UC Fullerton
M.A., CSU Sacramento

Roberts, Jason M. (2006)
Welding
A.A., B.S., M.S., Cal Poly State University

Rodrigues, Matthew J. (2018)
Mathematics
M.A., UC Davis

Ruark, Steven (2024)
Chemistry
M.S., CSU Northridge)

Russell, Michael (2015)
Chemistry
B.S., Indiana University
M.C., University of Madison
D.V.M. University of Madison

Samaniego, Celia S. (2002)
Spanish
B.A., UC Los Angeles
M.A. CSU Sacramento

Schroeder, Kristy Howard (2011)
Physical Education/Head Women's Softball Coach
B.A., UC Los Angeles
M.A., University of the Pacific

Schubert, Richard C. (1999)
Philosophy
B.A., M.A., University of Connecticut
Ph.D., UC Davis

Seamons, John (2015)
Reading
B.A., M.A., CSU Sacramento

Sertich, Sangchin (2013)
Mathematics
M.A., CSU Sacramento

Simpson, Roy W. (2007)
Mathematics
A.A., Sacramento City College
A.S., Cosumnes River College
B.S., UC Davis
M.S. Stony Brook University

Spisak, John "Buddy" (2022)
CIS, Cybersecurity/IT Networking
B.S., CSU Sacramento
M.S., University of San Francisco

Soriano, Paolo (2017)
EOPS Counselor
A.A. Solano CC
B.A., UC Davis
M.S. CSU Sacramento

Tau, Omari (2016)
Music
Bachelor of Music Ed., Michigan State
Master of Music, University of Houston

Thomas-Fisk, Cory E. (2007)
Construction Management
B.S., Texas A&M University
M.S., University of Phoenix

Torres, Gabriel S. (2002)
Spanish
B.A., M.A., UC Davis

Tovar, Alejandra (2022)
Counselor
B.A., San Francisco State University

Trench, Jena M. (2008)
Biology
B.S., UC Santa Barbara
M.A., San Francisco State

Velasquez, Jacob L. (2019)
Philosophy
Ph.D., UC Davis

Wadenius, Adam P. (2019)
Film and Media Studies
M.A., San Francisco State University

Wagner, Lauren (2014)
Radio, Television & Film Production
B.A. San Francisco State University
M.F.A., University of Southern California

Washington, Christina (2016)
English
B.A., M.A., CSU Sacramento

Weinshilboum, David. H. (2007)
English
B.A., University of Wisconsin
M.F.A., Mills College
M.A., CSU Sacramento

Wheeler Abeyta, Sandra P. (2017)
Communication Studies
M.A., CSU Sacramento

Williams-Brito, Kimberly (2007)
Mathematics
B.A., M.A., San Francisco State University

Wilson, James B. (2008)
English as a Second Language
B.A., TESL, UC Irvine
M.A., CSU, Fullerton

Wilson, Katy (2021)
Faculty Researcher
M.A., Middlebury Institute of International Studies

Wohl, Matthew (2019)
Counselor (Athletics)
M.A., CSU Stanislaus

Yarbrough, Michael D. (2001)
Mathematics
B.S., CSU Cal Poly
M.S., University of Arizona

Yoon, Haengku (2022)
Economics
M.A., SungKyunKwan University
M.A., CSU Long Beach
Ph.D., UC Davis

Zaigralin, Ivan (2016)
Mathematics
B.S., M.S., San Jose State University
Ph.D., Boston University

Zoller, Karl A. (2018)
Humanities
Ph.D., UC Davis

Staff

Abboushi, Dalal
Instructional Assistant

Adao, Gwennicole
Student Support Specialist

Aguayo, Alejandra
Instructional Assistant

Alvarado, Janet
Financial Aid Officer

Ambriz, Laura
Operations Technician

Anaya, Kayla
Student Life Supervisor

Andrews, Richard
Admissions and Records Supervisor

Arambula, Alvaro
Custodian

Ayoubi, Sadia
Educational Center Clerk

Ballesteros, Lauren
Student Support Specialist

Banford, Kelly
Student Support Specialist

Barkley, Emily
Student Personnel Assistant

Bayaz, Hadia
Financial Aid Technician

Bettencourt, Saira
Instructional Services Assist II

Bhatia, Gurpreet
Student Personnel Assistant, DSPS

Bittner, Michael
Digital Communications & Web Specialist

Border, Brandy
Administrative Assistant I

Borison, Sophie
Admissions and Records Evaluator I

Brady, Angela
Financial Aid Supervisor

Brakel, Robyn
Instructional Assistant

Briggs, Melissa
Library Technician

Bryant, Suzette
Counseling Clerk II

Cano, Marissa
Child Development Center Lead Teacher

Canton, Stuart
Instructional Assistant

Carrasco, Carlos
Laboratory Technician

Cartright, Tony
Custodial/Receiving Supervisor

Castaneda, Alessandra
Educational Center Supervisor

Chang, Choua
Child Development Center Lead Teacher

Charron, Shelly
Counseling Clerk II

Chasengnou, Emily
Financial Aid Technician

Cheetham, Michael
Maintenance Technician II

Chen, Yu
Custodian

Chepurnoy, Andrey
Senior IT Specialist

Childress, Josheua
IT Specialist II - AV Media Support

Ciofi, Tommaso
Senior IT Technician

Clark, Jeri
Child Development Center Teacher

Corona-Gomez, Marta
Senior IT Technician

Corpuz, Mary Grace
Administrative Assistant III

Dehoney, Eugene
Student Support Specialist

De La Torre, Alyssa
Student Support Specialist

Devi, Sunita
Administrative Assistant III

Dismukes, Aujonique
Student Support Specialist

Dolar, Faustino
Custodian

Dudley, Jada
Student Support Assistant

Dusanovic, Ruza
Custodian

Elliott, Julie
Administrative Assistant I

Ellis, Brandon
Instructional Assistant

Estrada, Estela
Custodian

Figueroa, Denize
Student Support Specialist

Fox-Sailor, Margaret
Clerk III

Gacilan, Gilbert
Mental Health Clinician Supervisor

Garcia, Mayra
Student Support Assistant

Gonzalez, Jessie
Laboratory Technician

Guidi, Sabrina
Maintenance Technician Supervisor

Hamilton, Clarissa
Student Support Assistant

Hartman, Jorrena
Business Services Supervisor

Higashino, Dick
Laboratory Technician

Hill, Akaysia
Mental Health Advocate

Hixon, Timothy
IT Analyst II

Cláudia Hoffman
Administrative Assistant II

Holden, Ebonie
Student Personnel Assistant

Holmes Torres, Juliana
Student Support Assistant

Holquin, Daniel
Lead Custodian

House, Amber
Administrative Assistant I

Hurtado, Lynn
Administrative Assistant II

James, Brianna
Student Support Specialist

Johnson, David
Printing Services Operator II

Johnson, Garrett
Educational Center Assistant

Juarez, Crispin
Custodian

Karnaukh, Oleg
Senior IT Technician

Kearney, Michael
Admissions and Records Evaluator

Keoonla, Virasane
Laboratory Technician

Khang, Moua
Admissions and Records Tech II

Korolev, Vladislav
Custodian

Kwok, Wing
Instructional Services Assist II

Larsen, Amber
Administrative Assistant I

Larsen, Rachel
Confidential Administrative Assistant III

Larson, Victoria
Instructional Assistant

Laxa, Cesar
Custodian

Le, Phuong
Financial Aid Officer

Leal, Claudia
Administrative Assistant I

Leclair, Jason
Instructional Assistant

Lee, Tchong
Head Custodian

Lemus, Miguel
Admissions and Records Evaluator/ Degree Auditor I

Leong, Jonathan
Student Support Assistant

Li, Jiawei
Laboratory Technician

Lindo, Tavona
Student Support Specialist

Lintzbryant, Monet
Student Support Assistant

Lopez, Natalie
Administrative Assistant I

Lopez, Teresa
Account Clerk II

Lor, Lisa
Student Personnel Assistant

Love, Derek
Senior IT Technician

Loyola, Brianna
Clerk II

Lusanaxay, Aksone
Financial Aid Officer

Lwenya, Caren
Financial Aid Technician

Ly, Aubrie
Financial Aid Technician

Marrufo, Mishelle
Admissions and Records Evaluator II

Marsant, Irina
Alternate Media Design Specialist

Marsant, Stanislav
Administrative Assistant I

Martinez, Fabiola
Custodian

Martinez, Selena
Counseling Clerk II

McCans, Kyle
IT Technician

McLane, Jennifer
Digital Communications and Web Specialist

Medrado, Cintia
Child Development Center Lead Teacher

Meinz, Paul
IT Business/Tech Analyst I

Mendoza, Valeria
Administrative Assistant II

Meroux, Norbert
Instructional Assistant

Minamide, Jerry
Instructional Assistant

Mize, Katherine
Student Support Specialist

Mohibi, Abdullah
Clerk III

Montanez, Robin
Administrative Assistant I

Mow, Jessica
Student Support Specialist

Murillo, Shirley
Student Personnel Assistant

Naidu, Zaria
Library Technician

Naiem, Laili
Student Support Specialist

Nazimko, Polina
Child Development Center Clerk

Neary, Jason
Kinesiology/Athletic Attendant

Neuharth, Raymond
Instructional Assistant

Ngai, Eric
Laboratory Technician

Nguyen, Tina
Confidential Administrative Assistant I

Oesterman, Emmie
College IT Systems Supervisor

Patten, Cynthia
Instructional Assistant

Pena, Elizabeth
Athletic Trainer

Perez, Mariadejesus
Financial Aid Officer

Perez, Renee
Administrative Assistant I

Pownall, Laurie
Library/Media Teaching Assistant

Pulatov, Saidaziz
Custodian

Purdy, Karen
Animal Health Instructional Technician

Quezada, Stephanie
Laboratory Technician

Ramirez, Courtney
Instructional Assistant

Redondo, Raquel
Clerk III

Reyes, Christy
Clerk II

Reyescruz, Carrie
Outreach Specialist

Rhodes, Eva
Counseling Supervisor

Rivera, Guadalupe
Custodian

Robinson, Mollyanna
Operations Technician

Robinson, Philip
Account Clerk II

Rocha, Laura
Custodian

Rodriguez, Felix
Custodian

Rodriguez-V, Lucia
Student Support Specialist

Romero, Daniel
Athletic Trainer

Rubalcava, Pedro
Instructional Assistant

Ruiz, Michael
Theater Technician

Santiago, Daniel
Custodian

Shuler, John
Instructional Assistant

Singh, Shristi
Child Development Center Teacher

Sledz, Oleksandr
Senior IT Technician

Smith, Gordon
Laboratory Technician

Stack, Linda
Administrative Assistant I

Stevenson, James Trevor
College Receiving Clerk/Storekeeper

Tam, Ada
Custodian

Tarver, Destiny
Financial Aid Technician

Tarzia, Joshua
IT Specialist II

Torres-Martinez, Alejandro
Student Support Specialist

Tran, Valerie
Laboratory Technician

Trujillo, Priscilla
Student Support Assistant

Ustyak, Olha
Custodian

Vang, Fong
Student Support Supervisor

Vang, Jessica
Student Support Assistant

Vang, Kevin
Student Support Specialist

Vang, Khou
Accountant

Vang, See
Administrative Assistant I

Valencia Tinoco, Estela
Administrative Assistant I

Velazquez Martinez, Bernadette
Student Support Specialist

Velazquez Quinones, Carlos
Accounting Specialist

Veliz, Evarista
Programmer I

Veri, Ronald
Account Clerk III

Villalobos, Julia
Student Support Assistant

Vue, Choua
Student Support Specialist

Wardlaw, Lora
Child Development Center Supervisor

Whitfield, Cameron
Student Personnel Assistant

Worcester, Douglas
Printing Services Operator II

Xiong, Kevin
Admissions and Records Evaluator II

Xiong, Ma
Custodian

Yabu, Russell
IT Assistant II

Ye, Mei
Custodian

Yeung, Wing
Custodian

Zalasky, Julie
Account Clerk III

Zhong, Qiaowen
Clerk I